United States Environmental Protection Agency

Fiscal Year 2020

Justification of Appropriation Estimates for the Committee on Appropriations

EPA-190-R-19-002

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www.epa.gov/ocfo

EPA's Mission

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

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

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

- **Goal 1 – Core Mission**: Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.

- **Goal 2 – Cooperative Federalism**: Rebalance the power between Washington and the states to create tangible environmental results for the American people.

- **Goal 3 – Rule of Law and Process**: Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law.

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

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

FY 2020 Annual Performance Plan

EPA's FY 2020 Annual Performance Plan and Budget[1] of $6.068 billion represents a $2.76 billion, or 31 percent reduction from the Agency's FY 2019 Annualized Continuing Resolution (ACR) level. This resource level, including the Agency's requested 12,414.6 FTE, will enable EPA to support our highest priorities and fulfill our critical mission for the American people.

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

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

Acknowledging that environmental protection is a shared responsibility, funds are provided to our state and tribal partners through categorical grant programs. EPA recognizes states require flexibility in addressing their unique environmental priorities, and the Budget includes funding for Multipurpose Grants to enable states to implement core mission work in a flexible manner. This Budget also provides essential resources to equip EPA in delivering vital emergency response services in environmental disasters that no one state can handle alone.

The EPA is focused on providing certainty to the American people and our co-regulators. EPA will prioritize certainty in three primary areas: certainty to the states and local governments, including tribes; certainty within EPA programs, such as permitting and enforcement actions; and certainty in risk communication. Risk communication goes to the heart of EPA's mission and the Agency must speak with one voice when explaining to the American people the environmental and health risks they face in their daily lives. EPA's efforts are guided by scientific data, tools, and research that alert the American people to emerging issues and inform decisions on managing materials and addressing contaminated properties.

A priority area for EPA is to create consistency and certainty for the regulated community and to remove unnecessary or redundant regulations. Removing unnecessary regulatory burdens allows the EPA to be a catalyst for economic growth while strengthening our focus on protecting human health and the environment. This Budget supports implementation of Executive Order 13783, Promoting Energy Independence and Economic Growth, which directs all agencies to identify and propose measures to suspend, revise or rescind regulatory barriers that impede progress towards energy independence.

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

FY 2018-2019 Agency Priority Goals

The budget highlights EPA's six FY 2018-2019 Agency Priority Goals[2] (APGs) that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*.

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

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

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

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

Increase environmental law compliance rate. Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21% from a baseline of 24%.[3]

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

FY 2020 Funding Priorities

Infrastructure

The infrastructure of the Nation is not limited to roads and bridges. The infrastructure needs of our communities are broader and include making improvements to drinking water and wastewater infrastructure as well as cleaning up contaminated land. In FY 2020, EPA will focus on making infrastructure and public health protection investments in communities by working with and through our state and tribal partners.

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

[3] 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.

A priority for the Agency is modernizing the aging water infrastructure on which the American public depends every day. This Budget supports the President's commitment to infrastructure repair and replacement and would allow states, municipalities, and private entities to finance high-priority infrastructure investments. The FY 2020 Budget includes $1.98 billion for the State Revolving Funds (SRF), $83 million to begin implementation of the new America's Water Infrastructure Act of 2018 (AWIA) legislation, and $25 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program.

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

Clean and safe drinking water is critical to the health of communities across the Nation. While most systems consistently provide safe and reliable drinking water, many small systems face challenges with aging infrastructure, increasing costs and decreasing rates bases. To address the needs of a more robust water infrastructure framework, President Trump signed the bipartisan AWIA legislation on October 23, 2018. AWIA strengthens EPA's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. The Budget includes five new programs to support the AWIA legislation, including: Drinking Fountain Lead Testing, Drinking Water Infrastructure Resilience, Sewer Overflow Control Grants, Technical Assistance for Treatment Works, and Water Infrastructure and Workforce Investment. These programs will enable EPA to begin implementing the new law passed by Congress.

With $25 million in FY 2020 WIFIA appropriations, EPA could potentially provide over $2 billion in credit assistance, which, when combined with other funding sources, could spur over an estimated $4 billion in total infrastructure investment.[4] The WIFIA program is designed to offer credit assistance with flexible terms in order to attract private participation, encourage new revenue streams for infrastructure investment, and allow increased overall infrastructure investment. This makes the WIFIA program's credit assistance a powerful tool to help address a variety of existing and new water infrastructure needs.

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

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

Improving Air Quality

In FY 2020, the EPA will continue to advance activities in support of the National Ambient Air Quality Standards (NAAQS) and implementation of stationary source regulations to support state, local, and tribal air quality programs. The Agency will continue its Clean Air Act (CAA) mandated responsibilities to administer the NAAQS and will provide a variety of technical assistance, training, and information to support state clean air plans. EPA will continue to prioritize statutorily mandated responsibilities and court-ordered actions. A focus will continue to be placed on states achieving attainment, with an emphasis on improved processes for State Implementation Plans (SIPS) and implementation options. EPA will continue to conduct periodic "technology reviews" and conduct risk assessments to determine whether Maximum Achievable Control Technology based National Emission Standards for Hazardous Air Pollutants (MACT-based NESHAP) appropriately protect public health.

In FY 2020, the Federal Vehicle and Fuels Standards and Certification program will focus its efforts on certification decisions, which directly support environmental protection and commerce. The Agency will perform its compliance oversight functions on priority areas, where there is evidence to suggest noncompliance, and conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars.

The Budget includes a proposal to authorize EPA to establish user fees for entities that participate in the Energy Star program. By administering the Energy Star program through the collection of user fees, EPA would continue to provide a trusted resource for state and local governments, consumers, businesses, and other interested parties to save money and help protect the environment.

Air monitoring, which provides information to states used to develop clean air plans, for research, and for the public, will continue to be a focus of the Agency. In FY 2020, EPA will provide grants to state, local, and tribal air pollution control agencies to manage and implement their air quality programs. We will work with our state and tribal partners to approve their implementation plans for attaining air quality standards to reduce contaminants that cause or exacerbate health issues.

Clean and Safe Water

EPA will continue to provide scientific water quality criteria information, review and approve state water quality standards, and review and approve state lists of impaired waters. In FY 2020, the Agency will continue to work with states and other partners on Total Maximum Daily Loads (TMDLs) as required by the Clean Water Act, as well as on waterbody restoration plans for listed impaired waterbodies. The EPA also will continue to implement and support core water quality programs that control point-source discharges through permitting and pre-treatment programs.

EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to sustainable infrastructure efforts, as source water protection can reduce the need for additional drinking water treatment and the associated costs. On February 14, 2019, EPA announced a new Per- and Polyfluoroalkyl Substances (PFAS) Action Plan to help states and local

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

Revitalizing Land

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

The FY 2020 Budget includes $1.056 billion to revitalize land and prevent future contamination. In FY 2020, emphasis will be placed on the Agency's top priority list of Superfund sites.[5] These sites are targeted for immediate and intensive action to accelerate cleanup and promote site reuse, while addressing risks to human health and the environment. The Agency will accelerate cleanup by re-prioritizing some resources to focus on remedial actions, construction completions, ready-for-anticipated use determinations, and National Priorities List (NPL) site deletions. Further, the Agency will focus efforts to clean up and propel development at Superfund sites that offer the greatest expected redevelopment and commercial potential, as outlined in the recently released Superfund Redevelopment Focus List[6], and will promote additional private investment in cleanup activities as recommended by the Superfund Task Force[7].

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

Ensuring the Safety of Chemicals

In FY 2020 resources will support the Agency's significant continuing and new responsibilities under the Toxic Substances Control Act (TSCA) for ensuring that new and existing chemicals are evaluated in a timely manner and that any unreasonable risks are addressed. EPA will focus on meeting its statutory requirements and mandatory deadlines under TSCA and ensuring reviews are efficient, effective, and transparent to stakeholders.

For chemicals in commerce, EPA will maintain an ambitious schedule for initiating and completing chemical risk evaluations and, where risks are identified, for initiating and completing

[5] https://www.epa.gov/superfund/superfund-sites-targeted-immediate-intense-action
[6] https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-focus-list
[7] https://semspub.epa.gov/work/HQ/197209.pdf

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

New chemicals will be evaluated before they are allowed to commercialize, and decisions will be based on best available science and the weight of evidence. EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of unsafe new chemicals into commerce. EPA also will implement the new mandates related to determinations on claims for confidentiality for chemical identities. In addition to fees, $66.4 million is requested in FY 2020 for the TSCA Chemical Risk Review and Reduction program to support this high priority work. EPA will focus on meeting its statutory requirements and mandatory deadlines.

In FY 2020, the Agency will also continue to provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as provide for the operation and maintenance of the online Federal Lead-Based Paint program database (FLPP) that supports the processing of applications for training providers, firms and individuals.

Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy rely is integral to ensuring environmental and human safety. In FY 2020, EPA will continue to meet its statutory requirements for pesticide registration and registration review, and will invest resources to improve the compliance of pesticide registrations with the Endangered Species Act. A portion of the funding also will ensure that pesticides are correctly registered and applied in a manner that protects water quality. Pesticides help provide for effective pest control for homes, schools, gardens, highways, utility lines, hospitals, and drinking water treatment facilities, while also controlling vectors of disease and supporting food production. EPA ensures pesticides available in the U.S. are safe when used as directed.

Protecting our Children

EPA is committed to aggressively addressing lead issues across America, working with communities and partners to further identify and reduce lead exposure, especially for children who are most vulnerable. Through the Federal Action Plan to Reduce Childhood Lead Exposure, EPA is coordinating with other federal agencies to reduce exposure to lead with the aim of ultimately improving children's health. However, children may be exposed to additional environmental hazards beyond lead, particularly in outdated schools and educational centers. To address this multifaceted issue, the FY 2020 Budget proposes $50 million to establish a new Healthy Schools Grant Program that is intended to address these potential gaps in school environmental health by working with and through our state, tribal and community partners. This flexible grant program will enable our implementing partners to target their highest-priority efforts to protect human health and the environment in school settings. Funding would be available to identify and help prevent, reduce and resolve environmental hazards and reduce childhood lead exposure, reduce asthma triggers, promote integrated pest management, and reduce or eliminate childhood exposure to one or more toxics in schools across all environmental media.

Regulatory and Permitting Priorities

The Budget provides resources to ensure EPA is able to meet pressing demands in priority areas, including reviewing and revising regulations, improving the permitting process, and enhancing collaboration with state, tribal and federal partners. Efforts to identify and address potential hold-ups in the permitting process will continue to ensure that unnecessary delays do not get in the way of environmental protection or economic growth. In FY 2020, $28 million is requested to advance deregulation, permitting work, and technical assistance for our co-regulatory partners.

Establishing New Fees

EPA continues to propose several new fees in FY 2020 to better align appropriated resources to the Agency's core mission, to provide dedicated funding sources for specific activities and to better align program costs with beneficiaries. By administering select EPA programs through the collection of user fees, entities benefiting from those programs would directly pay for the services and benefits that the programs provide. EPA is proposing two voluntary user fees that will enable the Agency to provide compliance assistance services to both Risk Management Plan facilities, and Facility Response Plan and Spill Prevention Control and Countermeasure facilities. EPA also is proposing to establish Energy Star as a fee-funded program in FY 2020. This fee would allow the Agency to continue to provide a trusted resource for state and local governments, consumers, businesses, and other interested parties, helping them to save money and protect the environment. In addition, EPA will continue to work with OMB, other Agencies, and key stakeholders to review potential areas where fee-funding may be an appropriate mechanism to reduce the burden on taxpayers.

Eliminated Programs

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

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APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget
Science & Technology	$685,123.0	$713,823.0	$463,060.0
Environmental Programs & Management	$2,584,046.9	$2,643,299.0	$1,845,268.0
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	$18,727.0	$18,209.0	$15,962.0
IG Transfer	$9,159.7	$8,778.0	$9,586.0
Superfund Program	$1,183,245.5	$1,130,673.0	$1,017,990.0
S&T Transfer	$14,728.6	$15,496.0	$17,775.0
Hazardous Substance Superfund	$1,207,133.8	$1,154,947.0	$1,045,351.0
Leaking Underground Storage Tanks	$94,437.6	$91,941.0	$47,801.0
State and Tribal Assistance Grants	$4,067,093.9	$4,212,161.0	$2,774,602.0
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
SUB-TOTAL, EPA	*$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*

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

APPROPRIATION SUMMARY

Full-time Equivalents (FTE)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget
Science & Technology	2,009.8	2,039.2	1,497.5
Environmental Programs & Management	8,947.5	9,111.9	7,487.7
Inspector General	209.4	215.8	201.4
Inland Oil Spill Programs	84.4	86.8	75.7
IG Transfer	51.0	50.2	40.6
Superfund Program	2,475.8	2,468.4	2,466.9
S&T Transfer	61.3	61.7	83.1
Hazardous Substance Superfund	2,588.1	2,580.3	2,590.6
Leaking Underground Storage Tanks	46.9	48.6	40.7
State and Tribal Assistance Grants	5.5	6.6	0.4
Hazardous Waste Electronic Manifest System Fund	7.4	7.9	11.0
Water Infrastructure Finance and Innovation Fund	11.7	12.8	12.0
Rereg. & Exped. Proc. Rev Fund	90.6	87.8	221.5
WCF-Reimbursable	152.8	178.4	212.5
Deepwater Horizon Natural Resource Damage Assessment	4.1	0.0	0.0
Pesticide Registration Fund	57.1	0.0	0.0
UIC Injection Well Permit BLM	1.9	0.0	0.0
TSCA Service Fee Fund	0.0	0.0	63.6
SUB-TOTAL, EPA	*14,217.2*	*14,376.1*	*12,414.6*
TOTAL, EPA	*14,217.2*	*14,376.1*	*12,414.6*

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

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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]

[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.

EPA works to improve the health and livelihood of all Americans by cleaning up and returning land to productive use, preventing contamination, and responding to emergencies. In FY 2020, the Agency is accelerating the pace of cleanups and reuse while addressing risks to human health and the environment. EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around hazardous waste sites, by collaborating with, and leveraging efforts of other federal agencies, industry, states, tribes, and local communities. EPA also partners with states, tribes, local communities, and industry to prevent and reduce exposure to harmful contaminants. Superfund and the Resource Conservation and Recovery Act (RCRA) provide legal authority for EPA's work to protect and restore land. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites, allowing land to be returned to productive use. Under RCRA, EPA works in partnership with states and tribes to address risks associated with the generation, transportation, treatment, storage or disposal of waste, and to clean up contamination at active sites.

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

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

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

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[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)

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[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.

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[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.

[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.

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

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

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

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

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

Environmental Protection Agency
2020 Annual Performance Plan and Congressional Justification

Table of Contents – Science and Technology

APPROPRIATION: Science & Technology
Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology				
Budget Authority	$685,123.0	$713,823.0	$463,060.0	-$250,763.0
Cancellation of Funds	$0.0	-$7,350.0	-$23,000.0	-$15,650.0
Budget Authority Post Cancellation of Funds		$706,473.0	$440,060.0	-$266,413.0
Total Workyears	2,009.8	2,039.2	1,497.5	-541.7

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

Bill Language: Science and Technology

For science and technology, including research and development activities, which shall include research and development activities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; necessary expenses for personnel and related costs and travel expenses; procurement of laboratory equipment and supplies; and other operating expenses in support of research and development, $463,060,000, to remain available until September 30, 2021.

Program Projects in S&T

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Clean Air				
Clean Air Allowance Trading Programs	$7,543.1	$7,569.0	$5,739.0	-$1,830.0
Atmospheric Protection Program	$8,572.7	$8,018.0	$0.0	-$8,018.0
Federal Support for Air Quality Management	$5,722.3	$6,714.0	$3,776.0	-$2,938.0
Federal Vehicle and Fuels Standards and Certification	$90,650.1	$94,240.0	$77,826.0	-$16,414.0
Subtotal, Clean Air	$112,488.2	$116,541.0	$87,341.0	-$29,200.0
Indoor Air and Radiation				
Indoor Air: Radon Program	$133.5	$159.0	$0.0	-$159.0
Radiation: Protection	$2,407.4	$2,246.0	$990.0	-$1,256.0
Radiation: Response Preparedness	$3,259.5	$3,266.0	$3,793.0	$527.0
Reduce Risks from Indoor Air	$40.0	$326.0	$0.0	-$326.0
Subtotal, Indoor Air and Radiation	$5,840.4	$5,997.0	$4,783.0	-$1,214.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Enforcement				
Forensics Support	$12,016.5	$13,669.0	$10,883.0	-$2,786.0
Homeland Security				
Homeland Security: Critical Infrastructure Protection	$9,504.5	$9,788.0	$7,457.0	-$2,331.0
Homeland Security: Preparedness, Response, and Recovery	$22,767.3	$22,918.0	$24,847.0	$1,929.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$415.0	$416.0	$500.0	$84.0
Subtotal, Homeland Security	$32,686.8	$33,122.0	$32,804.0	-$318.0
IT / Data Management / Security				
IT / Data Management	$2,296.0	$3,089.0	$2,747.0	-$342.0
Operations and Administration				
Facilities Infrastructure and Operations	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Workforce Reshaping	$0.0	$0.0	$5,994.0	$5,994.0
Subtotal, Operations and Administration	$70,101.6	$68,339.0	$73,268.0	$4,929.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$2,888.3	$2,531.0	$2,401.0	-$130.0
Pesticides: Protect the Environment from Pesticide Risk	$2,309.7	$3,072.0	$2,257.0	-$815.0
Pesticides: Realize the Value of Pesticide Availability	$362.0	$424.0	$615.0	$191.0
Subtotal, Pesticides Licensing	$5,560.0	$6,027.0	$5,273.0	-$754.0
Research: Air and Energy				
Research: Air and Energy	$87,503.9	$91,906.0	$31,707.0	-$60,199.0
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	$104,163.5	$106,257.0	$69,963.0	-$36,294.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$131,757.3	$134,327.0	$53,631.0	-$80,696.0
Research: Chemical Safety and Sustainability				
Human Health Risk Assessment	$33,568.7	$36,523.0	$22,689.0	-$13,834.0
Research: Chemical Safety and Sustainability				
Endocrine Disruptors	$12,501.0	$16,253.0	$10,346.0	-$5,907.0
Computational Toxicology	$21,153.1	$21,409.0	$17,630.0	-$3,779.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Research: Chemical Safety and Sustainability (other activities)	$45,933.8	$52,745.0	$35,901.0	-$16,844.0
Subtotal, Research: Chemical Safety and Sustainability	$79,587.9	$90,407.0	$63,877.0	-$26,530.0
Subtotal, Research: Chemical Safety and Sustainability	$113,156.6	$126,930.0	$86,566.0	-$40,364.0
Water: Human Health Protection				
Drinking Water Programs	$3,458.2	$3,519.0	$4,094.0	$575.0
Congressional Priorities				
Water Quality Research and Support Grants	$4,094.0	$4,100.0	$0.0	-$4,100.0
Cancellation of Funds	$0.0	-$7,350.0	-$23,000.0	-$15,650.0
TOTAL S&T	**$685,123.0**	**$706,473.0**	**$440,060.0**	**-$266,413.00.0**

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

***** Fact Sheet tables do not include applicable cancellation of funds *****

Clean Air

Clean Air Allowance Trading Programs
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$14,720.4	$15,270.0	$13,292.0	-$1,978.0
Science & Technology	***$7,543.1***	***$7,569.0***	***$5,739.0***	***-$1,830.0***
Total Budget Authority	$22,263.5	$22,839.0	$19,031.0	-$3,808.0
Total Workyears	61.8	63.9	63.7	-0.2

Program Project Description:

This program is responsible for managing the Clean Air Status and Trends Network (CASTNET), a long-term ambient monitoring network, established under Title IX of the Clean Air Act (CAA) Amendments of 1990, which serves as the Nation's primary source for atmospheric data on the dry component of acid deposition, regional ground-level ozone, and other forms of particulate and gaseous air pollution. Used in conjunction with the National Atmospheric Deposition Program's (NADP) wet deposition networks and other ambient air quality networks, CASTNET's long-term datasets and data products are used to determine the effectiveness of national and regional emission control programs. The CASTNET Program provides spatial and temporal trends in ambient air quality and atmospheric deposition in non-urban areas and sensitive ecosystems (e.g, National Parks). Maintaining the CASTNET monitoring network continues to be critical for assessing the environmental benefits realized from the Acid Rain Program and regional programs that control transported emissions (thereby reducing secondary pollutant formation of ozone and fine particles).

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

Clean Air Allowance Trading Programs, established under Title I and IV of the Clean Air Act, help implement the National Ambient Air Quality Standards (NAAQS) and the Acid Rain Program, as well as reduce toxics emissions and regional haze. Pollutants reduced include sulfur

dioxide (SO_2), nitrogen oxides (NO_x), ground-level ozone, fine particulate matter ($PM_{2.5}$), and mercury. EPA provides assistance to states as they develop, implement, and assess their state and regional programs to address major regional and national air issues from large stationary sources. This assistance has traditionally come in the form of technical analysis, modeling, and emissions monitoring support.

The Cross-State Air Pollution Rule (CSAPR) requires 27 states to limit their state-wide emissions of SO_2 and/or NO_x in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states. The emissions limitations are defined in terms of maximum state-wide "budgets" for emissions of annual SO_2, annual NO_x, and/or ozone-season NOx from each state's large electric generating units. In September 2016, EPA finalized an update to CSAPR for the 2008 ozone NAAQS. On December 6, 2018, EPA finalized the Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard, also known as the CSAPR Close-Out Rule, which determined the CSAPR Update Rule fully addresses 20 states' interstate pollution transport obligations for the 2008 national ambient air quality standards (NAAQS) for ground-level ozone.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will:

- Continue quality assurance, analysis, and reporting of environmental data from the CASTNET deposition/rural ozone and LTM surface water monitoring networks.

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

- Assure the continuation of ongoing SO_2 and NO_X emission reductions from power plants in the eastern half of the U.S. by implementing CSAPR and the CSAPR update, and across the contiguous U.S. by implementing the Acid Rain Program.[1]

- Ensure accurate and consistent results for the clean air and allowance trading programs. Continue work on performance specifications and investigating monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting.

- Work with states to implement emission reduction programs to comply with CAA Section 110(a)(2)(D)(i)(I) requirements.[2]

[1] Clean Air Act §§ 110(a)(2)(D) and 401.
[2] For more information on program performance, please see: http://www.epa.gov/airmarket/progress/progress-reports.html.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$63.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$1,893.0) This program change reduces support for the Program with impacts to activities such as technical analysis, modeling, and emissions monitoring support to states as they develop, implement, and assess their state and regional programs to address regional and national air issues from large stationary sources.

Statutory Authority:

Clean Air Act.

Atmospheric Protection Program
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$92,753.7	$95,436.0	$13,965.0	-$81,471.0
Science & Technology	***$8,572.7***	***$8,018.0***	***$0.0***	***-$8,018.0***
Total Budget Authority	$101,326.4	$103,454.0	$13,965.0	-$89,489.0
Total Workyears	204.5	203.7	120.0	-83.7

Program Project Description:

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

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$8,018.0 / -30.8 FTE) This funding change eliminates the Program.

Statutory Authority:

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

Federal Support for Air Quality Management

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$128,588.0	$128,001.0	$107,298.0	-$20,703.0
Science & Technology	***$5,722.3***	***$6,714.0***	***$3,776.0***	***-$2,938.0***
Total Budget Authority	$134,310.3	$134,715.0	$111,074.0	-$23,641.0
Total Workyears	792.0	816.7	636.8	-179.9

Program Project Description:

Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management Program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, attaining, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The Program also develops and provides information, training, and tools to assist state, tribal, and local agencies, as well as communities, to reduce air toxics emissions and risk specific to their local areas. Finally, the Program includes activities related to the Clean Air Act (CAA) stationary source residual risk and technology review program, which involves an assessment of source categories subject to Maximum Achievable Control Technology (MACT) standards to determine if more stringent standards are needed to further reduce the risks to public health and to determine if any National Emission Standards for Hazardous Air Pollutants (NESHAP) (both MACT- and Generally Available Control Technology [GACT]-based standards) should be revised to reflect developments in practices, processes, and control technologies.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. During FY 2020, as part of implementing key activities in support of attainment of the NAAQS, EPA will provide states and local air quality agencies with scientifically and technically sound assistance in developing SIPs. The assistance includes providing models, modeling inputs and tools, and technical data and guidance and identifying emission control options. EPA will ensure national consistency in how air quality modeling is conducted as part of regulatory decision-making, including federal and state permitting programs, SIP-related actions, as well as how conformity determinations are conducted across the U.S. The Agency will work with states and local air quality agencies to ensure that particulate matter (PM) hot-spot analyses are conducted in a manner consistent with the transportation conformity regulation and guidance.

One of EPA's priorities is to fulfill its CAA and court-ordered obligations. Section 112 of the CAA requires that all NESHAP be reviewed and updated, as necessary, every eight years, taking into account developments in practices, processes and technologies related to those standards. In FY 2020, EPA will continue to conduct these periodic "technology reviews" and conduct risk assessments to determine whether MACT-based NESHAP appropriately protect public health. The Program will prioritize its work with an emphasis on meeting court-ordered deadlines.

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

In FY 2020, EPA will work with partners to continue improving emissions factors and inventories, including the National Emissions Inventory. This effort includes gathering improved activity data from emissions monitoring and using geographic information systems and satellite remote sensing systems, where possible, for key point, area, mobile, and fugitive sources, and global emission events.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$38.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$2,976.0 / +2.5 FTE) This net program change reflects an adjustment to EPA's support of state, tribal, and local agencies' Clean Air Act implementation activities.

Statutory Authority:

Clean Air Act.

Federal Vehicle and Fuels Standards and Certification

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$90,650.1***	***$94,240.0***	***$77,826.0***	***-$16,414.0***
Total Budget Authority	$90,650.1	$94,240.0	$77,826.0	-$16,414.0
Total Workyears	290.8	299.7	296.7	-3.0

Program Project Description:

Under the Federal Vehicle and Fuels Standards and Certification Program, EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source related air pollution from light-duty cars and trucks, heavy-duty trucks and buses, nonroad engines and vehicles, and from the fuels that power these engines. The Program also evaluates new emission control technology and provides state, tribal, and local air quality managers and transportation planners with access to information on transportation programs and incentive-based programs. As part of ensuring compliance with national emission standards, the Program tests vehicles, engines, and fuels, and establishes test procedures for federal emissions and fuel economy standards.

National Vehicle and Fuel Emissions Laboratory (NVFEL): The NVFEL ensures air quality benefits and fair competition in the marketplace by conducting testing operations on motor vehicles, heavy-duty engines, nonroad engines, and fuels to certify that all vehicles, engines, and fuels that enter the U.S. market comply with all federal clean air and fuel economy standards. The NVFEL conducts vehicle emission tests as part of pre-production tests, certification audits, in-use assessments, and recall programs to ensure compliance with mobile source clean air programs.

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

The four renewable fuel categories under the RFS are biomass-based diesel, cellulosic biofuel, advanced biofuel, and total renewable fuel. Obligated parties under the RFS Program are refiners or importers of gasoline or diesel fuel. Compliance is achieved by blending renewable fuels into transportation fuel, or by obtaining credits (called “Renewable Identification Numbers” or RINs) to meet an EPA-specified Renewable Volume Obligation (RVO).

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

FY 2020 Activities and Performance Plan:

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

In FY 2020, the Federal Vehicle and Fuels Standards and Certification Program will continue to focus its efforts on certification decisions. The Agency will continue to perform its compliance oversight functions on priority matters, conducting compliance oversight tests where evidence suggests noncompliance. EPA will continue to conduct pre-certification confirmatory testing activities for emissions and fuel economy for passenger cars. EPA anticipates reviewing and approving about 5,000 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. There has been a significant increase in demand for EPA's certification services over the last two decades, due in part to the addition of certification requirements for marine, other nonroad, and small spark-ignited engines.

EPA uses in-use emissions data provided by light-duty vehicle manufacturers to measure compliance and determine if any follow-up evaluation or testing is necessary. Since CY 2000, light-duty vehicle manufacturers have been required to test a number of newer and older in-use vehicles and provide the data to EPA, which receives over 2,100 test results annually. EPA reviews the data and determines if there are any specific vehicles, models, or manufacturers that are failing emissions in-use. The Agency will use this information submitted by light-duty manufacturers to determine if there are vehicle models that should be identified for testing for the upcoming model year prior to granting the manufacturer a certificate of conformity, which allows the manufacturer to sell vehicles in the U.S.

On August 2, 2018, EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) released a notice of proposed rulemaking, the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). This Notice of Proposed Rulemaking (NPRM) is the first formal step in setting the 2021-2026 Model Year (MY) standards that must be achieved by each

automaker for its car and light-duty truck fleet. With this proposal, EPA and NHTSA are seeking public comment on a wide range of regulatory options.[3]

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

In FY 2020, EPA also will oversee compliance with vehicle fuel economy labeling requirements. In past years, EPA conducted in-use audits of manufacturer "coast-down" data, revealing issues in manufacturer data submitted to EPA and, as a result, inaccurate fuel economy labels on more than a million vehicles from several well-known manufacturers.

In FY 2020, EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers' fleets for vehicle Model Year 2021. EPA is responsible for establishing the test procedures needed to measure tailpipe emissions and for verifying manufacturers' vehicle fuel economy data. As a result, the Agency will deploy its laboratory testing resources to ensure that new cars and trucks are in compliance with the Tier 3 emissions standards.

EPA will continue working with the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) on programs to control conventional pollutant emissions from marine and aircraft engines, respectively. In FY 2020, the Agency will work with ICAO on its program to develop international action plans to reduce particulate matter (PM) emissions from international civil aviation.

The Motor Vehicle Emissions Simulator (MOVES) is the Agency's emission modeling system that estimates emissions for mobile sources at the national, county, and project levels for criteria air pollutants, greenhouse gases, and air toxics. In FY 2020, MOVES will support the Agency's emission control programs, as well as provide critical support to states in their determination of program needs to meet air quality standards. The Agency also will evaluate the schedule for updates to MOVES.

In FY 2020, EPA will continue to provide state and local governments with assistance in developing SIPs and providing assistance with transportation conformity determinations. EPA will continue to work with states and local governments to ensure the technical integrity of the mobile source emission estimates in their SIPs. EPA will assist in identifying control options available and provide guidance, as needed. In addition, EPA will ensure national consistency in how conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in air quality plans, for use in conformity determinations.

EPA will continue to provide assistance to state and local transportation and air quality agencies working on $PM_{2.5}$ hot-spot analyses. This will help ensure that analyses use the latest available information and that a measure of consistency exists across the nation. Additionally, EPA will

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

continue partnering with states to support inspection and maintenance (I/M) programs that focus on in-use vehicles and engines. Basic and/or enhanced I/M testing is currently being conducted in over 30 states with technical and programmatic guidance from EPA.

In FY 2020, EPA will continue to work with a broad range of stakeholders to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and freight) to limit emissions from older, pre-2007 diesel engines not subject to stringent emissions standards. Because large numbers of people live near ports and are vulnerable to mobile source diesel emissions, EPA will focus its efforts on reducing mobile source emissions in and around ports. Approximately 39 million people in the U.S. currently live near ports and can be exposed to air pollution associated with emissions from diesel engines at ports, including particulate matter, nitrogen oxides, ozone, and air toxics.[4] EPA also is working with industry to bring about field testing and emissions testing protocols for a variety of innovative energy-efficient, emissions reducing technologies for the legacy fleet.

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

EISA also requires EPA to develop a comprehensive lifecycle GHG methodology to implement the Act's GHG threshold requirements for the RFS. Producers of new and advanced biofuels regularly seek to qualify their fuels under RFS and EPA will continue to apply its lifecycle analysis to such fuels to evaluate and determine eligibility for the Program.

In FY 2020, EPA will maintain oversight of the RFS Program and continue to evaluate compliance with RFS provisions through its system, which is used to track the creation, trades, and use of billions of Renewable Identification Numbers (RINs) for compliance. The tracking system handles 4,000 to 6,000 submissions per day, typically averaging more than 20,000 transactions per day, and the generation of more than 1.4 billion RINs per month. RINs are generated with the production of qualifying renewable fuel and are used to achieve national RFS programmatic goals of reducing or replacing the quantity of petroleum-based transportation fuel, heating oil, or jet fuel produced. In FY 2020, EPA will continue to implement its Fuel and Fuel Additive Registration program. The Agency will prioritize its review and decisions for Part 79 registrations.

[4] EPA National Port Strategy Assessment Report: https://www.epa.gov/ports-initiative/national-port-strategy-assessment.

Performance Measure Targets:

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						5,200	5,000	5,000	Certificates
Actual		4,225	4,360	4,453	5,109	4,869			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,120.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (+$165.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (-$12,459.0 / -3.0 FTE) This program change streamlines technical assistance to industry, stakeholders, state and local governments, and other partners and focuses the Program on core statutory requirements.

Statutory Authority:

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

Indoor Air and Radiation

Indoor Air: Radon Program
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$2,575.1	$3,136.0	$0.0	-$3,136.0
Science & Technology	***$133.5***	***$159.0***	***$0.0***	***-$159.0***
Total Budget Authority	$2,708.6	$3,295.0	$0.0	-$3,295.0
Total Workyears	9.4	9.0	0.0	-9.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities to address the public health risks posed by exposures to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, and advises the public of steps they can take to reduce exposure. EPA's Radon Program has provided important guidance, technical assistance, and funding to help states establish and support their own programs.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$159.0) This funding change eliminates the Program in the S&T account.

Statutory Authority:

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

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$9,286.8	$9,180.0	$2,307.0	-$6,873.0
Science & Technology	***$2,407.4***	***$2,246.0***	***$990.0***	***-$1,256.0***
Hazardous Substance Superfund	$2,176.9	$1,985.0	$1,933.0	-$52.0
Total Budget Authority	$13,871.1	$13,411.0	$5,230.0	-$8,181.0
Total Workyears	68.5	66.3	25.0	-41.3

Program Project Description:

EPA supports waste site characterization and cleanup by providing field and fixed laboratory environmental radiological and radioanalytical data and technical support, radioanalytical training to state and federal partners, and developing new and improved radioanalytical methods and field measurement technologies. The National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada provide analytical and field operation support for radio analytical testing, quality assurance, analysis of environmental samples, field radiological measurement/support, and field measurement systems and equipment to support site assessment, cleanup, and response activities in the event of a radiological accident or incident.

Together, these organizations provide technical support for conducting site-specific radiological characterizations and cleanups. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA, in cooperation with states, tribes, and other federal agencies, will provide ongoing site characterization and analytical support for site assessment activities, remediation technologies, and measurement and information systems. EPA also will provide training and direct site assistance, including field surveys and monitoring, laboratory analyses, health and safety, and risk assessment support at sites with actual or suspected radioactive contamination.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$17.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$86.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities.

- (-$1,153.0 / -7.2 FTE) This program change reflects a decrease in support activities at the National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada.

Statutory Authority:

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

Radiation: Response Preparedness
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$1,774.5	$1,952.0	$2,219.0	$267.0
Science & Technology	***$3,259.5***	***$3,266.0***	***$3,793.0***	***$527.0***
Total Budget Authority	$5,034.0	$5,218.0	$6,012.0	$794.0
Total Workyears	29.6	31.5	31.5	0.0

Program Project Description:

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

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA's RERT will continue to provide support for federal radiological emergency response and recovery operations under the National Response Framework and the National Oil and Hazardous Substances Pollution Contingency Plan. They also will support basic field operations (e.g., on-site technical support/consultation, fixed laboratory, and mobile laboratory analyses) to provide for the rapid collection of field measurements/samples and accurate radionuclide analyses of environmental samples.[5]

In FY 2020, NAREL and NCRFO will: maintain core levels of readiness for radiological emergency responses; participate in the most critical emergency exercises; provide scientific support to state radiation, solid waste, and health programs that regulate radiation remediation;

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

participate in the Protective Action Guidance[6] implementation; and respond, as required, to radiological incidents. NAREL and NCRFO will prioritize the development of rapid methods and techniques for the laboratory analysis of samples, development of updated field scanning technologies, and rapid deployment capabilities to ensure that field teams and laboratory personnel are ready to provide scientific data, analyses, and updated analytical techniques for radiation emergency response programs across the Agency.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$104.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (+$267.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (+$156.0 / -0.6 FTE) This net program change reflects an adjustment in support activities for preparedness work, including basic laboratory analytic functions.

Statutory Authority:

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

[6] For additional information, please see: https://www.epa.gov/sites/production/files/2017-01/documents/epa_pag_manual_final_revisions_01-11-2017_cover_disclaimer_8.pdf.

Reduce Risks from Indoor Air
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$13,489.6	$13,369.0	$0.0	-$13,369.0
Science & Technology	***$40.0***	***$326.0***	***$0.0***	***-$326.0***
Total Budget Authority	$13,529.6	$13,695.0	$0.0	-$13,695.0
Total Workyears	42.8	46.0	0.0	-46.0

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate efforts at the federal, state, and local levels. EPA conducts field measurements and assessments and provides technical support for indoor air quality remediation, when requested.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$326.0 / -1.4 FTE) This funding change eliminates the Program in the S&T account.

Statutory Authority:

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

Enforcement

Forensics Support
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$12,016.5***	***$13,669.0***	***$10,883.0***	***-$2,786.0***
Hazardous Substance Superfund	$1,999.6	$1,824.0	$1,144.0	-$680.0
Total Budget Authority	$14,016.1	$15,493.0	$12,027.0	-$3,466.0
Total Workyears	65.2	69.0	52.1	-16.9

Program Project Description:

The Forensics Support Program provides expert scientific and technical support for criminal and civil environmental enforcement cases, as well as technical support for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences.[7] The NEIC maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with expertise across media. The NEIC works closely with EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with EPA's Headquarters and Regional Offices to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Civil Enforcement Program.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. The Forensics Support Program provides expert scientific and technical support for EPA's criminal and civil enforcement efforts. In FY 2020, NEIC will continue to streamline its forensics work, and identify enhancements to our sampling and analytical methods, using existing technology. The Program will continue to focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. In support of that effort, NEIC conducted two *kaizen* events in FY 2018 aimed at streamlining the timeline for completion of civil inspection reports and identifying efficiencies in laboratory operations. The results of these efforts will inform our work in FY 2020 and beyond.

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

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$359.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$20.0) This change to fixed and other costs is an increase due to recalculation of lab utilities.

- (-$3,165.0 / -12.2 FTE) This change reflects a focus on analyzing material to attribute it to individual sources or facilities and a reduction in other support.

Statutory Authority:

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

Homeland Security

Homeland Security: Critical Infrastructure Protection
Program Area: Homeland Security
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$908.7	$880.0	$1,188.0	$308.0
Science & Technology	***$9,504.5***	***$9,788.0***	***$7,457.0***	***-$2,331.0***
Total Budget Authority	$10,413.2	$10,668.0	$8,645.0	-$2,023.0
Total Workyears	25.5	26.7	21.0	-5.7

Program Project Description:

Under the federal homeland security system, EPA is the Sector-Specific Agency responsible for implementing statutory and Presidential directives relating to homeland security for the water sector. EPA's Water Security Program is implemented through close partnerships with the water sector, state emergency response and water program officials, and other federal agencies—most notably the Department of Homeland Security (DHS), the U.S. Army Corps of Engineers, and the Intelligence Community. The Program is not driven by regulatory requirements on water systems or the states, but instead operates under the principles of cooperative federalism by engaging federal, state, and local entities in defining annual objectives and identifying high priorities for immediate action.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 – 2022 EPA Strategic Plan*. This program provides critical resources to coordinate and support protection of the nation's critical water infrastructure from terrorist threats and all-hazard events. Under this homeland security project area, EPA will train, in FY 2020, about 2,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger water and wastewater services. In FY 2020, EPA will provide tools, training, and technical assistance which will address the highest risks confronting the water sector.

Natural Disasters and General Preparedness

Drought, floods, hurricanes, earthquakes, and other natural disasters represent a high risk to the water sector owing to their historical frequency of occurrence and their enormous potential for destruction. As evident from several recent natural disasters, the level of preparedness within the water sector varies significantly—with many utilities lacking an adequate preparedness capability. In FY 2020, EPA will improve the preparedness of the water sector by providing nationwide training sessions to address natural disasters and general preparedness with the objective to train

water and wastewater systems, state officials, and emergency response partners. Specifically, EPA will:

- Provide in-person trainings and workshops which will include: Incident Command System (ICS)/National Incident Management System (NIMS) training; drought response training; flood response training; state functional exercises (e.g., scenarios of hurricanes, floods and earthquakes); resource typing and site access workshops; a regional interstate emergency response exercise (e.g., hurricane), etc.
- Conduct tabletop and functional exercises to improve the operation of intra-state and inter-state mutual aid agreements among water utilities.
- Implement lessons learned of relevance to the water sector from the 2017 hurricane season, as identified by reports from FEMA, the Water Agency Response Network, and EPA's Inspector General.
- Continue to address high priority security areas as identified in the stakeholder generated *2017 Roadmap to a Secure and Resilient Water and Wastewater Sector*[8] with an emphasis on projects addressing the following four priorities: (1) establishing the critical lifeline status of the water and wastewater sector and translating that definition into strong support for the sector's needs and capabilities; (2) improving detection, response, and recovery to contamination incidents; (3) advancing preparedness and improving capabilities of the water and wastewater sector for area-wide loss of water and power; and (4) advancing recognition of vulnerabilities and needed responses related to cyber risk management.
- Conduct nationwide training sessions with three critical, inter-dependent sectors: health care, emergency services, and energy. Most incidents, particularly natural disasters, have underscored the mutual reliance on the water sector with other lifeline sectors. Through training sessions with officials at the local, state, and federal levels from these other sectors, EPA will seek to improve coordination among critical lifeline sectors.
- Sustain operation of the Water Desk in the Agency's Emergency Operations Center in the event of an emergency by: updating roles/responsibilities; training staff in the incident command structure; ensuring adequate staffing during activation of the desk; and coordinating with EPA's regional field personnel and response partners.
- Develop annual assessments, as required under the National Infrastructure Protection Plan, to describe existing water security efforts and progress in achieving the sector's key metrics.

Water Security Initiative and Water Lab Alliance

Water Security Initiative. The Water Security Initiative (WSI) designs and demonstrates an effective system for timely detection and appropriate response to drinking water contamination threats and incidents through a pilot program that has broad application to the nation's drinking water utilities in high-threat cities. The FY 2020 request includes $3.4 million for necessary WSI Surveillance and Response System (SRS) activities to refine technical assistance products based on the five full-scale SRS pilots, implement a monitoring and response program for water utilities focused on source water chemical spills, and provide direct technical assistance to the dozens of water utilities that seek to leverage EPA's expertise in deploying their own warning system.

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

In FY 2020, EPA will train about 250 drinking water utilities in the design, operation, and response components of early contaminant warning systems. In FY 2020, EPA will:

- Continue efforts to promote the water sector's adoption of Water Quality Surveillance and Response Systems. This will help to rapidly detect and respond to water quality problems, such as contamination in the distribution system, in order to reduce public health and economic consequences through the development of several online training modules and webinars, as well as the provision of in-person direct technical assistance.
- Build upon the Drinking Water Mapping Application to Protect Source Waters (DWMAPS),[9] EPA will pilot an effort to compile and disseminate chemical storage data from state and local sources to ensure that drinking water utilities have access to the basic information (e.g., what chemicals are stored upstream from a surface water intake) necessary for implementing effective source water contamination detection and response systems.
- Conduct nationwide training sessions for its SRS Capabilities Assessment Tool,[10] a web-based, easy to use, decision support tool that presents the user with a series of questions by which to assess existing detection and response capabilities, compare these existing capabilities to a target capability, and identify potential enhancements to address gaps between the existing and target capabilities.
- Continue the successful SRS implementation pilot program[11] within the water sector - the purpose of which is to: demonstrate the application of SRS tools to designing and operating an early warning system for contamination events; illustrate additional applications of SRS tools, such as extending the SRS approach to source water monitoring; and identify champions, within the industry, for implementing surveillance and response systems.

Water Laboratory Alliance. In a contamination event, the sheer volume or unconventional type of samples could quickly overwhelm the capacity or capability of a single laboratory. To address this potential deficiency, EPA has established a national Water Laboratory Alliance (WLA) comprised of laboratories harnessed from the range of existing lab resources from the local (e.g., water utility) to the federal levels (e.g., the Centers for Disease Control and Prevention [CDC]'s Laboratory Response Network). In FY 2020, EPA will continue to promote, through exercises, expert workshops and association partnerships, the Water Laboratory Alliance Plan,[12] which provides a protocol for coordinated laboratory response to a surge of analytical needs. Under WLA, EPA will train, in FY 2020, approximately 100 laboratories in improving their ability to handle potential problems associated with surge capacity and analytical method capabilities during an emergency. In particular, EPA will:

- Continue work with regional and state environmental laboratories to conduct exercises and continue efforts to automate the exercises, enabling laboratories and other members of the water sector to participate in exercises simultaneously and continue the innovative practice of pursuing validation of methods through exercises.

[9] For more information, please see: https://www.epa.gov/sourcewaterprotection/dwmaps.
[10] For more information, please see: https://www.epa.gov/sites/production/files/2015-06/documents/srs_fact_sheet.pdf.
[11] For more information, please see: https://www.epa.gov/waterqualitysurveillance.
[12] For more information, please see: https://www.epa.gov/waterlabnetwork.

- Continue to expand the membership of the WLA with the intention of achieving nationwide coverage. The WLA has 160 member laboratories that are geographically diverse and can provide a wide range of chemical, biological, and radiological analyses.[13] For the WLA to become a robust infrastructure that can cover major population centers and address a diverse array of high priority contaminants, membership must continue to increase.
- Continue to target laboratories located in areas where the WLA has both inadequate membership levels and gaps in laboratory analytical capabilities.
- Coordinate with other federal agencies, primarily DHS, CDC, Food and Drug Administration, and Department of Defense, on biological, chemical, and radiological contaminants of high concern and how to detect and respond to their presence in drinking water and wastewater systems.
- Continue to implement specific recommendations of the Water Decontamination Strategy as developed by EPA and water sector stakeholders (e.g., defining roles and responsibilities of local, state, and federal agencies during an event).

Cybersecurity

Cybersecurity represents a substantial concern for the sector, given the ubiquitous access to critical water treatment systems from the Internet. In FY 2020, EPA will fulfill its obligations under Executive Order (EO) 13636 – *Improving Critical Infrastructure Cybersecurity* – which designated EPA as the lead federal agency responsible for cybersecurity in the water sector. EPA also will partner with the water sector to promote cybersecurity practices and gauge progress in the sector's implementation of these practices as directed by the Cybersecurity Enhancement Act of 2014, conducting nationwide training sessions in cybersecurity threats and countermeasures for about 200 water and wastewater utilities. Specifically, in FY 2020, EPA will:

- Conduct one-day classroom training, at locations distributed nationally, on water sector cybersecurity. The training will address cybersecurity threats, vulnerabilities, consequences, best practices, and incident response planning.
- Update and/or develop new course materials owing to the evolving nature of the cyber threat, such as the recently documented role of Russian state actors in infiltrating water system industrial control processes and business enterprise functions.
- Develop brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers.
- Develop outreach materials to promote the adoption of cybersecurity practices across the water sector.

America's Water Infrastructure Act (AWIA)

In FY 2020, EPA also will take actions to fulfill the mandates of the Community Water System Risk and Resilience section of AWIA requiring community water systems serving a population greater than 3,300 to prepare risk assessments and emergency response plans. EPA will provide guidance and technical assistance to these systems on how to conduct resilience assessments, prepare ERPs, and address threats from malevolent acts and natural hazards. EPA will provide

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

technical assistance to water systems to address drinking water vulnerabilities where EPA determines an urgent and immediate need. The EPM Homeland Security: Critical Infrastructure Protection program also can support AWIA homeland security related work.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$244.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$3,798.0 / -11.2 FTE) This streamlines emergency response efforts for natural disasters through further coordination with other federal agencies and through enhanced coordination of activities with work performed in the Homeland Security: Preparedness, Response, and Recovery Program.

- (+$1,711.0 / +2.9 FTE) These resources and FTE are provided to begin implementation and administration of the requirements of the Community Water System Risk and Resilience Section of the America's Water Infrastructure Act.

Statutory Authority:

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

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$22,767.3***	***$22,918.0***	***$24,847.0***	***$1,929.0***
Hazardous Substance Superfund	$31,102.4	$31,648.0	$31,054.0	-$594.0
Total Budget Authority	$53,869.7	$54,566.0	$55,901.0	$1,335.0
Total Workyears	117.3	123.3	127.1	3.8

Program Project Description:

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

The Homeland Security Research Program (HSRP) is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of Agency program and regional offices, states, and tribes and is implemented with their active collaboration and involvement.

EPA's disaster-related responsibilities are described by the following three objectives in the HSRP's StRAP: (1) protecting America's water systems; (2) remediating indoor and outdoor contaminated areas, and (3) developing a nationwide laboratory network with the capability and capacity to analyze for chemical, biological, radiological, and nuclear (CBRN) agents during routine monitoring and in response to terrorist attacks and other disasters.

Funding supports EPA in carrying out these critical responsibilities, including EPA's efforts to help communities prepare for, endure, and recover from disasters – safeguarding their economic, environmental, and social well-being. The HSRP collaborates with state, local, and private sector organizations and key federal agencies[14] to prioritize research needs and prevent the duplication of scientific and technical work. HSRP will deliver effective tools, methods, information, and guidance to local, state, and federal decision-makers that will address both critical terrorism-related issues and natural or manmade disasters.

EPA also is responsible for operating and maintaining the network of near real-time stationary and

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

deployable monitors, known as *RadNet,* under the Nuclear/Radiological Incident Annex to the National Response Framework (NRF). This network is critical in responding to large-scale incidents such as Fukushima and is an EPA Critical Infrastructure/Key Resource asset. EPA additionally serves as the Sector-Specific Agency (SSA) for the water sector, coordinating water sector-specific risk assessment and management strategies and assessing and mitigating cybersecurity risks with the Department of Homeland Security (DHS) and the sector under Executive Order 13636: Improving Critical Infrastructure Cybersecurity.

Recent Accomplishments:

Assisting in the Development of Fentanyl Factsheet and Drug Lab Clean-up Approaches:
The misuse of fentanyl is quickly approaching an epidemic scale. As the popularity of fentanyl use rises, so does the potential for contamination of indoor environments. HSRP contributed to the development of a factsheet for EPA On-Scene Coordinators who may respond with or provide technical advice to local HazMat teams at sites with environmental fentanyl contamination. This factsheet summarizes information on characteristics, release scenarios, health effects, effect levels, personal safety, personal protective equipment, field detection, sampling, analysis, decontamination/cleanup, and waste management. HSRP also responded to a request by the U.S. Drug Enforcement Agency (DEA) to assist in devising potential clean-up approaches designed to maximize decontamination efficacy while minimizing damage to high value items. HSRP completed initial decontamination research to identify decontamination solutions that lead to efficacious *in situ* inactivation of fentanyl as part of cleanup procedures. These recommendations have been shared with responders in multiple EPA regions and state and local stakeholders.

Supporting Rapid Development of Sampling Plans for Biological Threat Incidents. Federal, state, and local decision makers need to access the latest contamination characterization methods following a pathogen or chemical threat contamination incident. The contaminated area must be quickly determined as well as public health risks. To improve response times, HSRP evaluated the current advantages and limitations of existing methods for sampling, analysis, and assessing risk and developed methods that will be readily available for characterizing large areas such as subway systems and urban centers. HSRP developed the *MicroSAP* tool to decrease the time required to construct sampling and analysis plans during emergency response by walking decision makers through the development process. This tool ensures that EPA's data quality standards and the latest science supporting sampling procedures is included in the sampling and analyses plans. An informational companion to the MicroSAP tool includes considerations for sampling, analysis, and data interpretation. Access to the companion guide is available online.[15]

Treatment Methods for Per- and Polyfluoroalkyl Substances (PFAS) Contamination Arising from Emergency Response. PFAS are found in products that resist heat, stains, grease, and water. These chemicals are identified as emerging contaminants because they do not break down in the environment and have the potential to bioaccumulate in plants and animals. PFAS in firefighting foam impacts the run-off water, which may spread contamination through the environment, down storm drains, and into drinking water. It also can cause secondary spread of PFAS when contaminated sewer sludge is land-applied or disposed in landfills.[16] HSRP evaluated the

[15] For more information, please see: MicroSAP Companion Guide.
[16] For more information, please see: https://www.epa.gov/chemical-research/research-and-polyfluoroalkyl-substances-pfas.

effectiveness of on-site collection and treatment methods of water contaminated with PFAS resulting from firefighting activities. The results[17] of this work are assisting decision makers in designing approaches to minimize the impact of PFAS contaminated waste water under challenging emergency situations. The methods are not limited to emergency response and are applicable to other agency needs, such as treating water contaminated by other chemicals.

Analytical Method Supporting Ricin Cleanups. Ricin is a toxin if inhaled, injected, or ingested, and is easily extracted from castor-oil manufacturing waste material left from processing castor beans.[18] EPA identified a critical gap in the decontamination process in past ricin incidents. Residues were picked up while wiping down surfaces during the sampling process, tainting the samples. This prevented important analytical methods from being performed during the sample evaluation. The HSRP addressed this challenge by developing a processing method for environmental samples that enabled ricin detection by multiple analytical approaches.[19] In addition to removing potential interferences picked up during sampling, the process concentrates the samples and results in a 10-fold or more increase in the detection capability. The method was used by EPA during a December 2017 incident that involved a 70-year old woman in Vermont that made ricin to allegedly poison her neighbors at a retirement community.[20] Ricin was found post-decontamination due to the increased sensitivity of the new sample processing method. Without this method, the site may have been deemed clean, posing a public health risk.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 - 2022 EPA Strategic Plan*.

Research Planning: EPA's Board of Scientific Counselors (BOSC) evaluates performance and provides feedback to the Agency for the HSRP Program. The HSRP Program, BOSC, and the Science Advisory Board will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising EPA on developing its strategic research direction and StRAPs for FY 2019 - FY 2022.

EPA collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Department of Defense, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and others. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA and to better understand the science needs of state environmental agencies.

[17] For more information, please see: Treatment of PFAS in Wash Water.
[18] For more information, please see: Ricin Overview.
[19] For more information, please see: Development of a Sample Processing Approach.
[20] For more information, please see: https://www.cbsnews.com/news/judge-detains-woman-accused-of-making-ricin-testing-it-on-neighbors/.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators. This program also will work with the National Emergency Management Association and other appropriate national organizations reaching to state stakeholders to understand states' priority needs related to environmental emergency response and to ensure familiarity with the available scientific support.

The following work is reflected in the HSRP's StRAP. Research is planned and prioritized based on the needs of end-users of this science, including regional On-Scene Coordinators (OSCs), water utility companies, states, and EPA program and regional offices.

Characterizing Contamination and Assessing Exposure. During an incident, EPA oversees and provides support to state and local governments for site characterization[21] and remediation of contaminated water systems and indoor and outdoor areas. In FY 2020, HSRP will:

- Develop innovative bio-threat agent sampling and analytical methods for the Environmental Sampling and Analytical Methods (ESAM) program to support post-incident decisions regarding exposure assessment, remediation, and re-occupancy.[22]
- Conduct studies to support sample strategy options for characterization after a wide-area biological incident and examine methods and deployment strategies to reduce the logistical burden of characterization.
- Study the fate and transport of bio-threat agents after a release in an urban environment to inform sampling and decontamination.

Water System Security and Resilience. EPA will continue to address critical scientific knowledge gaps in responding to and recovering from contamination incidents, with a specific focus on addressing needs related to wide area attacks on urban centers and public areas as well as water contamination incidents. As the lead Agency overseeing the Water Sector, EPA addresses Water Sector research needs identified by the Water Sector Coordinating Council and the Water Government Coordinating Council's Critical Infrastructure Partnership Advisory Council.[23]

There are approximately 149,500 public drinking water systems and nearly 16,000 publicly owned wastewater treatment systems in the United States.[24,25] More than 80 percent of the U.S. population receives their potable water from these drinking water systems and about 75 percent of the U.S. population has its sanitary sewerage treated by these wastewater systems.[26] Within the past year, threats to drinking water systems ran the spectrum from toxic chemicals accidentally being introduced into a water system to concerns over an intentional attempt to poison a drinking water system.

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[21] The process of identifying and quantifying the contaminants in environmental samples of a site to determine the nature and extent of contamination present.
[22] To access ESAM, please see: https://www.epa.gov/homeland-security-research/sam.
[23] The Water Sector Coordinating Council is a "self-organized, self-run, and self-governed council" composed of water utilities. The Water Government Coordinating Council is responsible for interagency coordination of efforts related to the water sector.
[24] https://www.epa.gov/dwreginfo/information-about-public-water-systems.
[25] https://www.epa.gov/water-research/small-wastewater-systems-research-0.
[26] https://www.dhs.gov/cisa/water-and-wastewater-systems-sector.

In FY 2020, HSRP will:

- Conduct field-scale evaluations of water contamination sensors, decontamination methodologies, and water treatment at the Water Security Test Bed.[27]
- Develop methods to decontaminate infrastructure and manage contaminated water.

Remediating Wide Areas. Developing national resilience to disasters requires that decision-makers have the latest scientific information and ability to assess the downstream or cascading impacts of decisions. EPA will develop tools providing ready access to the latest science and supporting the decision-making process. In FY 2020, HSRP will:

- Develop a database for decontamination technologies data, including operational and logistical considerations to provide decision-makers.
- Develop a proof-of-concept virtual-reality tool to simulate a contaminated area, allowing the user to experience sampling and decontamination approaches. This tool supports pre-incident training and reduces the time responders spend in the hot zone during a response.
- Develop approaches to improve the capacity to conduct large-scale bio-agent cleanup; develop methods that are widely-available to local, state, and federal responders, such as deploying existing municipal equipment (e.g., street sweepers) and commercial off-the-shelf methods for effective distribution of decontaminants (e.g., pool chemicals).
- Develop scalable decontamination technologies for wide-area use and waste management approaches for a biological incident; develop approaches to predict decontamination efficacy and provide a basis for field-scale testing of remediation methods for chemical threats.

In addition to the activities above, EPA also conducts research across programs in areas such as lead. Within the HSRP, EPA is continuing to develop water infrastructure modeling tools that can be used to assist water utilities in understanding the impact of changes in their systems. The HSRP also is continuing to seek to test sensors that can indicate contamination in water.

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

In FY 2020, the Agency will continue to operate and maintain the *RadNet* air monitoring network, providing essential maintenance to routinely operating fixed stations. Fixed stations will operate in conjunction with deployable monitoring assets available during a radiological incident.

[27] Data from these studies are made available to water utilities through outreach activities.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$113.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$30.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities and security.

- (+$402.0 / +5.0 FTE) This program change reflects an increase for a focused effort to meet EPA's responsibilities as the water Sector-Specific Agency (SSA) implementing specific statutory and Presidential directives relating to water security.

- (+$1,212.0 / -5.3 FTE) This net program change increases existing research in wide-area decontamination and critical infrastructure, while refocusing resources from the development of tools to support resilience of water systems. The reduction changes EPA's timeline to carry out its mandates to develop strategies and methods for characterizing, decontaminating, and managing waste from an intentional or unintentional release of chemical and radiological agents.

- (+$232.0 / -0.5 FTE) This net program change is to keep RadNet capabilities current with technology to monitor the nation's air, precipitation, and drinking water for radiation.

Statutory Authority:

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

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$5,400.2	$5,405.0	$4,986.0	-$419.0
Science & Technology	***$415.0***	***$416.0***	***$500.0***	***$84.0***
Building and Facilities	$5,921.7	$6,676.0	$6,176.0	-$500.0
Hazardous Substance Superfund	$1,325.5	$968.0	$915.0	-$53.0
Total Budget Authority	$13,062.4	$13,465.0	$12,577.0	-$888.0
Total Workyears	8.0	9.6	12.2	2.6

Program Project Description:

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

FY 2020 Activities and Performance Plan:

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

In FY 2020, the Agency will continue to provide enhanced physical security for the NVFEL and its employees. This funding supports the incremental cost of security enhancements required as part of an Agency security assessment review.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$85.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities and security.

- (-$1.0) This program change reduces the budget for infrastructure security at the National Vehicle and Fuel Emissions Laboratory (NVFEL).

Statutory Authority:

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

IT / Data Management/ Security

IT / Data Management
Program Area: IT / Data Management / Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$84,464.5	$83,256.0	$71,117.0	-$12,139.0
Science & Technology	***$2,296.0***	***$3,089.0***	***$2,747.0***	***-$342.0***
Hazardous Substance Superfund	$14,126.0	$13,824.0	$13,443.0	-$381.0
Total Budget Authority	$100,886.5	$100,169.0	$87,307.0	-$12,862.0
Total Workyears	412.6	439.9	456.9	17.0

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. Science and Technology (S&T) resources for EPA's IT/DM Program fund the following activities: Quality Program,[28] EPA libraries, and One EPA Web.

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

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. The Quality Program will continue to provide technical support to all EPA program/regional offices and laboratories in implementing EPA quality policies, procedures and standards. In FY 2020, the Quality Program will conduct six Quality Management Plan reviews and four Quality System Assessments for selected EPA programs. These oversight activities help ensure the quality of EPA's data for intended uses, including environmental decision-making.

The Quality Program also will begin using an enterprise QA tracking and reporting IT system, which is expected to be implemented in late FY 2019. The enterprise QA tracking and reporting system will simplify, standardize and centralize the QA annual reporting process by providing a

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

mechanism for EPA organizations' quality activities throughout the year. Additionally, the Quality Program will provide oversight of EPA's Information Quality Guidelines and facilitate the development of the Agency's responses to public requests for correction of information disseminated by EPA. The Agency's S&T resources for IT/DM also will help provide library services through the EPA National Library Network to all EPA employees and access to environmental information to the public, as well as support the hosting of EPA's websites and Web pages.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$33.0) This net change to fixed and other costs is a net increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$375.0 / +1.2 FTE) This net program change reflects an adjustment to the technical support for conducting quality assurance oversight, training, policy development, and support for agencywide quality activities.

Statutory Authority:

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

Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$292,535.1	$308,701.0	$308,335.0	-$366.0
Science & Technology	***$70,101.6***	***$68,339.0***	***$67,274.0***	***-$1,065.0***
Building and Facilities	$34,605.1	$27,791.0	$33,377.0	$5,586.0
Leaking Underground Storage Tanks	$1,056.6	$813.0	$773.0	-$40.0
Inland Oil Spill Programs	$753.8	$584.0	$665.0	$81.0
Hazardous Substance Superfund	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Total Budget Authority	$475,113.4	$481,481.0	$483,964.0	$2,483.0
Total Workyears	321.8	327.6	308.0	-19.6

Program Project Description:

Science & Technology (S&T) resources in the Facilities Infrastructure and Operations Program fund rent, utilities, and security. This program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, energy conservation, sustainable buildings programs, and space planning. Funding for such services is allocated among the major appropriations for the Agency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to invest to reconfigure EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[29] the *Federal Assets Sale and Transfer Act of 2016*.

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide. This has the potential to provide a cumulative annual rent avoidance of nearly $28 million across all appropriations. These savings help offset EPA's escalating rent and security costs. Planned consolidations in FY 2020 will allow EPA to release an expected 146,477 square feet of space. For FY 2020, the Agency is requesting $26.82 million for rent, $20.31 million for utilities, and $13.75 million for security in the S&T appropriation.

[29] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

Performance Measure Targets:

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

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$380.0) This net change to fixed and other costs is a decrease due to the recalculation of rent, utilities, security, and transit subsidy.

- (-$685.0) This net program change reflects a decrease for facility operations contracts that support activities like custodial, landscaping, and warehouse activities at EPA's research and development facilities and laboratories. This change is partially offset by an increase for moves and space reconfiguration to assist the Agency in reducing its footprint.

Statutory Authority:

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

Workforce Reshaping
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$0.0	$0.0	$25,003.0	$25,003.0
Science & Technology	***$0.0***	***$0.0***	***$5,994.0***	***$5,994.0***
Total Budget Authority	$0.0	$0.0	$30,997.0	$30,997.0

Program Project Description:

Science and Technology (S&T) resources for the Workforce Reshaping Program support organizational restructuring efforts throughout the U.S. Environmental Protection Agency. To help achieve its mission, EPA will develop, review and analyze mission requirements and implement options to effectively align and redistribute the Agency's workforce based on program priorities, resource reallocation, and technological advances.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. Effective workforce reshaping is critical to EPA's ability to accomplish its mission. EPA will be examining our statutory functions and processes to eliminate inefficiencies and streamline our processes. Primary criteria will include effectiveness and accountability, as EPA is focused on greater value and real results. These analyses will likely create a need to reshape the workforce. The Agency anticipates the need to offer voluntary early out retirement authority (VERA) and voluntary separation incentive pay (VSIP), and potentially relocation expenses, as part of the workforce reshaping effort.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$5,994.0) In support of the reprioritization of Agency activities, this increase will support:
  - Voluntary early out retirement authority;
  - Voluntary separation inventive pay, and
  - Workforce support costs for relocation of employees as we realign work assignments.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Pesticides Licensing

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$56,288.2	$58,016.0	$49,440.0	-$8,576.0
Science & Technology	***$2,888.3***	***$2,531.0***	***$2,401.0***	***-$130.0***
Total Budget Authority	$59,176.5	$60,547.0	$51,841.0	-$8,706.0
Total Workyears	362.9	336.8	416.5	79.7

Total work years in FY 2020 include 126.0 FTE funded by pesticide maintenance and registration service fees.

Program Project Description:

EPA's Pesticide Program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act (FQPA) of 1996, and the Pesticide Registration Improvement Extension Act of 2012 (PRIA),[30] EPA is responsible for registering and re-evaluating pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. To make regulatory decisions and establish tolerances (maximum allowable pesticide residues on food and feed) for food use pesticides and for residential or non-occupational use, EPA must find the pesticide safe. This involves considering cumulative and aggregate risks and ensuring extra protection for children. The Agency must balance the risks and benefits of other uses.

EPA's Pesticide Program operates two laboratories, the Microbiology Laboratory,[31] and the Analytical Laboratory,[32] that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development, and validation efforts. These laboratories provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to protect human health from pesticide risk.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the Microbiology Laboratory will protect human health by ensuring the availability of scientifically sound efficacy test methods for antimicrobial pesticides. By developing new methods for new uses and emerging pathogens,

[30] Authority provided under the Pesticide Registration Improvement Extension Act of 2012 expired on September 30, 2017. Authority to continue to collect fees was authorized by H.R. 1625 - Consolidated Appropriations Act, 2018.
[31] For more information, please see: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[32] For more information, please see: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

the regulated community can register new products and new claims for existing products. Specific initiatives for FY 2020 include:

- Data collection and analysis on the Organization for Economic Cooperation and Development (OECD) method for bactericidal claims to support adoption of the method for regulatory purposes. If needed, hold a technical workshop to share information and solicit feedback on use and guidance associated with the method.
- Finalize a method and associated guidance for *Legionella* in recirculating water for cooling tower remediation.
- Continue to support the CDC by generating data on a broad range of product formulations (e.g., antimicrobial wipes and ready-to-use formulations) and active ingredients to inform the CDC and other federal agencies (e.g., Veterans Administration) on options for surface decontamination for *Candida auris* including the drug resistant strain. In addition, method development activities will be extended in FY 2020 to include the assessment of standardized testing of *C. auris* with antimicrobial wipes.
- Complete verification studies and issue guidance/method for review and comment for testing sanitizing claims for copper containing surfaces.
- Initiate multi-laboratory studies for use of the OECD method to support fungicidal and virucidal claims.
- Assist with efforts to formulate a new approach for evaluating claims based on use of a disinfectant hierarchy for establishing efficacy claims for antimicrobials.
- Per an OIG recommendation, develop a risk-based post-registration testing program for antimicrobials to identify potentially ineffective antimicrobial products.
- Continue to post and maintain website for existing and new antimicrobial test methods and guidance documents.[33]

In FY 2020, the Analytical Chemistry Laboratory will continue to protect human health by ensuring the availability of appropriate analytical methods for analyzing pesticide residues in food and feed and ensuring their suitability for monitoring pesticide residues and enforcing tolerances. In addition, the Analytical Chemistry Laboratory will:

- Develop improved analytical methods using state of the art instruments to replace outdated methods, thus increasing laboratory efficiency and accuracy of the data;
- As needed, provide analytical support to fill in data gaps for the Pesticide Programs' risk assessment and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation;
- Provide analytical assistance and technical advice to all regional offices in support of their enforcement cases;
- Verify that antimicrobial pesticides are properly formulated (as requested); and
- Operate EPA's National Pesticide Standard Repository.

[33] Please refer to the following website: https://www.epa.gov/pesticide-analytical-methods/antimicrobial-testing-methods-procedures-developed-epas-microbiology.

Evidence and Evaluation

The Microbiology Laboratory will continue efficacy method development activities to support EPA's antimicrobial pesticide regulatory programs. In support of these efforts, the Microbiology Laboratory submitted several methods for emerging pathogens (*Clostridium difficile* and biofilms) and selected formulation types (towelette) to American Society for Testing and Materials (ASTM) workgroups for technical review in FY 2018. The comments from the ASTM workgroups helped refine and improve the clarity of the methods, as well as modify formulas for quantitative efficacy method calculations. The results of these efforts will help inform EPA's method development activities in FY 2020 and beyond.

Through ongoing efficiency reviews of its analytical data processing procedures, the Analytical Chemistry Laboratory has streamlined its analytical data processing procedures by utilizing automated data transfer from the instruments and customized spreadsheets for data reporting. In FY 2020, the Analytical Chemistry Laboratory will continue to identify ways to improve efficiency in the laboratory, including streamlining data review processes according the ISO-17025 guidelines and using electronic media to store analytical data. By identifying efficiencies in the analytical processing procedures, the Analytical Chemistry Laboratory expects to reduce turn-around time and errors commonly seen with manual data processing, thus providing the Agency with more timely, traceable and accurate data for use in assessing risks of pesticides to human health and the environment.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$121.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, benefit costs, and for laboratory fixed costs.

- (+$536.0 / +3.1 FTE) This net program change shifts 3.1 FTE and associated payroll from the Pesticides: Protect the Environment from Pesticide Risk Program to adjust FTE levels in accordance with actual utilization in support of protecting human health from pesticide risk.

- (-$787.0) This program change is a reduction in funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

Statutory Authority:

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

Pesticides: Protect the Environment from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$38,380.7	$41,081.0	$30,668.0	-$10,413.0
Science & Technology	***$2,309.7***	***$3,072.0***	***$2,257.0***	***-$815.0***
Total Budget Authority	$40,690.4	$44,153.0	$32,925.0	-$11,228.0
Total Workyears	288.1	257.1	268.4	11.3

Total work years in FY 2020 include 85.0 FTE funded by pesticide maintenance and registration service fees.

Program Project Description:

Section 3(c)(5) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices, the product "will also not generally cause unreasonable adverse effects on the environment." FIFRA defines "unreasonable adverse effects on the environment," as "any unreasonable risk to man or the environment, considering the economic, social, and environmental costs and benefits of the use of any pesticide."[34]

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

EPA's Pesticide Program operates two laboratories, the Microbiology Laboratory[35] and the Analytical Laboratory,[36] that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development, and validation efforts. These laboratories will continue to provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to ensure the protection of the environment from pesticide risk.

[34] Federal Insecticide, Fungicide and Rodenticide Act. Sections 2 and 3, Definitions, Registration of Pesticides (7 U.S.C. §§ 136, 136a). Available online at: http://www.epa.gov/opp00001/regulating/laws.htm.
[35] For more information, please see: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[36] For more information, please see: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA must determine that food and residential uses of pesticides are safe. For other risk concerns, EPA must balance the risks of the pesticides with benefits provided from the use of the product. To avoid unreasonable risks, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying some or all uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may require monitoring of environmental conditions, such as effects on water sources or the development and submission of additional laboratory or field study data by the pesticide registrant.

In addition to FIFRA responsibilities, the Agency has responsibilities under the Endangered Species Act (ESA).[37] Under ESA, EPA must ensure that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or result in jeopardy to the continued existence of species listed by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS). Where risks are identified, EPA must work with FWS and NMFS in a consultation process to ensure these pesticide registrations also will meet ESA standard.

The national program laboratories of EPA's Pesticide Programs provide a diverse range of environmental data that the Agency uses to make informed regulatory decisions. The Analytical Chemistry Laboratory[38] and the Microbiology Laboratory[39] each provide critical laboratory testing and support activities to assist the decision-making processes of the Agency. The laboratories develop methods to test the efficacy of antimicrobial pesticides, evaluate the efficacy of antimicrobial products, and validate analytical chemistry methods to ensure that EPA, the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), and the states have reliable methods to measure and monitor pesticide residues in food and in the environment.

In FY 2020, the Microbiology Laboratory will work with the Department of Homeland Security and Department of Agriculture to evaluate various porous materials (wood, concrete, fabric, tile etc.) which simulate use sites in livestock, poultry and other food animal rearing operations. Outbreaks of avian influenza, swine fever etc. can be devastating to American agriculture and survival of these viruses on porous materials is not well understood. Currently, due to the unavailability of a quantitative test method, the response to an animal pathogen outbreak and submission of requests under FIFRA section 18 to address these outbreaks, relies on published, antiquated data, and the use of commonly available chemicals for remediation (e.g., citric acid, chlorine etc.) without extensive knowledge of their environmental impact from such widespread use. The goal of the laboratory is to develop a rapid efficacy test method for animal viruses to provide a tool for the development of efficacy data on porous materials. The availability of the

[37] The Endangered Species Act of 1973 sections 7(a)(1) and 7 (a)(2); Federal Agency Actions and Consultations (16 U.S.C. 1536(a)). Available at U.S. Fish and Wildlife Service, Endangered Species Act of 1973 internet site: http://www.fws.gov/endangered/laws-policies/section-7.html.
[38] Additional information on EPA's Analytical Chemistry Laboratory can be found at: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.
[39] Additional information on EPA's Microbiology Laboratory can be found at: https://www.epa.gov/aboutepa/about-microbiology-laboratory.

method to the regulated community will support more effective, targeted chemistries and refined antimicrobial application techniques for porous materials, and the development of new products following contemporary regulatory requirements.

In FY 2020, the Analytical Chemistry Laboratory will continue to focus on analytical method development and validations as well as special studies to address specific short-term, rapid-turnaround priority issues. The laboratory also will continue to provide technical and analytical assistance to EPA's Enforcement and Compliance Assurance program and EPA regional offices in support of their enforcement cases. If requested by the United States Geological Survey (USGS), analytical support will continue in the sixth year of a multi-year multi-agency (EPA and USGS) project to assess the quality of rivers and streams across the United States. These data will allow USGS and EPA to study the patterns of exposure of agricultural and urban ecosystems to pesticides. The lab will continue to support pesticide registration review and U.S. tarp manufacturers by reviewing the permeability data of fumigants through newly manufactured tarps which impact pesticide buffer zones. In an effort to reduce emission of soil fumigants into the air, the Agency established certain buffer zone credits based on the tarps' permeability: the lower the permeability of a tarp, the lower the emission of fumigants into the air, and more fumigant remains in the soil for pest control. Thus, EPA can allow a greater buffer zone reduction credit. Pollinators are critical to agricultural productivity and have experienced declining population in recent years. The Analytical Chemistry Laboratory will continue to work to understand the effects on pollinators as part of the Program's existing registration and registration review processes.

In FY 2020, the Analytical Chemistry Laboratory will continue to provide national technical analytical support for the development of data needed for the Pesticides Program's risk assessments and for FIFRA section 18 emergency exemptions, and to perform studies for use in risk mitigation. The laboratory also provides analytical assistance and technical advice to all EPA's regional offices for use in enforcement cases and reviews and validates analytical methods or studies submitted as part of a pesticide registration.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$48.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, benefit costs, and for laboratory fixed costs.

- (-$84.0 / -0.8 FTE) This program change reflects a reduction for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

- (-$683.0 / -4.1 FTE) This program change shifts 4.1 FTE and associated payroll to the Pesticides: Protect Human Health and Realize the Value of Pesticide Availability Programs to adjust FTE levels in accordance with actual utilization.

Statutory Authority:

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

Pesticides: Realize the Value of Pesticide Availability

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$7,004.6	$8,226.0	$5,571.0	-$2,655.0
Science & Technology	***$362.0***	***$424.0***	***$615.0***	***$191.0***
Total Budget Authority	$7,366.6	$8,650.0	$6,186.0	-$2,464.0
Total Workyears	34.5	36.8	46.3	9.5

Total work years in FY 2020 include 10.5 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

EPA's Chemical Safety and Pollution Prevention's national program laboratories make significant contributions to help the Agency realize the value of pesticides. This program operates two laboratories, the Microbiology Laboratory,[40] and the Analytical Laboratory,[41] that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development, and validation efforts.

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

The Analytical Chemistry Laboratory[42] provides scientific, laboratory, and technical support through chemical analyses of pesticides and related chemicals to protect human health and the environment. The Analytical Chemistry Laboratory responsibilities include:

- Providing technical support and chemical analyses of pesticides and related chemicals;
- Developing new multiresidue analytical methods; and
- Operating the EPA *National Pesticide Standard Repository*, which collects and maintains pesticide standards (*i.e.*, samples of pure active ingredients or technical grade active ingredients, regulated metabolites, degradates, and related compounds.)

These laboratories provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to ensure the value of pesticide availability is realized.

[40] For more information, please see: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[41] For more information, please see: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.
[42] https://19january2017snapshot.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl_.html.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will realize the benefits of pesticides by ensuring the continued operation of the National Pesticide Standard Repository. The laboratories will continue to conduct chemistry and efficacy evaluations for antimicrobials. As the recognized source for expertise in pesticide analytical method development, EPA's laboratories will continue to provide quality assurance review, technical support, and training to EPA's regional offices, state laboratories, and other federal agencies that implement the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

In FY 2020, the Microbiology Laboratory will continue to evaluate Section 18 emergency exemptions and novel protocol requests for new uses and novel pathogens. The laboratory will continue the development of data and methods to support Section 18s for high consequence animal pathogens (e.g., avian influenza, foot and mouth diseases, etc.). In addition, the continued work to develop new methods for emerging pathogens (*Legionella*, *Candida auris,* etc.) provides a pathway for registrants to add new claims to existing antimicrobial pesticides. In some cases, the methods lead to the development of new products when currently registered formulations are not effective against emerging pathogens. The laboratory anticipates supporting up to 25 requests in support of these activities during FY 2020.

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

<u>Evidence and Evaluation</u>

The Microbiology Laboratory will continue to refine and develop methods to support EPA's Section 3 and Section 18 regulatory programs. In FY 2018, in support of these efforts, the Laboratory provided a new quantitative efficacy test method to USDA for evaluating chemicals against high consequence animal pathogens on hard and porous surfaces. Following training, demonstrations and technical consultation from the Microbiology Laboratory, USDA successfully produced data to support Section 18 requests for avian influenza and foot & mouth disease using the Microbiology Laboratory's method. The results of USDA's review of the method will be used to help inform EPA's method development activities for other emerging and high consequence pathogens in FY 2020 and beyond.

The Analytical Chemistry Laboratory maintains EPA's National Pesticide Standard Repository per CFR part 158. This lab collects and maintains an inventory of analytical standards of registered pesticides in the United States, as well as some that are not currently registered. EPA provides the pesticide standards (approximately 4,000 to 5,000 annually) to qualified federal, state, territorial, and tribal laboratories for food and product testing and environmental monitoring. In FY 2018, efficiency reviews showed that the turnaround time for a standard request is typically

approximately 15 working days. Using the results of the efficiency review, in FY 2020 and beyond, the Analytical Chemistry Laboratory will implement procedural changes to identify areas for improvement and reduce the turnaround time to 12 days (for those pesticide standard requests that are not complicated) to help federal agencies, states and tribes laboratories expedite enforcement efforts.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$44.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$49.0) This program change reflects an increase in funding for pesticide laboratory operations and maintenance activities.

- (+$186.0 / +1.0 FTE) This program change shifts 1.0 FTE and associated payroll from the Pesticides: Protect the Environment Program to adjust FTE levels in accordance with actual utilization in support of realizing the value of pesticide availability.

Statutory Authority:

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

Research: Air and Energy

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$87,503.9***	***$91,906.0***	***$31,707.0***	***-$60,199.0***
Total Budget Authority	$87,503.9	$91,906.0	$31,707.0	-$60,199.0
Total Workyears	273.9	276.8	153.8	-123.0

Program Project Description:

The Air and Energy (A-E) Research Program provides scientific information to EPA program and regional offices. The 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 the result of a collaboration with, and supportive of, EPA's programs and regional offices, states and tribes.

The resources requested for A-E will support the analysis of research data, as well as the publication of scientific journal articles to disseminate findings from prior EPA research related to air quality, its impacts to health and the environment, and resilience. The Program also will offer critical support to provide essential science and tools for policy decisions and public awareness on the topics described below. The A-E Research Program relies on successful partnerships with other EPA research programs, offices, academic and industry researchers, states, local and private sector organizations, as well as key federal agencies.

Recent accomplishments in the A-E Research Program include:

- **Per- and Polyfluorinated Substances (PFAS) Research:** EPA conducts research across programs on PFAS. PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. There is evidence to suggest that PFAS move through the air from various sources, as both particulate and volatile compounds, contributing to overall PFAS fate, transport, and exposure.[43] Within the A-E Program, EPA is developing and piloting sampling and analytical chemistry methods to identify and quantify PFAS in stack emissions and in ambient air. This research is being done in collaboration with EPA's Air Program, EPA Regions 1 and 4, and with the states of New Hampshire and North Carolina. This research will enable federal, state and tribal officials to detect and measure PFAS travelling through the air.

[43] For more information on the environmental fate & transport of PFAS, please see: https://pfas-1.itrcweb.org/wp-content/uploads/2018/03/pfas_fact_sheet_fate_and_transport__3_16_18.pdf.

- **Evaluating the Health Effects of Complex Air Pollution Mixtures:** EPA has previously documented the health effects associated with individual air pollutants.[44] Predicting public health impacts from mixtures of pollutants remains a major challenge in air quality assessment and communication with the public. EPA conducted a series of studies[45] comparing the health effects of two laboratory-generated atmospheres containing different complex pollutant mixtures that are representative of poor air quality across the United States. The results of the studies indicated that cellular DNA is altered when exposed to simulated air pollution mixtures that produce high ozone levels. High ozone and particulate matter levels were found to cause an irregular heartbeat and impacted the heart's ability to function effectively. Further study of air pollution mixtures may provide opportunities to create strategies that optimally reduce emissions of air pollutants that impair human health.

- **Wildland Fire Research:** Within the last decade, wildfires have increased in frequency and size and now burn more than 7 million acres annually, 40 percent more than previous decades.[46] Wildland fires are a national challenge impacting public and environmental health, as well as the economy. In FY 2018, the Agency conducted research to optimize the use of prescribed fire to reduce health and property risk from uncontrolled wildfires. Research indicates that proper use of prescribed fires can result in substantial decreases in air pollutant emissions, up to four times lower[47]. Through laboratory and field sampling, researchers evaluated fuel, meteorological and ignition properties to generate fires that produce less air pollution. This field work was done in Florida, Kansas, and Oregon to develop methods for ground- and aerial-based sampling for a comprehensive array of pollutants. Researchers added small sensors and other samplers to lightweight instruments which were carried aloft or used in ground applications. Researchers used these along with larger, ground-based instruments, to extensively characterize gaseous and particle emissions. Sufficient understanding of these effects can improve the use of prescribed burning for agricultural and fuel reduction purposes, while minimizing downwind impacts on air quality attainment in surrounding communities.

- **Helping States Reduce Non-Attainment Areas:** Several areas in the U.S. still face challenges meeting national air quality standards.[48] Fundamental science gaps remain in comprehending the unique chemistry and meteorology specific to these locations, which hinder states' abilities to improve air quality. Advanced monitoring in collaboration with states provides valuable insights into the complex interactions between emissions, chemistry, and meteorology in these nonattainment areas. This insight enables the development of effective solutions. EPA partnered with state agencies to conduct short-term, intensive field studies to understand high wintertime $PM_{2.5}$ levels and ultimately address ozone issues in states bordering Lake Michigan, the Long Island Sound, and the area around Salt Lake City. The insights gained in these studies will help states improve air quality and public health by providing a better understanding of site-specific air pollution sources, meteorology and chemistry.

[44] For more information, please see: https://www.epa.gov/isa.
[45] To access the studies, please see: https://pubs.acs.org/doi/abs/10.1021/acs.est.7b04857.
[46] For more information, please see: http://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html.
[47] For more information, please see: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5120849/.
[48] https://fas.org/sgp/crs/misc/IN10891.pdf.

- **Nutrient Pollution Research:** Nutrient pollution is a multi-media, multi-pollutant problem facing the U.S. with far-ranging consequences for environmental conditions, economic prosperity, and human health and well-being.[49] EPA's A-E research is addressing nitrogen and co-pollutant loadings to watershed via atmospheric deposition. This research will provide information and tools that EPA's Office of Water, Office of Air and Radiation, and Regions, as well as states, tribes and communities can use to reduce atmospheric deposition of nitrogen and co-pollutants, to protect both airsheds and watersheds in an economically feasible manner.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3 Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. The A-E Program features three related research topics that include research areas that support EPA's mission to protect human health and the environment, fulfill the Agency's legislative mandates, and advance cross-agency priorities. The A-E Program will continue to measure progress toward environmental health goals and translate research results to inform communities and individuals about measures that can be taken to reduce the impacts of air pollution. In addition, research personnel will continue to analyze existing data from EPA on air quality, its impacts to health and the environment, and research to adapt to and prepare for extreme events and environmental change.

Research Planning: EPA's Board of Scientific Counselors (BOSC) evaluates performance and provides feedback to the Agency for the A-E Program. The A-E Program, BOSC, and Science Advisory Board will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising EPA on developing its strategic research direction and Strategic Research Action Plans for FY 2019-2022.

The Agency collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Department of Defense, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and others. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators.

[49] For more information, please see: https://www.epa.gov/nutrientpollution/effects.

Performance Measure Targets:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	77	80	Percent
Actual						77			
Numerator						171			Products
Denominator						222			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$2,234.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support and benefit costs.

- (-$31,324.0 / -75.7 FTE) This program change eliminates air quality research.

- (-$17,186.0 / -47.3 FTE) This program change reduces climate change research.

- (-$9,455.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2020.

Statutory Authority:

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

Research: Safe and Sustainable Water Resources

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$104,163.5***	***$106,257.0***	***$69,963.0***	***-$36,294.0***
Total Budget Authority	$104,163.5	$106,257.0	$69,963.0	-$36,294.0
Total Workyears	372.4	374.7	266.4	-108.3

Program Project Description:

The Safe and Sustainable Water Resources (SSWR) Research Program is developing cost-effective, innovative solutions to current, emerging, and long-term water resource challenges for complex chemical and microbial contaminants. The SSWR Research Program uses a systems approach to develop scientific and technological solutions for the protection of human health and watersheds. The research is being conducted in partnership with other EPA programs, federal and state agencies, academia, non-governmental agencies, public and private stakeholders, and the scientific community. This approach maximizes efficiency, interdisciplinary insights, and integration of results.

SSWR is dedicated to sustaining EPA's focus and commitment to robust research and scientific analysis to inform policy making under the authorities of the Safe Drinking Water Act and Clean Water Act. Our research supports EPA's Water Program in ensuring clean and safe waters through improved water infrastructure and sustainable water resource management.

The SSWR Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement.

Recent accomplishments of the SSWR Program include the following:

- **Contaminants of Emerging Concern (CECs):**[50] Wastewater effluents contain traces of chemicals that have been disposed of in the sink or toilet. These contaminants, including pharmaceuticals and per- and polyfluoroalkyl substances (PFAS), can persist downstream, ending up in drinking source waters as chemical mixtures. SSWR researchers have been conducting studies to monitor the occurrence of these CECs in wastewater, surface waters, groundwater, and drinking water, with some studies being done in collaboration with the U.S. Geological Survey (USGS). The combined research efforts of EPA and USGS

[50] For more information, please see epa.gov/water-research/determining-prevalence-contaminants-treated-and-untreated-drinking-water.

produced a data set of approximately 700 chemically characterized CECs, and resulted in a group of the most highly characterized watersheds that have been impacted by wastewater. Research efforts to monitor the effects of chemical mixtures continue, which will increase our understanding of wastewater effluent impacts to human and aquatic health.

- **Drinking Water Treatment:**[51] To help utilities with compliance challenges and provide clean drinking water to their communities, SSWR researchers developed, patented, and pilot tested an affordable and easy-to-use drinking water treatment process specifically designed for small systems. It uses naturally occurring microorganisms to remove multiple contaminants in a single treatment process without generating hazardous waste. The technology has now been marketed commercially by a private company and highlights a successful technology transfer from a federal agency to a private sector company.[52] In order to continue meeting the relevant needs of small systems, SSWR researchers are currently conducting additional pilot studies in several small, rural communities.

- **Water Reuse:**[53] To augment water availability some states, utilities, and communities are developing innovative ways to manage and treat water for non-potable (non-drinking) use through water reuse, fit-for-purpose water treatment, and wastewater resource recovery. SSWR scientists are part of the *National Blue Ribbon Commission for Onsite Non-potable Water Systems,*[54] which works with a group of utilities and public health agencies interested in adopting decentralized non-potable water reuse approaches to develop a regulatory framework, a new business model for utilities, and a research needs summary. This effort, along with SSWR's research on microbial risk assessment models, human health impacts, and the performance and costs of non-potable water reuse systems, supports the continued expansion of decentralized water reuse and has helped facilitate the development of on-site, non-potable water reuse guidelines.

- **Recreational Water Quality:**[55] SSWR scientists are developing microbial source tracking (MST) tools that can help characterize fecal pollution from different animal groups. When present at recreational beaches, fecal pollution can harbor disease causing pathogens leading to unsafe conditions and economic loss for communities that rely on clean and safe waters. Recently, the City of Santa Cruz, California used an EPA developed procedure to help identify a chronic, but manageable source of fecal pollution at their beaches. City of Santa Cruz officials reported that the tool saved their community approximately $450,000 in laboratory testing costs and played a key role in a 50 percent reduction of beach contamination postings, with further decreases expected in the future. In addition, the Centers for Disease Control and Prevention (CDC) has started using EPA developed MST tools for waterborne disease outbreak investigations, demonstrating how EPA and CDC interagency collaborations can provide invaluable assistance to communities across the country.[56]

[51] For more information, please see: https://www.epa.gov/water-research/small-drinking-water-systems-research.
[52] For more information, please see: https://adedgetech.com/nomonia-biological-filtration.
[53] For more information, please see: uswateralliance.org/initiatives/commission.
[54] For more information, please see: http://uswateralliance.org/initiatives/commission.
[55] For more information, please see: youtube.com/watch?v=sFEZ6YoeyMI.
[56] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=341843.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3 Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. The SSWR Research Program's work in FY 2020 will focus explicitly on efforts integral to achieving the Agency's priorities and informing EPA's implementation of key environmental regulations by leveraging research in the areas of nutrients, harmful algal blooms, watersheds and water infrastructure (including water reuse).

High priority SSWR efforts in FY 2020 include:

- Assisting states, communities, and utilities in addressing stormwater and wastewater infrastructure needs through applied models and technical assistance. Developing risk assessments on stormwater capture for groundwater augmentation and reuse.

- Evaluating the fate and potential effects of microplastics on coral reefs and developing methods to extract and quantify microplastics in coastal estuarine sediments to assess potential impacts on benthic organisms. Research is planned to further investigate the nature, severity, exposure, and effects of microplastic and microfiber pollution in the aquatic environment to inform Clean Water Act regulatory programs and voluntary approaches that address the proliferation of plastics in marine and freshwater systems.

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

- Improving methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters.

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

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

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

In addition to the activities listed above, EPA also conducts research across programs on PFAS, lead, and nutrients.

Per- and polyfluoroalkyl substances (PFAS): PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes and local communities in understanding and managing risks associated with these chemicals. A significant challenge for risk managers at the state and local level is how to identify and remove or treat PFAS chemicals, which are impacting drinking water supplies. There is a general lack of knowledge regarding how to measure and quantify different PFAS chemicals in water, how to remove or treat PFAS chemicals when detected, and how to estimate the cost of different treatment alternatives so that utilities can make informed investment decisions. Within the SSWR Program, EPA is: (1) developing and validating standard methods for measuring different PFAS in water; (2) reviewing available literature on effectiveness and cost data for different water treatment technologies applied to different PFAS chemicals; and (3) conducting pilot- and bench-scale testing of the most promising technologies to further elucidate on their effectiveness. This work is being done in collaboration with water utilities and water treatment technology suppliers. The results of this work will be posted to EPA's public Drinking Water Treatability Database so the information will be widely available to stakeholders.[57]

Lead: EPA, CDC, and the American Academy of Pediatrics unanimously agree that there is no safe level of lead in a child's blood, and that even low levels can result in behavior and learning problems, lower IQ, and other health effects.[58] In response to overwhelming scientific consensus and continued public health concern, reducing childhood lead exposure is one of the highest priorities for EPA. SSWR research focuses on (1) establishing reliable models for estimating lead exposure from drinking water, (2) developing improved sampling techniques and strategies for identifying and characterizing lead in plumbing materials, including lead service lines, (3) developing guidance on optimizing lead mitigation strategies, and (4) testing and evaluation of treatment processes for removing lead from drinking water. The overall impact of this research will be providing information and tools that EPA's Office of Water and regions, as well as, states, tribes, utilities, and communities can use to minimize or eliminate lead exposure in drinking water.

Nutrient Pollution: Nutrient pollution is the most widespread water quality problem facing the US with far-ranging consequences for human and animal health and economic prosperity. [59] SSWR research comprehensively addresses the problems of excess nutrients in waterbodies, including harmful algal blooms. The overall impact of this research will be to provide information and tools that EPA's Office of Water, Office of Air and Radiation, and regions, as well as, states, tribes, and communities can use. SSWR information and tools are then used to reduce nutrient loadings, address legacy nutrient issues, and protect and restore watersheds and waterbodies that are sensitive to nutrient pollution in an economically feasible manner.

[57] For more information, please see: https://iaspub.epa.gov/tdb/pages/general/home.do.
[58] For more information, please see the following: https://www.epa.gov/lead.
[59] For more information please see: https://www.epa.gov/nutrientpollution/problem.

Research Planning: EPA has established a standing subcommittee under EPA's BOSC for the SSWR Program to evaluate its performance and provide feedback to the Agency. In addition, EPA will meet regularly with both the BOSC and the Science Advisory Board to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on developing its strategic research direction and Strategic Research Action Plans for FY 2019-2022.

EPA collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Department of Defense, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and others. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators.

Performance Measure Targets:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	77	80	Percent
Actual						77			
Numerator						171			Products
Denominator						222			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$893.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$246.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities.

- (-$9,124.0 / -30.0 FTE) This program change streamlines funding to the Program for research related to technical support and site-specific support; communication and technology transfer efforts; translation of nutrient modeling and monitoring data; and research assisting states to prioritize watersheds and differentiating sources of nutrient overloading.

- (-$24,154.0 / -78.3 FTE) This program change refocuses resources from research on recovering resources (e.g. nutrients) from wastewater, transformative water systems and life cycle analysis, and research on advancing water systems technologies for FY 2020.

- (-$3,663.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2020.

Statutory Authority:

Safe Drinking Water Act (SDWA) § 1442(a)(1); Clean Water Act §§ 101(a)(6), 104, 105; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203; Title II of Ocean Dumping Ban Act of 1988 (ODBA); Water Resources Development Act (WRDA); Wet Weather Water Quality Act of 2000; Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA); National Invasive Species Act; Coastal Zone Amendments Reauthorization Act (CZARA); Coastal Wetlands Planning, Protection and Restoration Act; Endangered Species Act (ESA); North American Wetlands Conservation Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Toxic Substances Control Act (TSCA).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities
Program Area: Research: Sustainable Communities
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$131,757.3***	***$134,327.0***	***$53,631.0***	***-$80,696.0***
Leaking Underground Storage Tanks	$311.3	$320.0	$424.0	$104.0
Inland Oil Spill Programs	$695.6	$664.0	$511.0	-$153.0
Hazardous Substance Superfund	$11,023.3	$11,463.0	$10,977.0	-$486.0
Total Budget Authority	$143,787.5	$146,774.0	$65,543.0	-$81,231.0
Total Workyears	439.1	440.9	294.1	-146.8

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program conducts research to support regulatory activities, management of solid waste, and remedial actions. SHC provides on-demand technical support at federal, tribal or state-led cleanup sites and during emergencies. SHC's research products are unique in that they account for the interrelationships between social, economic, health, ecological, and environmental factors.

Program scientists conduct 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 health outcomes. These tools aim to minimize negative unintended consequences to human health and the environment and promote more robust and efficient infrastructure in built and natural environments.

The SHC Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of EPA program and regional offices, states, and tribes; and is implemented with their active collaboration and involvement.

Recent accomplishments of the SHC Program include:

- **Report on Sustainable Materials Management Options for Industrial, Construction & Demolition, and Municipal Materials.**[60] Material reuse is a potential source of savings in multiple sectors, but there are ongoing questions about how to do so safely and efficiently. This research addresses alternatives to help practitioners, regulators, and other stakeholders manage construction and demolition debris (CDD) in a manner that is protective of human health and the environment. This effort will build on previous

[60] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=342507&Lab=NRMRL.

materials management research, and will utilize life cycle analysis methods, as well as evaluation of human health and resource impacts.

- **Use Cases Demonstrating Uses of *EnviroAtlas*.** *EnviroAtlas*[61] provides a large volume of detailed Geographic Information System (GIS) information for users inside and outside the Agency and use cases that provide users with step-by-step applications of the data found in the *EnviroAtlas* to solve problems. Examples include using *EnviroAtlas* resources: (1) to determine where to address impaired waters, (2) in a Health Impact Assessment, (3) to determine where to best conserve land for biodiversity conservation, (4) to address Superfund and other contaminated site reuse, (5) to determine where to invest in ecosystem services markets, and (6) in the classroom. *EnviroAtlas* use cases are presented as GIS Story Maps or as reports and are available with other tutorial materials on the *EnviroAtlas* website. [62]

- **Report on Comparative Evaluation of Contaminant Mass Flux and Groundwater Flux Measurements in Fractured Rock Using Passive Flux Meters.[63]** Because ground water generally moves slowly, contamination often remains undetected for long periods of time. This makes cleanup of a contaminated groundwater supply difficult and expensive; more information on the subject is always in high demand.[64] At contaminated groundwater sites, groundwater flux and contaminant mass flux are important parameters. These parameters are used to understand the significance of contaminant loading to an aquifer, evaluate contaminant fate and transport, assess risk, design a groundwater remediation system, and assess remedial performance. This report summarizes a joint project among EPA headquarters and regional scientists to assess the ability of two existing technologies to measure groundwater flux and contaminant mass flux in a fractured bedrock setting and compare the results between the technologies. Results obtained using investigative methods are typically deployed at Superfund sites to characterize fractured bedrock hydrogeology.

- **Advances in the production of Platform Chemicals from Waste Cellulosic or Lignin Biomass.** There is currently no beneficial reuse for cellulosic and lignin waste material (forest-based waste biomass, demolition materials, crop waste) that are discarded in landfills. When burnt for waste volume reduction and energy recovery, the practice can pollute the air by generating hazardous waste (small particles and toxic organics) emission. This report describes suitable and beneficial use for these waste materials which are renewable and biodegradable. The information will be useful for informing practitioners' decisions that direct former waste material towards a beneficial purpose while minimizing other environmental impacts.

[61] For more information, please see: https://www.epa.gov/enviroatlas.
[62] For more information, please see: https://www.epa.gov/enviroatlas/enviroatlas-use-cases.
[63] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=342591&Lab=NRMRL.
[64] For more information, please see: https://www.epa.gov/sites/production/files/2015-08/documents/mgwc-gwc1.pdf..

- **Asthma Intervention Study of the Removal of Chemical and non-Chemical Stressors and Educational Outreach to Vulnerable Communities Regarding the Results.**[65] In the United States, around eight percent of children and adults suffer from asthma[66], impacting quality of life throughout the country. SHC's research in this area fills a gap in asthma intervention. It focuses on the removal of chemical and non-chemical stressors and informs educational outreach to vulnerable communities regarding the results.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. More specifically, SHC's FY 2020 research will focus on conducting research to support regulatory activities and protocol development for EPA's Office of Land and Emergency Management, EPA's regional offices, and in support of state-delegated programs. SHC will provide on-demand technical support at federal-, tribal-, or state-managed cleanup sites, as well as assistance during emergencies. The Agency conducts health, environmental engineering, and ecological research, and prepares planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes. Also, EPA scientists will assess the environmental and health impacts of proposed projects (e.g. health impact assessments) on vulnerable groups such as children, tribes, and environmental justice communities.

Resources will support the research personnel who analyze existing data and publish scientific journal articles to disseminate findings associated with the data. Research efforts will include *EnviroAtlas* (a web-based atlas of ecosystem services), conducting a valuation of ecosystem services, studying how ecosystem services impact human health and community resilience, measuring impacts on vulnerable populations (e.g. children), and the remediation of contaminated sites.

Per- and polyfluoroalkyl substances (PFAS): PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. A significant challenge for risk managers at the state and local level is how to remove or treat PFAS at sites contaminated through a) the use of Aqueous Film-Forming Foam (AFFF)[67], a common fire-fighting method at military bases and airports, or b) industrial operations which create, consume, or dispose of PFAS containing compounds. Within the SHC Program, EPA is developing and testing methods for site remediation including treating or removing PFAS from groundwater and soil. The research includes examination of *in situ* chemical transformation that may take place to better understand which PFAS chemical precursors might result in the highest risk outcomes. This work is being done in collaboration with the Department of Defense through participation in their Strategic Environmental Research and Development Program.[68]

[65] For more information, please see: https://www.epa.gov/children/childrens-health-research-regarding-asthma.
[66] For more information, please visit: https://www.cdc.gov/nchs/fastats/asthma.htm.
[67] For more information, please see: https://pfas-1.itrcweb.org/wp-content/uploads/2018/10/pfas_fact_sheet_afff__10_3_18.pdf.
[68] About SERDP: https://www.serdp-estcp.org/About-SERDP-and-ESTCP/About-SERDP.

The SHC Program also is conducting research 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, SHC supports a technical support and 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.

Lead Research: EPA, CDC, and the Academy of Pediatrics unanimously agree that there is no safe level of lead in a child's blood, and that even low levels can result in behavior and learning problems, lower IQ, and other health effects[69] . In response to overwhelming scientific consensus and continued public health concerns, and federal coordination efforts, reducing childhood lead exposure is one of the highest priorities for EPA. The Agency has joined 17 other federal agencies in the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts[70]. The SHC Program will implement three actions under this goal:

1. Enhancing and applying data and tools (e.g., models or approaches) to determine the key drivers of blood lead levels from water, air, soil, dust, and food exposures to inform lead regulatory decisions and site assessments.
2. Generating data, maps and tools to identify and prioritize communities or locations to help focus efforts to reduce children's blood lead levels.
3. Generating data to address critical gaps for reducing uncertainty in lead modeling and mapping for exposure/risk analyses and for estimating population-wide health benefits of actions to reduce lead exposures.

EPA's research in this area, is essential to support ongoing EPA regulatory and non-regulatory efforts, as well as, filling in the data gaps for federal partners, states, tribes, and local communities.

Research Planning: EPA's Board of Scientific Counselors (BOSC) evaluates performance and provides feedback to the Agency for the SHC Program. The SHC Program, BOSC, and Science Advisory Board will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising EPA on its strategic research direction midway through the 4-year cycle of StRAPs.

EPA collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory

[69] For more information, please see the following: https://www.epa.gov/lead, https://www.cdc.gov/nceh/lead/default.htm, and https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/lead-exposure/Pages/Lead-Exposure-in-Children.aspx.
[70] https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure.

Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	77	80	Percent
Actual						77			
Numerator						171			Products
Denominator						222			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3,182.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$16.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities.

- (-$34,228.0 / -74.0 FTE) This program change streamlines research support in FY 2020 by eliminating work related to the following activities: The Ecotox database; EPA's Report on the Environment (ROE); and the inclusion of a data layer in EnviroAtlas on ecosystem services and their beneficiaries.

- (-$17,574.0 / -57.7 FTE) This program change streamlines research efforts across environmental media by eliminating work related to: Research on the life cycle of materials in commerce; and the People, Prosperity & the Planet (P3) program for college-level competition.

- (-$16,173.0 / -24.7 FTE) This program change streamlines research on the following: the Health Impact Assessment (HIA) approach for assessing the impact of major planned infrastructure development (e.g. highway construction) at a city scale of governance; research into the mechanisms of chemical exposures and effects on human health outcomes and well-being, especially research into cumulative effects; research into the uptake and distribution of contaminates (e.g., lead, arsenic) within vulnerable populations; research into the environmental component of children's asthma.

- (-$9,523.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2020.

Statutory Authority:

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

Research: Chemical Safety and Sustainability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$328.4	$0.0	$0.0	$0.0
Science & Technology	***$79,587.9***	***$90,407.0***	***$63,877.0***	***-$26,530.0***
Total Budget Authority	$79,916.3	$90,407.0	$63,877.0	-$26,530.0
Total Workyears	276.9	281.2	240.9	-40.3

Total Workyears in FY 2020 include 2.0 FTE funded by TSCA fees.

Program Project Description:

EPA's Chemical Safety for Sustainability (CSS) Research Program provides information, tools and methods to make better-informed, more-timely decisions about the tens of thousands of chemicals circulating in the United States, many of which have not been thoroughly evaluated for potential risks to human health and the environment.[71] CSS products strengthen the Agency's ability to evaluate and predict human health and ecological impacts from the use and disposal of manufactured and naturally occurring chemicals and their by-products.

The CSS Program works with multiple EPA program offices to plan and develop innovative research that directly addresses agency challenges and informs EPA decisions regarding chemicals. Products delivered by the CSS Program inform agency program offices as they implement environmental regulations that govern agency actions, including the evaluation of existing and new chemicals (TSCA), development and use of alternative testing protocols (TSCA, FIFRA, FQPA, FFDCA), chemical prioritization (TSCA, SDWA), evaluation of pesticide registrations (FIFRA), and mitigation activity at Superfund sites (CERCLA).

The CSS Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement.

Recent Accomplishments of the CSS Program include:

- **Release of the TSCA Alternative Toxicity Testing Strategy Document, June 2018:**[72] Jointly developed by EPA's Office of Research and Development and the Office of Chemical Safety and Pollution Prevention, the strategy document promotes development

[71] For more information, please see: https://www.epa.gov/tsca-inventory/about-tsca-chemical-substance-inventory.
[72] For more information, please see: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/alternative-test-methods-and-strategies-reduce.

and implementation of test methods within the TSCA program that are better, faster, less expensive, and reduce the need for animal use.

- **New Methods to Screen and Prioritize Chemicals for Developmental Neurotoxicity:**[73] Nearly 1 in 6 children in the U.S. are affected by neurodevelopmental disability,[74] but less than one percent of chemicals have been evaluated as potential neurotoxicants.[75] EPA's new screening methods provide a means through which to fill those essential data gaps. Data produced from new in vitro testing methods will be important for the implementation of TSCA as amended by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act*, which requires consideration of susceptible subpopulations, including children.

- **Publication in *Scientific Data* on the Chemical and Products Database (CPDat):**[76] This database is intended for use by risk assessors of chemical and product safety. It provides data to inform TSCA-related chemical exposure estimates for more than 75,000 chemicals and 15,000 consumer products.

In addition to these specific accomplishments, CSS continues to work with the Agency's Office of Chemical Safety and Pollution Prevention (OCSPP), providing dedicated staff for the successful implementation of TSCA as amended by the *Lautenberg Chemical Safety for the 21st Century Act*.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3 Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the CSS Research Program will continue to produce innovative tools that accelerate the pace of data-driven chemical evaluations, enable EPA and state decisions to be environmentally sound, protective of public health, and support sustainable innovation of chemicals. CSS products will continue to leverage its key research areas to inform the Agency's implementation of key environmental regulations and to address contaminants of emerging concern, such as per- and polyfluoroalkyl Substances (PFAS) and focus on efforts integral to achieving the Administrator's priorities.

Computational Toxicology (*CompTox*): EPA continues to be a leader in developing innovative computational and high-throughput methods for efficiently screening large numbers of chemicals, including endocrine disrupting chemicals, in a shorter amount of time. These methods cost less, reduce the need for using vertebrate animals, and expand the number of relevant biological endpoints represented. In FY 2020, *CompTox* research will provide essential support to Agency activities across diverse regulatory frameworks (e.g. TSCA, FIFRA, FQPA, FFDCA, SDWA) and multiple EPA program offices. Development and application of new assessment methodologies add significant efficiency and effectiveness to Agency operations and provide states with the information to support effective decisions and actions. Specific *CompTox* activities in FY 2020 will include:

[73] For more information, please see: https://www.epa.gov/sites/production/files/2018-07/documents/dnt_factsheet_07_23_18_final.pdf.
[74] For more information, please see: https://www.cdc.gov/ncbddd/developmentaldisabilities/facts.html.
[75] For more information, please see: https://www.epa.gov/chemical-research/evaluating-effects-chemicals-nervous-system-development.
[76] For more information, please see: https://www.nature.com/articles/sdata2018125.

- Using *ToxCast*[77] data to develop high-throughput risk assessments on chemicals for which adequate information has not been available historically to conduct risk assessments.
- Developing approaches to use existing data on toxicity and exposure to inform screening and prioritization of the over 40,000 chemicals currently on the TSCA Active List.[78]
- Developing rapid, improved testing approaches that evaluate chemical responses of multiple genes simultaneously, and thereby more efficiently.
- Applying complex systems science to inform interpretive frameworks and exploit the use of new approach methodologies (NAMs).
- Exploring how high-throughput exposure and hazard information can be combined to predict potential for exposure and risk to susceptible subpopulations.
- Creating online software tools that integrate human health, environmental and exposure data to yield robust chemical information for chemical prioritization decisions.[79]

CompTox research directly supports the Agency's efforts to fulfill requirements for: chemical evaluation under the Toxic Substances Control Act of 1976 (TSCA) as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act; pesticide evaluation under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); chemical testing for endocrine system impacts under the Food Quality Protection Act of 1996 (FQPA) (Public Law 104-170); and chemical evaluation as part of the Safe Drinking Water Act (SDWA).

Rapid Exposure, Dosimetry, and Modeling: In FY 2020, the CSS Program will continue to provide data, models and tools to characterize total human exposure to environmental chemicals, which will inform Agency chemical prioritizations and evaluations. This includes the continued development of advanced analytical and computational tools to detect and identify unknown chemicals in environmental media, biological media and consumer products.

The above-mentioned research areas can be leveraged in cooperation with efforts from other research programs to strengthen EPA's response to contaminants of emerging concern over high-profile chemicals like PFAS.

Per- and Polyfluoroalkyl Substances (PFAS): PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes and local communities in understanding and managing risks associated with these chemicals.[80] A significant challenge is understanding PFAS chemical toxicity, because this class of chemicals includes thousands of different chemical compounds most of which have little or no published toxicity data available.[81] Within the CSS Program, EPA is addressing this gap by conducting high throughput computational toxicological screening assays on an initial set of 150 PFAS chemicals which have been selected to represent the full array of chemical and physical structural properties of the entire PFAS universe of compounds. The results will be used to identify subsets of PFAS chemicals with potentially high toxicity in order to prioritize for more detailed study, as well as enabling quantitative analysis to make inference about toxicity of chemicals for which there is no

[77] For more information, please see: https://www.epa.gov/chemical-research/toxicology-testing-21st-century-tox21.
[78] For more information, please see: https://www.epa.gov/tsca-inventory/interim-list-active-substances.
[79] For more information, please see: https://comtox.epa.gov/dashboard.
[80] For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.
[81] For more information, please see: https://www.epa.gov/pfas/epa-pfas-research.

experimental data. This work is being done in collaboration with the NIEHS National Toxicology Program.

Research Planning: EPA's Board of Scientific Counselors (BOSC) evaluates research dimensions, performance and provides feedback to the Agency for the CSS Program. The CSS program, BOSC, and Science Advisory Board will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising EPA on its strategic research direction as part of the review of the research and development program's StRAPs for FY 2019-2022.[82]

EPA collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, National Science Foundation, U.S. Department of Energy, U.S. Department of Agriculture. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	77	80	Percent
Actual						77			
Numerator						171			Products
Denominator						222			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,598.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$2,932.0 / -4.9 FTE) This program change reduces resources for the development of high-throughput toxicity testing and the Agency's development of improved methods for chemical evaluations.

- (-$3,330.0 / -6.7 FTE) This program change reduces research efforts focused on endocrine disrupting chemicals under this program.

- (-$15,971.0 / -29.5 FTE) This program change reduces funding for the development of virtual tissue models and tools that potentially can be used to conduct chemical toxicity

[82] EPA StRAPs may be found at: http://www.epa.gov/research/strategic-research-action-plans-2016-2019.

screening to understand impacts on human development and health outcomes, while minimizing the use of animal testing.

- (-$5,895.0) This program change eliminates funding for the Science to Achieve Results (STAR) program for FY 2020.

- (+0.8 FTE) This FTE change reflects an increase in reimbursable FTE funded by TSCA service fees to support risk assessment and evaluation science for new TSCA requirements.

Statutory Authority:

Clean Air Act §§ 103, 104; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Children's Health Act; 21st Century Nanotechnology Research and Development Act; Clean Water Act; Federal Food, Drug, and Cosmetic Act (FFDCA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA).

Human Health Risk Assessment

Program Area: Research: Chemical Safety and Sustainability
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	***$33,568.7***	***$36,523.0***	***$22,689.0***	***-$13,834.0***
Hazardous Substance Superfund	$2,822.9	$2,824.0	$5,338.0	$2,514.0
Total Budget Authority	$36,391.6	$39,347.0	$28,027.0	-$11,320.0
Total Workyears	152.8	150.2	111.6	-38.6

Program Project Description:

EPA's Human Health Risk Assessment (HHRA) Research Program is focused on the science of assessments that inform decisions made by EPA and its partners, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws, including the Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA), Toxic Substances Control Act (TSCA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The HHRA Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement.

The current portfolio of HHRA products encompass these four topic areas:

Integrated Risk Information System (IRIS): 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. These assessments inform decisions under the CAA, CWA, SDWA, CERCLA/Superfund, and TSCA. The IRIS Program utilizes a multi-step process which provides opportunities for public, stakeholder, and interagency engagement. The assessments are complex, multidisciplinary evaluations of scientific information, which are developed through a transparent process with independent peer review. IRIS is the only federal program to provide toxicity values for both cancer and non-cancer effects.

Integrated Science Assessments (ISAs): Provide a concise evaluation and synthesis of science necessary to support decisions to retain or revise the National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants (particulate matter, ozone, lead, sulfur oxides, nitrogen oxides, and carbon monoxide) as required every five years by sections 108(a)(2) and 109(d)(1) of

the CAA.[83] ISAs also inform the benefit-cost analyses that support the regulations designed to allow states and local areas to meet the NAAQS.

***Community and Site-specific Risk*:** Develop Provisional Peer-Reviewed Toxicity Values (PPRTVs) and exposure assessment tools to help inform EPA's timely response to contaminated Superfund and hazardous waste sites, as required by the CERCLA.[84] PPRTVs are typically developed for data poor chemicals for which no IRIS value exists.

Research to Advance Risk Assessment Methods: Develop tools and methods that support the scientific advances in assessments. This includes research to incorporate non-animal testing data into assessments. It also includes research on assessment methods for emerging contaminants such as perfluorinated compounds and biotechnologies.

Recent accomplishments in the HHRA Research Program include:

The HHRA Research Program has been developing new assessment product lines to enhance timely response, improve screening capabilities, and augment toxicity value derivations for health assessments. In April 2018, the NAS issued a consensus report on the progress of the IRIS Program in implementing recommendations from the Academies' 2011 and 2014 reports. In its overall conclusions the committee reported, "*The committee is encouraged by the steps that EPA has taken, which have accelerated during the last year under new leadership. It is clear that EPA has been responsive and has made substantial progress in implementing National Academies recommendations."*

Development of HHRA Deliverables:

The Final IRIS assessment for Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) was completed and assessment plans for a number of chemicals, including naphthalene, uranium, and ammonia were released for public comment and discussion in public science meetings. A draft of Perfluorobutane Sulfonic Acid and related Compound Potassium Perfluorobutane Sulfonate was released for public comment in November 2018. IRIS continues to provide support to TSCA, as requested, on the first 10 TSCA risk evaluations and information management support utilizing the HHRA *Health and Environmental Research Online* (HERO) database.

The Final ISA for Oxides of Sulfur – Health Criteria to support the primary NAAQS for Sulfur Dioxide (SO2) was issued by 2019. In addition, the second draft ISA for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter - Ecological Criteria was provided for peer review to the Clean Air Scientific Advisory Committee (CASAC) Secondary NAAQS Review Panel for Oxides of Nitrogen and Sulfur.

HHRA continues to provide ongoing technical support for EPA's human health and ecological risk assessment program, having delivered four high priority PPRTV assessments in FY 2018. In FY 2018 and 2019, HHRA made a significant effort to modernize its assessment infrastructure,

[83] For more information, please see: https://www.epa.gov/clean-air-act-overview/clean-air-act-title-i-air-pollution-prevention-and-control-parts-through-d#ia.
[84] See, 42 U.S.C. Sec. 9601 *et seq*.: http://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter103&edition=prelim.

resulting in measurable improvements in efficiency and transparency in assessment development. This includes: 1) expansion of the HERO database to support TSCA and other Agency assessment needs; 2) accelerated development of the EPA Health Assessment Workplace Collaborative (EPA-HAWC) by incorporating very widely used benchmark dose modeling software (BMDS) allowing EPA-HAWC users to conduct analyses of dichotomous and continuous data to inform endpoint selection and to derive "best model" based risk estimates; 3) development of a power user version of BMDS that implements BMDS 3.0 in a broadly usable format; and, 4) development of automated evidence extraction, qualitative and quantitative evidence synthesis, and visual data integration tools built on an adaptable platform to support systematic review in high-priority topic areas such as exposure and ecological risk assessments.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. The HHRA Research Program's work in FY 2020 will focus on efforts integral to achieving the Administrator's priorities and informing the Agency's implementation of key environmental regulations. Specifically:

- HHRA is working to reaffirm specific statutory, legal, and decisional needs for chemical assessments in order to prioritize assessments for FY 2020. This includes assessments of perfluorinated compounds as well as chemicals (such as hexavalent chromium and inorganic arsenic) that are of interest to EPA's Water and Land and Emergency Management programs.
- HHRA will deliver the final ISA for particulate matter to support decisions to retain or revise the NAAQS, as well as a mature draft of an ozone ISA for CASAC review.
- HHRA is working to prioritize critical assessment needs for FY 2020, HHRA plans on delivering up to six Provisional Peer-Reviewed Toxicity Value (PPRTV) assessments that each have the potential for deriving multiple toxicity values to help inform EPA's clean-up decisions at contaminated Superfund, Brownfields, and hazardous waste sites.
- HHRA will enhance the resources and workflow in its technical support centers to provide localized and tailored technical assistance and scientific expertise on human and ecological risk assessments to states, tribes, and EPA regions and programs. This includes direct support in cases of emergencies and other rapid response situations.
- HHRA, in cooperation with the Chemical Safety for Sustainability (CSS) research program, is working to apply new and alternative approaches, methods and data to risk assessment products and technical support to better respond to the needs of the states, tribes, and EPA regions and programs.
- Provide technical support required for TSCA implementation.

In addition to the activities listed above, EPA also conducts research across programs in areas such as Per- and polyfluoroalkyl substances and lead.

Per- and polyfluoroalkyl substances (PFAS): PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes and local communities in understanding and managing risks associated with these chemicals. Decision making at the state and local level is hindered by the lack of standard toxicity values (such as Reference Doses and cancer risk estimates) for many PFAS chemicals of interest. Toxicity values currently exist for PFOA and PFOS. The Agency will soon finalize toxicity assessments for GenX chemicals, PFBS, but there are many other PFAS of high interest to stakeholders which currently have no federal published, peer reviewed toxicity values. Within the HHRA Program, EPA is prioritizing additional PFAS for development of peer reviewed toxicity values. This will result in an expanded set of peer reviewed, toxicity values for use by federal, state, and tribal decision makers in making risk assessment and management decisions.

Lead: EPA, CDC, and the Academy of Pediatrics unanimously agree that there is no safe level of lead in a child's blood, and that even low levels can result in behavior and learning problems, lower IQ, and other health effects. In response to overwhelming scientific consensus and continued public health concerns, and federal coordination efforts, reducing childhood lead exposure is one of the highest priorities for EPA. To advance lead exposure and biokinetic models used in EPA regulatory decisions and site assessments, research focuses on enhancing, evaluating, and applying lead exposure and biokinetic models used for estimating potential blood lead levels and related analyses for regulatory determinations. Additionally, the Exposure Factors Handbook[85] provides up-to-date data on various human factors, including soil and dust ingestion rates, used by risk assessors.

Research Planning: EPA's Board of Scientific Counselors (BOSC) will be utilized to evaluate its performance and provide feedback to the HHRA Program for the Chemical Safety for Sustainability and Human Health Risk Assessment National Research programs. The BOSC will meet regularly to seek input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on developing its strategic research direction and StRAPs for FY 2019-2022.

EPA collaborates with several science agencies and the research community to assess our research performance, such as the National Institutes of Health, the National Science Foundation, the Department of Energy, and the United States Department of Agriculture. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA, and to enable the Agency to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, the Association of State and Territorial Health Officials as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

[85] For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.

Performance Measure Targets:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	77	80	Percent
Actual						77			
Numerator						171			Products
Denominator						222			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$285.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$11,611.0 / -38.6 FTE) This program change reduces the HHRA Research Program's ability to develop assessments to support Agency decisions, which will not only impact the number of FTEs but also the composition of the multidisciplinary teams assembled to address the needs of complex Agency decisions. It also reduces the HHRA Research Program's ability to provide daily technical support to program and regional offices, and states and Tribes, including during emergencies and urgent circumstances.

- (-$2,508.0 / -15.2 FTE) Resources are being rebalanced to the Superfund appropriation within this program for IRIS.

Statutory Authority:

Clean Air Act §§ 103, 108, 109, and 112; Clean Water Act §§ 101(a)(6), 104, 105; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 3(c)(2)(A); Safe Drinking Water Act (SDWA) § 1458; Toxic Substances Control Act (TSCA).

Water: Human Health Protection

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$91,494.4	$96,493.0	$89,808.0	-$6,685.0
Science & Technology	***$3,458.2***	***$3,519.0***	***$4,094.0***	***$575.0***
Total Budget Authority	$94,952.6	$100,012.0	$93,902.0	-$6,110.0
Total Workyears	459.0	466.0	457.1	-8.9

Program Project Description:

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

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to carry out the following activities:

- Lead the development, revision, evaluation, and approval of chemical and microbiological analytical methods for unregulated and regulated contaminants to assess and ensure protection of public health from contaminants in drinking water (e.g., Polyfluoroalkyl substances [PFAS], and toxins resulting from harmful algal blooms). Emphasis is placed on method development for chemicals on the Safe Drinking Water Act [SDWA]-mandated Contaminant Candidate List.
- Implement EPA's Drinking Water Laboratory Certification Program,[86] which sets direction for oversight of municipal and commercial laboratories that analyze drinking water samples. Conduct three regional program reviews during FY 2020 and deliver two laboratory certification officer training courses (for chemistry and microbiology) for state and regional representatives to ensure the quality of the analytical results.
- Partner with states and water systems to optimize their treatment technology and distribution systems under the drinking water Area Wide Optimization Program

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

(AWOP).[87] The AWOP is a highly successful technical/compliance assistance and training program that enhances the ability of small systems to meet existing microbial, disinfectant, and disinfection byproduct standards, and addresses distribution system integrity and water quality issues.

- During FY 2020, EPA expects to work with states and tribes to further help them identify performance limiting factors at public water systems and develop and apply tailored tools to help these public water systems overcome operational challenges, achieve performance and optimization levels, and reduce health-based compliance challenges. Specifically, the AWOP program within the S&T appropriation complements other drinking water activities to decrease the number of community water systems out of compliance with health-based standards. Over the 5-year period of the *FY 2018 – 2022 EPA Strategic Plan*, EPA is pursuing a 25 percent reduction in the number systems that have health-based violations from 3,508 in FY 2017 to 2,700 by FY 2022.
- Continue monitoring under the fourth Unregulated Contaminant Monitoring Rule (UCMR 4). The UCMR 4 was published in December 2016, and addresses collection of data on occurrence of 30 contaminants of interest (e.g., cyanotoxins, PFAS compounds, disinfection by-products (DBPs), pesticides) to assess the frequency and levels at which these contaminants are found in public water systems. The UCMR 4 is a federal direct implementation program coordinated by EPA, as directed by the Safe Drinking Water Act. The data collected are used by EPA as part of the Agency's determination of whether to establish health-based standards to protect public health. Monitoring activities for UCMR 4 will occur between FY 2018 and FY 2021. Key activities for EPA include ensuring laboratories are available to perform the required analyses, managing the field sample collection and sample analysis for small systems, and managing data reporting by large systems. In addition, EPA makes the data available to our state and tribal partners and to the public. In FY 2020, EPA expects to develop and publish a proposed rule for the next cycle of monitoring (UCMR 5) and will be evaluating PFAS and other priority candidates for inclusion.

In addition, EPA will be initiating actions to fulfill a new America's Water Infrastructure Act (AWIA) requirement requiring all drinking water systems serving between 3,300 and 10,000 persons to monitor for unregulated contaminants in the next cycle of monitoring under UCMR 5. Prior to AWIA and in previous UCMR monitoring cycles, only systems serving greater than 10,000 persons were required to monitor. Specific actions in FY 2020 include: drafting the UCMR preamble and rule and performing pre-monitoring implementation activities such as: designing and executing an expanded laboratory-approval program; developing expanded state monitoring plans; developing solicitations for an implementation support contract; and codifying the web-based data-reporting system to accommodate the expanded program scope.

[87] For more information, please see: https://www.epa.gov/dwstandardsregulations/optimization-program-drinking-water-systems.

Performance Measure Targets:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						3,510	3,380	3,280	CWSs
Actual						3,480			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$143.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$350.0 / +2.2 FTE) This change provides resources and FTE for the implementation and administration of the requirements of AWIA.

- (+$82.0 / +0.1 FTE) This increase is to help the Agency support other supplementary provisions necessary for the implementation and administration of AWIA.

Statutory Authority:

Safe Drinking Water Act (SDWA).

Congressional Priorities

Water Quality Research and Support Grants
Program Area: Congressional Priorities
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$25,400.0	$12,700.0	$0.0	-$12,700.0
Science & Technology	***$4,094.0***	***$4,100.0***	***$0.0***	***-$4,100.0***
Total Budget Authority	$29,494.0	$16,800.0	$0.0	-$16,800.0

Program Project Description:

In FY 2018, Congress appropriated $4.1 million in the Science and Technology appropriation to fund high priority water quality and water availability research. EPA was instructed to award grants on a competitive basis, independent of the Science to Achieve Results (STAR) program, and give priority to not-for-profit organizations that: conduct activities that are national in scope; can provide a 25 percent match, including in-kind contributions; and often partner with the Agency.

FY 2020 Activities and Performance Plan:

Resources and FTE have been proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,100.0) This eliminates this program as part of the effort to limit federal investment in lower priority activities and to focus resources on core environmental work.

Statutory Authority:

CAA 42 U.S.C. 7401 et seq. Title 1, Part A – Sec. 103 (a) and (d) and Sec. 104 (c); CAA 42 U.S.C. 7402(b) Section 102; CAA 42 U.S.C. 7403(b)(2) Section 103(b)(2); Clinger Cohen Act, 40 U.S.C. 11318; CERCLA (Superfund, 1980) Section 209(a) of Public Law 99-499; Children's Health Act; CWA, Sec. 101 - 121; CWPPRA; CZARA; CZMA 16 U.S.C. 1451 - Section 302; Economy Act, 31 U.S.C. 1535; EISA, Title II Subtitle B; ERDDA, 33 U.S.C. 1251 – Section 2(a); ESA, 16 U.S.C. 1531 - Section 2; FFDCA, 21 U.S.C. Sec. 346; FIFRA (7 U.S.C. s/s 136 et seq. (1996), as amended), Sec. 3(c)(2)(A); FQPA PL 104-170; Intergovernmental Cooperation Act, 31 U.S.C.

6502; MPRSA Sec. 203, 33 U.S.C. 1443; NAWCA; NCPA; National Environmental Education Act, 20 U.S.C. 5503(b)(3) and (b)(11); NEPA of 1969, Section 102; NISA; ODBA Title II; PPA, 42 U.S.C. 13103; RCRA; SDWA (1996) 42 U.S.C. Section 300j-18; SDWA Part E, Sec. 1442 (a)(1); TSCA, Section 10, 15, 26, U.S.C. 2609; USGCRA 15 U.S.C. 2921; WRDA; WRRA; and WWWQA.

Environmental Protection Agency
2020 Annual Performance Plan and Congressional Justification

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Environmental Protection Agency
FY 2020 Annual Performance Plan and Congressional Justification

APPROPRIATION: Environmental Programs & Management

Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management				
Budget Authority	$2,584,046.9	$2,643,299.0	$1,845,268.0	-$798,031.0
Cancellation of Funds	$0.0	-$45,300.0	-$46,000.0	-$700.0
Budget Authority Post Cancellation of Funds		$2,597,999.0	$1,799,268.0	-$798,731.0
Total Workyears	8,947.5	9,111.9	7,487.7	-1,624.2

Bill Language: Environmental Programs and Management

For environmental programs and management, including necessary expenses, not otherwise provided for, for personnel and related costs and travel expenses; hire of passenger motor vehicles; hire, maintenance, and operation of aircraft; purchase of reprints; library memberships in societies or associations which issue publications to members only or at a price to members lower than to subscribers who are not members; administrative costs of the brownfields program under the Small Business Liability Relief and Brownfields Revitalization Act of 2002; and not to exceed $31,000 for official reception and representation expenses, $1,845,268,000, to remain available until September 30, 2021: Provided, That of the amounts provided under this heading, the Chemical Risk Review and Reduction program project shall be allocated for this fiscal year, excluding the amount of any fees made available, not less than the amount of appropriations for that program project for fiscal year 2014.

In addition, $46,000,000, to remain available until September 30, 2021, for necessary expenses of the Energy Star program established by section 324A of The Energy Policy and Conservation Act (42 U.S.C. 6294a): Provided, That the Administrator of the Environmental Protection Agency shall collect fees pursuant to section 324A(e) (42 U.S.C. 6294a(e)), as added by this Act, and such fees shall be credited to this appropriation as offsetting collections: Provided further, That the sum herein appropriated in this paragraph from the general fund shall be reduced as such collections are received during fiscal year 2020 so as to result in a final fiscal year appropriation from the general fund estimated at $0: Provided further, That to the extent such collections received in fiscal year 2020 exceed $46,000,000, those excess amounts shall be deposited in the general fund.

Program Projects in EPM
(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Clean Air				
Clean Air Allowance Trading Programs	$14,720.4	$15,270.0	$13,292.0	-$1,978.0
Atmospheric Protection Program	$92,753.7	$95,436.0	$13,965.0	-$81,471.0
Federal Stationary Source Regulations	$19,618.3	$21,028.0	$17,311.0	-$3,717.0
Federal Support for Air Quality Management	$128,588.0	$128,001.0	$107,298.0	-$20,703.0
Stratospheric Ozone: Domestic Programs	$4,601.1	$4,637.0	$3,948.0	-$689.0
Stratospheric Ozone: Multilateral Fund	$8,326.0	$8,736.0	$0.0	-$8,736.0
Subtotal, Clean Air	$268,607.5	$273,108.0	$155,814.0	-$117,294.0
Indoor Air and Radiation				
Indoor Air: Radon Program	$2,575.1	$3,136.0	$0.0	-$3,136.0
Radiation: Protection	$9,286.8	$9,180.0	$2,307.0	-$6,873.0
Radiation: Response Preparedness	$1,774.5	$1,952.0	$2,219.0	$267.0
Reduce Risks from Indoor Air	$13,489.6	$13,369.0	$0.0	-$13,369.0
Subtotal, Indoor Air and Radiation	$27,126.0	$27,637.0	$4,526.0	-$23,111.0
Brownfields				
Brownfields	$24,175.6	$25,593.0	$16,728.0	-$8,865.0
Compliance				
Compliance Monitoring	$101,299.2	$101,665.0	$89,644.0	-$12,021.0
Enforcement				
Civil Enforcement	$164,266.9	$171,283.0	$147,647.0	-$23,636.0
Criminal Enforcement	$44,334.2	$44,995.0	$44,582.0	-$413.0
Environmental Justice	$6,436.5	$6,737.0	$2,739.0	-$3,998.0
NEPA Implementation	$15,751.2	$17,622.0	$16,598.0	-$1,024.0
Subtotal, Enforcement	$230,788.8	$240,637.0	$211,566.0	-$29,071.0
Geographic Programs				
Geographic Program: Chesapeake Bay	$67,542.4	$73,000.0	$7,300.0	-$65,700.0
Geographic Program: Gulf of Mexico	$9,122.9	$12,542.0	$0.0	-$12,542.0
Geographic Program: Lake Champlain	$8,395.0	$8,399.0	$0.0	-$8,399.0
Geographic Program: Long Island Sound	$11,753.9	$12,000.0	$0.0	-$12,000.0
Geographic Program: Other				
Lake Pontchartrain	$947.0	$948.0	$0.0	-$948.0
S.New England Estuary (SNEE)	$4,934.5	$5,000.0	$0.0	-$5,000.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Geographic Program: Other (other activities)	$1,507.4	$1,445.0	$0.0	-$1,445.0
Subtotal, Geographic Program: Other	$7,388.9	$7,393.0	$0.0	-$7,393.0
Great Lakes Restoration	$307,739.4	$300,000.0	$30,000.0	-$270,000.0
Geographic Program: South Florida	$1,674.5	$1,704.0	$0.0	-$1,704.0
Geographic Program: San Francisco Bay	$1,763.7	$4,819.0	$0.0	-$4,819.0
Geographic Program: Puget Sound	$27,961.9	$28,000.0	$0.0	-$28,000.0
Subtotal, Geographic Programs	$443,342.6	$447,857.0	$37,300.0	-$410,557.0
Homeland Security				
Homeland Security: Communication and Information	$4,471.8	$3,910.0	$3,514.0	-$396.0
Homeland Security: Critical Infrastructure Protection	$908.7	$880.0	$1,188.0	$308.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$5,400.2	$5,405.0	$4,986.0	-$419.0
Subtotal, Homeland Security	$10,780.7	$10,195.0	$9,688.0	-$507.0
Information Exchange / Outreach				
State and Local Prevention and Preparedness	$14,799.1	$14,760.0	$10,524.0	-$4,236.0
TRI / Right to Know	$13,796.8	$12,783.0	$7,811.0	-$4,972.0
Tribal - Capacity Building	$13,979.6	$14,547.0	$13,201.0	-$1,346.0
Executive Management and Operations	$49,458.4	$49,842.0	$41,771.0	-$8,071.0
Environmental Education	$10,223.4	$8,702.0	$0.0	-$8,702.0
Exchange Network	$17,432.4	$15,956.0	$12,127.0	-$3,829.0
Small Minority Business Assistance	$1,598.1	$1,574.0	$0.0	-$1,574.0
Small Business Ombudsman	$1,799.8	$1,826.0	$1,918.0	$92.0
Children and Other Sensitive Populations: Agency Coordination	$6,496.0	$6,548.0	$2,545.0	-$4,003.0
Subtotal, Information Exchange / Outreach	$129,583.6	$126,538.0	$89,897.0	-$36,641.0
International Programs				
US Mexico Border	$2,645.5	$3,033.0	$0.0	-$3,033.0
International Sources of Pollution	$6,619.8	$6,904.0	$5,339.0	-$1,565.0
Trade and Governance	$5,290.1	$5,463.0	$0.0	-$5,463.0
Subtotal, International Programs	$14,555.4	$15,400.0	$5,339.0	-$10,061.0
IT / Data Management / Security				
Information Security	$7,016.5	$7,280.0	$13,773.0	$6,493.0
IT / Data Management	$84,464.5	$83,256.0	$71,117.0	-$12,139.0
Subtotal, IT / Data Management / Security	$91,481.0	$90,536.0	$84,890.0	-$5,646.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$9,529.8	$10,653.0	$8,828.0	-$1,825.0
Administrative Law	$4,706.5	$4,753.0	$4,812.0	$59.0
Alternative Dispute Resolution	$1,155.7	$1,150.0	$0.0	-$1,150.0
Civil Rights Program	$8,848.2	$9,335.0	$9,003.0	-$332.0
Legal Advice: Environmental Program	$51,344.3	$50,886.0	$48,123.0	-$2,763.0
Legal Advice: Support Program	$14,616.0	$15,455.0	$17,151.0	$1,696.0
Regional Science and Technology	$1,094.6	$1,205.0	$0.0	-$1,205.0
Science Advisory Board	$3,531.8	$3,787.0	$3,763.0	-$24.0
Regulatory/Economic-Management and Analysis	$14,270.7	$14,190.0	$16,162.0	$1,972.0
Subtotal, Legal / Science / Regulatory / Economic Review	$109,097.6	$111,414.0	$107,842.0	-$3,572.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$70,053.3	$72,884.0	$71,100.0	-$1,784.0
Facilities Infrastructure and Operations	$292,535.1	$308,701.0	$308,335.0	-$366.0
Acquisition Management	$27,441.3	$30,210.0	$28,032.0	-$2,178.0
Human Resources Management	$43,220.4	$44,227.0	$41,635.0	-$2,592.0
Financial Assistance Grants / IAG Management	$24,462.0	$24,729.0	$20,202.0	-$4,527.0
Workforce Reshaping	$0.0	$0.0	$25,003.0	$25,003.0
Subtotal, Operations and Administration	$457,712.1	$480,751.0	$494,307.0	$13,556.0
Pesticides Licensing				
Science Policy and Biotechnology	$1,604.1	$2,040.0	$0.0	-$2,040.0
Pesticides: Protect Human Health from Pesticide Risk	$56,288.2	$58,016.0	$49,440.0	-$8,576.0
Pesticides: Protect the Environment from Pesticide Risk	$38,380.7	$41,081.0	$30,668.0	-$10,413.0
Pesticides: Realize the Value of Pesticide Availability	$7,004.6	$8,226.0	$5,571.0	-$2,655.0
Subtotal, Pesticides Licensing	$103,277.6	$109,363.0	$85,679.0	-$23,684.0
Research: Chemical Safety and Sustainability				
Research: Chemical Safety and Sustainability	$328.4	$0.0	$0.0	$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$37,118.1	$39,052.0	$33,202.0	-$5,850.0
RCRA: Waste Management	$58,434.1	$60,791.0	$46,813.0	-$13,978.0
RCRA: Waste Minimization & Recycling	$6,782.4	$9,534.0	$0.0	-$9,534.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	$102,334.6	$109,377.0	$80,015.0	-$29,362.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Toxics Risk Review and Prevention				
Endocrine Disruptors	$4,583.1	$7,553.0	$0.0	-$7,553.0
Pollution Prevention Program	$10,353.0	$11,236.0	$0.0	-$11,236.0
Toxic Substances: Chemical Risk Review and Reduction	$65,947.8	$61,105.0	$66,418.0	$5,313.0
Toxic Substances: Lead Risk Reduction Program	$12,523.5	$12,627.0	$0.0	-$12,627.0
Subtotal, Toxics Risk Review and Prevention	$93,407.4	$92,521.0	$66,418.0	-$26,103.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	$10,812.6	$11,295.0	$5,996.0	-$5,299.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	$25,187.6	$26,723.0	$0.0	-$26,723.0
Wetlands	$18,528.7	$21,065.0	$21,578.0	$513.0
Subtotal, Water: Ecosystems	$43,716.3	$47,788.0	$21,578.0	-$26,210.0
Water: Human Health Protection				
Beach / Fish Programs	$1,777.0	$2,014.0	$0.0	-$2,014.0
Drinking Water Programs	$91,494.4	$96,493.0	$89,808.0	-$6,685.0
Subtotal, Water: Human Health Protection	$93,271.4	$98,507.0	$89,808.0	-$8,699.0
Water Quality Protection				
Marine Pollution	$10,242.6	$11,065.0	$0.0	-$11,065.0
Surface Water Protection	$192,705.9	$199,352.0	$188,233.0	-$11,119.0
Water Infrastructure Finance and Innovation	$0.0	$0.0	$0.0	$0.0
Subtotal, Water Quality Protection	$202,948.5	$210,417.0	$188,233.0	-$22,184.0
Congressional Priorities				
Water Quality Research and Support Grants	$25,400.0	$12,700.0	$0.0	-$12,700.0
Cancellation of Funds	$0.0	-$45,300.0	-$46,000.0	-$700.0
TOTAL EPM	**$2,584,046.9**	**$2,597,999.0**	**$1,799,268.0**	**-$798,731.0**

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

***** Fact Sheet tables do not include applicable cancellation of funds *****

Clean Air

Clean Air Allowance Trading Programs
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$14,720.4***	***$15,270.0***	***$13,292.0***	***-$1,978.0***
Science & Technology	$7,543.1	$7,569.0	$5,739.0	-$1,830.0
Total Budget Authority	$22,263.5	$22,839.0	$19,031.0	-$3,808.0
Total Workyears	61.8	63.9	63.7	-0.2

Program Project Description:

Sulfur dioxide (SO_2) and nitrogen oxides (NO_X) are precursors for fine particulate matter ($PM_{2.5}$), while NO_X also is a precursor for ground-level ozone (O_3). Researchers have associated $PM_{2.5}$ and O_3 exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to $PM_{2.5}$ and O_3 contributes to significant human health benefits.

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries, such as those covered by the Cross-State Air Pollution Rule (CSAPR). In addition, under Title IV of the Clean Air Act, the Acid Rain Program (ARP), EPA operates a national annual SO_2 trading program and a NOx emissions reduction program for the power sector.[1]

The Clean Air Allowance Trading Programs establish a total emission limit that is allocated to affected emission sources in the form of allowances – authorizations to emit one ton of a pollutant. The owners and operators of affected emission sources may select among different methods of compliance – install pollution control equipment, purchase allowances, switch fuel types, or other strategies. These programs are managed through a centralized database system operated by EPA.[2] Select data, collected under these programs, are made available to the public through EPA's Air Markets Program Data (AMPD) website which provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through charts, reports, and pre-packaged datasets.

To implement the Clean Air Allowance Trading Programs, EPA operates the Part 75 emission measurement program that requires approximately 4,500 affected units to monitor and report emission and operation data.[3] The emission measurement program requires high degrees of accuracy and reliability from continuous emission monitoring systems (CEMS) or approved

[1] Clean Air Act § 401
[2] Clean Air Act § 403(d)
[3] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821

alternative methods at the affected sources. EPA provides the affected emission sources with a software tool, the Emissions Collection and Monitoring Plan System (ECMPS), to process and assure the quality of data, and facilitate reporting to EPA. The Agency conducts electronic audits, desk reviews, and field audits of the emission data and monitoring systems. The emission measurement program supports several other state and federal emission control and reporting programs.

EPA's centralized market operation system (the allowance tracking system) records allowance allocations and transfers.[4] At the end of each compliance period, allowances are reconciled against reported emissions to determine compliance for every facility with affected emission sources. For over 20 years, the affected facilities have maintained near-perfect compliance under the trading programs. In 2017, total SO_2 emissions from emission sources subject to the Acid Rain Program were 1.3 million tons, or more than 85 percent below the statutory nationwide emissions cap. Total annual NO_X emissions were 1.1 million tons in 2017 reflecting a reduction of over 6 million tons from projected 2000 NO_X levels absent the Acid Rain Program, exceeding the Program's total targeted reduction of 2 million tons.[5]

The Clean Air Act's Good Neighbor provision[6] requires states or, in some circumstances, the Agency to reduce interstate pollution that interferes with the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). Under this authority, EPA issued the Cross-State Air Pollution Rule, which requires 27 states in the eastern U.S. to limit their state-wide emissions of SO_2 and/or NO_X to reduce or eliminate the states' contributions to $PM_{2.5}$ and/or ground-level O_3 pollution in other downwind states. The emission limitations are defined in terms of maximum state-wide "budgets" for emissions of annual SO_2, annual NO_X, and/or ozone-season NO_X from certain large stationary sources in each state. On September 7, 2016, EPA revised the CSAPR ozone season NO_X program by finalizing an update to CSAPR for the 2008 ozone NAAQS, known as the CSAPR Update. The CSAPR Update ozone season NO_X program largely replaced the original CSAPR ozone season NO_X program starting on May 1, 2017. On December 6, 2018, EPA finalized the Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard, also known as the CSAPR Close-Out Rule, which determined the CSAPR Update Rule fully addresses 20 states' interstate pollution transport obligations for the 2008 national ambient air quality standards (NAAQS) for ground-level ozone.

EPA relies on the Clean Air Status and Trends Network (CASTNET) for monitoring ambient sulfate and nitrate deposition concentrations, and other air quality indicators. EPA uses the Long-Term Monitoring (LTM) program for assessing how water bodies and aquatic ecosystems are responding to reductions in sulfur and nitrogen emissions. Data from these air quality and environmental monitoring programs, in conjunction with SO_2 and NO_X emissions data from the Part 75 monitoring program, have allowed EPA to develop a comprehensive accountability framework to track the results of its air quality programs. EPA applies this framework to the programs it implements and issues annual progress reports on compliance and environmental results achieved by the Acid Rain Program and the Cross-State Air Pollution Rule. Previous reports

[4] Clean Air Act § 403(d)
[5] For more information, please see: https://www3.epa.gov/airmarkets/progress/datatrends/index.html.
[6] Clean Air Act § 110(a)(2)(D); see also, Clean Air Act § 110(c).

have covered progress under the Clean Air Interstate Rule and the NO_X Budget Trading Program. These annual progress reports not only track reductions in SO_2 and NO_X emissions from affected sources but assess the impacts of these reductions on air quality (e.g., ozone and $PM_{2.5}$ levels), acid deposition, surface water acidity, forest health, and other environmental indicators.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to operate the Clean Air Allowance Trading Programs and the systems to assess the programs' progress toward the environmental goals required by the Clean Air Act. EPA will work to meet requirements and requests for modeling in support of the power sector and for legal defense of regulatory actions. The Program will continue support emission reporting for the Mercury and Air Toxics Standard (MATS) Rule.[7]

Allowance tracking and compliance assessment: EPA will allocate SO_2 and NO_X allowances to affected emission sources and other account holders as established in the Clean Air Act[8] and state and federal CSAPR implementation plans. These allowance holdings will be maintained in an updated allowance tracking system (*i.e.*, central database) that will record allowance transfers.[9] At the end of each compliance period, EPA will reconcile each facility's allowance holdings against its emissions to ensure compliance for all affected sources.[10]

Emission measurement and data collection and review: EPA will operate the Part 75 Emission Measurement Program to collect, quality assure, and track emissions of air pollutants and air toxics from approximately 4,500 fossil-fuel-fired electric generating units.

Program Assessment: EPA will develop progress reports and other information to communicate the extent of the progress made by the Clean Air Allowance Trading Programs.[11]

Redesign System Applications: EPA will initiate the redesign of its Air Markets Program Data (AMPD) website and Emission Monitoring Plan System (ECMPS) desktop software. These mission critical systems support the trading programs, as well as other emission reporting programs operated by the states and EPA. Reengineering these decade old systems will enable EPA to enhance the user experience, comply with EPA technology requirements, consolidate software systems, and reduce operation and maintenance costs.

Assistance to States: EPA will work with states to develop emission reduction programs to comply with Clean Air Act Good Neighbor Provision requirements[12] including implementation of the CSAPR Update regulation finalized on September 7, 2016, as well as the CSAPR Close-Out Rule.

[7] See, 40 C.F.R. Part 63, Subpart UUUUU (*National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units*).
[8] Clean Air Act §§ 110 and 403
[9] Clean Air Act §§ 110 and 403
[10] Clean Air Act §§ 110 and 404-405, and state CSAPR implementation plans
[11] Government Performance and Results Act § 1115
[12] Clean Air Act § 110(a)(2)(D)

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

For more information on program performance, please visit:
http://www.epa.gov/airmarket/progress/progress-reports.html.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$480.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$2,458.0 / -0.2 FTE) This program change streamlines the Program's modeling and reporting activities and focuses the Program on core statutory requirements.

Statutory Authority:

Clean Air Act.

Atmospheric Protection Program
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$92,753.7***	***$95,436.0***	***$13,965.0***	***-$81,471.0***
Science & Technology	$8,572.7	$8,018.0	$0.0	-$8,018.0
Total Budget Authority	$101,326.4	$103,454.0	$13,965.0	-$89,489.0
Total Workyears	204.5	203.7	120.0	-83.7

Total workyears in FY 2020 include 70.0 FTE funded by Energy Star fees.

Program Project Description:

The Atmospheric Protection Program develops and delivers data, analysis, and technical information and assistance to identify technologies and strategies for industries, states, communities, and tribes to meet Clean Air Act (CAA) obligations and other statutory requirements.

ENERGY STAR: EPA manages the ENERGY STAR program with clearly defined support from the U.S. Department of Energy. ENERGY STAR is the recognized symbol for energy efficiency; the Program provides information that consumers and businesses rely on to make informed decisions to reduce energy use, save money, and reduce harmful air pollutants. By reducing energy use through voluntary action, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and other environmental goals. Specifically, EPA manages and implements the following activities: the specification process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Certified Homes program for both single family homes and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as monitoring and verification, setting performance levels for building types, managing and maintaining the ENERGY STAR Portfolio Manager to measure and track energy use in buildings, and managing the ENERGY STAR brand.

Greenhouse Gas Reporting Program: EPA implements the U.S. Greenhouse Gas Reporting Program under the CAA. In 2007, Congress directed EPA to "require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the U.S." EPA annually collects data from over 8 thousand facilities from 41 large industrial source categories in the U.S. and uses this data to improve estimates included in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, to support federal and state-level policy development, and to share with industry stakeholders, state and local governments, the research community, and the public.

Inventory of U.S. Greenhouse Gas Emissions and Sinks: To fulfill U.S. Treaty obligations, under Article 4 of the 1992 Framework Convention on Climate Change, which was ratified by the Senate,

EPA prepares the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks.* The *Inventory* provides information on total annual U.S. emissions and removals by source, economic sector, and greenhouse gas. EPA leads the interagency process of preparing the *Inventory*, working with technical experts from numerous federal agencies, including the Department of Energy's Energy Information Agency, Department of Agriculture, Department of Defense, U.S. Geological Survey, and academic and research institutions.

Managing the Transition from Ozone Depleting Substances: EPA implements efforts directed by Section 612 of the Clean Air Act to ensure a smooth transition from ozone depleting substances (ODS) to safer alternatives.

Science, Economic, and Technical Analyses: EPA conducts a range of economic, scientific, and technical analyses for CAA regulatory actions and technical input.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will provide technical, analytical, and scientific support for regulatory action consistent with Presidential Executive Order on Promoting Energy Independence and Economic Growth dated March 28, 2017.

In FY 2020, EPA would implement user fees for entities that participate in the ENERGY STAR program. Fee collection would start in FY 2020 after EPA undertakes a rulemaking and finalizes a fees rule. By requesting an advance appropriation of $46 million for FY 2020, the budget provides the Program the authority to use fees to operate the Program in advance of collections. The fees would provide for necessary expenses, including the development, operation, and maintenance of the ENERGY STAR program. The legislative proposal to authorize collection and spending of the fees is included as an administrative provision in the FY 2020 President's Budget Appendix.

The Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum on *Streamlining Permitting and Reducing Burden to Domestic Regulatory Manufacturing*. These efforts are expected to align with previously identified Executive Orders, including implementation of Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs and Executive Order 13777, Enforcing the Regulatory Reform Agenda. EPA will evaluate recommendations, and where appropriate, take action to repeal, replace, or modify existing regulations to make them less burdensome.

In FY 2020, EPA will continue to implement the Greenhouse Gas Reporting Program covering a total of 41 sectors, with approximately 8 thousand reporters. Focus areas for the Program will include:

- Developing and implementing regulatory revisions across multiple sectors, including oil and gas to reduce burden and streamline reporting where appropriate;
- Aligning the database management systems with those regulatory amendments; and

- Conducting a QA/QC and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary.

EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$7,098.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$74,373.0 / -122.9 FTE) This program change reflects a reduction in the GHG Reporting program and eliminates appropriated funding for the partnership programs with industry, businesses, states, tribes, and localities.

- (+70.0 FTE) This program change supports an increase in reimbursable FTE for the development, operation, and maintenance of a fee-supported ENERGY STAR program. By requesting an advance appropriation of $46 million for FY 2020, the budget allows for the time involved in both a fee rulemaking and developing and enacting new authorizing legislation by providing the Program with the authority to use fees to operate the Program in advance of collections.

Statutory Authority:

Clean Air Act; Global Change Research Act of 1990; Global Climate Protections Act; Energy Policy Act of 2005 § 756; Pollution Prevention Act §§ 6602-6605; National Environmental Policy Act (NEPA) § 102; Clean Water Act § 104; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) § 8001.

Federal Stationary Source Regulations
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$19,618.3***	***$21,028.0***	***$17,311.0***	***-$3,717.0***
Total Budget Authority	$19,618.3	$21,028.0	$17,311.0	-$3,717.0
Total Workyears	100.4	104.7	79.1	-25.6

Program Project Description:

Under the Clean Air Act (CAA), EPA is required to set National Ambient Air Quality Standards (NAAQS) for ambient pollutants considered harmful to public health and the environment. The six criteria pollutants for which EPA has established NAAQS are: particulate matter (PM), ozone, sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead. The CAA requires EPA to periodically review the science upon which the NAAQS are based and the standards themselves. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Section 109 of the CAA Amendments of 1990 established two types of NAAQS. Primary standards are set at a level requisite to protect public health with an adequate margin of safety. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects.

This program also includes activities directed toward reducing air emissions of toxic, criteria, and other pollutants from stationary sources mandated under Sections 111,112, and 129 of the CAA. Specifically, to address air toxics, this program provides for the development of National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of the NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. The statutory program also includes issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for criteria and certain listed pollutants from certain new, modified, or reconstructed sources of air emissions; issuing emissions guidelines for states to apply to certain existing sources; and providing guidance on Reasonably Available Control Technology (RACT) through issuance and periodic review and revision of control technique guidelines (CTGs). The CAA also requires the development and periodic review of standards of performance and emissions guidelines covering air emissions from waste combustion sources.

Sections 169A and 169B of the CAA also require protection of air quality related values (AQRV) for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Visibility is one such AQRV, and Congress established a national goal of returning visibility in the Class I areas to natural conditions, *i.e.*, the visibility conditions which existed without manmade air pollution. The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum, *Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing*. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, *Reducing Regulation and Controlling Regulatory Costs* and Executive Order 13777, *Enforcing the Regulatory Reform Agenda*. EPA will continue to evaluate recommendations, and, where appropriate, take action to repeal, replace, or modify existing regulations to make them less burdensome and provide greater certainty to regulated entities.

NAAQS: In FY 2020, EPA will continue its review of the NAAQS and make revisions, as appropriate. Each review involves a comprehensive reexamination, synthesis, and evaluation of the scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

EPA will continue work to achieve and maintain compliance with existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1997 PM_{10} standards; the 2012, 2006 and 1997 $PM_{2.5}$ standards; the 2008 lead standard;[13] the 2010 NO_2 standard;[14] the 1971 CO standard; and the 2010 SO_2 standard.[15] EPA, in close collaboration with states and tribes, will work to reduce the number of areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

Section 111 of the CAA requires EPA to set NSPS for new, modified, or reconstructed stationary sources of air emissions in categories that have been determined to cause, or significantly contribute to, air pollution that may endanger public health or welfare. Section 111 of the CAA also requires EPA, at least every eight years, to review and, if appropriate, revise NSPS for each source category for which such standards have been established. Section 111 of the CAA also requires that emission guidelines be established for existing sources for which air quality criteria have not been issued, are not included in the list published under Section 108(a) of the CAA or emitted from a source category that is regulated under section 112 of the CAA but to which a standard of performance would apply if such an existing source were a new source.

[13] In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision.
[14] In April 2018, EPA completed the review of the 2010 NO_2 NAAQS and retained the standards without revision.
[15] In January 2019, EPA is required to complete the review of the 2010 SO_2 NAAQS.

In FY 2020, EPA will continue work to address NSPS reviews for sources of air pollutants for four source categories, including Electric Utility Generating Units (EGUs), Crude Oil and Natural Gas Production, Transmission and Distribution, Residential Wood Heaters, and Municipal Solid Waste (MSW) Landfills, consistent with the requirements of the CAA. EPA also will continue to work to address emission guidelines for EGUs and MSW Landfills. Additionally, as a result of ongoing litigation, EPA expects to undertake additional NSPS reviews and regulatory revisions, as applicable, for two other source categories in FY2020.

Air Toxics**:** Section 112(d)(6) of the CAA requires EPA to review and revise, as necessary, all NESHAP (for both major and area sources) every eight years. These reviews include collecting new information and emissions data from industry; reviewing emission control technologies; and conducting economic analyses for the affected industries needed for developing regulations. Similarly, Section 112(f) of the CAA requires EPA to conduct reviews of the risk that remains after the implementation of MACT standards within eight years of promulgation.

In FY 2020, EPA will engage in rulemaking efforts to review and revise, as appropriate, emissions standards for 36 source categories. This is pursuant to three separate court orders for the final rules, with deadlines of March 13, 2020, June 30, 2020, and October 1, 2021. Additionally, as a result of ongoing litigation, EPA expects to undertake additional reviews and regulatory revisions, as applicable, under CAA section 112 for three other source categories in FY 2020.

EPA also may undertake other projects, such as statutorily mandated, overdue NSPS and area source technology reviews related to the 36 source categories mentioned earlier and others. In addition, under Section 129 of the CAA, EPA plans to continue efforts to address the risk and technology review for Large Municipal Waste Combustors. Compliance testing and monitoring methodologies will continue to be developed and improved in support of these risk determination and rulemaking efforts. In FY 2020, EPA also will continue to address program-wide issues, including court-vacated rules that apply across many industrial sources.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$721.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$4,438.0 / -25.6 FTE) This program change is a reduction in the Federal Stationary Source Regulations program. As a result of this change, the Agency will work to develop a more efficient approach to meeting Clean Air Act requirements including statutorily-required NAAQS reviews. In addition, EPA will rely on states and other stakeholders to identify burden and cost-reduction actions needed to improve the federal-state partnership and the stationary source regulatory process as a whole.

Statutory Authority:

Clean Air Act.

Federal Support for Air Quality Management

Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$128,588.0***	***$128,001.0***	***$107,298.0***	***-$20,703.0***
Science & Technology	$5,722.3	$6,714.0	$3,776.0	-$2,938.0
Total Budget Authority	$134,310.3	$134,715.0	$111,074.0	-$23,641.0
Total Workyears	792.0	816.7	636.8	-179.9

Program Project Description:

The Federal Support for Air Quality Management Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs for the National Ambient Air Quality Standards (NAAQS), establishes standards for reducing air toxics, and sustains visibility protection. EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; whereas states have the primary responsibility (and tribes may choose to take responsibility) for developing clean air measures necessary to meet the NAAQS and protect visibility. At the core of this program is the use of scientific and technical air emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring air emissions and concentrations, collects these data, and maintains databases (e.g., Emissions Inventory System, Air Quality System, etc.). EPA also supports training for state, tribal, and local air pollution professionals.

The Federal Support for Air Quality Management Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs for the National Ambient Air Quality Standards (NAAQS), establishes standards for reducing air toxics, and sustains visibility protection. EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; whereas states have the primary responsibility (and tribes may choose to take responsibility) for developing clean air measures necessary to meet the NAAQS and protect visibility. At the core of this program is the use of scientific and technical air emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring air emissions and concentrations, collects these data, and maintains databases (e.g., Emissions Inventory System, Air Quality System, etc.). EPA also supports training for state, tribal, and local air pollution professionals.

Under the Clean Air Act (CAA), EPA is required to set the NAAQS for ambient pollutants considered harmful to public health and the environment. The six "criteria" pollutants for which EPA has established NAAQS are: particulate matter (PM), ozone, sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to periodically review the science upon which the NAAQS are based and the standards themselves. These national

standards form the foundation for air quality management and establish goals that protect public health and the environment.

Section 109 of the CAA Amendments of 1990 established two types of NAAQS - primary and secondary standards. Primary standards are set at a level requisite to protect public health with an adequate margin of safety, including the health of at-risk populations. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

For each of the six criteria pollutants, under Section 110 of the CAA, EPA tracks two kinds of air pollution information: air pollutant concentrations based on actual measurements in the ambient (outside) air at monitoring sites throughout the country; and pollutant emissions based on engineering estimates or measurements of the total tons of pollutants released into the air each year. EPA works with state and local governments to ensure the technical integrity of emission source controls in State Implementation Plans (SIPs) and with tribes on Tribal Implementation Plans (TIPs). EPA also reviews SIPs to ensure they are consistent with applicable requirements of the CAA and takes regulatory action on SIP submissions consistent with CAA responsibilities. The new source review (NSR) preconstruction permit program in Title I of the CAA is a part of state plans to attain and maintain the NAAQS. The two primary aspects of this program are the prevention of significant deterioration (PSD) program, described in Section 165 of the CAA and the nonattainment NSR program, which is described in various parts of the CAA, to include Sections 173 and 182, among others.

Sections 169A and 169B of the CAA also require protection of visibility for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Congress established a national goal of returning visibility in the Class I areas to natural conditions (*i.e.*, the visibility conditions which existed without manmade air pollution). The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

The provisions of the CAA that address the control of air toxics are found in Section 112. This section requires issuing National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of all NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan.* This program also supports the Agency Priority Goal, "Improve Air Quality by Implementing Pollution Control Measures to Reduce the Number of Nonattainment Areas," and the long-term performance goal, "By September 30, 2022, reduce the number of nonattainment areas to 101." Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Since 1990, for

example, national average levels have decreased by 22 percent for ozone, 34 percent for particulate matter, 88 percent for sulfur dioxide, and 98 percent for lead.[16] In FY 2020, EPA will continue to prioritize key activities in support of attainment of the NAAQS and implementation of stationary source regulations by state, tribal, and local air quality programs.

In FY 2020, EPA will continue its review of the NAAQS in accordance with the CAA, including the ongoing NAAQS reviews for ozone and particulate matter, as well as the ongoing review of the secondary NAAQS for oxides of nitrogen, oxides of sulfur and particulate matter. In addition, EPA will continue its CAA mandated responsibilities to administer the NAAQS by reviewing state plans and decisions consistent with statutory obligations; taking federal oversight actions such as action on State Implementation Plan/Tribal Implementation Plan (SIP/TIP) submittals; and by developing regulations and policies to ensure continued health and welfare protection during the transition between existing and new standards. EPA will work with air agencies to determine the need for additional rulemakings and guidance documents to support state and tribal efforts to implement CAA SIP requirements, in alignment with capacity and priorities. EPA will provide technical and policy assistance to states and tribes developing or revising SIPs/TIPs.

The Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum, *Streamlining Permitting and Reducing Regulatory Burden for Domestic Manufacturing*. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, *Reducing Regulation and Controlling Regulatory Costs* and Executive Order 13777, *Enforcing the Regulatory Reform Agenda*. EPA will continue to evaluate recommendations, and, where appropriate, repeal, replace, or modify existing regulations to make them less burdensome and provide greater certainty to regulated entities.

On August 21, 2018, EPA proposed the Affordable Clean Energy (ACE) rule which would establish emission guidelines for states to develop plans to address greenhouse gas emissions from existing coal-fired power plants. After the rule is finalized, the Agency will work with the states in developing and reviewing their plans.

EPA, in close collaboration with states and tribes, will work to reduce the number of areas not in attainment with the NAAQS. The Agency will continue to look for ways to improve the efficiency and effectiveness of the SIP process, including its own review process, with a goal of maximizing timely processing of state-requested SIP actions and reducing the backlog. The Agency will act on designation or re-designation of nonattainment areas to attainment, as appropriate. A focus will be placed on states achieving attainment, looking at improved processes, and flexible implementation options. Also, the recently developed State Plan Electronic Collaboration System or SPeCS, is expected to improve EPA tracking of SIP submittals and EPA action on SIPs in FY 2020 and beyond EPA also will continue to review and take appropriate action on SIPs for regional haze to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. In FY 2020, EPA will continue to provide technical assistance to states that are developing plan revisions. Section 169A of the CAA requires EPA to assess and approve the plans.

[16] *Our Nation's Air: Status and Trends Through 2017*, found at: https://www.epa.gov/air-trends/air-quality-national-summary.

EPA will continue to assist other federal agencies and state and local governments in implementing the conformity regulations promulgated pursuant to Section 176 of the CAA. These regulations require federal agencies, taking actions in nonattainment and maintenance areas, to determine that the emissions caused by their actions will conform to the SIP.

One of EPA's priorities is to fulfill its CAA and court-ordered obligations. Section 112 of the CAA requires that all NESHAPs must be reviewed and updated, as necessary, every eight years, taking into account developments in practices, processes and technologies related to those standards. In FY 2020, EPA will continue to conduct these periodic "technology reviews" and conduct risk assessments to determine whether MACT-based NESHAP appropriately protect public health. The Program will prioritize its work with an emphasis on meeting court-ordered deadlines.

EPA will work to meet its Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) obligations pursuant to Sections 165 and 173 of the CAA. EPA will continue to work with citizens, states, and industries on NSR issues. In aligning this effort with Executive Order 13777, *Enforcing the Regulatory Reform Agenda* and Executive Order 13771, *Reducing Regulation and Controlling Regulatory Costs*, EPA will continue to evaluate existing regulations and policies, pursue opportunities to make them less burdensome, and provide greater regulatory certainty to air agencies and regulated entities.

In FY 2020, EPA will continue to provide technical assistance to state, local, and tribal air agencies for both NSR and title V (operating) permits. This support will occur at appropriate times and as requested, consistent with applicable requirements, before and during the permitting process. EPA expects to implement such support in an efficient manner and consistent with established timeframes for applicable oversight of state, tribal, and local air agencies during the permitting process. Also, EPA will continue to develop the Electronic Permitting System (EPS) which is expected to improve EPA interaction with states, locals, and tribal air agencies and improve data availability and transparency in FY 2020 and beyond.

In FY 2020, EPA will assist state, tribal, and local agencies with various technical activities. EPA develops and provides a broad suite of analytical tools, such as source characterization analyses, emission factors and inventories, statistical analyses, source apportionment techniques, quality assurance protocols and audits, improved source testing and monitoring techniques, source-specific dispersion and regional-scale photochemical air quality models, and augmented cost/benefit tools, to assess control strategies.[17] The Agency will maintain the core function of these tools (e.g., integrated multiple pollutant emissions inventory, air quality modeling platforms, etc.) to provide the technical underpinnings for scientifically sound, more efficient and comprehensive air quality management by state, local and tribal agencies.

EPA will maintain baseline analytical capabilities required to develop effective regulations including: analyzing the economic impacts and health benefits of regulations and policies; developing and refining source sampling measurement techniques to determine emissions from

[17] Please see https://www.epa.gov/technical-air-pollution-resources for additional information.

stationary sources; updating dispersion models for use in source permitting; and conducting air quality modeling that characterizes the atmospheric processes that disperse a pollutant emitted by a source. Resources from the Science and Technology appropriation component of this program support the scientific development of these capabilities.

In FY 2020, state and local agencies will have the lead in implementing the National Air Toxics Trends Sites (NATTS). The NATTS, designed to capture the impacts of widespread pollutants, is comprised of 27 permanent monitoring sites.[18] EPA will consult on priority data gaps to better assess population exposure to toxic air pollution.

In FY 2020, EPA will maintain the Air Quality System (AQS), one of the Agency's mission essential functions, which houses the nation's air quality data. EPA will provide the core support needed for the AQS Data Mart, which provides access to the scientific community and others to obtain air quality data via the internet. The Agency's national real-time ambient air quality data system (*AirNow*) will maintain baseline operations. EPA will continue to operate and maintain the Emissions Inventory System (EIS), a system used to quality assure and store current and historical emissions inventory data, and to support development of the National Emissions Inventory (NEI). The NEI is used by EPA, states, and others to support state and local air agency SIP development, to serve as a vital input to air quality modeling, to help to analyze the public health risks from air toxics and to develop strategies to manage those risks, and to support multi-pollutant analysis covering air emissions. EPA will continue to implement previously identified Lean strategies to streamline NEI development and to reduce burden for industry for meeting their emissions data reporting requirements through the Combined Air Emissions Reporting (CAER) e-Enterprise effort. The CAER project, when fully developed and deployed, will streamline multiple emissions reporting processes and is expected to reduce the cost to industry and government for providing and managing environmental data and to improve decision-making capacity through more timely availability of data.

Performance Measure Targets:

(PM NA1) Number of Nonattainment Areas.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						155	138	136	Nonattain-ment Areas
Actual						159			

[18] Please see: http://www.epa.gov/ttn/amtic/airtoxpg.html for additional information.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$5,458.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$32,911.0 / -217.4 FTE) This program change reflects a reduction in EPA technical assistance to and support of state, tribal, and local air programs, including those that develop and implement clean air plans, issue air permits, and provide air quality information to the public.

- (+$6,750.0 / +35.0 FTE) This is an increase to support the implementation of Administration priorities, specifically reducing the SIP backlog, streamlining the Title V permitting process, and implementing rulemakings like the Affordable Clean Energy Rule.

Statutory Authority:

Clean Air Act.

Stratospheric Ozone: Domestic Programs
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Program & Management	***$4,601.1***	***$4,637.0***	***$3,948.0***	***-$689.0***
Total Budget Authority	$4,601.1	$4,637.0	$3,948.0	-$689.0
Total Workyears	18.6	19.4	18.0	-1.4

Program Project Description:

The stratospheric ozone layer protects life by shielding the Earth's surface from harmful ultraviolet (UV) radiation. Scientific evidence demonstrates that ozone-depleting substances (ODS) used around the world destroy the stratospheric ozone layer,[19] which raises the incidence of skin cancer and other illnesses through overexposure to increased levels of UV radiation.[20]

EPA estimates that in the United States alone, the worldwide phase out of ODS will avert millions of cases of non-fatal and fatal skin cancers (melanoma and non-melanoma), as well as millions of cataract cases, which is the leading cause of blindness. Full implementation of the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) globally, including its amendments and adjustments, is expected to avoid more than 280 million cases of skin cancer, approximately 1.6 million skin cancer deaths, and more than 45 million cases of cataracts in the United States among individuals born between 1890 and 2100.[21]

EPA implements provisions of the Clean Air Act Amendments of 1990 (CAA) and the Montreal Protocol, resulting in the reduction of ODS in the U.S. and lower health risks to the American public. EPA uses a combination of regulatory and partnership programs to protect and restore the ozone layer. The CAA provides for a phase-out of production and consumption of ODS and requires controls on their use, including banning certain emissive uses, requiring labeling to inform consumer choice, and requiring sound servicing practices for the use of refrigerants in air conditioning and refrigeration appliances. The CAA also prohibits venting ODS and their substitutes and requires listing of alternatives that reduce overall risks to human health and

[19] World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland. 2014.
[20] Fahey, D.W., and M.I. Hegglin (Coordinating Lead Authors), Twenty questions and answers about the ozone layer: 2014 Update, In Scientific Assessment of Ozone Depletion: 2014, Global Ozone Research and Monitoring Project–Report No. 56, World Meteorological Organization, Geneva, Switzerland, 2014. Available on the internet at: https://www.esrl.noaa.gov/csd/assessments/ozone/2014/twentyquestions2014update.pdf.
[21] EPA, Updating ozone calculations and emissions profiles for use in the Atmospheric Health Effects Framework Model (2015). Available on the internet at: https://www.epa.gov/sites/production/files/2015-11/documents/ahef_2015_update_report-final_508.pdf.

the environment, ensuring that businesses and consumers have alternatives that are safer for the ozone layer than the chemicals they replace. As a signatory to the Montreal Protocol, the U.S. is committed to ensuring that our domestic program is at least as stringent as international obligations and to regulating and enforcing the terms of the Montreal Protocol respective of domestic authority. With U.S. leadership, in 2007 the Parties to the Montreal Protocol agreed to a more aggressive phase-out for ozone-depleting hydrochlorofluorocarbons (HCFCs) equaling a 47 percent reduction in overall emissions during the period 2010-2040. The adjustment in 2007 also calls on Parties to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate.[22] In 2016, the Parties to the Montreal Protocol agreed to the Kigali Amendment,[23] which will globally phase down production and consumption of hydrofluorocarbons (HFCs). HFCs are intentionally manufactured fluorinated greenhouse gases used in all the same sectors as ODS such as air conditioning, refrigeration, fire suppression, solvents, foam blowing agents, and aerosols. In 2018, the Parties to the Montreal Protocol agreed to adjust the HCFC phaseout's servicing provisions to, among other things, allow for servicing of existing fire suppression equipment until 2030.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In carrying out the requirements of the CAA and the Montreal Protocol in FY 2020, EPA will continue to meet its ODS import caps and work toward the gradual reduction in production and consumption of ODS. This will require finalization of a notice-and-comment rulemaking in calendar year 2019 that will issue HCFC allowances where needed and address the servicing provision changes under the Montreal Protocol. To meet FY 2020 targets and out year targets, EPA will issue allocations for HCFC production and import in accordance with the requirements established under CAA Sections 605 and 606; review petitions to import used ODS under sections 604 and 605; manage information that industry identifies as Confidential Business Information (CBI) under CAA Section 603; and implement regulations concerning the production, import, and export of ODS and maintenance of the tracking system used to collect the information. EPA also will prepare and submit an annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS.[24]

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) program[25] to find those that pose less overall risk to human health and the environment and to promote a smooth transition to safer alternatives. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for approximately 50 end uses across eight industrial sectors. In *Mexichem Fluor v. EPA*, the court partially vacated a

[22] *Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons).*

[23] Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Kigali 15 October 2016, https://treaties.un.org/doc/Publication/CN/2016/CN.872.2016-Eng.pdf.

[24] The Article 7 report prepared by EPA on behalf of the United States contains chemical-specific production, import and export data that is not available publicly. To protect potential confidential information the report is not available on the internet; however, the data included in the report is aggregated and available at: http://ozone.unep.org/countries/data?report=CalcCons&format=dataviz&group_by=anxgrp&filter[]=&output=ODP&year_from=1986&year_to=2019&parties=US.

[25] For more information, please see: http://www.epa.gov/ozone/snap/index.html.

2015 Rule "to the extent it requires manufacturers to replace HFCs with a substitute substance" and remanded the rule to EPA for further proceedings.

EPA will work to address the court's decision, including potentially making changes to the SNAP program's framework and implementation. In addition, EPA will consider a number of submissions and petitions in that would expand the list of acceptable alternatives, particularly for end-uses where there is an urgent need for more options. The schedule for other approvals will be adjusted through FY 2020. Certain approvals adjusted for FY 2019 will be taken up with other pending approvals in FY 2020, to the extent practicable, as EPA seeks to minimize the risk to the investment made by companies in research and development and testing phases given that SNAP listings are critical to the commercialization of many substitutes and alternative technologies in key sectors of use. Final Agency action can include notices of acceptability listings as well as notice-and-comment rulemaking. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption through support for changes to industry codes and standards.

In FY 2020, EPA is planning to implement a revised CAA Section 608 rule that the Agency intends to finalize in FY 2019. That rule revisits certain aspects of the extension of the Section 608 refrigerant management program to substitute refrigerants. At the same time, EPA will continue efforts under CAA Section 608 to reduce emissions of refrigerants during the service, maintenance, repair and disposal of air conditioning and refrigeration equipment. EPA will continue to educate stakeholders about the rules concerning servicing, maintenance, repair and disposal of air conditioning and refrigeration appliances. EPA will monitor industry standards and may adopt the standards into its regulations through incorporation by reference, as appropriate.

EPA will continue to support the CAA Section 609 motor vehicle air conditioning (MVAC) servicing program to reduce emissions of refrigerants from MVAC systems. Where industry consensus standards are available that EPA considers to be sufficient for protection of human health and the environment, EPA may adopt the standards into its regulations through incorporation by reference. EPA is aware of such standards developed by the Society of Automotive Engineers (SAE) for recovery equipment for new alternatives. EPA expects to develop a proposed rule in FY 2019 to incorporate by reference these industry, consensus-based standards for MVAC systems that use refrigerants currently listed as acceptable, subject to use conditions. EPA intends to finalize this rule in FY 2020.

In FY 2020, EPA will continue to support implementation of the Montreal Protocol domestically by ensuring U.S. interests are represented at Montreal Protocol meetings by providing technical expertise. The Agency will provide technical expertise for the Montreal Protocol's Technology and Economic Assessment Panel and its Technical Options Committees.

With the decline in allowable ODS production, a significant stock of equipment that continues to use ODS will need access to recovered and recycled/reclaimed ODS to allow for proper servicing. EPA reviews available market and reported data to monitor availability of recycled and reclaimed ODS, where production and import of new material is phased out. EPA also will implement other provisions of the Montreal Protocol, including exemption programs to allow for a continued smooth phase out of ODS, in particular HCFCs and halons.

Additionally, EPA will continue to work with federal and international agencies to stem illegal imports of ODS to support a level playing field for companies that have transitioned to non-ODS alternatives. This is particularly important in light of recent atmospheric measurements showing increased emissions of ODS phased out of production globally and the need to identify potential sources of these emissions including illegal production.[26] EPA will continue data exchange with U.S. Customs and Border Protection and Homeland Security Investigations on ODS importers and exporters for Customs to determine admissibility and target illegal ODS shipments entering the United States, as well as reviewing and approving ODS imports flagged in the Automated Customs Environment.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$242.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$931.0 / -1.4 FTE) This change is a reduction to program resources related to activities such as development of outreach and compliance assistance materials.

Statutory Authority:

Title VI of the Clean Air Act.

[26] See, Montzka *et al*. (2018). An unexpected and persistent increase in global emissions of ozone-depleting CFC-11, *Nature*, 557, pp. 413–417. Available on the internet at: https://www.nature.com/articles/s41586-018-0106-2.

Stratospheric Ozone: Multilateral Fund
Program Area: Clean Air
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$8,326.0***	***$8,736.0***	***$0.0***	***-$8,736.0***
Total Budget Authority	$8,326.0	$8,736.0	$0.0	-$8,736.0

Program Project Description:

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) facilitates a global phaseout of ozone-depleting substances (ODS). The United States implements its treaty obligations primarily through Title VI of the Clean Air Act.

The *Multilateral Fund for the Implementation of the Montreal Protocol* (Multilateral Fund) was created by the Parties to the Montreal Protocol to provide funds to enable developing countries to comply with their Montreal Protocol obligations to phase out the use of ODS on an agreed schedule. The United States and other developed countries contribute to the Multilateral Fund. The U.S. contribution to the Multilateral Fund is split between EPA and the Department of State.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. EPA will continue domestic ODS reduction work.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$8,736.0) This program change eliminates resources to support EPA participation in the Multilateral Fund.

Statutory Authority:

Title VI of the Clean Air Act.

Brownfields

Brownfields
Program Area: Brownfields
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$24,175.6***	***$25,593.0***	***$16,728.0***	***-$8,865.0***
Total Budget Authority	$24,175.6	$25,593.0	$16,728.0	-$8,865.0
Total Workyears	134.7	137.4	92.6	-44.8

Program Project Description:

Brownfields sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields can be found in the heart of America's main streets and former economic centers. The Brownfields Program supports these efforts by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.[27] As of the end of FY 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.[28]

This Program supports the operating expenses for the overall Brownfields program. Operating activities include 1) conducting the annual, high volume cooperative agreement competitions; 2) awarding new cooperative agreements; 3) managing the ongoing cooperative agreement workload; 4) providing technical assistance and ongoing support to grantees; 5) collaborating with other agency programs; 6) operating the Assessment Cleanup and Redevelopment Exchanges System (ACRES) online grantee reporting tool; 7) assisting communities to explore land reuse opportunities under the Land Revitalization Program; and 8) developing guidance and tools that clarify potential environmental cleanup liabilities.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Brownfields Program will continue to manage over 900 assessment, cleanup, revolving loan fund (RLF), multi-purpose, and Environmental Workforce Development and Job Training (EWDJT) cooperative agreements;

[27] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016; and (2) census data from the 2011-2015 American Community Survey.
[28] EPA's ACRES database.

as well as state and tribal assistance agreements; training, research, and technical assistance agreements; and land revitalization projects.

In FY 2020, the Brownfields Program will support the following activities:

- **Compete and Award New Cooperative Agreements**: Review, select, and award an estimated 360 new cooperative agreements which will lead to approximately $1.0 billion and 5,500 jobs leveraged in future years.

- **Oversight and Management of Existing Cooperative Agreements:** Continue federal fiduciary responsibility to manage approximately 900 existing brownfields cooperative agreements in a reduced capacity while ensuring the terms and conditions of the agreements are met, and provide limited technical assistance. Provide targeted environmental oversight support to grantees (*e.g.*, site eligibility determinations, review of environmental site assessment and cleanup reports).

- **Technical Assistance:** Provide technical assistance to states, tribes, and local communities in the form of research, training, and analysis. This can lead to cost effective implementation of brownfields redevelopment projects by providing communities with the knowledge necessary to understand market conditions, economic development and other community revitalization strategies, and how cleanup and reuse can be catalyzed by small businesses.

- **Collaboration:** The Program will work collaboratively with our partners at the state, tribal, and local level on innovative approaches to help achieve land reuse. It also will continue to develop guidance and tools that clarify potential environmental cleanup liabilities, thereby providing greater certainty for parties seeking to reuse these properties. The Program also can provide direct support to facilitate transactions for parties seeking to reuse contaminated properties.

- **Accomplishment Tracking**: Support the maintenance of the ACRES online grantee reporting tool. This enables grantees to track accomplishments and report on the number of sites assessed and cleaned up, and the amount of dollars and jobs leveraged with brownfields grants.

- **Land Revitalization Program Support:** Provide support for approximately two communities as part of EPA's Land Revitalization Program. The Land Revitalization Program supports communities in their efforts to restore contaminated lands into sustainable community assets.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$77.0) This net change to fixed and other costs is a decrease due to the recalculation of base worforce costs for exising FTE due to the adjustements in salary, essential workforce suport, and benefit costs.

- (-$8,788.0 / -44.8 FTE) This program change reduces funding for managing and closing out assistance agreements, data collection analysis, and system ehancements.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), §§ 101(39), 104(k), 128(a); Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, § 8001.

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$101,299.2***	***$101,665.0***	***$89,644.0***	***-$12,021.0***
Inland Oil Spill Programs	$122.5	$139.0	$0.0	-$139.0
Hazardous Substance Superfund	$943.0	$995.0	$991.0	-$4.0
Total Budget Authority	$102,364.7	$102,799.0	$90,635.0	-$12,164.0
Total Workyears	485.9	489.0	428.7	-60.3

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Compliance Assurance Program that allows the controlling regulatory authority to detect noncompliance. The Program also promotes compliance with the nation's environmental laws. Effective targeting of compliance monitoring plays a critical role in achieving the goals EPA has set forth for protecting health and the environment. The states and EPA use compliance monitoring tools and activities to identify whether regulated entities are complying with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as inspections and investigations, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment.

The Compliance Monitoring Program supports cooperative federalism and the expanded use of compliance assurance tools (such as compliance assistance) among state, tribal, local, and federal partners. States, tribes, and EPA have policies/procedures on the appropriate use of the tools in our compliance assurance tool box, with states undertaking the majority of enforcement and compliance activities in authorized programs. EPA is working to implement the Program in the most efficient manner possible by leveraging information technology systems and improving business processes. Tools in the compliance monitoring program include:

- Compliance Assistance. EPA collaborates with state, local, federal, tribal, and industry partners with the E-Enterprise Portal, a website which allows the states, the regulated community, and EPA to transact business such as permitting and reporting, and provides easy access to needed compliance assistance information. Also, EPA will continue its compliance assistance work by continuing to partner with third-party organizations and federal agencies to support existing web-based, sector-specific centers and other web-based assistance resources.

- Full Electronic Reporting with Compliance Assistance. EPA has a national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), which

supports both the compliance monitoring and civil enforcement programs. ICIS collects enforcement and compliance data, and EPA utilizes those data and other information technology tools to: identify potential violations of the federal environmental laws; facilitate efficient enforcement; and promote compliance with these requirements. EPA also makes ICIS data available to the public via the internet-accessible Enforcement and Compliance History Online ("ECHO") system. Using ICIS and ECHO to electronically track its civil enforcement work allows EPA to better ensure that its enforcement resources are going to address the most significant noncompliance and facilitates transparency. Currently, EPA and states are implementing the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule through ICIS.[29] Phase 1 of the rule was implemented in FY 2017 for NPDES Discharge Monitoring Reports (DMRs), including compliance assistance features such as electronic reminders to state and federal permittees that may have missed their compliance monitoring report deadlines. More than 20 states currently use EPA's electronic reporting tool for DMR reporting.

- Smart Tools for Field Inspectors. EPA is developing software solutions to improve the effectiveness and efficiency of how EPA and authorized states conduct compliance inspections, starting with the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Program.

- Compliance Training for EPA and States. To ensure the quality of compliance monitoring activities, EPA develops national policies, updates inspection manuals, provides required training for inspectors, and issues inspector credentials. In FY 2018, EPA performed audits of inspector credential possession and training documentation. The findings and recommendations from those audits are being used to improve the documentation supporting EPA inspector credentials. Also in 2018, EPA held a *kaizen* event to streamline the inspector credentialing process, which when implemented, will ensure greater integrity in the inspector credentialing process and make the process more efficient. For example, EPA estimates that shifting from the current paper process to an electronic one will decrease the total time it takes to provide credentials to an inspector by approximately 80 percent.[30]

  In addition, EPA delivers critical in-person and online training courses to new and experienced federal, state and local inspectors to ensure the integrity of the national compliance monitoring program. EPA hosts several multi-day training programs, such as the annual Clean Water Act National Pollutant Discharge Elimination System (CWA NPDES) Technical Inspector Workshop and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Pesticide Inspector Residential Training Program. These on-site training programs deliver in-depth technical and programmatic content to hundreds of inspectors nationwide. EPA's National Enforcement Training Institute (NETI) also provides on-line, e-learning courses for more than 2,500 EPA, state and tribal inspectors,

[29] For more information, please refer to: https://www.epa.gov/compliance/npdes-ereporting.
[30] Based on a technical evaluation from the *kaizen* event: Leaning the Civil Inspector Credentialing Process, July 17-19, 2018. Current practice took approximately 127 days. The new process is estimated to take 25 days.

and has made available over 165 on-line training courses in the NETI e-Learning Center for EPA and state, local, and tribal inspectors and enforcement partners.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. Work in this program also supports the long-term performance goal, "Increase Environmental Law Compliance Rate" in the *FY 2018 - 2022 EPA Strategic Plan*. 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 FY 2020, EPA will continue to streamline its compliance monitoring activities such as field inspections, data tools, and assistance. EPA will focus principally on 1) those programs that are not delegated to states ("direct implementation"), and 2) where EPA's expertise or unique role is best suited to address the issue. This includes, but is not limited to, multi-state/multi-regional matters, issues of national significance, and emergency situations. In addition, EPA will provide some targeted oversight and support to state, local, and tribal programs. To accomplish this, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. Also, the Agency will maintain accessibility to ICIS for EPA, states, and the tribes.

EPA has evolved the National Enforcement Initiatives program into a National Compliance Initiatives (NCI) program that provides states and tribes with additional opportunities for meaningful engagement, applies a broader set of compliance assurance tools, and aligns these priorities with the *FY 2018 - 2022 EPA Strategic Plan*. EPA engaged with states, tribes, and local governments to gather their input on the selection of enforcement and compliance assistance priorities in FY 2018 and continuing in FY 2019. Implementation of this NCI cycle begins in FY 2020 and continues through FY 2023.

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. EPA will work with states to evaluate and prioritize the development of additional electronic reporting tools that support states. EPA's centralized development of electronic reporting tools saves the states significant resources in information technology development costs.

Beginning in FY 2018 and continuing in FY 2020, EPA will track 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 SNC rate reductions with the goal of reducing the rate by 50 percent by the end of FY 2022. The Program also will continue to review the rate of electronic reporting for each authorized NPDES state program and work with states to achieve improved reporting.

In 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. EPA will address any lessons learned and issue a final policy with full implementation in FY 2020.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	17,000	17,000	15,500	15,500	14,000	10,000	10,000	10,000	Inspections & Evaluations
Actual	18,000	16,000	15,400	13,500	11,800	10,600			

(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						24	TBD	TBD	Percent
Actual						Data Avail 09/2019			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$747.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$12,768.0 / -60.0 FTE) This program change reflects a recognition that states conduct the vast majority of inspections, an EPA focus on direct implementation programs, and an increased reliance on technology rather than on-site inspections to monitor compliance.

Statutory Authority:

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

Enforcement

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$164,266.9***	***$171,283.0***	***$147,647.0***	***-$23,636.0***
Leaking Underground Storage Tanks	$619.8	$620.0	$470.0	-$150.0
Inland Oil Spill Programs	$2,464.8	$2,413.0	$2,373.0	-$40.0
Total Budget Authority	$167,351.5	$174,316.0	$150,490.0	-$23,826.0
Total Workyears	995.5	1,000.8	857.1	-143.7

Program Project Description:

The overall goal of EPA's Civil Enforcement Program is to maximize compliance with the nation's environmental laws and regulations to protect human health and the environment. EPA will seek to strengthen environmental partnerships with its state and tribal partners, encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, and pursue enforcement to deter future violations.

The Agency works closely with the U.S. Department of Justice, states, tribal governments, territories, and local agencies to ensure consistent and fair enforcement of all major environmental statutes, distinct programs under those statutes, and numerous regulatory requirements under those programs, which apply in various combinations to millions of regulated federal and private entities. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws. In FY 2018, because of EPA enforcement actions, 809 million pounds of pollutants and waste were reduced, treated, or eliminated.[31]

EPA has a national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), which supports both the Compliance Monitoring and Civil Enforcement programs. ICIS collects enforcement and compliance data, and EPA utilizes the data and other information technology tools to identify potential violations of federal environmental laws, facilitating efficient enforcement and promoting compliance with these requirements. In addition, EPA also makes ICIS data available to the public via the internet-accessible Enforcement and Compliance History Online (ECHO) system. Using ICIS and ECHO to electronically track its civil enforcement work allows EPA to ensure its enforcement resources will address the most significant noncompliance and facilitate transparency.

[31] For additional information, please refer to: https://www.epa.gov/sites/production/files/2019-01/documents/epa_2018_yearinreview_0128-4.pdf.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. Work in this program also supports the long-term performance Strategic Plan goal "Increase Environmental Law Compliance Rate."

In FY 2020, EPA will continue to focus efforts toward areas where, in support of the goals of the *FY 2018 - 2022 EPA Strategic Plan*, EPA's enforcement actions can address the most substantial impacts to human health and the environment. Recognizing the role of states and tribes as the primary implementers where authorized by EPA to implement the federal statutes, EPA will focus civil enforcement resources on direct implementation responsibilities, as well as assisting authorized states and tribes in meeting national standards, such as by providing expertise and implementing compliance monitoring and civil enforcement strategies that will ensure a level playing field. EPA is responsible for direct implementation 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 include the Clean Air Act (CAA) mobile source program, pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act, enforcement in Indian Country, and enforcement of non-delegated portions of various other laws, including the Resource Conservation and Recovery Act, the Clean Water Act, the Safe Drinking Water Act, and the CAA.

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 or take a federal action 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. And 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, or a human health emergency due to drinking water contamination. In addition, EPA ensures cleanup (corrective action) at Resource Conservation and Recovery Act (RCRA) facilities. For example, closely coordinating with states, EPA can issue cleanup orders to RCRA facilities to help meet the RCRA Corrective Action Program's goals. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered and ensure that federal facilities are held to the same standards as the private sector and will provide technical and scientific support to states and tribes with authorized programs. The Agency also will carry out its statutory oversight responsibilities and will offer assistance to states in their implementation of delegated programs when needed or in cases where the Agency maintains a unique expertise or capability.

EPA has evolved the National Enforcement Initiatives program into a National Compliance Initiatives (NCI) program that provides states and tribes with additional opportunities for meaningful engagement, applies a broader set of compliance assurance tools, and aligns these priorities with the *FY 2018 - 2022 EPA Strategic Plan*. EPA will engage with states, tribes, and local governments to gather their input on the selection of enforcement and compliance assistance priorities in FY 2019. Implementation of this NCI cycle begins in FY 2020 and continues through FY 2023.

Beginning in FY 2018 and continuing in FY 2020, EPA will track the rate of significant non-compliance (SNC) with National Pollutant Discharge Elimination System (NPDES) program requirements quarterly to assess progress with EPA's goal of reducing the SNC rate. EPA will identify focus areas to achieve SNC rate reductions with the goal of reducing the rate by 50% by the end of FY 2022. The Program also will continue to review the rate of electronic reporting for each authorized NPDES state program and work with states to achieve improved reporting.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						325	325	325	Millions of Pounds
Actual	1,425	1,221	1,030	62,223	461	810			

(PM 436) Number of all referred no complaint (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							129	129	Cases
Actual									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$7,278.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$30,914.0 / -143.5 FTE) This program change is due to the fact that states are primary implementers of our nation's environmental laws. EPA will focus on matters affecting multiple states or tribes, serve as a backstop for instances when a state or tribe does not timely or appropriately address serious noncompliance, and assisting a state or tribe in remedying noncompliance problems when it is unable to address the problem because it lacks the capability, resources, or will. This change includes a reduction in resources for cases that do not meet these criteria.

Statutory Authority:

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

Criminal Enforcement
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$44,334.2***	***$44,995.0***	***$44,582.0***	***-$413.0***
Hazardous Substance Superfund	$7,336.3	$7,502.0	$8,198.0	$696.0
Total Budget Authority	$51,670.5	$52,497.0	$52,780.0	$283.0
Total Workyears	225.3	235.9	219.6	-16.3

Program Project Description:

EPA's Criminal Enforcement Program enforces the nation's environmental laws through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment. EPA's criminal enforcement agents (Special Agents) investigate violations of environmental statutes and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice.

The agents are assisted in the Criminal Enforcement Program by forensic scientists, attorneys, technicians, engineers, and other experts. EPA's criminal enforcement attorneys provide legal and policy support for all the Program's responsibilities, including forensics and expert witness preparation, to ensure that program activities are carried out in accordance with legal requirements and the policies of the Agency. These efforts support environmental crime prosecutions primarily by the United States Attorneys and the Department of Justice's Environmental Crimes Section. In FY 2018, the conviction rate for criminal defendants was 92 percent.[32]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes. The Criminal Enforcement Program will increase its collaboration and coordination with the Civil Enforcement Program to ensure that EPA's Enforcement program identifies the most egregious cases and responds to them as effectively as possible. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment.

[32] For additional information, please refer to: https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2018.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,516.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$2,929.0 / -17.1 FTE) This net program change reflects a focus on the most egregious cases and increased coordination with the Civil Enforcement Program, and a reduction in resources for small cases that have limited deterrence value.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Emergency Planning and Community Right-To-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act; Rivers and Harbors Act; Pollution Prosecution Act.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$6,436.5***	***$6,737.0***	***$2,739.0***	***-$3,998.0***
Hazardous Substance Superfund	$617.0	$758.0	$0.0	-$758.0
Total Budget Authority	$7,053.5	$7,495.0	$2,739.0	-$4,756.0
Total Workyears	32.9	35.5	4.0	-31.5

Program Project Description:

The Environmental Justice (EJ) Program fosters environmental and public health improvements in low-income, minority and tribal and indigenous communities disproportionately burdened by pollution by supporting the integration and consideration of EJ issues throughout EPA's programs, through collaboration with interagency partners, and by directly supporting the efforts of vulnerable and overburdened communities to address environmental public health challenges. EPA's FY 2018 EJ grants program had a special emphasis on projects in rural EJ communities and awarded 80 percent of its grants to community-based organizations in rural areas to support local project activities. Examples of these projects included: addressing lead and radon pollution in low-income housing and educating residents about the public health threats from these pollutants; monitoring for and identifying the sources of and reducing pollutants in local water sources; and supporting an innovative pilot to remediate solid waste issues in Alaskan native villages and remote communities. EPA's FY 2019 EJ grants program has a special focus on supporting projects in communities that focus on disaster preparedness, response and recovery; projects focused on issues related to homelessness and military veterans; and a continuing focus on organizations which have not recently received an EJ grant.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Increase Transparency and Public Participation in the *FY 2018 – 2022 EPA Strategic Plan*. In accordance with the 2018 American Water Infrastructure Act, every EPA region employs a dedicated EJ coordinator and the Agency maintains a list of these persons on the Office of Environmental Justice website.

In FY 2020, EPA will use $2 million dedicated to the EJ Program to support the Environmental Justice Collaborative Problem Solving cooperative agreement program to support community-based organizations and Environmental Justice Technical Assistance for Communities to support the technical needs of low income, minority and tribal/indigenous populations. The Agency has five measures of national EJ significance that are annually tracked. Results are published in EPA's

annual EJ reports.[33] The Program is currently working to develop and implement measures of EJ integration throughout EPA's program activities.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$178.0) This net change to fixed and other costs is a decrease due to recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$3,820.0 / -27.1 FTE) This net program change will focus on providing financial assistance grants to community-based organizations and technical assistance to low income, minority, and tribal/indigenous populations.

Statutory Authority:

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

[33] For more information, please see: https://www.epa.gov/environmentaljustice/annual-environmental-justice-progress-reports.

NEPA Implementation
Program Area: Enforcement
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$15,751.2***	***$17,622.0***	***$16,598.0***	***-$1,024.0***
Total Budget Authority	$15,751.2	$17,622.0	$16,598.0	-$1,024.0
Total Workyears	101.3	104.5	95.5	-9.0

Program Project Description:

Pursuant to the National Environmental Policy Act (NEPA) and §309 of the Clean Air Act (CAA), EPA's NEPA Implementation Program coordinates and comments on the environmental review of major federal actions. The Program guides EPA's compliance with NEPA, and other related statutes and executive orders. The Program manages the official Environmental Impact Statement (EIS) filing system for all federal EISs, in accordance with a Memorandum of Understanding with the Council on Environmental Quality (CEQ).[34] It also comments on draft and final EISs and makes these comments publicly available. Moreover, the Program manages the review of Environmental Impact Assessments of non-governmental activities in Antarctica, in accordance with the Antarctic Science, Tourism and Conservation Act.

The NEPA Implementation Program also operates, uses and promotes *NEPAssist*, a publicly available geographic information system to help users (EPA, other federal agencies, and the public) with environmental reviews under NEPA. *NEPAssist* receives approximately 5,956 visits per month, with 91 percent being return visitors. EPA also promotes *e-NEPA*, a web-based system for federal agencies to file EISs and to make comments on EISs accessible to the public on a centralized public website.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in *the FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will focus its reviews on areas where EPA has statutory authority and expertise. EPA also will continue to work with OMB, CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process. In FY 2018, the NEPA Implementation Program issued comment letters on over 260 draft and final EISs as well as numerous environmental assessments. EPA was engaged early with the lead federal agency on 74 percent of projects where a draft EIS was published.

[34] Memorandum of Agreement No. 1 Between The Council on Environmental Quality and The Environmental Protection Agency, October 1977.

In support of EPA efforts to implement Executive Order 13807: "Establishing Discipline and Accountability in the Environmental Review and Permitting Process[35] for Infrastructure Projects", the Memorandum of Understanding Implementing One Federal Decision, Executive Order 13766: "Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects"[36] and the FAST-41 ACT, which all set requirements to streamline infrastructure permitting project reviews,[37] the NEPA Implementation Program will partner with federal agencies on proposed projects throughout the NEPA process to provide expertise and recommendations and will focus efforts on early engagement prior to the publication of the Draft EIS. Early engagement by stakeholders in the NEPA process can support efficiencies and improved project outcomes. Early engagement may involve meeting with the lead agency in person or by phone or providing written comments with recommendations to mitigate impacts of the proposed project or improve the development of the NEPA analysis.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$938.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$2,500.0 / +15.0 FTE) This change is an increase to support the implementation of the Agency's FY 2020 environmental review and permitting responsibilities under NEPA, CAA Section 309, FAST-41, Executive Order 13807, and the Memorandum of Understanding implementing One Federal Decision.

- (-$4,462.0 / -24.0 FTE) This program change will provide a centralized approach to elevating NEPA issues to the Administrator for resolution and allow the Agency to expedite environmental reviews and approvals of high-priority infrastructure projects, as directed by the President under Executive Order 13766.

Statutory Authority:

NEPA; CAA § 309; Antarctic Science, Tourism, and Conservation Act; Clean Water Act § 511(c); Endangered Species Act; National Historic Preservation Act; Archaeological and Historic Preservation Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; Title 41 of the Fixing America's Surface Transportation Act.

[35]For additional information, please refer to: https://www.whitehouse.gov/presidential-actions/presidential-executive-order-establishing-discipline-accountability-environmental-review-permitting-process-infrastructure/.
[36] For additional information, please refer to: https://www.whitehouse.gov/the-press-office/2017/01/24/executive-order-expediting-environmental-reviews-and-approvals-high.
[37] For additional information, please refer to: https://www.gpo.gov/fdsys/pkg/PLAW-114publ94/pdf/PLAW-114publ94.pdf.

Geographic Programs

Geographic Program: Chesapeake Bay
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$67,542.4***	***$73,000.0***	***$7,300.0***	***-$65,700.0***
Total Budget Authority	$67,542.4	$73,000.0	$7,300.0	-$65,700.0
Total Workyears	32.4	34.4	0.0	-34.4

Program Project Description:

The Chesapeake Bay Program is a voluntary partnership, initiated in 1983, that now includes the Chesapeake Bay watershed states (Delaware, Maryland, New York, Virginia, Pennsylvania, and West Virginia), the District of Columbia, the Chesapeake Bay Commission, and the federal government. EPA represents the federal government on the partnership's Chesapeake Executive Council (EC) and, under the authority of Section 117 of the Clean Water Act, works with the EC to coordinate activities of the partnership. On June 16, 2014, the Chesapeake Bay Program partners signed the most recent Chesapeake Bay Watershed Agreement,[38] which provides for the first time the Bay's headwater states (Delaware, New York, and West Virginia) with full partnership in the Bay Program. The Agreement establishes 10 goals and 31 outcomes for sustainable fisheries, water quality, vital habitats, climate change, toxic contaminants, and other areas.

EPA, the watershed jurisdictions, and other key federal agencies set two-year milestones for water quality to make progress towards the Bay Total Maximum Daily Load (TMDL) and the jurisdictions' Watershed Implementation Plans.[39] The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under Court-approved consent decrees for Virginia and Washington, D.C. dating to the late 1990s.[40] The TMDL is designed to ensure all nitrogen, phosphorus, and sediment pollution control efforts needed to restore the Bay and its tidal rivers are in place by 2025.

[38] The Chesapeake Bay Watershed Agreement (2014) available at: http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf.
[39] The federal milestones related to water quality in the Chesapeake Bay watershed are available at http://executiveorder.chesapeakebay.net/EO_13508_Water_Quality_Milestones-2012-01-06.pdf. The jurisdictional milestones are available at: http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/EnsuringResults.html.
[40] The Chesapeake Bay TMDL, available at: http://www.epa.gov/chesapeakebaytmdl/.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA is requesting $7.3 million for support of state and local collection of water quality monitoring data and coordination of science, research, and modeling. The $7.3 million requested in FY 2020 would support the following activities:

- Water quality monitoring ($5.2 million). This funding would leverage between $10-$12 million in combined federal, state, and local funds.
  - Tidal and non-tidal monitoring ($4.8 million).
  - Submerged Aquatic Vegetation (SAV) monitoring ($400 thousand).

- Help build capacity at the state level ($2.1 million).
  - Coordinate modeling, decision support services, data collection, analysis, storage, and access;
  - Support information dissemination and transparency; and
  - Provide consistency and efficiency in communications and data management.

Environmental results, measured through data collected by the states and shared with the federal government, show the importance of the investment that federal, state and local governments have made in providing clean and safe water. Every year the Chesapeake Bay Program uses available monitoring information from the 92 segments of the Chesapeake Bay to estimate whether each segment is attaining criteria for one or more of its designated uses. EPA, along with other federal, state and academic partners, are using this information to demonstrate progress toward meeting water quality standards and the Bay TMDL.

At the end of FY 2018, practices were in place to achieve 87 percent of the phosphorous reductions, 67 percent of the sediment reductions, and 40 percent of the nitrogen reductions necessary to attain applicable water quality standards as measured through the Partnership's Phase 5.3.2 Chesapeake Bay Watershed Model.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$992.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$64,708.0 / -34.4 FTE) This program change reduces funding for the Chesapeake Bay Program. Remaining resources will support critical activities in water quality monitoring.

Statutory Authority:

Clean Water Act, Section 117; Estuary Restoration Act of 2000; Chesapeake Bay Accountability and Recovery Act of 2014; Clean Air Act; Appropriation Act: FY 2018 (Public Law 115-141).

Geographic Program: Gulf of Mexico

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$9,122.9***	***$12,542.0***	***$0.0***	***-$12,542.0***
Total Budget Authority	$9,122.9	$12,542.0	$0.0	-$12,542.0
Total Workyears	11.2	13.1	0.0	-13.1

Program Project Description:

The efforts of EPA's Gulf of Mexico Program Office (GMPO) are dedicated to the protection, restoration and enhancement of the water bodies and coastal environments associated with the greater Gulf of Mexico region.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will encourage the five Gulf of Mexico states to continue to make progress in restoring the Gulf of Mexico from within core water programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$12,542.0 / -13.1 FTE) This program change eliminates the Gulf of Mexico Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act; Appropriation Act: FY 2018 (Public Law 115-141).

Geographic Program: Lake Champlain

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$8,395.0***	***$8,399.0***	***$0.0***	***-$8,399.0***
Total Budget Authority	$8,395.0	$8,399.0	$0.0	-$8,399.0

Program Project Description:

EPA supports efforts to protect Lake Champlain through partnerships to implement the "Opportunities for Action" management plan. The plan was developed to bring together people with diverse interests in the lake to create a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. EPA will encourage New York and Vermont to continue to make progress in restoring Lake Champlain from within core water programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$8,399.0) This program change eliminates the Lake Champlain Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Boundary Waters Treaty of 1909; Clean Water Act § 120; Appropriation Act: FY 2018 (Public Law 115-141).

Geographic Program: Long Island Sound

Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$11,753.9***	***$12,000.0***	***$0.0***	***-$12,000.0***
Total Budget Authority	$11,753.9	$12,000.0	$0.0	-$12,000.0

Program Project Description:

EPA and the States of Connecticut and New York work in partnership to restore and protect Long Island Sound. EPA assists states in implementing the Long Island Sound's Comprehensive Conservation and Management Plan by coordinating the cleanup and restoration actions of the Long Island Sound Study Management Conference.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. EPA will encourage Long Island Sound states and local entities to continue to make progress in restoring the Sound from within core water programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$12,000.0) This program change eliminates the Long Island Sound Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act § 119.

Geographic Program: Other
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$7,388.9***	***$7,393.0***	***$0.0***	***-$7,393.0***
Total Budget Authority	$7,388.9	$7,393.0	$0.0	-$7,393.0
Total Workyears	4.3	4.6	0.0	-4.6

Program Project Description:

Under this program, the Agency develops and implements approaches to mitigate pollution for specific and targeted geographic areas, including the Northwest Forest Program, Lake Pontchartrain Basin Restoration Program, and the Southeast New England Coastal Watershed Restoration Program.

Northwest Forest Program

The Northwest Forest Program supports interagency and intergovernmental efforts that coordinate and leverage resources for water quality and drinking water efforts in seven[41] western states.

Lake Pontchartrain Basin Restoration Program

The Lake Pontchartrain Basin Restoration Program, through a collaborative and voluntary effort, strives to restore ecological health by developing and funding restoration projects within the sixteen parishes in the basin.

Southeast New England Coastal Watershed Restoration Program (SNECWRP)

The Southeast New England Program serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England, including the ecosystem services that sustain the region's communities.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will encourage states and local entities to continue to make progress in restoring these major aquatic ecosystems from within core water programs.

[41] California, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$7,393.0 / -4.6 FTE) This program change eliminates the Geographic Other Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act.

Geographic Program: South Florida
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,674.5***	***$1,704.0***	***$0.0***	***-$1,704.0***
Total Budget Authority	$1,674.5	$1,704.0	$0.0	-$1,704.0
Total Workyears	1.1	1.8	0.0	-1.8

Program Project Description:

EPA's South Florida Program coordinates restoration activities in South Florida, including the Florida Keys.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will encourage state, tribal, and local entities to continue to make progress in protecting and restoring sensitive aquatic ecosystems in South Florida from within core water programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,704.0 / - 1.8 FTE) This program change eliminates the South Florida Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Florida Keys National Marine Sanctuary and Protection Act of 1990; Clean Water Act; Water Resources Development Act of 1996; Water Resources Development Act of 2000.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,763.7***	***$4,819.0***	***$0.0***	***-$4,819.0***
Total Budget Authority	$1,763.7	$4,819.0	$0.0	-$4,819.0
Total Workyears	2.2	2.3	0.0	-2.3

Program Project Description:

EPA collaborates with agencies and non-governmental organizations to implement the seven-point *Bay Delta Action Plan* (2012)[42] designed to protect and restore water quality, aquatic life, and ecosystem processes in the San Francisco Bay/Sacramento-San Joaquin Delta. EPA assists the State Water Resources Control Board with the comprehensive update of the Bay Delta Water Quality Control Plan.[43]

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will encourage the State of California and local entities to continue to make progress in restoring the San Francisco Bay from within core water programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,819.0 / -2.3 FTE) This program change eliminates the San Francisco Bay Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act § 320; Appropriation Act: FY 2018 (Public Law 115-141).

[42] EPA Bay Delta Action Plan (2012), found at: http://www2.epa.gov/sfbay-delta/bay-delta-action-plan.
[43] State Water Board Bay Delta Water Quality Control Plan (webpage updated in 2018), found at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/.

Geographic Program: Puget Sound
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$27,961.9***	***$28,000.0***	***$0.0***	***-$28,000.0***
Total Budget Authority	$27,961.9	$28,000.0	$0.0	-$28,000.0
Total Workyears	5.7	6.5	0.0	-6.5

Program Project Description:

The Puget Sound Program works with partners to implement the Puget Sound Action Agenda, the long-term plan for Puget Sound basin protection and restoration. In addition, the Puget Sound Program funds assistance agreements with the federally recognized tribes in Puget Sound, tribal consortia, and the North West Indian Fisheries Commission.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will encourage state, tribal, and local entities to continue to make progress in restoring the Puget Sound from within core water programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$28,000.0 / -6.5 FTE) This program change eliminates the Puget Sound Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act; Appropriation Act: FY 2018 (Public Law 115-141).

Great Lakes Restoration
Program Area: Geographic Programs
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$307,739.4***	***$300,000.0***	***$30,000.0***	***-$270,000.0***
Total Budget Authority	$307,739.4	$300,000.0	$30,000.0	-$270,000.0
Total Workyears	68.3	70.4	5.0	-65.4

Program Project Description:

The Great Lakes are the largest system of surface freshwater on Earth, containing 20 percent of the world's surface freshwater and 95 percent of the United States' surface freshwater. The watershed includes two nations, eight U.S. states, two Canadian provinces, and more than 35 tribes and tribal organizations.

Through a coordinated interagency process led by EPA, this program establishes a Great Lakes system-wide surveillance network to monitor the water quality of the Great Lakes. This program is consistent with EPA's focus on streamlining government and cooperative federalism.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. EPA will support states and tribes through Great Lakes system-wide monitoring for the improved collection, evaluation, management, and reporting of Great Lakes environmental information. By supporting programs that measure and assess the physical, biological, and chemical integrity of the Great Lakes, this program will link numerous existing Great Lakes monitoring activities to improve the scientific basis for policy decisions by environmental managers.

The Agency will partner with agencies involved in Great Lakes monitoring and natural resource management including states and tribes and, as appropriate, federal agencies, such as National Oceanic and Atmospheric Administration (NOAA), Bureau of Indian Affairs (BIA), and U.S. Geological Survey (USGS). This coordinated monitoring function is assigned to the federal government under Section 118 of the Clean Water Act and under the Great Lakes Water Quality Agreement. It also is a unique federal function because it involves coordination and collaboration among 8 states, numerous local governments, 35 tribes and tribal organizations, and Canada. Increased state involvement will embody cooperative federalism by better targeting resources to state and regional needs. As appropriate, EPA can invest in state monitoring infrastructure that supports public health, environmental benefits, and economic growth.

This work will measure and assess the overall results of activities that affect the environmental condition of the Great Lakes. A successful monitoring system requires the ability to perform an overall assessment of the Great Lakes, particularly when it can be used to support environmental management decisions that improve the environment and allow economic growth. Performance is assessed through annual reporting from GLNPO's monitoring programs and triennial reporting, such as the State of the Great Lakes Report and the Report of the Parties under the Great Lakes Water Quality Agreement.[44] The United States and Canada, together with many partners, have a suite of 9 indicators of ecosystem health, supported by 45 sub-indicators to assess the state of the Great Lakes. Maintaining this annual monitoring program will help governments evaluate the effectiveness of existing programs, policies and practices and to address, inform, and engage others. Objectives for ongoing activities in FY 2020 are listed below:

- Continuation and enhancement of the long-term trend monitoring programs that existed prior to the Great Lakes Restoration Initiative (GLRI) to measure the water quality of the Great Lakes and toxic chemicals in the Great Lakes air, water, sediments, and fish. This also includes monitoring for detection of invasive species and for nutrients that contribute to harmful algal blooms.
- Building state monitoring capacity to participate in regional collection, evaluation, management, and reporting of Great Lakes environmental information as has been demonstrated by successful Great Lakes Fisheries Management efforts.
- Enhancement coordination, and management of Great Lakes data systems for the benefit of environmental decision makers and the public.

EPA's Great Lakes National Program Office (GLNPO) was assigned oversight of the Great Lakes and Lake Champlain Invasive Species Program at the end of calendar year 2018 as a result of passage of the Vessel Incidental Discharge Act of 2018. In addition to continuing coordinated monitoring of Great Lakes health, EPA looks forward to collaborating with the NOAA, the United States Fish and Wildlife Service, the USGS, and the United States Coast Guard to fulfill the statutory mandate.

Numerous accomplishments under the Great Lakes Restoration Initiative (GLRI) in FY 2018 include:

- Since 2010, the Presque Isle (PA), Deer Lake (MI), and White Lake (MI) Areas of Concern (AOCs) have been delisted. In addition, federal agencies and their partners have completed the cleanup and restoration actions necessary for delisting at eight additional AOCs.
- Since 2010, a total of 70 Beneficial Use Impairments (BUIs), at 24 AOCs in the eight Great Lakes States, have been removed, seven times the total number of BUIs removed in the preceding 22 years. Seven BUIs were removed in FY 2018 at: Cuyahoga River (OH); St. Mary's River (MI); Waukegan Harbor (IL); Ashtabula River (OH); Lower Menominee River (MI/WI); Rochester Embayment (NY); and Buffalo River (NY).
- Since 2010, over 4 million cubic yards of contaminated sediment has been remediated through GLRI-associated projects.

[44] Summary, highlights, and technical report can be found at https://binational.net/2017/06/19/sogl-edgl-2017/.

- Since 2010, GLRI partners implemented invasive species control activities on over 148 thousand acres.
- GLRI has been central to efforts that keep self-sustaining populations of silver, bighead, and black carp out of the Great Lakes.
- Since 2015, GLRI has implemented projects that have resulted in a projected reduction of over 1 million pounds of phosphorus, which contributes to harmful algal blooms around the Great Lakes in priority watersheds.
- Since 2010, more than 240 thousand acres of habitat, including coastal wetlands, have been protected, restored, or enhanced.
- In FY 2018, EPA worked with four federal agencies and five states to finalize Lake Erie phosphorus reduction plans to meet a binational 40 percent phosphorus reduction target.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$909.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$269,091.0 / -65.4 FTE) This program change reduces support for the Great Lakes Program. This returns responsibility for local government efforts to state and local entities.

Statutory Authority:

Clean Water Act § 118; Appropriation Act: FY 2018 (Public Law 115-141).

Homeland Security

Homeland Security: Communication and Information

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$4,471.8***	***$3,910.0***	***$3,514.0***	***-$396.0***
Total Budget Authority	$4,471.8	$3,910.0	$3,514.0	-$396.0
Total Workyears	11.6	11.0	11.3	0.3

Program Project Description:

This program supports EPA's coordination and communication activities related to national security and homeland security. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in a number of areas, including critical water infrastructure protection and response to chemical, biological, and radiological events, through a series of statutes, presidential directives, and national plans. EPA's Office of Homeland Security (OHS) provides technical, policy, and intelligence advice to senior Agency leadership related to National and Homeland Security. OHS also leads and coordinates EPA's engagement with the White House, National Security Council, and other federal departments and agencies on the development of new homeland security policy and requirements. As EPA's Federal Intelligence Coordination Office (FICO), OHS coordinates analytical intelligence support capacity across the Agency to meet EPA requirements and EPA whole-of-government obligations.

OHS focuses on chemical, biological, and radiological preparedness and response programs as they relate to protection of air and water quality and the prevention of land contamination through external engagement with federal departments and agencies and others and internal coordination with EPA program offices with Homeland Security responsibilities. OHS coordinates with Regional, State, and Local Fusion Centers and Joint Terrorism Task Forces (JTTFs) to focus on integrating EPA Regions with the information sharing environment and DHS intelligence sharing network. OHS also advances implementation of EPA's Insider Threat, Suspicious Activity Reporting, Operational Security, Counterintelligence, and Committee on Foreign Investment in the U.S. Programs.

In addition, this program utilizes several mechanisms to support its ability to implement EPA's broad range of homeland security responsibilities, ensure consistent development and implementation of homeland security policies and procedures, avoid duplication, and build a network of partnerships. The Agency's Homeland Security Program regularly convenes both the Homeland Security Executive Steering Committee, composed of senior executives from EPA program and regional offices and the Homeland Security Collaborative Network (HSCN), a cross-agency leadership group.

Homeland security information technology efforts are closely coordinated with the agencywide information security and infrastructure activities, which are managed in the Information Security and Information Technology (IT)/Data Management programs. These IT support programs also enable contact among localities, EPA program and regional offices, and laboratories in emergency situations.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA's Homeland Security Program will:

- Promote a coordinated approach to EPA's homeland security activities and support the alignment of resources with government-wide homeland security priorities and requirements.

- Support federal, state, tribal, and local efforts to prevent, protect, mitigate, respond to, and recover from the impacts of natural disasters, acts of terrorism, and other emergencies by providing leadership and coordination across EPA's program offices and regions.

- Ensure appropriate Agency representation in various White House and other federal national security and homeland security policy activities. These efforts include serving as EPA's representative for Homeland Security, national disaster response, and mitigation and recovery policy in monthly meetings of the Domestic Resilience Group (DRG, chaired by the National Security Council) and in weekly meetings for other national Homeland Security policy committees. In addition, OHS serves as EPA's representative in monthly meetings of the Recovery Support Function Leaders Group (RSFLG, chaired by the Federal Emergency Management Agency [FEMA]) and the Mitigation Framework Leadership Group (MitFLG, also chaired by FEMA), and on other interagency workgroups.

- Focus on filling critical policy, knowledge, and technology gaps that may be essential for an effective EPA response, including working with our interagency partners to define collective capabilities and resources that may contribute to closing common homeland security gaps.

- Provide EPA end-users with relevant, accurate, reliable, objective, and timely intelligence bearing on matters of environmental policy and regulation and domestic threats and counterintelligence, where EPA functions to preserve or assist in the restoration of human health and the environment.

- Continue phased implementation of Executive Order 13587 (*Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information*) to meet the main pillars of classified information protection with a focus on the implementation of an Insider Threat Program (ITP) to address and mitigate threats to national security.

- Track emerging national/homeland security issues, through close coordination with the U.S. Intelligence Community, to anticipate and avoid crisis situations and target the Agency's efforts proactively against threats to the United States.

EPA's FY 2020 resources support national cybersecurity efforts through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious activity/software from EPA's computer and data networks. EPA will enhance internal Computer Security Incident Response Capability (CSIRC) to ensure rapid identification and reporting of suspicious activity and will increase training and awareness of cybersecurity threats. EPA's personnel are active participants in the United States Computer Emergency Readiness Team (US-CERT), a DHS-led group of experts from incident response and security response teams. Indicators and warnings are shared between EPA incident responders and their cleared counterparts in other agencies and with the Intelligence Community.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$16.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$80.0 / +0.1 FTE) This net program change streamlines activities related to communication, policies, and procedures to support and coordinate homeland security efforts across the Agency.

- (-$300.0 / +0.2 FTE) This net program change refocuses IT efforts coordinating homeland security across the Agency. The Agency will refocus on core functions that improve foundational capabilities and close gaps in IT security architecture.

Statutory Authority:

Resource Conservation and Recovery Act (RCRA) §§ 1001, 2001, 3001, 3005; Safe Drinking Water Act (SDWA); Clean Water Act §§ 101, 102, 103, 104, 105, 107; Clean Air Act §§ 102, 103, 104, 108; Toxic Substances Control Act (TSCA) §§ 201, 301, 401; Federal Insecticide Fungicide and Rodenticide Act (FIFRA) §§ 136a-136y; Bio Terrorism Act of 2002 §§ 303, 305, 306, 307; Homeland Security Act of 2002; Post-Katrina Emergency Management Reform Act; Defense Against Weapons of Mass Destruction Act; Food Safety Modernization Act § 208.

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$908.7***	***$880.0***	***$1,188.0***	***$308.0***
Science & Technology	$9,504.5	$9,788.0	$7,457.0	-$2,331.0
Total Budget Authority	$10,413.2	$10,668.0	$8,645.0	-$2,023.0
Total Workyears	25.5	26.7	21.0	-5.7

Program Project Description:

This program supports EPA's efforts to coordinate and provide technical expertise to enhance the protection of the nation's critical water infrastructure from terrorist threats and all-hazard events through effective information sharing and dissemination. The Program provides water systems with current information on methods and strategies to build preparedness for natural and manmade threats.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018-2022 EPA Strategic Plan.* In FY 2020, EPA will build the capacity to identify and respond to threats to critical national water infrastructure by:

- Providing timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols, and laboratory capabilities.
- Supporting effective communication conduits to disseminate threat and incident information and to serve as a clearinghouse for sensitive information.
- Promoting information sharing between the water sector and environmental professionals, scientists, emergency services personnel, law enforcement, public health agencies, the intelligence community, and technical assistance providers. Through this exchange, water systems can obtain up-to-date information on current technologies in water security, accurately assess their vulnerabilities to terror acts, and work cooperatively with public health officials, first responders, and law enforcement officials to respond effectively in the event of an emergency.
- Providing water utilities, of all sizes, access to a comprehensive range of important materials, including the most updated information, tools, training, and protocols designed to enhance the security, preparedness, and resiliency of the water sector.
- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level or about regional and national trends in certain types of water-related incidents. For example, should there be types of specific, water-related

threats or incidents that are recurring, EPA, in coordination with the Department of Homeland Security and other appropriate agencies, needs to alert the utilities of the increasing multiple occurrences or "trends" of these incidents.

Effective information sharing protocols allow the water sector to improve their understanding of the latest water security and resiliency protocols and threats. They also reduce risk by enhancing the water sector's ability to prepare for an emergency.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$312.0 / +2.6 FTE) This program change reflects an increase to carry out EPA's mission as the Sector-Specific Agency for drinking water and wastewater infrastructure security. Funding is critical to protect water infrastructure from natural disasters and terrorist threats.

Statutory Authority:

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

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$5,400.2***	***$5,405.0***	***$4,986.0***	***-$419.0***
Science & Technology	$415.0	$416.0	$500.0	$84.0
Building and Facilities	$5,921.7	$6,676.0	$6,176.0	-$500.0
Hazardous Substance Superfund	$1,325.5	$968.0	$915.0	-$53.0
Total Budget Authority	$13,062.4	$13,465.0	$12,577.0	-$888.0
Total Workyears	8.0	9.6	12.2	2.6

Program Project Description:

Environmental Programs and Management (EPM) resources for the Homeland Security: Protection of EPA Personnel and Infrastructure Program ensure that EPA maintains a robust physical security and preparedness infrastructure, ensuring that its numerous facilities are secured and protected in line with the federally-mandated Interagency Security Committee (ISC) standards.

In order to secure and protect EPA's personnel and physical infrastructure, the Agency operates a federally mandated Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive-12 (HSPD-12). This program ensures the Agency complies with government-wide standards for the issuance of secure and reliable forms of identification to federal employees and contractors who require access to federally controlled facilities and networks. Additionally, EPA initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified National Security Information (NSI), and maintains personnel security records for all federal and non-federal employees.

The NSI Program manages and safeguards EPA's classified information for its federal workforce and contractors. The Program ensures federal mandates are followed to protect national security information, conduct federally mandated training, and conduct NSI inspections.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. As part of the nationwide protection of buildings and critical infrastructure, EPA performs vulnerability assessments on facilities each year. Through this program, the Agency also recommends security risk mitigations, oversees

access control measures, determines physical security measures for new construction and leases, and manages the lifecycle of security equipment.

In FY 2020, EPA will partner with GSA to continue migrating to the Enterprise Physical Access Control System (ePACS), which enables the Agency to modernize its security infrastructure in compliance with HSPD-12. ePACS ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks. It provides EPA the ability to produce and maintain secure and reliable forms of identification, as required per HSPD-12, for all EPA employees and contractors.

EPA is in compliance with 5 CFR 1400, which requires that federal and non-federal positions are re-designated for both risk and sensitivity and that personnel have appropriate background investigations commensurate with their position's risk and sensitivity designation. EPA will continue to manage the personnel security, suitability, fitness, and NSI programs and conduct background investigations following appropriate federal guidance, ensuring that personnel are properly investigated for the positions they encumber and that classified material and activity is properly handled. As federal guidelines and policies change or are introduced, the systems supporting background investigations and the NSI program will be updated and enhanced (as needed).

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$419.0) This program change reduces funding for physical security and preparedness infrastructure. The Agency will focus on performing the highest priority annual facility assessments.

- (+2.6 FTE) This program change reflects an increase in reimbursable FTE to support critical working capital fund Agency background investigations needs.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Privacy Act of 1974; REAL ID Act of 2005; Homeland Security Act of 2002; Americans with Disabilities Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Indoor Air: Radon Program
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$2,575.1***	***$3,136.0***	***$0.0***	***-$3,136.0***
Science & Technology	$133.5	$159.0	$0.0	-$159.0
Total Budget Authority	$2,708.6	$3,295.0	$0.0	-$3,295.0
Total Workyears	9.4	9.0	0.0	-9.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities to address the public health risk posed by exposure to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance, and advises the public of steps they can take to reduce exposure. For over 30 years EPA's radon program has provided important guidance and significant funding to help states establish their own programs.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3,136.0 / -9.0 FTE) This funding change eliminates the Program in the EPM account.

Statutory Authority:

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

Radiation: Protection
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$9,286.8***	***$9,180.0***	***$2,307.0***	***-$6,873.0***
Science & Technology	$2,407.4	$2,246.0	$990.0	-$1,256.0
Hazardous Substance Superfund	$2,176.9	$1,985.0	$1,933.0	-$52.0
Total Budget Authority	$13,871.1	$13,411.0	$5,230.0	-$8,181.0
Total Workyears	68.5	66.3	25.0	-41.3

Program Project Description:

EPA has general and specific duties to protect human health and the environment from harmful and avoidable exposure to radiation under multiple statutes. This includes the Atomic Energy Act; Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act; Energy Policy Act; Nuclear Waste Policy Act; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act; Waste Isolation Pilot Plant Land Withdrawal Act; Marine Protection, Research, and Sanctuaries Act; and Clean Water Act.

EPA's Radiation Protection Program carries out these responsibilities through its federal guidance and standard-setting activities, including: regulatory oversight and implementation of radioactive waste disposal standards at the Department of Energy's Waste Isolation Pilot Plant (WIPP);[45] the regulation of airborne radioactive emissions; and the development and determination of appropriate methods to measure radioactive releases and exposures under Section 112 of the Clean Air Act.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for Department of Energy (DOE) activities at the Waste Isolation Pilot Plant (WIPP) facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. EPA also will review and update regulation or guidance, as necessary.

[45] For additional information, please see: http://www.epa.gov/radiation/wipp/background.html.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$310.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for FTE due to the adjustments in salary, essential workforce support, and benefit costs.

- (-$6,563.0 / -32.1 FTE) This program change reduces support activities in the Radiation Protection Program to focus Agency resources on priority activities.

Statutory Authority:

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

Radiation: Response Preparedness
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,774.5***	***$1,952.0***	***$2,219.0***	***$267.0***
Science & Technology	$3,259.5	$3,266.0	$3,793.0	$527.0
Total Budget Authority	$5,034.0	$5,218.0	$6,012.0	$794.0
Total Workyears	29.6	31.5	31.5	0.0

Program Project Description:

EPA generates policy guidance and procedures for the Agency's radiological emergency response under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Agency maintains its own Radiological Emergency Response Team (RERT) and is a member of the Federal Radiological Preparedness Coordinating Committee (FRPCC) and the Federal Advisory Team for Environment, Food and Health (the "A-Team"). EPA continues to respond to radiological emergencies; conducts essential national and regional radiological response planning and training; and develops response plans for radiological incidents or accidents.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to evaluate its resources and streamline activities across radiological emergency response activities and assets to focus on essential preparedness work. The RERT will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will design and conduct essential training and exercises to maintain the RERT's ability to fulfill EPA's responsibilities and improve overall radiation response preparedness.[46]

[46] For additional information, please see: https://www.epa.gov/radiation/radiological-emergency-response-expertise-and-equipment.

Evaluation of Response Plans

In FY 2020, EPA will continue to work with interagency partners under the FRPCC to revise federal radiation emergency response plans and develop radiological emergency response protocols and standards as resources dictate. The Agency will continue to use guidance addressing lessons learned from incidents and exercises to ensure the effective delivery of EPA support in coordination with other federal and state response agencies.

Coordinating Preparedness Efforts

EPA will continue essential planning and participation in international and federal table-top and field exercises, including radiological anti-terrorism activities with the Nuclear Regulatory Commission (NRC), the Department of Energy (DOE), the Department of Defense (DoD), and the Department of Homeland Security (DHS). The Agency also will continue to train state, local and federal officials; provide technical support on priority issues to federal and state radiation, emergency management, solid waste and health programs responsible for radiological emergency response; and develop preparedness programs.

Assessment

EPA will continue to develop and use both laboratory and field measurement methods, as well as procedures and quality systems to support expedited assessment and characterization of areas impacted with radiological contamination. These methods and procedures will support rapid assessment and triage of impacted areas (including buildings, indoor environments and infrastructure) and the development of cleanup strategies.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$108.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (+$159.0 / +0.6 FTE) This program change is an increase in the Radiation: Response Preparedness Program and provides increased technical support for stakeholders that are responsible for radiological emergency response.

Statutory Authority:

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

Reduce Risks from Indoor Air
Program Area: Indoor Air and Radiation
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$13,489.6***	***$13,369.0***	***$0.0***	***-$13,369.0***
Science & Technology	$40.0	$326.0	$0.0	-$326.0
Total Budget Authority	$13,529.6	$13,695.0	$0.0	-$13,695.0
Total Workyears	42.8	46.0	0.0	-46.0

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, and local levels. EPA utilizes a range of strategies, including partnerships with non-governmental, professional, federal, state and local organizations, to educate and prepare individuals, school districts, industry, the health care community, and others to take action to reduce health risks from poor indoor air quality in homes, schools, and other buildings.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$13,369.0 / -44.6 FTE) This funding change eliminates the Program in the EPM account.

Statutory Authority:

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

Information Exchange

Children and Other Sensitive Populations: Agency Coordination

Program Area: Information Exchange / Outreach
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$6,496.0***	***$6,548.0***	***$2,545.0***	***-$4,003.0***
Total Budget Authority	$6,496.0	$6,548.0	$2,545.0	-$4,003.0
Total Workyears	18.7	19.6	9.9	-9.7

Program Project Description:

The Program coordinates and advances the protection of children's environmental health across EPA by: assisting with developing regulations; improving risk assessment and science policy; implementing community-level outreach and education programs; and tracking and communicating measures, indicators, and progress on children's health. In addition, the Children's Health Program is directed by EPA's recently reaffirmed *Policy on Evaluating Health Risks to Children*, Executive Order 13045 *Protection of Children's Health from Environmental Health Risks and Safety Risks*, statutory authorities addressing children's environmental health, and other existing guidance.[47] The Program supported the February 2018 Principal's Meeting of the President's Task Force on Environmental Health Risks and Safety Risks to Children, co-chaired by EPA and the U.S. Department of Health and Human Services Deputy Secretary. The Program coordinated the development of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Effects,*[48] which was finalized in December 2018.

FY 2020 Activities and Performance Plan:

Work in this program supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Children's Health Program will:

- Continue to serve as co-lead for the interagency efforts of the President's Task Force on Environmental Health Risks and Safety Risks to Children alongside the Department of Health and Human Services. This effort will focus on co-chairing the Senior Steering Committee and implementing priority strategies, including implementation of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.* Each of the four goals of the Federal Action Plan has specific objectives and associated activities, designed to be tracked by the Task Force. They are as follows: Goal 1: Reduce children's exposure to lead sources; Goal 2: Identify lead-exposed children and improve their health

[47] For more information: https://www.epa.gov/children/history-childrens-environmental-health-protection-epa.
[48] For more information: https://www.epa.gov/sites/production/files/2018-12/documents/fedactionplan_lead_final.pdf.

outcomes; Goal 3: Communicate more effectively with stakeholders; and Goal 4: Support and conduct critical research to inform efforts to reduce lead exposures and related health risks. Implementation efforts associated with federal initiatives may be supported by other Task Force agencies or EPA program offices.

- Support implementation of the amended Toxic Substances Control Act (TSCA) by providing children's environmental health expertise focused on actions addressing the statutory provisions that include children's health, such as existing chemicals prioritization efforts, risk evaluations and regulatory actions.

- Provide children's environmental health expertise in the development of priority pesticide assessments that address children's health concerns.

- Identify both potential health benefits and/or health risks to children during the development of Agency regulations and policies with targeted participation on regulatory workgroups.

- Coordinate two in-person plenary meetings of the Children's Health Protection Advisory Committee (CHPAC).[49]

- Support and administer the newly proposed Healthy Schools Grant Program to provide funding to identify and prevent, reduce or resolve environmental hazards in schools, including preventing childhood lead exposure, reducing asthma triggers, promoting integrated pest management, and reducing childhood exposure to one or more toxics in schools across all environmental media.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$485.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce cost for existing FTE due to adjustments in salary and benefit costs.

- (-$4,064.0 / -12.7 FTE) This net program change reflects a reduction in the Children's Health Program due to streamlining activities including: 1) the Pediatric Environmental Health Specialty Units; 2) grants to state or local organizations; 3) IRIS reviews; 4) regionally selected community-based projects addressing local children's environmental health issues; 5) indicators presented in *America's Children and Environment* and *America's Children; Key National Indicators of Well-Being*; and 6) other streamlined efforts.

[49] For more information, please see: https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac.

- (+$546.0 / +3.0 FTE) This increase is to support and administer the newly proposed Healthy Schools Grant Program to provide funding to identify and prevent, reduce or resolve environmental hazards in schools, including preventing childhood lead exposure, reducing asthma triggers, promoting integrated pest management, and reducing childhood exposure to one or more toxics in schools across all environmental media.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Toxic Substances Control Act (TSCA); Safe Drinking Water Act (SDWA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Food Quality Protection Act.

Environmental Education
Program Area: Information Exchange / Outreach
Goal: Cooperative Federalism
Objective(s): Increase Transparency and Public Participation

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$10,223.4***	***$8,702.0***	***$0.0***	***-$8,702.0***
Total Budget Authority	$10,223.4	$8,702.0	$0.0	-$8,702.0
Total Workyears	6.7	10.3	0.0	-10.3

Program Project Description:

The Environmental Education (EE) Program provides guidance and financial support to both rural and urban focused grassroots and nonprofit organizations, local educational institutions, universities, community colleges and state and local environmental agencies. Financial support from EE received by these entities is via the competitive grant process and cooperative agreements. EE also administers the Presidential Environmental Education Awards Program.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will continue to find ways to streamline education activities and leverage funding outside the Agency for environmental stewardship activities via existing cooperative agreements and at the state and local level.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$8,702.0 / -10.3 FTE) This funding change proposes to eliminate the Environmental Education Program.

Statutory Authority:

National Environmental Education Act (NEEA); Clean Air Act, § 103; Clean Water Act, § 104; Solid Waste Disposal Act (SWDA), § 8001; Safe Drinking Water Act (SDWA), § 1442; Toxic Substances Control Act (TSCA), § 10; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), § 20.

Exchange Network
Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$17,432.4***	***$15,956.0***	***$12,127.0***	***-$3,829.0***
Hazardous Substance Superfund	$1,328.6	$1,328.0	$1,293.0	-$35.0
Total Budget Authority	$18,761.0	$17,284.0	$13,420.0	-$3,864.0
Total Workyears	28.5	29.4	30.2	0.8

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal and territorial partners to exchange and share environmental data over the Internet. Capitalizing on advanced technology, data standards, open-source software, shared services for the E-Enterprise business strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision making.

The Central Data Exchange (CDX)[50] is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective enterprise architecture for the Agency by avoiding the creation of duplicative services. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden. Working in concert with CDX are EPA's System of Registries, which are shared data services, designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes.

These shared data services catalog entities routinely referenced by EPA and EN partners, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, fosters data consistency and data quality as well as enabling data integration.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to support core functions for the EN IT systems, which is in line with the President's Management Agenda for IT modernization and data, accountability, and transparency.[51]

[50] For more information on the Central Data Exchange, please visit: http://www.epa.gov/cdx/.
[51] For additional information, please refer to: https://www.whitehouse.gov/omb/management/pma/.

The potential for burden reduction and savings from IT improvements are significant. For example, the Virtual Exchange Service (VES) used for facilitating large scale data transactions has been implemented by 58 state and tribal partners. The electronic signature service has been adopted by 58 partners to date and six more are expected to join in FY 2019. EPA estimates that implementation of these services has reduced the cost overall for partners to develop, deploy, and operate these services by approximately $7.25 million. These partners would otherwise need to build and manage their own exchange services. EPA will continue to carry out the baseline support for the adoption and onboarding of VES, signature services, and federated identity service for EPA and its partners. In 2019, EPA will deploy EPA's Federal Regulation Finder, which will integrate multiple shared services into a discovery tool that will help industry and the public more easily identify potentially applicable regulations. The Federal Regulation Finder initially will integrate three catalogs: a substance catalog (Substance Registry Services), an Enterprise Vocabulary, and a catalog of federal statutes and regulations (Laws and Regulations Services) to enable a user to search for laws and regulations by substance or keyword. Further, EPA will pursue the development and roll out of a business workflow service that is built once and shared multiple times to support automation of major EPA program initiatives and other streamlining efforts as a result of EPA Lean Management System events. Building and managing a workflow service centrally reduces potential for duplicate and independent development and maintenance of solutions in the Agency.

Multiple performance efforts also use exchange services and registries (shared data services) to improve data quality in EPA, state, and tribal program data, and to reduce reporting burden on the regulated community. Beginning in FY 2019, EPA is promoting adoption of the Tribal Identification (TRIBES) shared service by tracking its use by EPA systems that collect tribal names.

EPA also tracks the number of registry webpages users and web service hits as one measure of usage. For example, the Substance Registry Service (SRS) website is visited by about 50 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 25 thousand and 60 thousand web service hits per month, mostly by EPA systems that have incorporated the web services into their online reporting forms.

Priorities for Agency registries include improving registry technologies and expanding the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud. In addition, the Agency will deploy in 2019 the Federal Regulation Finder tool to help small and medium businesses discover potentially applicable regulations. It allows a user to search by chemical or keyword to discover relevant regulations, with links to EPA's program website for further information. Expansion of this tool in FY 2020 and FY 2021 will allow users to search by industrial classification through the association of industrial processes to North American Industrial Classification System.

In FY 2020, the EN Program will continue to be a pivotal component of the E-Enterprise for the Environment strategy that supports business process change agencywide. The E-Enterprise strategy – jointly governed by states, tribes, and EPA – rethinks how government agencies deliver

environmental protection. Under this strategy, the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. In FY 2019 the Agency developed an identity management service that eliminated redundant and time-consuming user registrations across environmental programs and partners. As a result, the E-Enterprise Portal transforms the EN to a more open platform of services and makes environmental data reporting, sharing and analysis faster, simpler and less expensive.

EPA also will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain systems that support the importation process of products that are of dual interest to EPA and CBP. Following the successful conclusion of the limited pilot test for electronic reporting and processing of EPA-regulated imports for vehicles and engines in FY 2019, EPA will continue to support mission essential activities of these EPA and CBP data exchanges in FY 2020. Such electronic reporting will aid enforcement coordinators by automating a currently manual review process and allowing them to focus on key high-value monitoring and targeting activities for noncompliant imports.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$292.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$4,121.0 / +0.8 FTE) This net program change is an adjustment that reflects a modified timeline to address required modifications to the Exchange Network IT systems; streamlines quality assurance of registries; refocuses modernization efforts; and reduces the collection and exchange of environmental data with states, tribes, and regulated entities.

Statutory Authority:

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$49,458.4***	***$49,842.0***	***$41,771.0***	***-$8,071.0***
Total Budget Authority	$49,458.4	$49,842.0	$41,771.0	-$8,071.0
Total Workyears	292.9	298.6	235.6	-63.0

Program Project Description:

This program supports various offices that provide direct executive and logistical support to EPA's Administrator. In addition to the Administrator's Immediate Office (IO), resources in this program support the Office of Congressional and Intergovernmental Relations (OCIR), Office of Administrative and Executive Services (OAES), Office of the Executive Secretariat (OEX), the Office of Public Affairs (OPA), and the Office of Public Engagement (OPE).

This program also supports EPA's Regional Administrators' offices. The program and regional offices' activities link the Agency's engagement with outside entities, including: Congress, state and local governments, nongovernmental organizations, national and community associations, and the public. These activities include management, coordination, and establishing policy.

Within this program, key functions include: responding to congressional requests for information; coordinating and providing outreach to state and local governments and rural communities; and supporting press and other communications activities. This program also supports administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, and information technology management services.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the IO will continue providing management, leadership, and direction to all of EPA's programs and activities and develop the guidance necessary to ensure achievement of the Agency's core statutory responsibilities. In FY 2020, IO resources will primarily support critical needs for staff, including travel and workforce support.

OCIR serves as EPA's principal point of contact for Congress, regions, states, and local governments and as the coordination point for interaction with other Agency offices and officials. OCIR is comprised of two main components: The Office of Congressional Affairs (OCA) and the Office of Intergovernmental Relations (OIR). Interactions with Congress are managed out of the

Office of Congressional Affairs, the staff of which is responsible for specific programmatic areas of the Agency. The Office of Intergovernmental Relations manages interactions with state and local governments and serves as the liaison for the Agency with national associations for state and local officials.

In FY 2020, OCIR's OCA will prepare EPA officials for hearings, oversee responses to written inquiries and oversight requests from members of Congress, and coordinate and provide technical assistance and briefings on legislative areas of interest to members of Congress and their staff. OIR will continue to inform state and local governments of regulatory and other EPA activities. Additionally, OIR will lead the Agency's efforts to support productive working relationships with states through a renewed focus on cooperative federalism.

OCIR regularly reviews and evaluates its processes for responding to congressional and intergovernmental correspondence and FOIA requests, preparing for hearings or briefings, providing technical assistance, and coordinating with HQ program offices, regions, states, local officials and associations. Efficiency and effectiveness improvements identified are implemented as appropriate. In addition, OCIR participates in an agencywide metric on responding to state and tribal requests. OCIR also is exploring the use of a new reporting tool which will reduce reporting burdens while enhancing transparency in grant commitment setting across EPA regions.

The Office of Public Affairs (OPA) facilitates the exchange of information between EPA and the public, media, Congress, and state and local governments; broadly communicates EPA's mission; assists in public awareness of environmental issues; and informs EPA employees of important issues that affect them. OPA generally responds to approximately 8,000 media inquiries annually, and oversees more than 200 audio-visual productions; and 300 graphic productions annually. In addition, OPA receives over 45 million impressions on the internet, including www.epa.gov and EPA social media accounts. Also, to facilitate good communications with EPA employees nationwide, OPA annually posts over 200 intranet banners; issues a weekly e-newsletter - *This Week @ EPA*; and sends more than 100 Agencywide Mass Mailers from EPA's Administrator and other senior leaders.

In FY 2020, OPA will continue to inform the media of agency initiatives and deliver timely, accurate information. The Office will continue to update the Agency's internet site to provide stakeholders with transparent, accurate, and comprehensive information on EPA's activities and policies. OPA will continue using social media, multi-media and new media tools to provide stakeholders with information. The Office also will work with EPA's programs and regions to improve employee communications and collaboration, update the Agency's intranet site, and use other tools to provide timely Agency information to employees.

As the central administrative management component of the Administrator's Office (AO), the OAES provides advice, tools, and assistance to the AO's programmatic operations. In FY 2020, OAES will continue to conduct the following activities: human resources management, budget and financial management, information technology and security, and audit management.

The Office of the Executive Secretariat (OEX) manages the AO's correspondence, records management, Privacy Act implementation and FOIA activities. The OEX correspondence team

processes correspondence for the Administrator and Deputy Administrator and reviews and prepares documents for their signature. The team also manages the Administrator's primary email account. OEX serves as custodian of the Administrator's, Deputy Administrator's and Immediate Office records and oversees the records management program for all AO staff offices. OEX reviews and issues ethics determinations for gifts received by the Administrator and Deputy Administrator. The Office manages the privacy program for the AO and monitors, reviews and audits AO systems of records. OEX operates the Correspondence Management System, which provides paperless workflow, tracking and records management capabilities to more than three thousand registered users agencywide. Finally, OEX manages FOIA-related operations for the AO, a centralized program that results in greater efficiencies, improved responsiveness and transparency consistent with the statute's intent. In FY 2020, OEX will continue to provide critical administrative support to the Administrator, Deputy Administrator, senior Agency officials, and staff in order to comply with the statutory and regulatory requirements under the Federal Records Act, FOIA, and related statutes and regulations.

The Office of Public Engagement (OPE) in the Office of the Administrator advises the Administrator and senior staff on activities surrounding different stakeholder groups. Also, OPE generates and distributes outreach plans for most regulatory actions. Such plans often include: meeting regularly with stakeholder groups to communicate the Administration's agenda at EPA, providing advance notification communications to relevant stakeholder groups on upcoming regulatory actions, facilitating in-state visits by the Administrator and/or senior staff to collect regulatory feedback, communicating key dates to stakeholders pertaining to opportunities to comment on EPA rulemakings, and organizing conference calls on regulatory topics with impacted stakeholders.

In FY 2020, the United States will be hosting the G7 Summit and EPA will be hosting the associated Environmental Ministers G7 meeting. In preparation for the summit, approximately three planning meetings will occur.

Performance Measure Targets:

(PM ST1) Number of grant commitments achieved by states, tribes, and local communities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	No Target Established	TBD	Commit-ments
Actual						N/A			

(PM ST2) Number of alternative shared governance approaches to address state, tribal, and local community reviews.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	3	3	Alternative Approaches
Actual						0			

Work related to the results of measure: Number of grant commitments achieved by states, tribes, and local communities, is agencywide in scope. The lead office is the Office of the Administrator.

Work related to the results of measure: Number of alternative shared governance approaches to address state, tribal, and local community reviews, is agencywide in scope. The lead office is the Office of the Administrator.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,898.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$9,981.0 / - 63.1 FTE) This net program change reflects EPA's efforts to focus on the core legal requirements, federal-only and national efforts, provide support to states in implementing environmental laws, and ease burden.

- (+$12.0) This program change reflects an increase for hosting the associated Environmental Minsters as part of the 2020 G7 Summit.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Environmental Research, Development, and Demonstration Authorization Act (ERDDAA).

Small Business Ombudsman
Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,799.8***	***$1,826.0***	***$1,918.0***	***$92.0***
Total Budget Authority	$1,799.8	$1,826.0	$1,918.0	$92.0
Total Workyears	5.4	4.9	4.6	-0.3

Program Project Description:

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) currently includes the Small Business Ombudsman Program and the Small Business Contracting Program. Effective December 23, 2018, the Disadvantaged Business Enterprise program, which was previously managed within OSDBU, was transferred to EPA's Office of Grants and Debarment as part of a corrective action measure recommended in GAO Report, GAO-17-675. Based on the effective administration of the Small Business Ombudsman Program and the Agency's overall small business regulatory and environmental compliance assistance efforts, EPA has earned a grade of "A" in the last 12 Small Business Administration (SBA) Office of the National Ombudsman Annual Reports to Congress. EPA also has earned an "A" on SBA's last nine government-wide Small Business Procurement Scorecards, for the Agency's record of excellence in affording small business contracting opportunities.

The Small Business Ombudsman Program includes the Asbestos and Small Business Ombudsman (ASBO),[52] as well as the Small Business Advocacy Chair and other small business activities located in the Office of Policy's Office of Regulatory Policy and Management.[53] The Program provides a comprehensive suite of resources, networks, tools, and forums for education and advocacy on behalf of small businesses and leads EPA's implementation of the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act. For example, in FY 2018, ASBO provided a newsletter and hosted a comprehensive environmental compliance and education training conference.

The ASBO serves as the Agency's principal advocate for small business regulatory issues through its partnership with EPA Regional Small Business Liaisons, state Small Business Environmental Assistance Programs (SBEAPs)[54] nationwide, the U.S. Small Business Administration Office of Advocacy, and hundreds of small business trade associations. These partnerships provide the

[52] For more information, please see: https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman.
[53] For more information, please see: https://www.epa.gov/aboutepa/about-office-policy-op#ORPM.
[54] For more information, please see: https://nationalsbeap.org/.

information and perspective EPA needs to help small businesses achieve their environmental goals.

Overall, the core functions of the Small Business Ombudsman Program include assisting EPA's program offices with analysis and consideration of the impact of their regulatory actions on small businesses; engaging small entity representatives, and other federal agencies in evaluating the potential impacts of rules; operating and supporting the Program's hotline and homepage; and supporting internal and external small business activities. The Program helps small businesses learn about new actions and developments within EPA and helps the Agency learn about the concerns and needs of small businesses.

The Small Business Contracting Program is mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). As prescribed under that section, the Program provides expertise in ensuring small business prime and subcontract opportunities to expand the competitive supplier base in furthering the Agency's mission. The Program offers statutorily required counseling to EPA's contracting community on all aspects of the acquisition cycle. It also affords statutorily mandated advocacy and technical assistance to the various categories of small businesses, including, disadvantaged businesses; certified small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses. In accordance with that statutory mandate, during FY 2018 OSDBU hosted or participated in an average of at least one small business outreach and training conference each month, providing technical assistance to hundreds of small businesses across the country.

In implementing the many statutory responsibilities required under Section 15(k), OSDBU reviews acquisition strategies to maximize small business procurement opportunities; provides expertise in conducting market research for EPA acquisitions; performs contract bundling reviews to avoid unnecessary or unjustified limitations on small business utilization; reviews purchase card transactions within the statutory threshold; and evaluates large prime contractor subcontracting plans. In addition, the Office of Small and Disadvantaged Business Utilization reviews unsolicited proposals for agency acquisitions, and assists small businesses in resolving payment issues under EPA acquisitions. It further provides a broad range of training, outreach and technical assistance to new and prospective small business awardees. Current data reported in the Federal Procurement Data Systems indicates that EPA has awarded 52 percent of total acquisition dollars to small business – well above the Agency's established small business contracting goal of 39.9 percent.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 – 2022 EPA Strategic Plan.* In FY 2020, the Programs will:

- Improve environmental protection by working with EPA program offices and state SBEAPs to share information and leverage resources, provide compliance assistance resources and enhance the compliance assistance tool box available to the small business community.

- Continue to implement a new internal and external outreach program focused on increasing outreach platforms for more effective public engagement. This will include a compendium of available resources for small business environmental compliance assistance.

- Serve as the Agency's point of contact for the Small Business Paperwork Relief Act[55] by coordinating efforts with the Agency's program offices to further reduce the information collection burden for small businesses with fewer than 25 employees.

- Support EPA's efforts to expand regulatory consistency and certainty by strengthening the outreach and engagement efforts of the Agency's Small Business Advocacy Review Panel process performed under Section 609 of the Small Business Regulatory Enforcement Fairness Act. The engagement will ensure appropriate dissemination of relevant information and opportunity for public input to help build trust and create positive environmental outcomes.

- Build on the successful launch of EPA's electronic process for forecasting the Agency's upcoming acquisitions. The new electronic forecast process provides a structured framework for the Agency to strategically plan acquisitions to ensure prudent financial stewardship and resource management. OSDBU will strengthen the forecast data submission requirements to enhance its accuracy and timeliness.

- Expand the transparency of EPA's contract spending by developing more real-time reporting of the specific acquisitions of each EPA organization. OSBU was successful in developing an automated small business contracting dashboard to efficiently track, analyze and report EPA's progress in achieving the small business goals established in accordance with Section 15 of the Small Business Act. The efforts contributed to EPA achieving the highest percent of small business awards in five years. Enhancing the dashboard's real-time reporting capacity in FY 2020 will facilitate more data-driven acquisition planning and efficiency EPA-wide.

- Consistent with the EPA Lean Management System, OSDBU will develop a small business contracting manual that will further streamline and standardize internal business operations. In FY 2018, OSDBU issued first-time operational guidance for carrying out several of its statutory responsibilities. In FY 2020, OSDBU will continue its comprehensive review of governing requirements and internal processes to identify additional opportunities for process improvements. Based on that review, OSDBU will develop new and consolidate existing guidance into a single manual that will serve to strengthen operational efficiency, effectiveness and compliance with governing statutory requirements.

- Institute a new more transparent and collaborative process for conducting the important small business technical assistance required under Section 15(k) of the Small Business Act. The process will leverage existing and emerging collaborative tools, resources and

[55] For more information, please see: https://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/sbpra-hr327.pdf.

technology to reach a broad and diverse spectrum of small businesses to maintain a qualified industrial base to support EPA mission achievement.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$19.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$111.0 / -0.3 FTE) With a limited change in resources, the Agency will prioritize activities to ensure compliance with its statutory obligations under the Small Business act. This net program change incorporates the statutory functions of the Small Minority Business Assistance program project, under the Office of Small and Disadvantaged Business Utilization in this program.

Statutory Authority:

Clean Air Act Amendments of 1990 § 1001 (42 U.S.C. § 7601 note); 42 U.S.C. § 7661f; 42 U.S.C. § 4370d; 15 U.S.C § 644(k); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.).

Small Minority Business Assistance

Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,598.1***	***$1,574.0***	***$0.0***	***-$1,574.0***
Total Budget Authority	$1,598.1	$1,574.0	$0.0	-$1,574.0
Total Workyears	7.0	8.9	0.0	-8.9

Program Project Description:

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) manages the Agency's Small Business Contracting and Disadvantaged Business Enterprise (DBE) programs.

The Small Business Contracting Program is mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). The Program provides expertise in expanding small business prime and subcontracting opportunities. The Program offers counseling to EPA's contracting community on all aspects of the acquisition cycle. It also provides a range of advocacy, outreach and technical assistance to the various categories of small businesses, including, disadvantaged and women-owned small businesses; businesses located in Historically Underutilized Business Zones (HUBZone); and service-disabled veteran-owned small businesses (SDVOSBs).

The DBE Program provides national outreach, education and assistance to increase the utilization of businesses owned and controlled by socially and economically disadvantaged individuals in procurements funded under EPA financial assistance agreements. Under the DBE Program, OSDBU issues the governing program eligibility and compliance requirements.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. The Agency will integrate its resources for Small and Disadvantaged Business activities under the Small Business Ombudsman Program.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- ($-1,574.0 / -8.9 FTE) This funding change eliminates the Small Minority Business Assistance Program as part of the effort to streamline functions that can be absorbed into other programs. Key portions of this program's activities will be shifted to the Small Business Ombudsman Program.

Statutory Authority:

15 U.S.C § 644(k); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.).

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$14,799.1***	***$14,760.0***	***$10,524.0***	***-$4,236.0***
Total Budget Authority	$14,799.1	$14,760.0	$10,524.0	-$4,236.0
Total Workyears	65.0	67.8	46.9	-20.9

Program Project Description:

The State and Local Prevention and Preparedness Program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, facility workers, the environment, and property from chemical accident risks through accident prevention and emergency response programs, community and facility engagement, and improved safety systems. This framework provides the foundation for community and facility chemical hazard response planning, and reduction of risk posed from chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act amendments, chemical facilities that store more than a certain amount of listed hazardous substances are required to implement a Risk Management Plan (RMP) program. These facilities, known as RMP facilities, take preventive measures, report data, mitigate and/or respond to chemical releases, and work with communities, response, and planning groups to increase understanding of risks.[56]

The Emergency Planning and Community Right–to-Know Act (EPCRA) of 1986 was created to help communities plan for chemical emergencies and to inform the public about chemicals in their community. Under EPCRA, facilities are required to report about the chemicals they produce, use, and store to state and local governments. States, tribes, and local governments use this information to prepare communities for potential releases from these facilities through the development of local emergency response plans.[57]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the State and Local Prevention and Preparedness Program will perform the following activities:

[56] For additional information, please refer to: https://www.epa.gov/rmp.
[57] For additional information, please refer to: https://www.epa.gov/epcra.

- Inspect RMP and EPCRA facilities to ensure compliance with accident prevention and preparedness regulations, and work with chemical facilities to reduce chemical risks and improve safety. There are approximately 12,300 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,850 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and proximity to large residential populations.[58] EPA prioritizes inspections at high-risk facilities.

- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.

- Maintain the RMP national database, which is the nation's premier source of information on chemical process risks and contains hazard information on all RMP facilities. Industry electronically submits updated RMPs to this secure database.

- Develop updates to maintain and further enhance the Computer-Aided Management of Emergency Operations (CAMEO) software suite, *i.e.*, the CAMEO Chemicals, CAMEO*fm*, Areal Locations of Hazardous Atmospheres (ALOHA) and Mapping Application for Response, Planning, and Local Operational Tasks (MARPLOT) applications, which provide free and publicly available information for firefighting, first aid, emergency planning, and spill response activities.

- Take action as necessary regarding reconsideration of the RMP Amendments final rule to address three petitions for reconsideration under the Clean Air Act. Based on any further amendments to the final rule, carry out implementation of rule provisions, including drafting and revising facility guidance, and revising the RMP database to accept modified submissions.

EPA is proposing to develop a new program that would authorize EPA to collect and use fees for compliance assistance which can assist RMP facilities in complying with EPA regulations. This fee and service will be voluntary.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$528.0) This change in fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

[58] Population data is reported in facility risk management plans and available in the EPA RMP national database.

- (-$4,764.0 / -20.9 FTE) This program change reduces resources for technical support and outreach, and eliminates grant support for certified RMP inspectors in FY 2020.

Statutory Authority:

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r).

TRI / Right to Know
Program Area: Information Exchange / Outreach
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$13,796.8***	***$12,783.0***	***$7,811.0***	***-$4,972.0***
Total Budget Authority	$13,796.8	$12,783.0	$7,811.0	-$4,972.0
Total Workyears	33.5	35.8	20.8	-15.0

Program Project Description:

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, accurate and relevant information. The Toxics Release Inventory (TRI) Program[59] supports EPA's mission by annually publishing for the public, release, other waste management (e.g., recycling), and pollution prevention data for over 650 toxic chemicals from approximately 20,000 industrial and federal facilities. The TRI Program is a premiere source of toxic chemical release data for communities, non-governmental organizations, industrial facilities, academia, and government agencies.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will focus on the collection of the chemical release data and making the data available to governments and the public.

EPA will continue to provide reporting facilities with an online reporting application, TRI-MEweb, to facilitate the electronic preparation and submission of TRI reports through EPA's Central Data Exchange (CDX). In addition, the TRI data collected by EPA are shared with states, tribes, and territories that have an active node on CDX and are partners of the TRI Data Exchange (TDX). EPA will continue to maintain the TDX used by states, tribes, and territories. The Agency also will continue to support the Toxics Release Inventory Processing System (TRIPS) database, which is the repository for TRI data. Maintaining the TRI data includes data quality activities and transmitting the data to the Envirofacts database in support of the public's access to TRI data. In FY 2020, additional activities include continued streamlining of the application and database using the EPA Lean Management System (ELMS) process including on feedback from users and the Program.

[59] Please see: http://www.epa.gov/tri/

In FY 2020, the TRI Program intends to collect performance evidence by conducting approximately 600 data quality checks which will be used to help ensure the accuracy and completeness of the reported data and thereby improve the Program's analyses of and impacts on chemical releases and wastes. The TRI Program will continue to publish the annual TRI National Analysis, including describing relevant trends in toxic chemical releases as well as trends in other waste management practices and innovative approaches by industry to reduce pollution.

Since electronic systems that collect and disseminate TRI data have already been largely developed, the focus will be on operations and maintenance of TRI-MEweb, TRIPS, and the streamlining of business processes that contribute to the annual TRI National Analysis. This will be accomplished by leveraging the cloud environments and Agency enterprise infrastructure and services. Emphasis also will be placed on optimizing search and data transfers within EnviroFacts, the system that provides public access to the statutorily required data submitted by industry. Use of enterprise infrastructure and services as well as a commitment to continuous service improvement will allow the TRI Program to meet statutory requirements for industry reporting and public access to TRI as efficiently as possible.

As required by the Emergency Planning and Community Right-to-Know Act (EPCRA), the Agency will respond to EPCRA petitions regarding TRI within 180 days after receipt. Petitions may request to add or delete chemicals or industry sectors on the TRI. The quantity and complexity of petitions are unknown until submitted to the Agency.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$127.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary and benefit costs.

- (-$3,458.0 / -13.6 FTE) This program change eliminates funding for the TRI National Training Conference, TRI University Challenge, TRI Tools (other than for operations and maintenance), and other TRI communication initiatives, and reflects planned streamlining of the TRI Program as TRI information can increasingly be accessed remotely via databases and web tools. This program change also reflects a reduction in contractual costs for producing TRI annual reports as a result of the 2013 TRI Electronic Reporting Rule. Resources include -$2,237.0 in associated payroll.

- (-$1,641.0 / -1.4 FTE) This program change reduces resources for operations and maintenance for the OEI TRI tools in EnviroFacts, Data Processing Center operations, Help Desk activities, and security upgrades. In addition, enhancements for TRI-MEweb and TRIPS are eliminated. Resources include -$230.0 in associated payroll.

Statutory Authority:

Emergency Planning and Community Right-to-Know Act (EPCRA) § 313; Pollution Prevention Act of 1990 (PPA) § 6607.

Tribal - Capacity Building
Program Area: Information Exchange / Outreach
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$13,979.6***	***$14,547.0***	***$13,201.0***	***-$1,346.0***
Total Budget Authority	$13,979.6	$14,547.0	$13,201.0	-$1,346.0
Total Workyears	83.4	86.6	72.0	-14.6

Program Project Description:

EPA is responsible for protecting human health and the environment in Indian Country under federal environmental statutes. Under the Agency's 1984 Indian Policy,[60] EPA works with federally recognized tribes (tribes) on a government-to-government basis, in recognition of the federal government's trust responsibility to tribes, to implement federal environmental programs. In the 1984 Indian Policy, "EPA recognizes tribes as the primary parties for setting standards, making environmental policy decisions, and managing programs for reservations consistent with agency standards and regulations," therefore, EPA assists tribes in developing the programs to make such decisions. In the absence of a program delegation to a tribe, the Agency directly implements the Program.

EPA's American Indian Environmental Office leads the agencywide efforts to ensure environmental protection in Indian Country. Please see http://www.epa.gov/tribal for more information.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 – 2022 EPA Strategic Plan*. Overall, the Agency has made steady progress towards strengthening human health and environmental protection on tribal lands. EPA will further its priority of strengthening tribal partnerships and continue to work toward its goal of building tribal capacity through a number of mechanisms in FY 2020. In addition, the Agency continues the direct implementation assessment effort to better understand EPA's direct implementation responsibilities and activities on a program-by-program basis in Indian Country.

Capacity Building: EPA will continue to provide assistance and to support mechanisms for tribes to pursue developing and implementing federal environmental programs, including the "treatment in a manner similar to a state" (TAS) process and the use of the Direct Implementation Tribal

[60] EPA Policy for the Administration of Environmental Programs on Indian Reservations, available at https://www.epa.gov/tribal/epa-policy-administration-environmental-programs-indian-reservations-1984-indian-policy.

Cooperative Agreement (DITCA) authority. The Agency will continue to provide technical and financial assistance to ensure tribal governments have the opportunity to build the capacity to meaningfully participate and engage in environmental protection activities. To date, EPA has approved 78 TAS regulatory program delegations to tribes, including 17 approvals for compliance and enforcement authority. EPA also has entered into 52 DITCAs, with 22 active DITCAs in FY 2018.

Indian Environmental General Assistance Program (GAP) Capacity Building Support: GAP grants to tribal governments help build the basic components of a tribal environmental program. The Agency manages GAP grants according to its *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia*.[61] In FY 2020, EPA will continue to administer GAP financial assistance to build tribal capacity and address environmental issues in Indian Country. EPA's work in FY 2020 also will continue to enhance EPA-Tribal partnerships through development and implementation of EPA-Tribal Environmental Plans and a continued focus on tracking and reporting measurable results of GAP-funded activities.

GAP Online: EPA will continue to use and evaluate the future needs for GAP Online consistent with evolving EPA grant processes. GAP Online is an internet-based system that assists tribes and EPA in developing, reviewing, and archiving GAP work plans and progress reports. EPA and tribes use the system to negotiate plans and track progress with individual grantees. GAP Online supports program accountability and creates an easily accessible record to help maintain continuity regardless of staff turnover in EPA regional offices and many Tribal environmental departments.

Tribal Consultation: In working with the tribes, EPA follows its *Policy on Consultation and Coordination with Indian Tribes* [62] The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear agency standards for a consultation process promoting consistency and coordination. In FY 2020, EPA will continue to support the Agency's web-based Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[61] Please refer to https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal for further information.
[62] Please refer to: https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$487.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$1,833.0 / -14.6 FTE) This reduces some tribal capacity building efforts and eliminates grants to tribal colleges and universities; certain tribal small-grant programs; and including other contract program support.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

International Programs

International Sources of Pollution
Program Area: International Programs
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$6,619.8***	***$6,904.0***	***$5,339.0***	***-$1,565.0***
Total Budget Authority	$6,619.8	$6,904.0	$5,339.0	-$1,565.0
Total Workyears	35.0	36.7	14.2	-22.5

Program Project Description:

The United States works with international partners to address international sources of pollution, as well as the impacts of pollution from the United States on other countries and the global environment. International sources of pollution impact air, water, food crops and food chains, and can accumulate in foods such as fish. Healthy environments, ecosystems, and communities provide the foundation for economic development, food security, and sustainable growth.

EPA's work with international partners and organizations is essential to successfully addressing transboundary pollution adversely impacting the United States. Strengthening environmental protection abroad so that it is on par with practices in the U.S. helps build a level playing field for industry and promotes opportunities for technologies and innovation. EPA's international programs also play an important role in fulfilling national security and foreign policy objectives.

An important example is EPA's engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings, which negotiate outcomes on key EPA issues such as marine litter, resource efficiency, and air quality. In addition, EPA's engagement with the World Health Organization has helped advance recognition of the critically important role of environmental factors, including air pollution and toxic chemicals, in the global burden of non-communicable diseases (NCDs) and of the role that sound environmental laws can play in reducing these risks.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 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. Specifically, EPA will engage with key priority countries like China to address air pollution that contributes significant pollution to the domestic and international environment. For example, China is implementing national air quality monitoring, planning, and control strategies with advice and lessons learned from the United States. Environmental policies adopted and implemented in China will improve competitiveness

for U.S. businesses, drive demand for U.S. emissions control technologies, and expand exports of U.S. environmental goods and services to China while improving air quality conditions in the United States.

EPA will maintain efforts to reduce environmental threats to U.S. citizens from global contaminants impacting air, water, and food safety. EPA will continue technical and policy assistance for global and regional efforts to address international sources of harmful pollutants, such as mercury. Since 70 percent of the mercury deposited in the U.S. comes from global sources[63], both domestic efforts and international cooperation are important to address mercury pollution. EPA will continue to work with international partners and key countries to fully implement obligations under the Minamata Convention on Mercury in order to protect the U.S. population from mercury emissions originating in other countries, including from artisanal and small-scale gold mining. EPA will continue to play a leadership role in the Lead Paint Alliance to increase the number of countries that establish effective laws to limit lead in paint, which remains a priority health concern following successful efforts to eliminate lead in gasoline worldwide.

EPA also will continue its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health and sustainable economic growth in North America.

EPA will engage multilaterally and bilaterally to prevent and reduce marine litter, an increasingly prominent global issue that can negatively impact domestic water quality, tourism, industry and public health in the U.S. Because 80 percent of marine litter comes from land-based sources[64] of waste, countries with inadequate waste management contribute to the pollution in our shared oceans. EPA will continue to work with other federal agencies to advance sound policy approaches for global action on marine litter.

The United States assumes the Presidency of the G7 in 2020. Because the G7 Presidency involves hosting ministerial-level meetings in addition to a Leaders Summit, EPA will participate with other federal agencies in ensuring the President's agenda for the United States' G7 Presidency. EPA's work on the G7 for 2020 will advance key environmental policy deliverables on clean air, clean water, and marine litter, developed in partnership with U.S. stakeholders, building on priorities agreed to in previous G7 Environment Ministers Meetings, and in support of the Administration's vision for the U.S. G7 Presidency.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[63] For more information, please see: https://www.epa.gov/international-cooperation/minamata-convention-mercury and www.mercuryconvention.org.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$316.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefits costs.

- (-$2,869.0 / -22.5 FTE) This reduction supports the continued reprioritization of agency activities. The Program will focus efforts on the highest priority international issues.

- (+$988.0) This program change focuses on the President's agenda for the United States' G7 Presidency by advancing key environmental policy deliverables on clean air, clean water, and marine litter.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 13547; E.O. 13689.

Trade and Governance
Program Area: International Programs
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$5,290.1***	***$5,463.0***	***$0.0***	***-$5,463.0***
Total Budget Authority	$5,290.1	$5,463.0	$0.0	-$5,463.0
Total Workyears	16.2	15.9	0.0	-15.9

Program Project Description:

Since the 1972 Trade Act mandated the U.S. Trade Representative engage in interagency consultations, EPA has played a key role in trade policy development. Specifically, EPA is a member of the Trade Policy Staff Committee and the Trade Policy Review Group - interagency mechanisms that provide advice, guidance, and clearance to the Office of the U.S. Trade Representative in the development of U.S. international trade and investment policy. Trade influences the nature and scope of economic activity and therefore the levels of pollutant emissions and natural resource use. EPA's role in trade negotiations is to ensure that agreements have provisions that are consistent with the Administration's environmental protection goals while not putting the United States at an economic disadvantage.

FY 2020 Activities and Performance Plan:

Resources and FTE have been proposed for elimination for this program in FY 2020. EPA will continue its participation in the North American Commission for Environmental Cooperation (CEC) and other international forums, as appropriate, through the International Sources of Pollution Program.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$5,463.0 / -15.9 FTE) This funding change eliminates the Trade and Governance Program.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 12915; E.O. 13141; E.O. 13277.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$2,645.5***	***$3,033.0***	***$0.0***	***-$3,033.0***
Total Budget Authority	$2,645.5	$3,033.0	$0.0	-$3,033.0
Total Workyears	13.1	13.9	0.0	-13.9

Program Project Description:

The two thousand-mile border between the United States and Mexico is one of the most complex and dynamic regions in the world, where the benefits of international programs are perhaps most apparent. This region accounts for three of the ten poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the country.[65] In addition, over 430 thousand of the 14 million people in the region live in 1,200 colonias,[66] which are unincorporated communities characterized by substandard housing and unsafe drinking water. The 1983 La Paz Agreement[67] and the adoption of the Border Programs have gone a long way to protect and improve the health and environmental conditions along a border that extends from the Gulf of Mexico to the Pacific Ocean.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. Projects historically funded along the border between the United States and Mexico may be eligible for funding under the Clean Water and Drinking Water State Revolving Funds.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3,033.0 / -13.9 FTE) This funding change eliminates the U.S. Mexico Border Program as part of the effort to focus resources on core environmental work.

[65] http://hsc.unm.edu/community/toolkit/docs2/10.USMBHC-TheBorderAtAGlance.pdf
[66] http://hsc.unm.edu/community/toolkit/docs2/10.USMBHC-TheBorderAtAGlance.pdf
[67] https://www.epa.gov/sites/production/files/2015-09/documents/lapazagreement.pdf

Statutory Authority:

In conjunction with the 1983 Agreement between the United States of America and the Mexican United States on Cooperation for the Protection and Improvement of the Environment in the Border Area (La Paz Agreement) and National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) §§ 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) § 10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1).

IT/ Data Management/ Security

Information Security

Program Area: IT / Data Management / Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$7,016.5***	***$7,280.0***	***$13,773.0***	***$6,493.0***
Hazardous Substance Superfund	$745.8	$661.0	$5,082.0	$4,421.0
Total Budget Authority	$7,762.3	$7,941.0	$18,855.0	$10,914.0
Total Workyears	16.0	16.6	12.8	-3.8

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Agency's Information Security Program's mission is to protect the confidentiality, availability and integrity of EPA's information assets. The information protection strategy includes, but is not limited to policy, procedure and practice management; information security awareness, training and education; governance and oversight; risk-based weakness management; operational security management; and incident detection, response and recovery.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. Cybersecurity is a serious challenge to our nation's security and economic prosperity. Effective information security requires vigilance and the ability to adapt to new challenges every day. As reported to the Department of Homeland Security (DHS), in FY 2018, EPA experienced 145 known successful attacks against its systems. EPA has identified significant gaps in its ability to detect, respond to, protect against and recover from attacks. These gaps increase the risk to compromise agency information.

According to the draft FY 2018 Q4 *Cybersecurity Risk Management Assessment* from DHS, EPA is one of the CFO Act agencies whose cybersecurity posture is "At Risk." In response, in FY 2020 EPA will leverage new capabilities through the Continuous Diagnostics and Mitigation (CDM) program to close existing gaps in the *Cybersecurity Risk Management Assessment* areas of identifying and alerting on the introduction of unauthorized hardware and software into the Agency's networks and systems, checking outbound traffic for unauthorized exfiltration, automated removal media prevention and assessing systems with a Security Content Automation Protocol (SCAP) product. In addition to protecting EPA information assets, CDM will help the Agency identify and respond to federal-wide cybersecurity threats and incidents quicker and more efficiently, thereby better protecting all federal information assets.

EPA's cost to implement new and maintain existing CDM capabilities as mandated by the Office of Management and Budget is estimated to be over $10 million in FY 2020 across all appropriations. With available resources, EPA also will work to close non-CDM capability gaps essential to adequately protect agency information assets. Such efforts include the *Cybersecurity Risk Management Assessment* area of analyzing malicious email attachments, detecting and mitigating effects of insider threats and advanced persistent threats, and conducting program responsibilities, such as governance, oversight, and risk management.

Cybersecurity Risk Management Assessment metrics developed by the National Institute of Standards and Technology (NIST) and industry best practices help prioritize action to adequately protect agency information assets, and EPA's Information Security Program continues to provide the Agency visibility on vulnerabilities. While EPA's cybersecurity posture is expected to remain at risk in FY 2020, the Agency will continue to conduct risk-assessments and alternatives analyses to determine which protections EPA must maintain or implement. For example, the Agency is assessing alternatives for Security Operations as a Service and cloud security options such as Cloud Access Security Brokers Services for possible implementation.

In FY 2020, the Information Security Program will continue to collect Federal Information Security Modernization Act (FISMA) metrics and evaluate related processes, tools, and personnel to continue to identify areas of weakness and opportunities for improvement. The Program will collect phishing test results and evaluate the effectiveness of awareness efforts. With these data, the Agency will identify strategies and prioritize areas to mitigate risks. The Agency will expand strategies for identifying and leveraging common controls and smartly managing system boundaries to reduce associated compliance costs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$5,283.0) This change to fixed and other costs is a net increase due to the recalculation of base workforce costs, including IT security and privacy, for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$1,210.0 / -3.8 FTE) This net program change is an adjustment needed for mandatory cyber security requirements,[68] including CDM funding that will be used to close existing gaps by improving audit capabilities, ensuring accountability and adding protections directly associated with the information. This change also supports CDM phase three, which will continue implementation in FY 2020.

[68] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$84,464.5***	***$83,256.0***	***$71,117.0***	***-$12,139.0***
Science & Technology	$2,296.0	$3,089.0	$2,747.0	-$342.0
Hazardous Substance Superfund	$14,126.0	$13,824.0	$13,443.0	-$381.0
Total Budget Authority	$100,886.5	$100,169.0	$87,307.0	-$12,862.0
Total Workyears	412.6	439.9	456.9	17.0

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. It ensures: access to scientific, regulatory, policy, and guidance information needed by the Agency, the regulated community, and the public; analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; and rapid, secure, and efficient communication.

This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to get the information they need on demand, to understand what it means, and to share environmental data with the least cost and burden. The Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of the Federal Information Technology Acquisition Reform Act (FITARA).

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. The goal of EPA's IT/DM services is to enhance the power of information by delivering on demand data to relevant parties. The Agency's increased investment in Technology Business Management (TBM) will further support its efforts to make sound, data-driven IT investment decisions by providing increased IT spend information, integrating this information into agency Chief Information Officer (CIO) portfolio reviews, and using this information to optimize IT services funded through the Working Capital Fund.

In FY 2020, the Agency will focus on improving customer experiences to allow EPA, its partners, and the public to acquire, generate, manage, use, and share information as a critical resource. In line with the President's Management Agenda for IT modernization and data, accountability, and

transparency,[69] EPA will improve how it supports and manages the lifecycle of information and information products. In addition, the Agency will continue to modernize IT/IM infrastructure, applications and services, empower a mobile workforce using innovative and agile solutions, and support state and tribal partnerships using innovative and agile solutions.

In FY 2020, EPA will further strengthen its IT acquisition review process as part of the implementation of federal Common Baseline Controls for FITARA. FITARA controls include an established communication and engagement strategy for the CIO with the Agency's programs and regional offices to ensure that their IT plans are well designed, directly drive Agency strategic objectives, and follow best practices. These controls also enable the CIO to engage closely with key IT stakeholders across EPA and to foster plans to refresh IT skills within the Agency.

In FY 2020, the following IT/DM activities will continue:

- **Data Management and Collection**: Data management and collection efforts include support for a variety of essential information management programs, including the National Records Management Program. These national activities include providing regulations, policies/procedures, coordination, and support to help fulfill EPA's statutory obligations to maintain records. Additionally, Discovery Services technology will continue to support the search/collection of agency information needed to help respond to requests for information from external stakeholders. EPA will continue to coordinate and oversee the Agency's Information Collection Request development and approval process, helping to ensure that data collections are approved by the Office of Management and Budget as required by the Paperwork Reduction Act.

- **Mission Software and Digital Services Capabilities:** The FY 2020 budget includes a funding request to enhance the Agency's software development and architecture capability, including application development and deployment approaches and technical platforms. This program continues EPA's adoption of transformative technologies and practices, including cloud computing, agile development methodologies, and shared software development services.

- **Geospatial:** In FY 2020, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications and services, the Agency can integrate and interpret multiple data sets and information sources to support environmental decisions. GeoPlatform will continue to publish internal and public mapping tools, which will better inform the public about EPA's programs to protect the environment and public health. As of December 2018, EPA has over 4,400 GeoPlatform mapping applications created or modified for public and internal use using the GeoPlatform. The number of GeoPlatform users has increased from nearly two thousand users in early calendar year 2015 to over eight thousand users at the end of calendar year 2018.

[69] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- **Information Access and Analysis**: In FY 2020, EPA will focus on providing core support to agency infrastructure and tools that will drive better environmental decision making with data from across the Agency. EPA will provide partnership support to other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze and visualize data. In FY 2020, EPA will continue to support Envirofacts and data visualization applications, which receives over 40 million annual application interface requests.

- **Information Technology and Infrastructure**: EPA will adjust the schedule for replacement or upgrades to align with resources and will continue to maintain and provide: desktop computing equipment, network connectivity, e-mail and collaboration tools, hosting services, remote access, telephone services, web and network services, and other IT-related equipment. In FY 2020, the Agency will continue efforts to consolidate EPA's data centers and computer rooms and to optimize operations within EPA's remaining data centers.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$822.0) This net change to fixed and other costs is a net decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefits costs.

- (-$11,317.0 / +19.8 FTE) This program change modifies the timeline for development of new technologies to address agency needs such as new assistive technology tools, ability to re-platform legacy applications, and replace end of service IT equipment that provides basic workforce support across the Agency. It also reflects an increase in reimbursable FTE to support critical working capital fund information technology and data service needs.

Statutory Authority:

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

Legal/ Science/ Regulatory/ Economic Review

Administrative Law
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$4,706.5***	***$4,753.0***	***$4,812.0***	***$59.0***
Total Budget Authority	$4,706.5	$4,753.0	$4,812.0	$59.0
Total Workyears	24.0	23.2	23.8	0.6

Program Project Description:

This program supports EPA's Administrative Law Judges (ALJ) and the Environmental Appeals Board (EAB). By adjudicating disputed matters, the ALJ furthers the Agency's mission to protect human health and the environment. The ALJ preside in hearings and issue initial decisions in cases initiated by EPA's enforcement program concerning environmental, civil rights, and government program fraud related violations. The Fifth Amendment of the Constitution of the United States of America guarantees the regulated community the right to due process of the law.

The ALJ provides the constitutionally guaranteed legal process and review for hearings and issues initial decisions in cases brought by the Agency's enforcement program against those accused of violations under various environmental, civil rights, and anti-fraud statutes. The right of affected persons to appeal those decisions is conferred by various statutes, regulations, and constitutional due process rights. The ALJ also offers an opportunity for alternative dispute resolution.

The EAB is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue final decisions in environmental adjudications (primarily enforcement- and permit-related) under all major environmental statutes that EPA administers. The EAB promotes the rule of law and furthers the Agency's mission to protect human health and the environment. The EAB decides petitions for reimbursement under CERCLA 106(b), hears appeals of pesticide licensing and cancellation proceedings under FIFRA, and serves as the final approving body for proposed settlements of enforcement actions initiated at EPA headquarters. The EAB issues decisions consistent with the Administrative Procedure Act (APA) and under the authority delegated by the Administrator and pursuant to regulation.

The EAB adjudicates administrative appeals in a fair and timely manner in accord with the APA, ensuring consistency in the application of legal requirements. The EAB also resolves disputes efficiently, avoiding protracted federal court review. In over ninety percent of matters decided by the EAB, no further appeal is taken to federal court, providing a final resolution to the dispute. The EAB also offers an opportunity for alternative dispute resolution.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the ALJ will convene formal hearings in the location of the alleged violator or violation, as required by statute. In FY 2020, the ALJ will continue to modernize its electronic filing and case management system to reduce mailing delays and costs. In FY 2020, the EAB will continue to implement its streamlined procedures for adjudicating permit appeals under all statutes and will continue to expedite appeals in Clean Air Act New Source Review cases and in FIFRA licensing proceedings.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$60.0 / +0.6 FTE) This net change is an adjustment of funds for managing an electronic filing and case docketing system and for travel.

Statutory Authority:

Administrative Procedure Act (APA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Water Act (CWA); Clean Air Act (CAA); Toxic Substance Control Act (TSCA); Solid Waste Disposal Act (SWDA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Emergency Planning and Community Right-to-Know Act (EPCRA); Marine Protection, Research, and Sanctuaries Act (MPRSA); Mercury-Containing and Rechargeable Battery Management Act (MCRBMA); the Act to Prevent Pollution From Ships (APPS).

Alternative Dispute Resolution
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,155.7***	***$1,150.0***	***$0.0***	***-$1,150.0***
Hazardous Substance Superfund	$744.3	$748.0	$0.0	-$748.0
Total Budget Authority	$1,900.0	$1,898.0	$0.0	-$1,898.0
Total Workyears	8.0	8.4	0.0	-8.4

Program Project Description:

EPA's General Counsel and Regional Counsel Offices provide environmental Alternative Dispute Resolution (ADR) services and workplace conflict prevention. EPA utilizes ADR as a method for preventing or resolving conflicts prior to engaging in formal litigation. ADR includes the provision of legal counsel, facilitation, mediation and consensus building advice and support. This program oversees a strategically-sourced contract for these services that provides mediation, facilitation, public involvement, training, and organizational development support to all headquarters and regional programs.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measures Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,150.0 / -5.9 FTE) This program change eliminates the centralization of the conflict prevention and ADR Program. Programs across the Agency may pursue ADR support services and training individually.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Civil Rights Program

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$8,848.2***	***$9,335.0***	***$9,003.0***	***-$332.0***
Hazardous Substance Superfund	$60.0	$0.0	$0.0	$0.0
Total Budget Authority	$8,908.2	$9,335.0	$9,003.0	-$332.0
Total Workyears	48.7	53.6	48.3	-5.3

Program Project Description:

The Civil Rights Program enforces federal civil rights laws that prohibit discrimination by recipients of federal financial assistance and protect employees and applicants for employment from discrimination. The Office of Civil Rights (OCR), which has responsibility for Title VII Equal Employment Opportunity (EEO) complaints, affirmative employment analysis, and reasonable accommodations, accomplished the following in FY 2018: eliminated a multi-year backlog of Final Agency Decisions (FADs); conducted a Lean process to evaluate and improve investigatory timeframes; developed a mediation guide to enhance efforts to promote use of alternative dispute resolution; engaged senior management and EPA program offices in the development of the Agency's Anti-Harassment Policy and EEO Policy; launched training for Special Emphasis Program Managers (SEPMs); and processed over 400 Reasonable Accommodations (RA) requests.

The Program provides policy guidance and technical assistance to external recipients and internally on EEO and is responsible for carrying out the following functions:

- External Civil Rights Compliance (Title VI) functions include the enforcement of several civil rights laws, including Title VI of the Civil Rights Act of 1964, that prohibit discrimination on the bases of race, color, national origin (including limited-English proficiency), disability, sex, and age, in programs or activities that receive federal financial assistance from EPA. The Agency investigates and resolves external complaints, develops policy, conducts proactive compliance initiatives and compliance reviews, and provides technical assistance to recipients and outreach to communities.

- Employment Complaints Resolution (Title VII) functions address complaints of employment discrimination, including those filed under Title VII of the Civil Rights Act of 1964 and pursuant to Executive Order 13672 (July 21, 2014).

- Affirmative Employment Analysis and Accountability functions provide leadership, direction, and advice to managers and supervisors to assist them in carrying out equal

opportunity and civil rights responsibilities. The Program also is responsible for reporting under the EEO Commission's Management Directive 715 (MD-715),[70] which provides guidelines for identifying triggers and conducting barrier analysis related to EEO within EPA's workforce.

- Reasonable Accommodation functions carry out EPA's responsibilities under the Rehabilitation Act of 1973, which requires the Agency to provide reasonable accommodation for individuals with disabilities, unless it would cause undue hardship for the Agency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. The Civil Rights Program is developing strategic plans for its internal, employment-related functions, including specific goals, implementation steps, and benchmarks that will serve as internal performance measures to ensure accountability for all of the functions. In FY 2020, EPA's Civil Rights Program will continue its strategic planning process with an emphasis on process improvement, internal performance measures, technology resources, and strategic human capital planning. These actions are consistent with measures called for in the EPA Report "Developing a Model Civil Rights Program at the EPA."[71]

External Civil Rights, including Title VI

In FY 2020, the Program will continue to implement the External Compliance Program Strategic Plan for FY 2015-2020 which focuses on three key goals: Enhance Strategic Docket Management; Develop a Proactive Compliance Program; and Strengthen the External Civil Rights and Compliance Office's Workforce to Promote a High-Performing Organization. The Program continues to support complaint docket management through investigations, informal resolution agreements and mediation consistent with its Case Resolution Manual. Providing proactive technical assistance and partnering with states; reviews, outreach to communities, strategic policy development, and the Program's workforce planning and training will be prioritized.

During FY 2018 and FY 2019, the Program developed and refined internal performance measures and successfully reduced the backlog of complaints under investigation and pending Jurisdictional Reviews. In FY 2020, the Program will continue to track internal performance measures to ensure complaints pending under investigation are resolved within 180 days of acceptance for investigation, as required by EPA's nondiscrimination regulation, and that all Jurisdictional Reviews are processed within 20 days, as required by EPA's nondiscrimination regulation. In FY 2019, and continuing through FY 2020, the Program will continue to deploy and refine an electronic case and document management system to manage the external civil rights complaint docket; refine and reissue its Case Resolution Manual; provide guidance to recipients of EPA funds

[70] Equal Employment Opportunity Commission, *Equal Employment Opportunity Management Directive 715, October 1, 2013.*
[71] For more information, please see: http://intranet.epa.gov/civilrights/pdfs/training/ecfr-developing-a-model-civil-rights-program.pdf.

regarding their regulatory obligation to have in place a nondiscrimination program; and implement a contract to provide language assistance services to limited-English proficient customers throughout EPA. Some specific initiatives may continue to build off FY 2018 and FY 2019 activities, including:

- Deployment of additional proactive technical assistance pilots to work collaboratively with states to build upon and strengthen each state's nondiscrimination program in light of the federal civil rights laws.

- Development of chapter three of the Civil Rights Toolkit to share guidance and promising practices with EPA recipients related to "Risk Communication" on environmental civil rights issues.

- Continued implementation of the Program's Functional Competency Framework which strengthens the Agency's workforce by promoting the development of a highly effective, performance-based organization, including individual development plans that include customized training objectives.

Title VII

In FY 2020, EPA will dedicate most of its financial resources to the processing of discrimination complaints, including EEO counseling, investigations, and drafting FADs. The Program will focus on process improvements to: 1) ensure prompt, effective, and efficient EEO complaint docket management; 2) enhance the proactive EEO compliance program through strategic policy and training development; and 3) strengthen the Title VII workforce through strategic human capital planning. In addition, the Program will:

- Continue to train additional collateral-duty EEO Counselors and professionalize other collateral duty functions for SEPMs, FAD writers, and Local Reasonable Accommodation (RA) Coordinators.

- OCR will continue to improve its investigation timeliness with a target of 92 percent on-time completion rate. The Program currently has a completion rate of 90 percent.

- Improve the Alternative Dispute Resolution (ADR) participation rate to the Equal Employment Opportunity Commission goal of 50 percent by strengthening the Program through increasing training, marketing and the development of an ADR guide for use by Agency employees.

- Institute routine evaluations of the Title VII investigation process for continuous improvement using the Lean methodology.

- Apply visual management techniques to Title VII process improvement efforts to ensure greater accountability and transparency.

- Implement cross agency training for supervisors and staff to increase global understanding of the EEO process, and relevant roles and responsibilities.

- Assess how services are provided nationally to ensure their availability and efficient delivery.

Affirmative Employment Analysis and Accountability (AEAA)

In FY 2020, the Program will continue to focus on process improvements to: 1) ensure prompt, effective, and efficient development of critical and required reports, such as MD-715; 2) enhance the proactive Affirmative Employment function through development of strategic policy, training and the engagement of critical internal EPA partners; and 3) strengthen the AEAA workforce through strategic human capital planning. Consistent with this strategic approach, the Program will continue to:

- Increase collaboration among program offices and regions to ensure coordination of related EEO and diversity and inclusion objectives.

- Ensure integration of civil rights into EPA's strategic planning processes, organizational assessments, operating plans, and other relevant reporting vehicles.

- Develop and implement activities, trainings, and educational events that assist EPA's programs in civil rights.

- Use the Lean methodology to evaluate the MD-715 development plan to identify efficiencies and process improvements.

- Increase the availability of data from the AEAA Program through visual management (e.g., dashboards) and increased use of technology to demonstrate progress.

- Provide effective training and tools for managers and supervisors in carrying out their responsibilities under MD-715 and the Diversity and Inclusion Strategic Plan.

Reasonable Accommodations (RA) Program

In FY 2020, the RA Program will continue to focus on process and technological improvements to ensure prompt, effective, and efficient RA request docket management. The Program also will enhance the proactive RA compliance function through development of strategic policy; training and the engagement of critical internal EPA partners; The Program will continue to:

- Transition to the Reasonable Accommodations Management System for processing RA requests to ensure greater efficiency and integrity within the Program.

- Update reasonable accommodation processes and templates to improve the timeliness, efficiency, and consistency of communications and to avoid release of sensitive personally identifiable information.

- Assess, evaluate, and further develop the in-person and on-line training curriculum for reasonable accommodation and Section 508 compliance with a goal of training all EPA managers by quarter 2 of FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$476.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$808.0 / -5.3 FTE) This program change reflects a reduction in the Civil Rights Program through the streamlining of support for the processing of investigations for Title VI and Title VII complaints, enhancement of mandatory reporting, and improvements in the overall management of complaints and reporting processes.

Statutory Authority:

Title VI of the Civil Rights Act of 1964; Title IX of the Educational Amendments of 1972; Rehabilitation Act of 1973 § 504; the Age Discrimination Act of 1975, Federal Water Pollution Control Act Amendments of 1972 § 13; Title VII of the Civil Rights Act of 1964; Equal Pay Act of 1963; Rehabilitation Act of 1973 §§ 501, 504, 505, 508; Americans with Disabilities Act of 1990; ADA Amendments Act of 2008; Age Discrimination in Employment Act (ADEA) of 1967; Genetic Information Nondiscrimination Act (GINA).

Integrated Environmental Strategies
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$9,529.8***	***$10,653.0***	***$8,828.0***	***-$1,825.0***
Total Budget Authority	$9,529.8	$10,653.0	$8,828.0	-$1,825.0
Total Workyears	45.9	47.2	42.0	-5.2

Program Project Description:

The Integrated Environmental Strategies (IES) Program advances the Agency's mission of protecting human health and the environment while promoting economic growth from the national level to the community level. The IES Program provides tools and resources to transform EPA into a more effective organization. Nationally, IES is focused on: (1) streamlining EPA's permitting processes; (2) working with industrial sectors to identify and develop sensible approaches to better protect the environment and public health; and (3) collaborating with federal, state, and municipal partners, communities, businesses, and other stakeholders to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training. Since 2017, community-driven technical assistance workshops have been delivered in 116 communities. Over the same period, $1.9 million in funds from other agencies through interagency agreements have been coordinated with EPA investments to more effectively support this work. Additionally, through the normal course of follow up with community partners, EPA has documented how the assistance products set the stage for private investment in real estate and infrastructure assets that improve neighborhood environmental conditions.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 - 2022 EPA Strategic Plan*. This program demonstrates new approaches to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. In FY 2020, the Program will focus on permit streamlining, sector strategies, and community-driven environmental protection. In addition, the Agency will look to provide resources, as available, to assist school districts in addressing the improvement of health and environmental conditions in schools.

Permit Streamlining

One way that EPA implements its statutory authority is through various permitting programs. These programs are based on a set of processes that vary across EPA program and regional offices.

The Agency is focused on working across EPA program offices and with state and tribal co-regulators to streamline EPA's permitting processes in support of the President's Memorandum, "Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing." This work supports the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* of making permitting decisions within six months. In FY 2020, EPA also will improve its role in cross-cutting permitting and policy issues and partnership with state permitting offices to streamline our review of state-issued permits. The Program will facilitate and support the sharing and implementation of permitting best practices and approaches of environmental co-regulators to achieve efficient and effective permitting.

Smart Sectors

EPA's Smart Sectors is a partnership program that provides a platform to collaborate with 13 regulated sectors of the economy and develop less burdensome approaches to protect the environment and public health. In FY 2018, EPA conducted 17 site visits covering the operations of nine different sectors, and more than 400 other substantive meetings. The Sectors Program launched a new sector snapshot tool that provides environmental and economic data about three industries participating in the program. This interactive, web-based application employs a novel approach by assembling a range of environmental and economic data from different publicly-available sources to provide an integrated, easy-to-understand context for each sector over the last 20 years. EPA will continue highlighting best practices for industry, and states, as well as facilitating cross-sector dialogue to identify innovative solutions to environmental problems. 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. Lastly, EPA will continue working to reduce recordkeeping and reporting burden. In FY 2018, the Agency met its annual target of reducing recordkeeping and reporting burden by 2,000,000 hours.

Community-Driven Environmental Protection

This program delivers technical assistance, training, and tools to economically distressed communities and coordinates the Agency's work with communities to increase efficiency, effectiveness, and accountability. In FY 2020, the IES Program will continue to lead the existing Cross-Agency Communities team, focusing on the Administration's priorities, such as leveraging private investment and aligning federal investments to maximize benefits to communities.

Technical assistance and training is the cornerstone of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. The objective is to help tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, using public and private sector investments, and other resources more efficiently. Where appropriate, EPA will partner with other agencies to help achieve locally-led, community-driven approaches to protecting clean air, land, and water, while at the same time supporting economic revitalization.

The Program will continue analyses on emerging trends, innovative practices, and tools that support clean air, land, and water outcomes. EPA will develop tools to help interested communities

incorporate innovative approaches to infrastructure and land development policies that deliver multiple economic, community, and quality of life benefits while also managing storm water, reducing combined sewer overflows, improving local air quality, facilitating private investment in Brownfield and Superfund site redevelopment, and achieving other environmental benefits.

Process Improvement and EPA's Lean Management System (ELMS)

In FY 2018, EPA's Chief of Operations introduced the EPA Lean Management System (ELMS), which has enhanced the Agency's performance management framework. ELMS is a set of practices and tools that supports Agency employees in identifying and solving problems for optimal performance results. As part of ELMS, the Agency's senior leaders hold monthly business meetings to discuss performance results and actions needed to make improvements.

The Agency is deploying ELMS to support the accomplishment of the Agency's priorities by increasing efficiencies and making operational process improvements. Routine monitoring, measurement, and engagement, enable the Agency to identify problems while they are still small, solve problems before they become too big, and sustain improvements over time to carry out their work more efficiently and effectively. The Office of Continuous Improvement (OCI) is providing training and technical assistance to Agency offices on deploying visual management and using Lean and other business process improvement principles and tools to streamline and standardize processes, analyze root causes of problems, and assess progress monthly towards performance measures. Initially, EPA counted an operational process as improved following a completed *kaizen* event that meets a three-part test: (1) the work of the process has been standardized; (2) visual management has been put in place and used, and (3) performance has improved. EPA completed 11 of these events in FY 2018. EPA is currently refining the definition to include other key tools of the EPA Lean Management System, in addition to *kaizen* events, to achieve process improvements that meet a more stringent requirement for improvement. The data lag for the final FY 2018 number of operational processes improved will be rectified and reported by April 30, 2019. The Agency is on target to complete 50 process improvements in FY 2019 and 50 more in FY 2020. Some examples of improvements include, streamlining cleanup decision under the Resource Conservation and Recovery Act, reducing investigations, faster processing of permits and improved acquisitions.

Performance Measure Targets:

(PM PE2) Number of permit applications in backlog.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							No Target Established	TBD	Permits
Actual									

(PM OP1) Number of operational processes improved.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						25	50	50	Operational Processes
Actual						Data Available 04/2019			

Work related to the results of measure: Number of permit applications in backlog is agencywide in scope. The lead office is the Office of the Administrator.

Reduced the backlog of new applications by nearly 18 percent (from 166 to 136 applications) between June and September 2018, through a series of targeted Lean events to improve the efficiency and effectiveness of permitting programs. (FY 2018-2019 APG).

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$116.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary and benefits costs.

- (-$1,709.0 / -5.2 FTE) This program change reflects a reduction in the Integrated Environmental Strategies Program through streamlining of the community work and climate adaptation efforts within the IES Program.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Legal Advice: Environmental Program

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$51,344.3***	***$50,886.0***	***$48,123.0***	***-$2,763.0***
Hazardous Substance Superfund	$914.1	$505.0	$579.0	$74.0
Total Budget Authority	$52,258.4	$51,391.0	$48,702.0	-$2,689.0
Total Workyears	266.4	282.0	242.8	-39.2

Total workyears in FY 2020 include 5.5 FTE funded by TSCA fees.

Program Project Description:

This program provides legal representational services, legal counseling and legal support for all the Agency's environmental activities.[72] The legal support provided by this program is essential to the Agency's core mission. The personnel assigned to this program represent essential expertise in these critical fields that the Agency relies on for all decisions and activities in furtherance of its mission: to protect human health and the environment.

This program provides counsel on every major action the Agency takes. It plays a central role in all statutory and regulatory interpretation of new and existing rules and all rule and guidance development under EPA's environmental authorities. This program provides essential legal advice for every petition response, every judicial response and every emergency response. When the Agency acts to protect the public from pollutants or health-threatening chemicals in the air we breathe, in the water we drink, or in the food we eat, this program provides counsel on the Agency's authority to take that action; it then provides the advice and support necessary to finalize and implement that action. When that action is challenged in court, this program in coordination with the Department of Justice, defends it.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 - 2022 EPA Strategic Plan.* This program provides legal representation in more than 350 defensive judicial cases each year. It is projected that the number of cases in FY 2020 will exceed this number. The Program will continue to provide legal representation in judicial and administrative litigation for core agency environmental programs and for agency priorities. The

[72] Resources for legal services for Support programs are included in the Legal Advice: Support Program.

Program also will provide counseling outside of the litigation context in the highest priority issues arising under all the legal environmental statutes administered by EPA.

In FY 2020, the Agency will continue to focus on its core mission to apply the most effective approaches by implementing EPA's environmental programs under the Resource Conservation and Recovery Act, Leaking Underground Storage Tanks, Clean Air Act, Clean Water Act, Toxic Substances Control Act (TSCA), Federal Insecticide Fungicide and Rodenticide Act, Food Quality Protection Act, Safe Drinking Water Act, and other authorities. This strategy will help ensure that human health and the environment are protected and provided with clean air, water, and land, and safe chemicals and pesticides in the most effective way.

Legal counseling resources also continue to be in high demand to support the Agency's response to states seeking assistance developing or implementing environmental programs, industrial facilities seeking permits that are required to undertake new economic activity, and citizens seeking actions to protect local environmental quality, among other things. The Program will prioritize resources after supporting judicial and administrative litigation to counseling agency clients on these matters.

The following examples illustrate this program's important role in implementing the Agency's core mission:

- EPA proposed to repeal the Clean Power Plan (CPP) and issued a notice of proposed rulemaking to solicit public comment on a potential replacement for the CPP. These ongoing rulemaking efforts are a high priority for the Agency.

- Providing ongoing critical legal support for implementing a Presidential Executive Order directing EPA and the U.S. Army Corps of Engineers to undertake rulemaking to redefine "waters of the United States" under the Clean Water Act, including providing significant support in the drafting of rulemaking documents for three separate rulemaking proceedings.

- Developing legal options and provided critical legal advice and litigation defense in support of EPA's implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernized and substantially overhauled TSCA.

Performance Measure Targets:

(PM RG1) Percentage of legal deadlines met by EPA.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	No Target Established	TBD	Percent
Actual						N/A			
Numerator									Legal Deadlines
Denominator									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$4,082.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, WCF, and benefit costs.

- (-$10,845.0 / -61.2 FTE) This net program change is a reduction in FTE and pay resources. EPA will focus on counseling and legal advice to the highest agency priorities and focus on litigation support.

- (+$4,000.0 / +20.0 FTE) This program change increases to support to priority efforts in deregulation, permitting support and state delegation support.

- (+2.2 FTE) This program change is an increase in fee funded reimbursable FTE to support planned TSCA fee workload.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Legal Advice: Support Program
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$14,616.0***	***$15,455.0***	***$17,151.0***	***$1,696.0***
Total Budget Authority	$14,616.0	$15,455.0	$17,151.0	$1,696.0
Total Workyears	77.9	86.3	90.4	4.1

Total workyears in FY 2020 include 3.5 FTE funded by TSCA fees.

Program Project Description:

The Legal Advice: Support Program provides legal representational services, legal counseling and legal support for all activities necessary for EPA's operations.[73] It provides legal counsel and support on issues including, but not limited to: appropriations, claims, contracts, employment law, grants, information law, intellectual property law, real property, and all aspects of civil rights law.

For example, if an EPA program office needs guidance on how to respond to a Freedom of Information Act (FOIA) request, whether it may spend money on a certain activity, or what to do when a plaintiff files a tort claim against the Agency, this program provides answers, options, and legal advice. This program also supports EPA in maintaining high ethical standards and in complying with all laws and policies that govern the Agency's operations.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to address and manage information requests, legal support for work under the Civil Rights Statutes, and employment law. There also is an ongoing need for a high level of involvement in questions related to contracts, ethics, grants, finance, appropriations, and employment.

In addition to the increase in employee and labor relations matters, litigation and appeals under the Freedom of Information Act (FOIA) have continued to increase steadily in both number and complexity. In FY 2020, EPA will continue to focus on responding to the increased number of complex and challenging information requests. Targeted legal counseling will be provided to ensure appropriate responses for FOIA requests.

[73] Resources for legal services to support environmental programs are included in the Legal Advice: Environmental Program.

The following examples illustrate this program's important role in meeting FOIA's requirements, increasing transparency, and in supporting EPA's workforce in maintaining high ethical standards in all their activities:

- The Office of General Counsel provides various trainings for Agency FOIA professionals to ensure that EPA is effectively and efficiently responding to the public's FOIA requests. In FY 2019 and continuing in FY 2020, the Office of General Counsel will launch additional FOIA training for the Agency's supervisors to ensure that supervisors fully understand the relevant legal requirements, and the Office of General Counsel will improve the FOIA intake and assignment process to improve FOIA response timeliness and accuracy. These training opportunities are particularly critical given that the Agency received over 11,350 FOIA requests in FY 2018.

- The Office of General Counsel has developed an Ethics Communication Initiative to improve employee awareness and compliance with ethics laws. In FY 2020, EPA will continue implementing the outcomes of this initiative, including: revamping EPA's ethics intranet site; deploying an online tool to assist EPA's workforce with identifying ethics officials within their organization; and establishing an Ethic's help-line phone number for EPA employees to report ethics concerns.

Performance Measure Targets:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	25	50	Percent
Actual						-9			
Numerator						-224*			Requests
Denominator						2,537			

***** Preferred direction of numerator is an increase. Negative number reflects an addition to the backlog.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,168.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$528.0 / +2.7 FTE) This program change is an increase to focus on high priority FOIA cases.

- (+1.4 FTE) This program change is an increase in fee funded reimbursable FTE to support planned the Toxic Substance Control Act (TSCA) workload for CBI and other new requirements under the new law.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Regional Science and Technology

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,094.6***	***$1,205.0***	***$0.0***	***-$1,205.0***
Total Budget Authority	$1,094.6	$1,205.0	$0.0	-$1,205.0
Total Workyears	2.1	2.0	0.0	-2.0

Program Project Description:

The Regional Science and Technology (RS&T) Program provides assistance to programs implementing the Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; and Comprehensive Environmental Response, Compensation and Liability Act. The RS&T Program performs laboratory analysis, field monitoring, and sampling investigations in order to provide credible scientific data on environmental pollutants and conditions to agency decision makers.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. The Agency is working to establish a comprehensive enterprise-wide laboratory approach.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,205.0 / -2.0 FTE) This funding change eliminates the RS&T Program. The Agency is working to establish a comprehensive enterprise-wide laboratory approach.

Statutory Authorities:

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

Regulatory/Economic-Management and Analysis
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$14,270.7***	***$14,190.0***	***$16,162.0***	***$1,972.0***
Total Budget Authority	$14,270.7	$14,190.0	$16,162.0	$1,972.0
Total Workyears	74.9	73.2	74.0	0.8

Program Project Description:

The Regulatory/Economic, Management and Analysis Program is responsible for reviewing Agency regulations to ensure that they are developed in accordance with the governing statutes, executive orders, and Agency commitments and are based on sound technical, economic and policy assumptions. Further, the Program ensures consistent and appropriate economic analysis of regulatory actions, analyzes regulatory and non-regulatory approaches, and considers interactions between regulations across different environmental media. The Program establishes compliance with Executive Order (EO) 13771 by ensuring that the costs and cost savings of EPA's actions are fully and appropriately estimated. This program also ensures Agency regulations comply with additional statutory and EO requirements, including the Congressional Review Act, the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act), and EOs 12866 and 13563 regarding the Office of Management and Budget (OMB) regulatory review. EPA recently built a prototype economy-wide model and assessed under what circumstances economy wide impacts should be assessed. EPA also completed an assessment of how involuntary unemployment due to regulation affects health and welfare allowing a more robust estimate of the costs of regulatory impacts.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 - 2022 EPA Strategic Plan*. The Program assists the Administrator and senior agency staff in implementing new regulatory policy priorities, including EO 13771 (Reducing Regulation and Controlling Regulatory Costs), EO 13777 (Enforcing the Regulatory Reform Agenda), EO 13783 (Promoting Energy Independence and Economic Growth), and EO 13790 (Promoting Agriculture and Rural Prosperity in America).

In FY 2020, EPA will continue its efforts to assess, review, and improve its regulations while considering costs and burdens to businesses, jobs, communities, government entities, and the economy, and maximizing the net benefits to protect human health and the environment. EPA will collect data and build models to assess regulatory proposals and their impacts on costs, benefits and economic performance. Key program activities planned include:

- Develop a model of the U.S. economy, ideally suited to assess how regulations affect the economy, including distributional impacts, costs, and broader macro-economic performance. The model will have the capability to assess both costs and benefits of regulation. EPA also will have the model peer reviewed, available for public comment and demonstrated in some regulatory analyses. This model will provide critical evidence-based analyses to inform decision making.

- Currently, EPA relies on dated water quality benefit studies that often are inconsistent with best practices in place today. EPA's National Center for Environmental Economics will gather important benefits data and build a benefits model to assess the benefits of national regulations that change water quality. This effort will provide important evidence-based data and analyses, consistent with economic science best practices to inform decision making.

- Continue to manage EPA's implementation of EOs, including development and management of the annual regulatory budget, analyzing potential areas of cost savings, ensuring that EPA continues to meet or exceed the goal of repealing two regulations for each new regulation issued, pursuant to EO 13771, and maintaining a new website that provides information about deregulatory actions.

- Review economic analyses prepared by EPA to ensure compliance with OMB Circular A-4 on Regulatory Analysis, EO 12866, and other related requirements. Provide the Administrator and the public with high-quality analysis of the costs, benefits, and impacts on jobs, businesses, and communities to better inform decision-making and ensure transparency about the consequences of regulation.[74]

- Work on development of new regulation to support greater consistency and transparency in consideration of economic costs and benefits in the regulatory development process and implementation of Agency programs.

- Update EPA's *Guidelines for Preparing Economic Analyses* to ensure that analyses provide a complete accounting of the impacts of regulatory actions, including distributional consequences. Apply the best economy-wide modeling tools to assess the economic effects of environmental regulatory options, including methods designed to examine the distribution of regulatory burdens. Work to develop open source data and economic models to analyze incidence and distribution of impacts of environmental regulations on U.S. economy. These updated guidelines will help ensure that evidence-based economic analysis will be done consistently across EPA programs and in accordance with best economic methods.

- Pursuant to EPA's Energy Independence Report under EO 13783, conduct more detailed employment analysis of regulations (both the direct and indirect employment impacts) on

[74] For more information, please see: https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses.

a regular basis, including developing information and models to help conduct ex post cumulative assessment.

- Continue to develop EPA's semiannual unified Regulatory Agenda, while ensuring EPA complies with requirements under EO 13771.

- Manage EPA's internal Action Development Process and expand and upgrade regulatory planning and tracking tools to facilitate timely decisions and coordination across programs.

- Serve as EPA's liaison with the Office of Information and Regulatory Affairs (OIRA) within OMB.

- Serve as EPA's liaison with the Office of the Federal Register by reviewing, editing, and submitting documents for publication so that the public, states, other agencies, and Congress are informed about EPA's regulatory activities in a timely manner.

- Develop, in conjunction with other EPA programs (e.g., air, land, water), improved analytical tools to capture the uncertainty associated with EPA's risk assessment methods used in quantifying human health effects.

Performance Measure Targets:

(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						2,000,000	2,000,000	2,000,000	Hours
Actual						2,026,627			

(PM RG3) Number of EO 13771 regulatory actions issued.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	No Target Established	No Target Established	Actions
Actual						3			

(PM RG4) Number of EO 13771 deregulatory actions issued.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	No Target Established	No Target Established	Actions
Actual						10			

(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						-40	-50	No Target Established	Millions of Dollars
Actual						-75			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$692.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$1,280.0 / 0.8 FTE) This net program change reflects a focus to implement regulatory policy priorities and to assess, review, and improve the Agency's regulations and underlying economic tools, in accordance with new Executive Orders.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Science Advisory Board

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$3,531.8***	***$3,787.0***	***$3,763.0***	***-$24.0***
Total Budget Authority	$3,531.8	$3,787.0	$3,763.0	-$24.0
Total Workyears	16.4	17.5	18.7	1.2

Program Project Description:

Congress established EPA's Science Advisory Board (SAB) in 1978, under the Environmental Research, Development, and Demonstration Act, to advise the Administrator on a wide range of highly visible and important scientific matters. The Clean Air Scientific Advisory Committee (CASAC) was established in 1977, under the Clean Air Act Amendments of 1977, to provide independent advice to the EPA Administrator on the technical bases for EPA's National Ambient Air Quality Standards. The SAB and the CASAC, both statutorily-mandated chartered Federal Advisory Committees, draw from a balanced range of non-EPA scientists and technical specialists from academia, states, independent research institutions, and industry. This program provides management and technical support to these advisory committees. The committees provide EPA's Administrator independent advice and objective scientific peer review on the technical aspects of environmental issues, as well as, the science used to establish criteria, standards, regulations, and research planning as requested.[75]

In FY 2018, the SAB and CASAC produced five advisory reports from independent, scientific peer reviews providing scientific and technical advice on topics ranging from risk exposure and integrated science assessments, health and ecological criteria, and both toxicological and regulatory reviews. In FY 2019, the SAB and CASAC anticipate producing six advisory reports while also improving efficiency and response time. To improve efficiency and effectiveness of the committees' advice and recommendations, EPA has proposed a cross-cutting measure. The measure recommends a 7 percent reduction in the time it takes to develop reports as well as posting Federal Advisory Committee Act (FACA) meeting minutes 90 days after the meeting. These actions are intended to increase transparency and public participation. A *kaizen* event will be organized in the spring of 2019 to discuss this performance measure target in more detail.

[75] For more information, please see: http://www.epa.gov/sab/, http://www.epa.gov/casac/.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 - 2022 EPA Strategic Plan*. FY 2020 resource levels are an opportunity for EPA's SAB to reprioritize activities. Authorizing legislation and scientific integrity mandate that each peer review meets certain minimum standards for a successful independent review. In FY 2020, the Program will continue federally mandated CASAC reviews of policy assessments, risk exposure assessments, and health and ecological criteria for primary National Ambient Air Quality Standards. The CASAC will review Particulate Matter (PM), Ozone, and NAAQS Secondary standards for NOx/Sox/PM. The SAB has a statutory requirement to review the FY 2020 spring and fall regulatory agendas and supporting science associated with rulemakings. The SAB also has requested to review several rules to do an in-depth analysis on the science behind the new proposed rules. The Program will assist the Agency in its review of toxic chemicals under the reformed Toxic Substances Control Act (TSCA) and anticipates a review of several chemicals in the Agency's Integrated Risk Information System (IRIS) Program. The Program will accommodate additional requests as made by EPA's Administrator or program offices such as economy-wide modeling, lead and a review of the All Ages Lead Model and risk communication.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$13.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$37.0 / +1.2 FTE) This net program change reflects a reduction in the Science Advisory Board Program through streamlined support for conducting peer reviews, hosting meetings to assess Integrated Risk Information System chemicals, and implementing business process improvements to assure logistical support is provided to help the SAB and CASAC adhere to the provisions of Federal Advisory Committee Act.

Statutory Authority:

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); Clean Air Act (CAA).

Operations and Administration

Acquisition Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$27,441.3***	***$30,210.0***	***$28,032.0***	***-$2,178.0***
Leaking Underground Storage Tanks	$6.5	$152.0	$138.0	-$14.0
Hazardous Substance Superfund	$20,477.3	$21,183.0	$21,541.0	$358.0
Total Budget Authority	$47,925.1	$51,545.0	$49,711.0	-$1,834.0
Total Workyears	263.2	275.1	259.5	-15.6

Program Project Description:

Environmental Programs and Management (EPM) resources in the Acquisition Management Program support EPA's contract activities, which cover planning, awarding, and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology improvements for acquisition.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Federal Procurement Policy (OFPP). EPA is evaluating options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system. The Agency is focusing on a solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Once available, the Agency will plan to migrate to the new contract writing system with a Fit Gap analysis and a "soft" pilot of the system and will begin data migration. At the same time, the Agency will begin to decommission the legacy EAS system.

In FY 2020, EPA will continue to implement Best-in-Class (BIC) solutions to identify pre-vetted, government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[76] Through BIC solutions, EPA will leverage acquisition experts to optimize spending within the government-wide category management framework and increase the

[76] For additional information, please refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

transactional data available for agency level analysis of buying behaviors. In FY 2020, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals.

The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP can transform the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. The Agency has established a goal of obtaining at least five percent savings for all strategically sourced categories of goods and services. Since the SSP's inception at the beginning of FY 2013 through FY 2018, EPA has saved approximately $14.5 million from strategic sourcing initiatives focused on VoIP, laboratory supplies, print, cellular services, shipping, office supplies, equipment maintenance, and software. In FY 2020, EPA anticipates approximately $7.5 million in savings.

In FY 2020, EPA will continue to focus on implementing the Financial Information Technology Acquisition Reform Act (FITARA) by:

- Avoiding vendor lock-in by competing contracts with multiple vendors or confining the scope of the contract to a limited task; and

- Developing acquisition vehicles that support the Agency in FITARA implementation.

Performance Measure Targets:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						SA: 75 CP: 65 FAA: 80	85	90	Percent
Actual						SA: 70 CP: 88 FAA: 76			
Numerator						SA:704 CP: 21 FAA: 3,038			Actions
Denominator						SA: 1,007 CP: 24 FAA: 4,002			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$598.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$2,776.0 / -14.9 FTE) This program change streamlines contractor support for: helpdesk services for EPA's Acquisition System; the closeout of contracts; and the Defense Contract Management Agency for Audit Services and the Virtual Acquisition Office (a source for up-to-date government acquisition news, research, and analysis). It also eliminates funding for Contracts Management Assessment Program Reviews which enable EPA to self-identify and remedy internal weaknesses, and reduces the Agency's training for its acquisition community. In FY 2020, EPA will utilize available program resources to prepare to transition from its commercial off-the-shelf acquisition system to an approved federal shared service provider for a new contract writing system.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$70,053.3***	***$72,884.0***	***$71,100.0***	***-$1,784.0***
Leaking Underground Storage Tanks	$390.3	$387.0	$434.0	$47.0
Hazardous Substance Superfund	$20,503.7	$22,018.0	$21,340.0	-$678.0
Total Budget Authority	$90,947.3	$95,289.0	$92,874.0	-$2,415.0
Total Workyears	430.9	448.8	433.3	-15.5

Total workyears in FY 2020 include 1.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.

Program Project Description:

Activities under the Central Planning, Budgeting and Finance Program support the management of integrated planning, budgeting, financial management, performance and risk assessments and reporting, and financial systems to ensure effective stewardship of resources. This includes managing and supporting the Agency's performance management system consistent with the Government Performance and Results Modernization Act of 2010 that involves: providing financial payment and support services for EPA, as well as specialized fiscal and accounting services for many of EPA's programs; strategic planning and accountability for environmental, fiscal, and managerial results; executing an Enterprise Risk Management program to support effective and efficient mission delivery and decision making; providing policy, systems, training, reports, and oversight essential for EPA's financial operations; managing the agencywide Working Capital Fund; and managing the Agency's annual budget process. This program also supports the Digital Accountability and Transparency (DATA) Act of 2014 and the Federal Information Technology Acquisition Reform Act (FITARA) of 2015 requirements.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will maintain key planning, budgeting, and financial management activities. EPA will sustain basic operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, and related financial reporting systems. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

EPA will continue to modernize and streamline business processes and operations to promote transparency and efficiency. The Program will apply Lean principles and leverage input from customer-focused councils, advisory groups and technical workgroups to continue improving as a high-performance organization. EPA will standardize and streamline internal business processes and use additional federal and/or internal shared services when supported by business case analysis. Since 2014, Department of Interior's (DOI) Interior Business Center (IBC) serves as EPA's payroll and HR shared service provider. In FY 2020 or FY 2021, DOI will transition to the New Pay System under GSA's Office of Shared Solutions and Performance Improvement. To prepare for this transition, DOI must decouple its Federal Personnel and Payroll System to manage payroll separately. The Agency may incur costs to facilitate this transition.

In FY 2020, the Program will continue to focus on core responsibilities in the areas of strategic planning, performance assessment and reporting, and enterprise risk management; budget preparation; financial reporting; and, transaction processing. As the Agency lead in designing and implementing performance and risk management strategies that inform agency decision making and advance mission results, the Program will focus on driving progress toward the Administrator's priorities by regularly assessing performance results against ambitious targets, monitoring and mitigating risks, and adjusting strategies as needed. This includes convening regular Performance Reviews to assess progress; promoting an increased use of data analytics and evidence-based decision-making practices; working collaboratively with agency programs to assess and analyze performance and risk data; and providing technical assistance on agencywide measures governance to enhance data quality. EPA also will continue to use the performance data and other evidence to answer fundamental business questions and identify opportunities for service improvements.

During FY 2020, EPA will focus on the Financial Management – Financial Acquisition Modernization Effort (FAME) project. The goal of FAME is to deliver a streamlined approach for the end-to-end delivery of financial transactions for contracts and grants by taking advantage of federal shared services. Among other benefits, EPA seeks to adopt accepted and standardized business processes that will deliver greater streamlining and efficiency and achieve improved financial and programmatic oversight. Equally important is the ability to meet increased transparency needs, such as those prescribed in the DATA ACT, as well as increased compliance and reporting standards. The FY 2020 investment will fund activities including system configuration, training, and outreach. This project will reduce the IT costs, streamline business processes, improve data reliability and security, and position the Agency to leverage additional federal/non-federal financial services and systems capabilities.

EPA will continue to follow OMB Circular A-123 guidance, conduct internal program reviews and use the results and recommendations from the Office of Inspector General (OIG) to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Agency will collect key operational statistics for its financial management program to further evaluate its operations and for management decision making. For example, in FY 2018, EPA tracked the timeliness of employees submitting travel vouchers. Through monthly review of performance, strategies were identified and implemented that resulted in improving compliance from 60 percent to 80 percent.

The Program will continue to support FITARA requirements in accordance with EPA's Implementation Plan.[77] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that IT needs are properly planned and resourced in accordance with FITARA.

EPA is dedicated to reducing fraud, waste, and abuse and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002, EPA has reviewed, sampled, and monitored its payments to protect against erroneous payments. The Agency's payment streams are consistently well under the government-wide threshold of 1.5 percent and $10 million of estimated improper payments. EPA conducts risk assessments in its principal payment streams, including grants, contracts, commodities, payroll, travel, purchase cards, and the Clean and Drinking Water State Revolving Funds. When overpayments are identified, they are promptly recovered. EPA has expanded its risk assessments, performed statistical sampling, set appropriate reduction/recovery targets, and implemented corrective action plans. The Agency conducts these activities to reduce the potential for improper payments and ensure compliance with the Improper Payments Information Act, as amended by the Improper Payments Elimination and Recovery Act of 2010 (P.L. 111-204) and the Improper Payments Elimination and Recovery Act of 2012 (P.L. 112-248).

Performance Measure Targets:

(PM CF1) Number of administrative shared services.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						6	7	8	Shared Services
Actual						5			

(PM CF2) Number of Agency administrative subsystems.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						24	22	20	Subsystems
Actual						26			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,045.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$4,572.0 / -24.0 FTE) This program change streamlines efforts in the areas of strategic planning, budget preparation, financial reporting and transaction processing.

- (+7.5 FTE) This program change is an increase in reimbursable FTE to support the Agency's fee-funded programs and to support working capital fund financial management services.

[77] For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

- (+$3,833.0) This increase supports the implementation of the Financial Management Payment Processing Modernization project and fixed costs to operate the Agency's financial management systems.

Statutory Authority:

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

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$292,535.1***	***$308,701.0***	***$308,335.0***	***-$366.0***
Science & Technology	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Building and Facilities	$34,605.1	$27,791.0	$33,377.0	$5,586.0
Leaking Underground Storage Tanks	$1,056.6	$813.0	$773.0	-$40.0
Inland Oil Spill Programs	$753.8	$584.0	$665.0	$81.0
Hazardous Substance Superfund	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Total Budget Authority	$475,113.4	$481,481.0	$483,964.0	$2,483.0
Total Workyears	321.8	327.6	308.0	-19.6

Program Project Description:

Environmental Programs and Management (EPM) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. This program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, printing, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to invest to reconfigure EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[78] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical.

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide. This has the potential to provide a cumulative annual rent avoidance of approximately $28 million across all

[78] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

appropriations. These savings help offset EPA's escalating rent and security costs. Planned consolidations in FY 2020 will allow EPA to release an expected 146,477 square feet of space. For FY 2020, the Agency is requesting $165.82 million for rent, $9.02 million for utilities, and $23.05 million for security in the EPM appropriation.

In FY 2020, the Agency will continue to explore opportunities to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial B&F funding to achieve long-term cost avoidance.

At the requested resource levels, EPA will continue to manage lease agreements with GSA and other private landlords, maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, On-Scene Coordinators), and track capital equipment of $25 thousand or more. In addition, the Agency will retire EPA's Personal Access and Security System (EPASS) program and shift to GSA's Managed Service Office, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a shared services solution which is in line with OMB's Federal IT Shared Services Strategy and the President's Management Agenda.[79]

Performance Measure Targets:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						241,000	163,626	146,477	Square Feet
Actual						149,278			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,607.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$5,830.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, partially offset by a decrease in transit subsidy.

- (-$8,803.0 / -15.6 FTE) This net program change reflects:
  - a decrease in the recalculation for moves and space reconfiguration to assist the Agency in reducing its footprint;
  - a net increase for core operations and maintenance costs at EPA-owned facilities and laboratories;

[79] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- a decrease in programs associated with environmental management systems, comprehensive facility energy audits, re-commissioning, and sustainable building design; and
- a decrease in the minor facilities alterations service.

Statutory Authority:

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

Financial Assistance Grants / IAG Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$24,462.0***	***$24,729.0***	***$20,202.0***	***-$4,527.0***
Hazardous Substance Superfund	$2,498.6	$2,607.0	$2,655.0	$48.0
Total Budget Authority	$26,960.6	$27,336.0	$22,857.0	-$4,479.0
Total Workyears	139.3	142.8	115.7	-27.1

Program Project Description:

Environmental Programs and Management (EPM) resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs, and suspension and debarment activities. Grants comprise approximately 40 percent of EPA's overall budget. Resources in this program ensure that EPA's management of grants and IAs meet the highest fiduciary standards, that grant and IA funding produces measurable results for environmental programs, and that the suspension and debarment program effectively protects the government's business interest.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In accordance with the overarching 2016-2020 EPA Grants Management Plan (GMP), and EPA's Strategic Plan, EPA will continue to implement activities to achieve efficiencies while enhancing quality and accountability. In FY 2020, EPA will continue investment in modernizing grant and IA IT systems in support of the President's Management Agenda.[80]

In FY 2019, EPA is preparing to deploy *GrantSolutions* software, an OMB-selected grants business leader for end-to-end grants management services provided by the Department of Health and Human Services. *GrantSolutions* will support the full 14 stages of the grants management lifecycle. FY 2020 work will center on streamlining business processing in the new system, and leveraging the full complement of system capabilities, including enhanced reporting and dashboards. For IAs, EPA will maintain and operate an integrated business solution using EPA's Interagency Agreement Payment Tracking System (IA PTS) IA Module, which will be deployed in FY 2019. Benefits of this modernization include:

[80] For more information, please visit: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- Eliminating reliance on paper for records and improving records management. For grants, EPA will utilize the records management solution provided by the Federal Shared Service – *GrantSolutions*. For IAs, EPA will evaluate options to integrate IA PTS with the Agency's internal electronic records management tool using Documentum technology.

- Strengthening decision making with improved and standardized reporting capabilities. For grants, EPA will leverage common reporting tools and other capabilities provided by *GrantSolutions* Enterprise Reporting System. For IAs, EPA will consolidate technology and capabilities to leverage the Agency's existing financial reporting system.

In addition to IT-related investments, the GMP focuses on reducing the administrative burden on EPA and grants recipients, and on improving grants management procedures. In FY 2020, the Agency will continue to: 1) fully implement the streamlining reforms in OMB's Uniform Grants Guidance; 2) streamline EPA's grants management policies through utilization of a new comprehensive framework to guide policy development, implementation, compliance, and review; 3) use EPA's Lean Management System to refine grants management processes; and 4) move to a risk-based method of pre- and post-award monitoring for grants to more effectively ensure compliance and also reduce burden.

EPA is a recognized leader in suspension and debarment. The Agency will continue to make use of discretionary debarments and suspensions as well as statutory debarments under the Clean Air Act and Clean Water Act to protect the government's business interests. In FY 2020, EPA will focus suspension and debarment activity to the most egregious violations. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and non-procurement awards (for example: grants, cooperative agreements, loans, and loan guarantees). A number of recent federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs in order to protect the public's interest and the integrity of federal programs.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$763.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,290.0 / -27.6 FTE) This program change is a decrease based on the Agency's shift to focusing on core grants management operations, which include pre-award reviews; post-award monitoring; compliance; administrative advanced monitoring reviews; management effectiveness reviews; baseline monitoring; and audit follow-up activities on the highest

risk awards. This program change is offset by expected efficiencies in the processing of grant and IA awards, lower requested grant funding levels throughout the Agency, and a review of unliquidated obligations.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

Human Resources Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$43,220.4***	***$44,227.0***	***$41,635.0***	***-$2,592.0***
Hazardous Substance Superfund	$6,279.4	$7,044.0	$5,444.0	-$1,600.0
Total Budget Authority	$49,499.8	$51,271.0	$47,079.0	-$4,192.0
Total Workyears	217.7	230.9	223.8	-7.1

Program Project Description:

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management Program support human capital (HC) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HC functions including recruitment, hiring, employee development, performance management, and workforce planning. EPM resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR enterprise risk management are focused on sustaining the workforce, retaining critical expertise, and capturing institutional knowledge. The Agency is developing and deploying management tools to assist EPA in ensuring the right staff with the appropriate skills are placed in the most suitable positions. These tools also will be valuable as an increasing percentage of the workforce becomes retirement eligible in the next five years, which is estimated to be greater than 40 percent. EPA will continue to support efforts that increase the quality of core operations, improve productivity, and achieve cost savings in mission support functions including HC management.

In FY 2020, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate *FedTalent*, a talent management system provided through the Department of Interior (DOI)'s Interior Business Center (IBC), which was deployed in FY 2019. *FedTalent* serves as a valuable tool that assists with developing, delivering, and tracking high-impact training. EPA will continue to migrate and consolidate training data from more than fifteen disparate training repositories to ensure *FedTalent* is a one-stop-shop for all training needs. The Agency is planning to procure and deploy two additional *FedTalent* modules in FY 2020: the performance management module and the competency assessment module.

In FY 2020, EPA will continue to maintain and operate two other recent workforce planning tools. The Workforce Demographics Dashboard, deployed in FY 2018, provides data visualizations and easy-to-understand information about the current workforce and succession planning and management. It affords managers a strategic view of retirement eligibility, diversity information, occupational series, and grade levels, as well as the ability to drill down and access data at lower organizational levels. The dashboard assists EPA with succession planning by helping anticipate workforce gaps due to anticipated retirements.

The Talent Enterprise Diagnostics (TED) tool, which EPA will fully implement in FY 2019, advances human capital priorities by enhancing EPA's ability to make strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management process to identify potential competency gaps across the Agency and to increase management's understanding of where needed skill sets reside within EPA.

EPA will continue to focus on delivering statutorily required services associated with the Employee Counseling Assistance Program, the Federal Worker's Compensation Program, the Drug-free Workplace Program, Unemployment Compensation, and Sign Language Interpreting and Captioning services. Furthermore, the Agency will continue its focus on Labor and Employee Relations (LER) by administering and/or negotiating national labor agreements in accordance with Executive Orders 13836[81], 13837[82], and 13839[83] and providing advice, guidance, and assistance to regional and local level negotiations. EPA also will continue its efforts to strengthen managers' and supervisors' institutional knowledge on LER related matters through training and outreach; provide advisory and counseling support agencywide; and conduct analysis of HC information to assist managers and supervisors.

The Agency is planning to strengthen and improve its HR accountability program through internal assessments with the Office of Personnel Management's HRStat framework. EPA also is working to reconstitute an intern program to address the retirement wave expected over the next three to five years, which will complement formal coaching and performance management programs aimed at sustaining the workforce, expanding professional development opportunities, and increasing employee productivity.

EPA's advisory committees, which operate as a catalyst for public participation in policy development, implementation, and decision making, have proven effective in building consensus among the Agency's diverse external partners and stakeholders. The Agency will continue its ongoing efforts to modernize the advisory committee administrative processes by implementing an electronic committee membership nomination and appointment process to improve operational efficiency, effectiveness, accuracy, and timeliness. The Agency is heavily involved with OPM's Chief Human Capital Officer Council and the President's Management Council and Agenda to address the challenges of the twenty-first century federal workforce. EPA will continue to actively

[81] For more information, please refer to: https://www.federalregister.gov/documents/2018/06/01/2018-11913/developing-efficient-effective-and-cost--reducing-approaches-to-federal-sector-collective-bargaining.
[82] For more information, please refer to: https://www.federalregister.gov/documents/2018/06/01/2018-11916/ensuring-transparency-accountability-and-efficiency-in-taxpayer-funded-union-time-use.
[83] For more information, please refer to: https://www.federalregister.gov/documents/2018/06/01/2018-11939/promoting-accountability-and-streamlining-removal-procedures-consistent-with-merit-system-principles.

participate and collaborate in these forums to maximize the value these communities add to important policy considerations.

This program also supports the transition from DOI's IBC payroll manager to GSA's New Pay System. The Agency may incur costs to facilitate this transition.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,136.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$1,504.0 / -2.0 FTE) This net program change reflects a reduction for:
  - Operational support for the following HR programs being utilized agencywide: the Agency's recruitment and diversity and inclusion activities; EPA's Human Resources Council and National Partnership Council; the Leave Bank; and the Workplace Solutions.
  - Enhancements and maintenance of EPA's HR IT Systems including HR Line of Business, data management and analysis, troubleshooting, and change requests; maintenance of EPA's University portal that provides online training and professional development;
  - Support for Federal Advisory Committees not mandated by statute; and
  - Centrally-provided, non-mandatory training.

- (+$48.0) This program change is an increase due to recalculation of sign language support costs.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Workforce Reshaping

Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$0.0***	***$0.0***	***$25,003.0***	***$25,003.0***
Science & Technology	$0.0	$0.0	$5,994.0	$5,994.0
Total Budget Authority	$0.0	$0.0	$30,997.0	$30,997.0

Program Project Description:

Environmental Programs and Management (EPM) resources for the Workforce Reshaping Program support organizational restructuring efforts throughout the U.S. Environmental Protection Agency. To help achieve its mission, EPA will develop, review and analyze mission requirements and implement options to effectively align and redistribute the Agency's workforce based on program priorities, resource reallocation, and technological advances.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. Effective workforce reshaping is critical to EPA's ability to accomplish its mission. EPA will be examining our statutory functions and processes to eliminate inefficiencies and streamline our processes. Primary criteria will include effectiveness and accountability, as EPA is focused on greater value and real results. These analyses will likely create a need to reshape the workforce. The Agency anticipates the need to offer voluntary early out retirement authority (VERA) and voluntary separation incentive pay (VSIP), and potentially relocation expenses, as part of the workforce reshaping effort.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$25,003.0) In support of the reprioritization of Agency activities, this increase will support:
  - Voluntary early out retirement authority;
  - Voluntary separation inventive pay, and
  - Workforce support costs for relocation of employees as we realign work assignments.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Pesticides Licensing

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$56,288.2***	***$58,016.0***	***$49,440.0***	***-$8,576.0***
Science & Technology	$2,888.3	$2,531.0	$2,401.0	-$130.0
Total Budget Authority	$59,176.5	$60,547.0	$51,841.0	-$8,706.0
Total Workyears	362.9	336.8	416.5	79.7

Total work years in FY 2020 include 126.0 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)[84] and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act (FQPA) of 1996, and the Pesticide Registration Improvement Extension Act of 2012 (PRIA),[85] EPA is charged with protecting people from the health risks that pesticide use can pose. FIFRA requires EPA to register pesticide products before they are marketed for use in the United States. Registration is based on review of scientific data sufficient to demonstrate that the product can perform its intended function without unreasonable adverse effects on people or the environment.

Under FFDCA, if a pesticide is to be used in a manner that may result in pesticide residues in food or animal feed, EPA must establish a tolerance, or maximum legal residue level or exemption from the requirement of a tolerance before it can be registered. To establish a tolerance, EPA must find that the residues are "safe," which, under FFDCA, means that there is a reasonable certainty of no harm to human health from aggregate exposure to the pesticide residue in food and from all other exposure except occupational exposure.[86] EPA must periodically review the registration and tolerances that the Agency issues to ensure that the public health is adequately protected.

[84] For more information on FIFRA, please see: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.
[85] Authority provided under the Pesticide Registration Improvement Extension Act of 2012 expires under the current Continuing Resolution on February 15, 2019. Authority to continue to collect fees was authorized by H.R. 1625 - Consolidated Appropriations Act, 2018.
86 Additional information related to pesticide registration, the setting of tolerance levels, and the pesticide risk assessment process can be found at the following location: https://www.epa.gov/pesticide-tolerances/setting-tolerances-pesticide-residues-foods.

FY 2020 Activities and Performance Plan:

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

Pesticide Review and Registration

In FY 2020, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with statutory requirements. In addition, the Agency will be evaluating pesticides that are already in the market against current scientific standards for human health. To further advance EPA's work supporting environmental justice and children's health, EPA will process these registration requests with special consideration for susceptible populations, especially children. Under the Food Quality Protection Act, EPA is statutorily required to ensure that its regulatory decisions are protective of children's health and other vulnerable subpopulations. EPA will continue to emphasize the registration of reduced risk pesticides, including biopesticides, to provide farmers and other pesticide users with new safer alternatives. The Agency, in collaboration with the United States Department of Agriculture (USDA), will work to ensure that minor use registrations receive appropriate support and that needs are met for reduced risk pesticides for minor use crops. EPA will assist farmers and other pesticide users in learning about new, safer products and methods of using existing products through workshops, demonstrations, small grants, and materials available on the website and in print.

In FY 2020, EPA will continue to review the registrations of existing pesticides with a focus on assessing and ensuring that pesticides can continue to be used safely, without unreasonable adverse effects to human health and the environment. The goal of the registration review process, as mandated by statute, is to review pesticide registrations every 15 years to determine whether it continues to meet the FIFRA standard for registration.[87]

For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. There is a total of 725 such cases. For each case, the steps in this process include, in this order, opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. It is important to open dockets and develop work plans for as many cases as possible early in the process so that there is time to complete the risk assessments and make decisions by the end of the FY 2022 deadline. EPA completed the opening of all 725 dockets in FY 2017 and can now focus its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. In working towards meeting the FY 2022 deadline for registration review, EPA expects to complete approximately 75 draft risk assessments and 75 decisions during FY 2020. The draft risk assessments will be published for public comments.

In FY 2020, EPA will continue enhancements to the Pesticide Registration Information System (PRISM). Expanding the capabilities of PRISM via further inclusion of electronic processes will

[87] Please see U.S. Environmental Protection Agency, Registration Review Internet site: http://www.epa.gov/oppsrrd1/registration_review/index.htm.

reduce paperwork burden and maximize efficiency, in accordance with the President's Management Agenda (PMA), by converting paper-based processes into electronic processes and corresponding workflows for the Pesticide Program's regulated entities. In addition, PRISM will create an iterative/inclusive, streamlined electronic workflow to support pesticide product registration, chemical reviews and assessments, and will be used as a centralized data repository to electronically store associated data as they relate to regulatory decisions and scientific information. Overall, the Agency projects that by expanding PRISM and related projects, over 150 existing business process workflows supporting the implementation of the Pesticide Registration Improvement Act (PRIA) will be improved.

Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides

This program emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides. In FY 2020, EPA will continue to promote reduced risk pesticides by giving registration priority to pesticides that have lower toxicity to humans and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).[88]

Several other countries and international organizations also have instituted programs to facilitate registering reduced risk pesticides. EPA works with the international scientific community and the Organization for Economic Cooperation and Development (OECD) member countries to register new reduced risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts in FY 2020, EPA will help reduce risks to Americans from foods imported from other countries.

Protecting Workers from On-the-Job Pesticide Risks

Millions of America's workers are exposed to pesticides in occupations such as agriculture, lawn care, food preparation, and landscape maintenance. Protecting workers from potential effects of pesticides is an important role of the Pesticide Program. Workers in several occupations may be exposed to pesticides when they prepare pesticides for use, such as by mixing a concentrate with water or loading and applying the pesticide.

The Worker Protection Standard (WPS)[89] and the Certification of Pesticide Applicators rules were finalized in FY 2015 and FY 2017, respectively, and are key elements of EPA's strategy for reducing occupational exposure to pesticides. In FY 2020, EPA will provide extensive in-person training to state regulators and inspectors and regions on the revised regulations to ensure accurate implementation and protection of America's workforce.

[88] Please see U.S. Environmental Protection Agency, Pesticides: Health and Safety, Reducing Pesticide Risk internet site: http://www.epa.gov/pesticides/health/reducing.htm.
[89] For more information, please see: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

EPA also will further expand outreach and training to healthcare providers in the recognition and management of pesticide-related illnesses, via a grant awarded in FY 2019. The outreach will focus on efforts to train clinicians serving the migrant and seasonal farmworker community, further improving the treatment of agricultural workers and communities potentially exposed to pesticides.[90]

Preventing Disease through Public Health Pesticides: Antimicrobial Testing

Antimicrobial pesticides play an important role in public health and safety by killing germs, bacteria, viruses, fungi, protozoa, algae, and slime. Some of these products are used to sterilize hard surfaces in hospitals. Chemical disinfection of hard, non-porous surfaces such as floors, bed rails, and tables is one component of the infection control systems in hospitals, food processing operations, and other places where disease-causing microorganisms, such as bacteria and viruses, may be present. In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness.[91]

EPA's Antimicrobial Testing Program has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is currently in the process of developing a risk-based testing strategy in response to OIG recommendations made in FY 2016[92]. EPA expects to release the new strategy in FY 2019 and continue to seek public input prior to implementation in FY 2020 – FY 2021.

Outreach and Education

Giving priority to reduced risk and Integrated Pest Management (IPM)-friendly pesticides are two steps toward protecting human health. It is essential for people using pesticides to be well informed, to understand the importance of reading and following label directions, and the importance of proper disposal. They also need to understand how to protect themselves from pests that can transmit disease. In FY 2020 the Pesticide Program will continue to invest in environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general.

Reducing Animal Testing

In FY 2020, the Agency will continue to utilize its guiding principles on data needs[93], to ensure that the Agency has enough information to support strong regulatory decisions to protect human health, while reducing, and eliminating in some cases, unnecessary resources, animal testing, and cost of data. EPA's Hazard and Science Policy Council (HASPOC) plays an important role in the implementation of the vision of the 2007 National Academy of Sciences (NAS) report on toxicity testing in the 21st century -- moving toward smarter testing strategies by waiving human health toxicity studies that do not provide useful information. Since its inception, HASPOC has waived

[90] For more information, please see https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.
[91] FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).
[92] For more information, please see: https://www.epa.gov/pesticide-registration/antimicrobial-testing-program.
[93] Reducing animal testing information may be found at: https://www.epa.gov/pesticides/new-epa-guidance-testing-pesticides-will-reduce-animal-testing.

hundreds of studies resulting in the saving of tens of thousands of animals and tens of millions of dollars in the cost of conducting the studies. In addition, the Agency has continued to develop and implement 21st Century toxicology and exposure methods, including the use of computer-modeling and in vitro testing techniques, to advance more efficient and effective human health risk assessments that support sound, risk-based, regulatory decision-making.

Evidence and Evaluation

One area that EPA is actively working to improve, using the Lean Management System, is the review process for pesticides new active ingredient applications, and specifically, reducing the timeframes that the Agency takes to review these types of applications. In FY 2020, the focus will be on gathering evidence that will assist the Agency with streamlining the review process for new active ingredient applications and building on previous efforts to map the process and identify bottlenecks. By identifying efficiencies in the review process for new active ingredients, the Agency expects to reduce decision time frames for new active ingredient applications and leverage those process improvements for related processes (e.g., new uses).

Performance Measure Targets:

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

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$233.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$8,343.0 / -2.1 FTE) This program change reflects a reduction in funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

- (+78.7 FTE) This program change shifts 78.7 FTE from annual appropriations to pesticide user fee collections.

Statutory Authority:

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

Pesticides: Protect the Environment from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$38,380.7***	***$41,081.0***	***$30,668.0***	***-$10,413.0***
Science & Technology	$2,309.7	$3,072.0	$2,257.0	-$815.0
Total Budget Authority	$40,690.4	$44,153.0	$32,925.0	-$11,228.0
Total Workyears	288.1	257.1	268.4	11.3

Total work years in FY 2020 include 85.0 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires EPA to register a pesticide if, among other things, the product "will also not generally cause unreasonable adverse effects on the environment" when used in accordance with labeling and common practices. The goal of this program is to protect the environment from the potential risks posed by pesticide use. EPA must conduct risk assessments before the initial registration of each pesticide for each use, as well as re-evaluate each pesticide at least every 15 years, as required by the Food Quality Protection Act (FQPA). This periodic review is accomplished through EPA's Pesticide Registration Review Program.

In addition to FIFRA responsibilities, the Agency has distinct obligations under the Endangered Species Act (ESA).[94] These obligations include ensuring that pesticide regulatory decisions will not also destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) (jointly, the Services).

FY 2020 Activities and Performance Plan:

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

[94] For more information, please see: https://www.epa.gov/endangered-species.

Assessing the Risks Pesticides Pose to the Environment

To accomplish the goals set out in the FIFRA and ESA statutes, in FY 2020, EPA will continue to conduct ecological risk assessments[95] to determine what risks are posed by each pesticide to plants, animals, and ecosystems that are not the targets of the pesticide and whether changes are necessary to protect the environment. EPA has extensive authority to require the submission of data to support its scientific decisions and uses the latest scientific methods to conduct these ecological risk assessments. The Agency requires applicants for pesticide registration to conduct and submit a wide range of environmental laboratory and field studies. These studies examine the ecological effects or toxicity of a pesticide and its breakdown products on various terrestrial and aquatic animals and plants, and the chemical fate and transport of the pesticide (how it behaves and where it enters the soil, air, and water). EPA uses these and other data to prepare an environmental fate assessment and a hazard, or ecological effects, assessment that interprets the relevant toxicity information for the pesticide and its degradation products.[96]

In FY 2020, EPA will examine all the toxicity and environmental fate data together to determine what risks its use may pose to the environment. The process of comparing toxicity information and the amount of the pesticide a given organism may be exposed to in the environment is called risk assessment. A pesticide can be toxic at one exposure level and have little or no effect at another. Thus, the risk assessor's job is to determine the relationship between possible exposure to a pesticide and the resulting harmful effects.

The Agency reviews all data to make sure they were developed according to standard practices within the discipline and EPA's test guidelines. Risk assessments are peer reviewed, and regulatory decisions are posted on the Internet for review and comment to ensure that these actions are transparent, and stakeholders are engaged in decisions that affect their environment. When complex scientific issues arise, the Agency consults the FIFRA Scientific Advisory Panel[97] for independent scientific advice.

Risk Mitigation

To ensure unreasonable risks are avoided, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may subsequently require monitoring of environmental conditions, such as effects on water sources, or the development and submission of additional laboratory or field study data by the pesticide registrant.

[87] For more information, please see: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/factsheet-ecological-risk-assessment-pesticides.
[96] For more information, please see: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.
[97] For more information, please see: http://www.epa.gov/scipoly/sap.

Ensuring Proper Pesticide Use through Labeling

Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions. In FY 2020, EPA will continue to use pesticide labels to indicate what uses are appropriate and to ensure that the pesticide is used at the application rates and according to the methods and timing approved. When EPA registers a pesticide product, it requires specific labeling instructions and precautions. When risks are identified during the initial registration or during registration review, the Agency may mitigate those risks by requiring label changes. For example, EPA may require buffer zones around water sources to prevent contamination of water or endangering aquatic plants and wildlife. Other examples are changing the application method, or rate or timing of applications to when pollinators are not present to prevent risks to pollinators such as bees.

Pesticide Registration Review

In FY 2020, EPA's activities will involve increased efforts on comprehensive risk assessments to protect the environment. For the 725 cases covering all pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. For each case, the steps in this process include, in this order; opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. It is important to open dockets and develop work plans for as many cases as possible early in the process so that there is time to complete the risk assessments and make decisions by the FY 2022 deadline. EPA completed the opening of all 725 dockets in FY 2017 and can now focus its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. In working towards meeting the FY 2022 deadline for registration review, EPA expects to complete approximately 75 draft risk assessments and 75 decisions during FY 2020. The draft risk assessments will be published for public comments.

Pesticide Registration and Reducing Risk Through the Use of Safer Pesticides and Methods

The review of pesticides currently in the marketplace and implementation of decisions made as a result of these reviews are a necessary element of meeting EPA's goals. However, attaining risk reduction would be significantly hampered without availability of alternative products to these pesticides for consumers.[98] Consequently, the success of the Registration Program in ensuring the availability of reduced risk pesticides plays a significant role in meeting the environmental outcome of improved ecosystem protection. EPA has promoted reduced risk pesticides since 1993 by giving registration priority to pesticides that have lower toxicity to people and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management[99]. Biological pesticides and biotechnology often represent lower risk solutions to pest problems. In FY 2020, EPA will continue to assist pesticide users in learning about new, safer products and

[98] Reducing Pesticide Risk, found at: http://www.epa.gov/pesticides/health/reducing.htm.
[99] For more information, please see: http://www.epa.gov/pesticides/ipm/.

methods for using existing products. The Agency also will continue encouraging the use of IPM tools.

Reducing Animal Testing

In FY 2020, through stakeholder discussions and participation in intergovernmental working groups, the Agency will work to identify opportunities to reduce the use of animals in ecological hazard testing. EPA will reach out to non-governmental organizations to collaborate on projects (*e.g.*, to retrospectively analyze the results of ecological hazard testing). Based on the results of those projects, EPA will then develop and disseminate guidance materials for companies to clarify ecotoxicology testing requirements/needs.

Minimizing Environmental Impacts through Outreach and Education

Through public outreach, the Agency will continue to encourage the use of Integrated Pest Management (IPM) and other practices to maximize the benefits pesticides can yield while minimizing the impacts on the environment in. The Agency will develop and disseminate brochures, provide education on potential benefits of IPM, and promote outreach on the success of IPM to encourage its use.[100] To encourage responsible pesticide use that does not endanger the environment, EPA will reach out to the public through the Internet, and to workers and professional pesticide applicators through worker training programs.

Protection of Endangered Species

EPA is responsible for complying with the Endangered Species Act (ESA). This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 products – many of which have multiple uses – and over 1,600 listed endangered species in the US with diverse biological attributes, habitat requirements, and geographic ranges.[101] In FY 2020, as part of EPA's determination of whether a pesticide product may be registered for a particular use, the Agency will assess whether listed endangered or threatened species or their designated critical habitat may be affected by use of the product. Where risks are identified, EPA will work with the FWS and the NMFS in a consultation[102] process to ensure these new or existing pesticide registrations also will meet the ESA standard.[103]

Under the ESA, federal agencies must ensure that the "actions" they authorize will not result in jeopardy to species listed as endangered or threatened by the Services, or adversely modify designated critical habitat. Based on the parameters specified in the labeling, the Agency performs comprehensive risk assessments to determine if there is a potential risk to Threatened or Endangered species.

[100] For additional information, please see: http://www.epa.gov/pesp/ipminschools/implementation.html.
[101] For additional information, please see: https://ecos.fws.gov/ecp0/reports/box-score-report.
[102] For additional information, please see: https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.
[103] Additional information on how EPA protects endangered species from pesticides can be found at: https://www.epa.gov/endangered-species.

During registration review, EPA will support obtaining risk mitigation earlier in the process by encouraging registrants to agree to changes in uses and applications of a pesticide that are beneficial to the protection of endangered species prior to completion of EPA's consultations with FWS and NMFS. In FY 2020, pesticide registration reviews are expected to contain environmental assessments, including determining potential endangered species impacts. This effort will continue to expand the Program's workload due to the need to review studies that were received as a result of data call-ins and the need to conduct additional environmental assessments for pesticides already in the review pipeline.

In FY 2020, in cooperation with the Services and the United States Department of Agriculture (USDA), the Agency will continue to work on implementing the ESA. To this end, the Agency continues to implement recommendations from the National Academy of Sciences (NAS) National Research Council regarding scientific and technical issues related to the methods and assumptions used by EPA and the Services to carry out their joint responsibilities under the ESA and FIFRA. Since receiving the NAS report, the four agencies have developed shared scientific approaches, solicited input from stakeholders, and presented those approaches to stakeholders. During FY 2020, EPA will continue to improve the Biological Evaluations methodology and will apply the revised approaches to selected pesticide risk assessments.

The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2020, EPA will continue the advancement and integration of state-of-the-art science models, knowledge bases, and analytic processes to increase productivity and better address the challenge of potential risks of specific pesticides to specific species. Interconnection of the various databases within the program office also will provide improved support to the risk assessment process during registration review by allowing risk assessors to more easily analyze complex scenarios relative to endangered species.

EPA authorizes the sale, distribution, and use of pesticides according to the product labeling. EPA will continue to impose use limitations through appropriate label statements, referring pesticide users to EPA-developed Endangered Species Protection Bulletins when necessary, which are available on the Internet via *Bulletins Live Two!*[104] These bulletins also will, as appropriate, contain maps of pesticide use limitation areas necessary to ensure protection of listed species and compliance with the ESA. Any such limitations on a pesticide's use will be enforceable under the misuse provisions of FIFRA. In FY 2020, EPA will continue revising and updating *Bulletins Live Two!* to provide a more interactive and more geographically discrete platform for pesticide users to understand the use limitations necessary to protect endangered or threatened species.

Pollinator Protection

Bees and other pollinators play a critical role in ensuring the production of food. USDA is leading the federal government's effort to understand the causes of declining pollinator health and identify actions that also will improve pollinator health. EPA is part of this effort and is focusing on the potential role of pesticides. EPA's emphasis is to ensure that the pesticides used represent acceptable risks to pollinators and that products are available for commercial bee keepers to

[104] For additional information, please see: https://www.epa.gov/endangered-species/endangered-species-protection-bulletins.

manage pests that impact pollinator health. EPA is working with pesticide registrants to change pesticide labels to reduce acute exposure and ensure that pollinators are protected.

EPA has implemented a pollinator risk assessment framework to assess the potential effects that pesticides may have on bees through the registration and registration review programs, in cooperation with Canada and the California Department of Pesticide Regulation. In addition, EPA is working with several other federal agencies, including USDA and the Department of the Interior (DOI), to increase and improve pollinator habitat. EPA also is working with seed companies to develop and implement strategies to reduce the release of pesticide residues during the planting process of treated seed. In FY 2020, EPA will continue to apply the best available science and risk management methods for sustaining pollinators.[105]

Protection of Water Resources

Reduced concentration of pesticides in water sources is an indication of the effectiveness of EPA's risk assessment, management, mitigation, and communication activities. Using monitoring data collected under the U.S. Geological Survey (USGS) National Water Quality Assessment (NWQA) Program for urban watersheds, EPA will continue to monitor the impact of regulatory decisions for three priority chemicals – diazinon, chlorpyrifos, and carbaryl. In agricultural watersheds, the Program will monitor the impact of regulatory decisions on azinphos-methyl and chlorpyrifos and consider whether any additional action is necessary.[106] These four organophosphate insecticides most consistently exceeded EPA's aquatic life benchmarks for aquatic ecosystems[107] during the last ten years of monitoring by the USGS NAWQA Program. In FY 2020, the Agency will continue to work with USGS to develop sampling plans and refine program goals. Water quality is a critical endpoint for measuring exposure and risk to the environment and a measure of EPA's ability to reduce exposure from these key pesticides of concern.[108]

Evidence and Evaluation

One area that EPA is actively working to improve, through the use of the Lean Management System, is the review process for pesticide new active ingredient applications, and specifically, reducing the timeframes that EPA takes to review these types of applications. In FY 2020, the focus will be on gathering evidence that will assist the Agency with streamlining the review process for new active ingredient applications and building on previous efforts to map the process and identify bottlenecks. By identifying efficiencies in the review process for new active ingredients, the Agency expects to reduce decision time frames for new active ingredient applications and leverage those process improvements for related processes (e.g., new uses).

[105] Additional actions EPA is taking to protect pollinators from pesticides can be found at: https://www.epa.gov/pollinator-protection.
[106] Gilliom, R.J., et al. 2006. *The Quality of Our Nation's Waters: Pesticides in the Nation's Streams and Ground Water, 1992–2001*. Reston, Virginia: U.S. Geological Survey Circular 1291, p 171. Available on the Internet at: http://pubs.usgs.gov/circ/2005/1291/.
[107] For additional information, please see: http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm.
[108] The most sensitive aquatic benchmarks for the chemicals are posted on the following website: http://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/aquatic-life-benchmarks-pesticide-registration.

Performance Measure Targets:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						58	75	75	Decisions
Actual						65			

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						70	72	75	Risk
Actual						113			Assessments

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						643	631	619	Days
Actual						603			

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	99	97	96	96	97	99	99	99	Percent
Actual	98.8	85	98.4	99	99	99.7			
Numerator	2,023	1,627	2,078	2,157	2,008	2,193			Decisions
Denominator	2,048	1,919	2,111	2,174	2,026	2,199			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$623.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$11,036.0 / -28.3 FTE) This program change reflects the reduction of funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees.

- (+44.5 FTE) This program change shifts 44.5 FTE from annual appropriations to pesticide user fee collections.

Statutory Authority:

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

Science Policy and Biotechnology
Program Area: Pesticides Licensing
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,604.1***	***$2,040.0***	***$0.0***	***-$2,040.0***
Total Budget Authority	$1,604.1	$2,040.0	$0.0	-$2,040.0
Total Workyears	7.0	7.2	0.0	-7.2

Program Project Description:

The Science Policy and Biotechnology Program provides scientific and policy expertise, coordinates EPA's intra/interagency efforts, and facilitates information-sharing related to core science policy issues concerning pesticides and toxic chemicals. In addition, the Science Policy and Biotechnology Program provides for independent, external scientific peer review through the Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel (FIFRA SAP), a federal advisory committee and the newly-formed Science Advisory Committee on Chemicals (SACC).

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. Statutory requirements will be absorbed by the pesticides and toxics programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$2,040.0 / -7.2 FTE) This program change eliminates the Science Policy and Biotechnology Program. The science advisory committee oversight, including peer review, required by FIFRA and TSCA, will be conducted by the pesticides and toxics program offices.

Statutory Authority:

Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA) § 408; Toxic Substances Control Act (TSCA).

Pesticides: Realize the Value of Pesticide Availability

Program Area: Pesticides Licensing
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$7,004.6***	***$8,226.0***	***$5,571.0***	***-$2,655.0***
Science & Technology	$362.0	$424.0	$615.0	$191.0
Total Budget Authority	$7,366.6	$8,650.0	$6,186.0	-$2,464.0
Total Workyears	34.5	36.8	46.3	9.5

Total work years in FY 2020 include 10.5 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

The primary federal law that governs how EPA oversees pesticide manufacture, distribution and use in the United States is the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Originally enacted in 1947, this law has been significantly amended several times, most recently by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2012 (PRIA). FIFRA requires that EPA register pesticides based on a finding that they will not cause unreasonable adverse effects to people and the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide. Each time the law has been amended, while Congress has strengthened the safety standards of the act, it continues to recognize the benefits of pesticides.

This program seeks to realize the value of pesticides that can be used safely to yield many benefits, such as killing viruses and bacteria in America's hospitals. These benefits also include guarding the nation's abundant and wholesome food supply, protecting the public from disease-carrying pests, and protecting the environment from the introduction of invasive species from other parts of the world.

This program manages the following types of pesticide registrations and regulatory actions under FIFRA:

- Special Local Needs under FIFRA section 24(c);
- Federal registrations at the national level under FIFRA section 3;
- Experimental Use Permit;
- Emergency, Quarantine and Crisis Exemption; and
- Periodic review of existing chemicals under the Registration Review Program.[109]

[109] Additional information can be found at: https://www.epa.gov/pesticide-registration/types-registrations-under-fifra.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*.

Meeting Agriculture's Need for Safe, Effective Pest Control Products

With the passage of FQPA, Congress acknowledged the importance of and need for "reduced-risk pesticides" and supported expedited Agency review to help these pesticides reach the market sooner and replace older and potentially riskier chemicals. The law defines a reduced risk pesticide as one that "may reasonably be expected to accomplish one or more of the following: (1) reduces pesticide risks to human health; (2) reduces pesticide risks to non-target organisms; (3) reduces the potential for contamination of valued, environmental resources, or (4) broadens adoption of Integrated Pest Management (IPM)[110] or makes it more effective." In FY 2020, EPA will continue to support and develop procedures and guidelines for expedited review of applications for registration or amendments for a reduced risk pesticide.

FIFRA's Version of "Generic" Pesticides

FIFRA authorizes EPA to register products that are identical to or substantially similar to already registered products (known as "me too" products). Applicants for these substantially similar products may rely on, or "cite" data already submitted by another registrant. The entry of these new products into the market can cause price reductions resulting from new competition and broader access to products, which benefits farmers and other consumers. The agency will continue to prioritize and review generic registrations consistent with the statutory schedule for decision-making. Application submissions for this category of action can generally be reviewed in four months. In FY 2018, the Agency completed just over 200 registrations for the primary PRIA category (R-300) that involves 'me-too' conventional chemical registration requests. The Agency expects to complete a similar volume of registrations in FY 2020.

Outreach and Education

In FY 2020, the Agency will continue to encourage IPM, which emphasizes minimizing the use of broad-spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application. IPM relies on pesticide users being well-informed about the pest control options available and how to best use them. It is not enough to have pesticide products registered to control pest infestations. Pesticide users need to know which pesticides to use, how to use them, and how to maintain the site, so pests do not return. The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general.

Review and Registration

During FY 2020, EPA will review and register new pesticides, new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and FFDCA standards as well as

[110] For additional information, please see: http://www.epa.gov/pesticides/factsheets/ipm.htm.

PRIA timeframes. Many of these actions will be for reduced-risk pesticides, which, once registered and used by consumers, will increase benefits to society. Working together with the affected user communities, through IPM and related activities, the Agency plans to accelerate the adoption of these lower-risk products.

EPA will continue to support implementation of other IPM-related activities. The Agency will partner in the development of tools and informational brochures to promote IPM efforts and to provide guidance to schools, farmers, other partners, and stakeholders.

Similarly, the Agency will continue its work-sharing efforts with its international partners. Through these collaborative activities and resulting international registrations, international trade barriers will be reduced. When nations with whom the U.S. trade accept imported crops treated with newer, lower-risk pesticides, domestic users can more readily adopt these newer pesticides into their Crop Protection Programs. Work-sharing efforts also reduce the costs of registration to governments by sharing the expenses.

Emergency, Quarantine, and Crisis Exemptions

In FY 2020, EPA will continue to prioritize emergency exemptions under FIFRA Section 18, which authorizes EPA to allow an unregistered use of a pesticide for a limited time in the event of an emergency, such as a severe pest infestation, public health emergency, or invasive pest species quarantine. The economic benefit of the Section 18 Emergency Exemptions Program to growers is the avoidance of losses incurred in the absence of pesticides exempted under FIFRA's emergency exemption provisions. In addition, exemptions serve as important public health controls to avert pests that may cause significant risk to human health. In FY 2018, the Agency processed just over 110 requests for emergency uses and expects to process a similar level in FY 2020.

Evidence and Evaluation

One area that EPA is actively working to improve, through the use of the Lean Management System, is the review process for pesticide new active ingredient applications, and specifically, reducing the timeframes that EPA takes to review these types of applications. In FY 2020, the focus will be on gathering evidence that will assist the Agency with streamlining the review process for new active ingredient applications and building on previous efforts to map the process and identify bottlenecks. The process also will be streamlined by incorporating special antimicrobial sections and further monitoring the use of unregistered pesticides under Section 18. By identifying efficiencies in the review process for new active ingredients, the Agency expects to reduce decision time frames for new active ingredient applications and leverage those process improvements for related processes (e.g., new uses).

Performance Measure Targets:

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

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$190.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$2,465.0 / -2.0 FTE) This program change reflects a reduction in funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections. Proposed legislative language accompanying the President's Budget will expand EPA's scope of activities that can be funded with user fees. This reduction recognizes the adoption of some process improvements in the registration and registration review processes and the completion of some upgrades to program IT systems.

- (+10.5 FTE) This program change shifts 10.5 FTE from annual appropriations to pesticide user fee collections.

Statutory Authority:

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

Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$37,118.1***	***$39,052.0***	***$33,202.0***	***-$5,850.0***
Total Budget Authority	$37,118.1	$39,052.0	$33,202.0	-$5,850.0
Total Workyears	198.3	199.4	172.0	-27.4

Program Project Description:

To reduce risks from exposure to hazardous wastes, EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Program: ensures that contaminated facilities subject to RCRA requirements are cleaned up by the responsible party, returns contaminated property to productive use, and keeps costs from being transferred to the taxpayer-funded portion of the Superfund program. Pursuant to EPA promulgated regulations and administrative orders under RCRA, EPA and authorized states will continue to direct financial assurance funds set aside by members of the regulated community to ensure that the funds are used to meet regulated entities' obligations and to protect taxpayers from having to pay the bill. Approximately 111 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population),[111] and the total area covered by these corrective action sites is approximately 18 million acres.[112]

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action Program[113] to ensure that cleanups are protective of human health and the environment. The Corrective Action Program allows for the return of properties to beneficial use, which benefits the surrounding communities, reduces liabilities for facilities, and allows facilities to redirect resources to productive activities. The Agency provides program direction, leadership, and support to its state partners. This includes specialized technical and program expertise, policy development for effective program management, national program priority setting, measurement and tracking, training and technical tools, and data collection/management/documentation. In addition, through work-sharing, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

In FY 2018, EPA approved 117 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,349 of our priority universe. In

[111] U.S. EPA, Office of Land and Emergency Response Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016 from RCRAInfo; and (2) census data from the 2011-2015 American Community Survey.
[112] As compiled by RCRAInfo.
[113] State implementation of the Corrective Action Program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

addition, 95 percent of corrective action facilities achieved protection of human health while 89 percent achieved groundwater protection.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. The Program is currently focusing its resources on cleaning up 3,779 priority contaminated facilities (the "2020 Baseline"), which includes highly contaminated and technically challenging sites. As of the end of FY 2018, only 36 percent of the 2020 Baseline facilities has completed final and permanent cleanups, leaving approximately 2,500 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. Additionally, the 2020 Baseline is a subset of a larger group of facilities with potential corrective action obligations under the RCRA. The Program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the 2020 Baseline facilities, and assess and cleanup identified non-2020 Baseline facilities.

In FY 2020, EPA will:

- Reassess its universe of cleanup facilities, priorities, and measures to ensure that resources are focused on addressing those facilities that present the highest risk to human health and the environment by implementing actions to end or reduce these threats. The Program also will prioritize meeting the RCRA RAU measure targets, ensuring that where possible properties are returned to productive use and human health and environment are protected into the future.

- Provide technical assistance to authorized states in the areas of site characterization, sampling, remedy selection, reaching final cleanup goals, and long-term stewardship at 2020 Baseline facilities.

- Prioritize and focus the Program on completing site investigations to identify the most significant threats, establish interim remedies to reduce and eliminate exposure, and select and construct safe, effective long-term remedies that also maintain the economic viability of the operating facility.

- For high priority facilities, perform cleanup work under work-sharing agreements to assist with facilities that have complex issues[114] or special tasks (e.g. ecological risk assessments).

- Continue to improve cleanup approaches and share best practices and cleanup innovations, such as the use of the Lean RCRA FIRST[115] toolbox developed to speed up and improve cleanups by eliminating inefficiencies in key procedural steps.

[114] For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.
[115] For more information, please visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

- Maintain RCRAInfo, which is the primary data system that many states rely upon to manage their RCRA permitting, corrective action, and hazardous waste generator programs. RCRAInfo receives data from hazardous waste handlers for the National Biennial RCRA Hazardous Waste Report, which is mandated by RCRA Sections 3002 and 3004. The last biennial report showed there were 26,284 generators of over 33 million tons of hazardous waste. RCRAInfo provides the only national-level RCRA hazardous waste data and statistics to track the environmental progress of approximately 20,000 hazardous waste units at 6,600 facilities.

Performance Measure Targets:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						75	91	107	Facilities
Actual						117			

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							98	98	Facilities
Actual									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$915.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$6,765.0 / -27.4 FTE) This net program change will modify the timeline for initiating cleanups and ongoing cleanups. EPA will prioritize resources on those facilities that present the highest risk to human health and the environment.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3004, 3005, 8001.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$58,434.1***	***$60,791.0***	***$46,813.0***	***-$13,978.0***
Hazardous Waste Electronic Manifest System Fund	$2,146.2	$0.0	$0.0	$0.0
Total Budget Authority	$60,580.3	$60,791.0	$46,813.0	-$13,978.0
Total Workyears	296.9	289.7	227.2	-62.5

Total workyears in FY 2020 include 10.0 FTE funded by e-Manifest fees.

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) established EPA's role as a federal leader in the conservation and recovery of resources. Under RCRA, EPA sets national standards for managing hazardous wastes and provides federal agencies, state, tribal, and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation. Approximately 60,000 facilities generate and safely manage hazardous waste in the United States.[116] Eighty percent of the U.S. population lives within three miles of one of these facilities,[117] making national standards and procedures for managing hazardous wastes a necessity.

The Waste Management Program safeguards the American people while facilitating commerce by supporting an effective waste management infrastructure. Cradle-to-grave hazardous waste management regulations help ensure safe management practices through the entire process of generation, transportation, recycling, treatment, storage, and final disposal. The Program increases the capacity for proper hazardous waste management in states by providing grant funding and technical support.

EPA and its state partners issue, update, maintain, and oversee RCRA controls for approximately 20,000 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 6,600 treatment, storage, and disposal facilities.[118] Just as businesses innovate and grow, the waste management challenges they face also evolve; this requires new direction and changes in the federal hazardous waste program through updated regulations, guidance, and other tools.

[116] Memorandum, February 18, 2014, from Industrial Economics to the EPA, Re: Analysis to Support Assessment of Economic Impacts and Benefits under RCRA Programs: Key Scoping Assessment, Initial Findings and Summary of Available Data (Section 1), pages 5-11.
[117] U.S. EPA, Office of Solid Waste and Emergency Response Estimate. 2014. Data collected includes: (1) site information as of the end of FY 2011 from RCRAInfo; and (2) census data from the 2007-2011 American Community Survey.
[118] As compiled by RCRAInfo.

EPA directly implements the entire RCRA program in Iowa and Alaska and provides leadership, work-sharing, and support to the states and territories authorized to implement the permitting program. Additionally, the Toxic Substances Control Act polychlorinated biphenyls (PCB) cleanup and disposal program is implemented under the Waste Management Program to reduce PCB exposure from improper disposal, storage, and spills. The Program reviews and approves PCB cleanup, storage, and disposal activities. This federal authority is not delegated to state programs. PCBs were banned in 1979, but legacy use and contamination still exists, and PCBs can still be released into the environment from poorly maintained hazardous waste sites that contain them.

In FY 2018, EPA permitted, clean-closed, or otherwise had initial controls in place to prevent release at an additional 43 facilities. Issuance of controls decreases the risk of future releases and enhances protection of human health and the environment. At the end of FY 2018, 251 (50 percent) of 500 facilities in need of controls had initial controls. Additionally, EPA issued RCRA hazardous waste permit renewals or clean-closures to 109 additional facilities. Maintaining updated permits and controls ensures that permitted facilities have consistent and protective standards to prevent release; proper standards for waste management can protect human health, prevent land contamination/degradation, and avoid future cleanups and associated substantial costs.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the RCRA Waste Management Program will:

- Provide technical assistance to regions, states, and tribes regarding the development and implementation of solid waste programs.

- Provide technical and implementation assistance, oversight, and support to facilities that generate, treat, store, recycle and dispose of hazardous waste.

- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. EPA will prioritize PCB approvals and expedite high priority cleanups or address those unaddressed in a timely fashion. Issuing PCB approvals is a federal responsibility, non-delegable to states.

- Under EPA's Lean Management System, EPA will monitor progress in issuing permits more quickly without sacrificing permit integrity. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner.

- Manage the Waste Import Export Tracking System (WIETS) system, which provides for the electronic submission of hazardous waste import and export notices. This saves businesses time and effort and makes shipping hazardous waste across borders more efficient. Managing hazardous waste imports and exports is a federal responsibility, nondelegable to states.

- Provide technical hazardous waste management assistance to tribes to encourage sustainable practices and reduce exposure to toxins from hazardous waste.

- Directly implement the RCRA program in unauthorized states, on tribal lands, and other unauthorized portions of state RCRA programs. Issue and update permits, including continuing to improve permitting processes.

- Take action as necessary regarding regulations to ensure protective management of coal combustion residuals (CCR). The Agency has promulgated regulations specifying improved management and disposal practices to ensure people and ecosystems are protected. The Agency will continue to work with our stakeholders as we develop and implement regulations, through technical assistance and guidance.

- Implement applicable provisions of the Water Infrastructure Improvements for the Nation Act of 2016, which enables states to submit for EPA approval state CCR permit programs. The Agency will continue to work closely with state partners to review and make determinations on State programs. Subject to appropriations, EPA will implement a permit program for CCR disposal facilities on tribal lands as well as participating states.

Performance Measure Targets:

(PM HW5) Number of permit renewals issued at hazardous waste facilities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						64	64	64	Facilities
Actual	113	110	100	89	125	109			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$924.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$3,000.0 / +14.0 FTE) This program change reflects an increase to support states in the development and implementation of a coal combustion residual permit program.

- (-$17,902.0 / -78.6 FTE) This program change reflects a focus on PCB cleanup and hazardous waste disposal programs, while reducing technical assistance to stakeholders regarding the development, approval, and implementation of solid waste management programs.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3002, 3004, 3005, 3017; Toxic Substances Control Act (TSCA) § 6.

RCRA: Waste Minimization & Recycling

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$6,782.4***	***$9,534.0***	***$0.0***	***-$9,534.0***
Total Budget Authority	$6,782.4	$9,534.0	$0.0	-$9,534.0
Total Workyears	36.4	47.6	0.0	-47.6

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) established EPA's role in the conservation and recovery of material. Charged to provide federal agencies, state and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation, EPA established the RCRA Waste Minimization Program.

The RCRA Waste Minimization Program is designed to collect, maintain, and share information on the market potential of energy and materials recovered from solid waste, including information regarding the savings potential of conserving resources that go into the waste stream.[119] As a result, industries can efficiently conserve virgin resources, including natural resources, fossil fuels, minerals, and precious metals.

Efforts in Sustainable Materials Management (SMM) seeks to efficiently and effectively minimize environmental impacts throughout the full life cycle of materials—from raw materials extraction, through transportation, processing, manufacturing, and use, as well as reuse, recycling, and disposal. This approach highlights ways to reduce waste throughout the life-cycle and to use waste materials as commodities to grow industries and associated jobs.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. State and local entities or industry groups may elect to continue to promote reuse and recycling of materials based on previous work supported by this program.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[119] For additional information, please refer to: https://www.epa.gov/smm.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$9,534.0 / -47.6 FTE) This funding change proposes to eliminate the RCRA Waste Minimization and Recycling Program in FY 2020. EPA will focus on core waste management work.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA).

Toxics Risk Review and Prevention

Endocrine Disruptors
Program Area: Toxics Risk Review and Prevention
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$4,583.1***	***$7,553.0***	***$0.0***	***-$7,553.0***
Total Budget Authority	$4,583.1	$7,553.0	$0.0	-$7,553.0
Total Workyears	7.8	7.7	0.0	-7.7

Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Federal Food, Drug and Cosmetic Act (FFDCA) and the Safe Drinking Water Act (SDWA) amendments. Current activities within the EDSP include transitioning to the use of high throughput screening (HTS) and computational toxicology (CompTox) tools to screen thousands of chemicals for endocrine activity, establishing policies and procedures for screening and testing, and evaluating data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will absorb the remaining functions within the Pesticides Program using the currently available tiered testing battery.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$7,553.0 / -7.7 FTE) This program change eliminates the Endocrine Disruptors Program. The ongoing functions of the Program can be continued within the Pesticides Program.

Statutory Authority:

Federal Food Drug and Cosmetic Act (FFDCA) § 408(p); Safe Drinking Water Act (SDWA) § 1457.

Pollution Prevention Program
Program Area: Toxics Risk Review and Prevention
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$10,353.0***	***$11,236.0***	***$0.0***	***-$11,236.0***
Total Budget Authority	$10,353.0	$11,236.0	$0.0	-$11,236.0
Total Workyears	47.8	46.2	0.0	-46.2

Program Project Description:

The Pollution Prevention (P2) Program is a tool for advancing environmental stewardship and sustainability by federal, state and tribal governments; businesses; communities; and individuals. The P2 Program seeks to alleviate environmental problems by achieving reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials; reductions in the generation of greenhouse gases; and reductions in the use of water. The Program also helps businesses and others reduce costs as a result of implementing these preventative approaches.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. Based on previous investments in P2 solutions made under this program project, partners are expected to be able to continue to share best practices and pursue additional pollution prevention solutions. EPA will continue to meet core statutory requirements under the Pollution Prevention Act of 1990 in other programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$11,236.0 / -46.2 FTE) This program change eliminates the Pollution Prevention Program.

Statutory Authority:

Pollution Prevention Act of 1990 (PPA); Toxic Substances Control Act (TSCA).

Toxic Substances: Chemical Risk Review and Reduction

Program Area: Toxics Risk Review and Prevention

Goal: Core Mission

Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$65,947.8***	***$61,105.0***	***$66,418.0***	***$5,313.0***
Total Budget Authority	$65,947.8	$61,105.0	$66,418.0	$5,313.0
Total Workyears	248.7	289.2	258.7	-30.5

Total Workyears in FY 2020 include 51.6 FTE funded by TSCA fees.

Program Project Description:

Under the Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, EPA has significant responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable risks to human health or the environment. These responsibilities are executed by the Agency through the Chemical Risk Review and Reduction (CRRR) Program, which works to ensure the safety of:

- Existing chemicals (those already in use when TSCA was first enacted in 1976 and those which have since gone through review by the TSCA New Chemicals Program)[120] by obtaining and evaluating chemical data and by taking regulatory action, where appropriate, to prevent any unreasonable risk posed by their use; and

- New chemicals by reviewing new chemical notices submitted by industry, including Pre-Manufacture Notices (PMNs), and taking action, as appropriate, to ensure that no unreasonable risk will be posed by such chemicals upon their entry into U.S. commerce.

The amended TSCA law, signed on June 22, 2016, provided EPA with significant new authorities and obligations:

- *Clear deadlines.* EPA is required to systematically prioritize and evaluate existing chemicals on a specific schedule, complete specified numbers of chemical risk evaluations within specified time frames, complete risk management actions within specified time frames where warranted by the findings of the evaluations, and review and make determinations on Confidential Business Information (CBI) claims within specified time frames, among other actions.

[120] These include certain prevalent, high-risk chemicals known generally as "legacy chemicals" (e.g., PCBs, mercury), which were previously covered in a separate Chemical Risk Management (CRM) budget justification. The CRM program area was combined with Chemical Risk Review and Reduction effective FY 2015.

- *Requirement to address risks.* EPA is required to take timely action to address any unreasonable risks identified in the risk evaluations by applying by rule one or more of the requirements specified in TSCA Section 6(a), which can include: prohibiting or restricting the manufacture, processing or distribution in commerce of the chemical substance or mixture for a particular use; limiting the amount of the substance or mixture that may be manufactured, processed or distributed in commerce for a particular use; or imposing requirements affecting labeling, recordkeeping or any manner or method of commercial use or disposal of the substance or mixture; to the extent necessary so that the chemical will no longer present an unreasonable risk.

- *Increased transparency of chemical data while protecting legitimate confidential information.* EPA is required to review all chemical identity CBI claims for certain types of submissions and for 25 percent of most other CBI claims within 90 days of receipt.

- *Requirement that EPA make an affirmative determination of safety on every new chemical.* Previously, new chemicals were allowed to enter the marketplace unless EPA made a specific determination that regulatory controls were needed. Now, an affirmative determination must be made by EPA within a mandated 90-day timeframe[121] that a new chemical substance will present, may present, or is not likely to present an unreasonable risk to human health or the environment; or that the available information is insufficient to enable the Agency to make any of the above determinations. Unless EPA determines that the substance is not likely to present unreasonable risk, the Agency must issue an order or rule that imposes conditions sufficient to protect against any such unreasonable risk before the chemical can enter the marketplace.

In addition, amended TSCA provided a sustainable source of funding for EPA to carry out its responsibilities, authorizing the Agency to collect user fees designed to defray 25 percent of its costs for administering certain sections[122] of TSCA, as amended.[123] Fee levels may be adjusted on a recurring three-year basis for inflation and to ensure that fees defray 25 percent of relevant costs. Chemical manufacturers (including importers) and, in limited instances, processors began incurring TSCA User Fees on October 1, 2018.

The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and, in limited instances, processors who:

- Are required to submit information (TSCA section 4);
- Submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (TSCA section 5);

[121] EPA may extend this timeline by 90 days, and submitters may request to suspend review to develop/provide additional information.
[122] The costs of implementing TSCA (as amended) Sections 4, 5 and 6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.
[123] The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

- Manufacture, (including import) a chemical substance that is subject to an EPA-initiated risk evaluation (TSCA section 6); or
- Request that EPA conduct risk evaluation on an existing chemical (TSCA section 6), subject to the Agency's approval of the request.

The Agency has made considerable progress in carrying out work activities required under the amended law. Key achievements include:

- Commencing risk evaluations for the initial set of 10 chemicals, issuing scoping documents in accordance with statutory deadlines, issuing problem formulation documents and initiating development of draft evaluations;
- Completing the first draft risk evaluation, for Pigment Violet 29, in November 2018;
- Finalizing all four key framework rules needed to carry out provisions of the amended TSCA law (Inventory Rule, Risk Evaluation Process Rule, Prioritization Process Rule, User Fees Rule);
- Releasing guidance for external parties interested in submitting draft risk evaluations to EPA for consideration;
- Completing reviews under the new law of more than 2,600 new chemical notifications and submissions[124] and utilizing a pre-submission consultation step to engage early with submitters;
- Enhancing chemical data transparency by issuing guidance for state, tribal, and local governments and emergency responders on sharing TSCA CBI, guidance on structurally descriptive names, and policy and procedures for assigning unique identifiers to improve public tracking of information on chemicals;
- Finalizing a Strategic Plan to promote the development and implementation of alternative test methods and strategies to reduce, refine or replace vertebrate animal testing and the initial List of Alternative Test Methods and Strategies (or New Approach Methodologies [NAMs]), which the Agency plans to update at least once a year;
- Proposing a Significant New Use Rule (SNUR) requiring EPA review for new uses of asbestos before they can be allowed to be commercialized;
- Advancing development of a required regulatory action under section 6(a) for five Persistent, Bioaccumulative and Toxic (PBT) chemicals from the 2014 update of the TSCA Work Plan for Chemical Assessments that meet a specific set of criteria laid out in section 6(h), with publication of a draft rule planned to occur in the early summer of 2019;
- Releasing for public comment a systematic review approach document to guide EPA's selection and review of studies and to explain how the agency plans to evaluate scientific information;
- Publishing an Interim List of Active Substances, as required by TSCA Section 8;
- Publishing a list of five mercury compounds that are to be made subject to export restrictions and a final rule on reporting mercury manufacturing and imports; and
- Conducting a series of public meetings and webinars to gather public input on TSCA implementation activities.

[124] For more information, please see: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review#chart

Future implementation activities will build on the progress EPA already has made.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the resources requested by EPA will support continued implementation of the amendments to TSCA, with emphasis on the critical mandates and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, review and determinations on incoming CBI claims, and other statutory priorities. EPA anticipates an increased workload to support these efforts in FY 2020 as the Agency reaches statutory deadlines to conclude the first ten risk evaluations for existing chemicals, and initiate risk management regulatory actions as necessary. EPA also will conclude the statutorily required prioritization work to identify 20 Low-Priority chemicals for which risk evaluation is not warranted at this time, and to identify 20 High Priority chemicals for which risk evaluation must begin immediately. At the same time, the Agency will work to reduce review timeframes for review of Pre-Manufacture Notices for new chemicals and will continue to carry out ongoing base program activities.

<u>Primary TSCA Implementation Activities – TSCA Sections 4, 5, 6, and 14:</u>

TSCA, as amended, provides requirements and authorities to EPA to collect chemical test data, review new and existing chemicals, and address unreasonable risks under TSCA Sections 4, 5, and 6; to collect, process, review, and provide access to and protect from disclosure information on chemical substances as appropriate under TSCA Section 14; and to defray 25 percent of the costs of those activities through user fees.

TSCA Section 4, as amended, authorizes EPA to require testing of a chemical substance or mixture by manufacturers (including importers) or processors. The 2016 TSCA amendments provided new test order authorities which are designed to expedite the Agency's collection of testing information for prioritizing and conducting chemical risk evaluations for new and existing chemicals. In FY 2020, EPA may utilize these authorities to require testing on chemicals in connection with the prioritization and risk evaluation processes, where such testing is needed. The Agency will continue to review test data submitted from prior test rules and enforceable consent agreements. As in past years, EPA will make use of Toxics Release Inventory (TRI) data in prioritizing chemicals for collection of testing information and evaluation of potential risks.

Under TSCA Section 5, as amended, EPA is responsible for reviewing all new chemical submissions to determine whether the chemicals may pose unreasonable risks to human health or the environment if they were to enter U.S. commerce, and, when necessary, requiring restrictions or testing prior to allowing chemicals to be commercialized. In FY 2020, the Agency will continue to implement these responsibilities; EPA expects to review and manage, as necessary, the potential risks from approximately one thousand new chemicals, including nanoscale materials and products of biotechnology, prior to their entry into the marketplace. The Program also will evaluate the data submitted under requirements of Section 5 Consent Orders. The Agency also will continue to make improvements to internal data and tracking systems stemming from lean projects undertaken by the program to enhance the efficiency of the new chemical review process. These improvements

will provide regulatory relief to submitters by increasing certainty about review timeframes and associated risk management actions. In addition, in FY 2020, EPA will continue to use TSCA Section 5 authorities to issue SNURs to require notification to EPA for significant new uses of existing chemicals, where applicable.

Under TSCA Section 6, as amended, EPA is statutorily mandated to maintain an ambitious schedule for initiating and completing chemical risk evaluations of existing chemicals. When unreasonable risks are identified, TSCA sets timelines for initiating and completing risk management regulatory actions to address those unreasonable risks.

- *Chemical Prioritization and Risk Evaluation*: In FY 2020, EPA intends to complete risk evaluations for the first 10 chemicals designated to undergo risk evaluation under the amended law no later than December 2019, in accordance with statutory timelines, or by June 2020 if EPA invokes a statutorily allowed 6-month extension. (Designation of Ten Chemical Substances for Initial Risk Evaluations Under the Toxic Substances Control Act, 81 FR 91927). Scoping and problem formulation documents for all 10 evaluations were released by EPA in June 2017 and June 2018, respectively.

  For EPA-initiated risk evaluations beyond the first 10 chemicals noted above, EPA must first undertake a risk-based prioritization process to determine which chemicals will be evaluated, identifying them as either "high" or "low" priority substances for evaluation as set forth in TSCA section 6(b)(1)(A). In FY 2020, in accordance with statutory requirements, EPA will finalize designations of at least 20 high-priority and at least 20 low-priority chemicals and will commence risk evaluations for the 20 high-priority chemicals. After EPA designates at least 20 high-priority substances in FY 2020, EPA is required to commence a risk evaluation for another high-priority substance each time a risk evaluation is completed so that EPA maintains a pace of at least 20 EPA-initiated risk evaluations underway from the end of calendar year 2019 forward [TSCA section 6(b)(2)].

  The law also includes provisions allowing manufacturers to request that EPA conduct evaluations of specific chemicals. EPA is required to undertake manufacturer-requested risk evaluations that meet the Agency's acceptance criteria at levels up to 50 percent of the number of EPA-initiated evaluations underway.

- *Risk Management:* When unreasonable risks are identified in the final risk evaluation, EPA must finalize risk management actions (rulemakings under TSCA Section 6(a)) to address the unreasonable risk within two years, or up to four years if an extension is utilized. Accordingly, the Agency may be proposing risk management actions in FY 2021 for chemicals which have been found to present an unreasonable risk, based upon the first ten risk evaluations that must be completed in FY 2020.

  In FY 2020, EPA also will take risk management regulatory action on other chemicals. TSCA Section 6(h) establishes a fast-track process to address certain persistent, bioaccumulative, and toxic (PBT) chemicals on the 2014 TSCA Work Plan. EPA is developing a regulation for five such chemicals based upon peer-reviewed exposure and use assessments and expects to propose that regulation by June 2019 as prescribed by the

law. In FY 2020, EPA expects to work to finalize this regulation. EPA also expects to continue work on regulating certain uses of methylene chloride in paint and coating removal in FY 2019. The final rule action was based on a final risk assessment released in 2014 ("TSCA Work Plan Chemical Risk Assessment Methylene Chloride: Paint Stripping Use").

Under TSCA Section 14, as amended, EPA is required to review and make determinations on confidential business information (CBI) claims contained in TSCA submissions, to share – under defined circumstances – TSCA CBI with states, tribes, health and medical professionals, first responders, and similar persons, and to make non-CBI TSCA data available to the public. EPA is updating policies, regulations and guidance to implement the amendments. In FY 2020, EPA will:

- Complete CBI claim reviews for more than 2,500 new cases[125] anticipated to be associated with Section 4, 5 and 8 submissions;
- Complete CBI claim reviews for approximately 1,900 chemical identity claims associated with Notice of Activity submissions;
- Complete CBI claim reviews for approximately 1,500 CBI cases from the backlog that has developed since 2016 pending finalization of EPA's review procedures;
- Assign unique identifiers to chemicals where CBI claims for chemical identify are upheld.

Other TSCA Mandates and Activities

TSCA Section 8: In FY 2020, as required under Section 8 of TSCA, as amended, EPA will publish the next inventory of supply, use and trade of mercury and mercury compounds in the U.S. This effort will include implementation of a June 2018 rule establishing reporting requirements for persons who manufacture or import mercury and mercury-added products, or intentionally use mercury in a manufacturing process. In FY 2020, EPA also will maintain the Mercury Electronic Reporting application, an electronic reporting interface and database within the Central Data Exchange (CDX) and conduct outreach to instruct potentially affected stakeholders on how to report required information.

In FY 2020, EPA also expects to analyze about 300 Substantial Risk Notifications submitted by industry pursuant to Section 8(e), which requires EPA be notified immediately when a company learns that a substance or mixture presents a substantial risk of injury to health or the environment.

TSCA Section 8, as amended, also requires the Agency to promulgate a rule that establishes a plan for reviewing claims to protect confidential chemical identities reported in retrospective commercial activity notices. The review plan rule must be finalized by February 18, 2020 (within

[125] "Case" is not equivalent to a "CBI claim." The term "case" is a term utilized within the Agency that reflects a unique submission of a particular type from a particular company, and generally from a particular site. A "case" may have a large number of individual CBI claims, each of which might be subject to individual CBI claim consideration. To demonstrate the relationship of a case to claims, here are two examples:

1. In a particular TSCA Section 5 PMN "case", the PMN document and the related attachments may number 1,000 pages or more. Within the case there may be dozens of individual CBI claims.
2. In a TSCA section 8(a) CDR case with chemical identity and non-chemical identity elements being subject to review, there could be hundreds of individual chemical reports with many individual CBI claims related to each chemical report.

one year of compiling the initial Inventory with active and inactive designations). CBI claims made by manufacturers or processors for chemical identities in retrospective activity notices must be reviewed and determinations made no later than five years after the rule is made final (compiling the initial Inventory). The current Inventory has approximately 7,750 chemicals on the confidential portion that have been reported as being active in commerce in the last 10 years.

In FY 2020, EPA will continue to provide responses to any requests for exemption from export prohibitions under the Mercury Export Ban Act and work as necessary to support compliance with the Minamata Convention on Mercury, to which the United States is a party. In FY 2020, EPA also will continue to meet the requirements of Section 21 of TSCA, as amended, which authorizes citizen petitions for the issuance, amendment or repeal of certain actions (rules and orders) promulgated under TSCA: §4 (rules and orders requiring chemical testing); §6 (rules imposing risk mitigation controls on chemicals); §8 (rules requiring submission of information); §5 (orders affecting new chemical substances). Since September 2007, 24 citizen petitions have been filed with EPA under this authority. The Agency must grant or deny a Section 21 petition within 90 days; if EPA grants a petition, the requested action must be initiated in a timely fashion.

In FY 2020, EPA will continue implementing regulations under the TSCA Title VI Formaldehyde Standards for Composite Wood Products Act (Public Law 111-199), which established national emission standards for formaldehyde in new composite wood products. [126]

In FY 2020, the Agency will shift into the CRRR Program a subset of its activities to implement required TSCA Title IV activities. These activities make significant contributions to protecting children's health by helping to reduce the number of children with blood lead levels of five micrograms per deciliter or higher[127] and to reduce the disparities in blood lead levels between low-income children and non-low-income children.[128]

- In FY 2020, EPA will provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation, repair, and painting efforts; provide operation and maintenance of the online database (FLPP)[129] that supports the processing of applications for training providers, firms and individuals; and continue efforts to increase the number of certified renovation firms capable of providing lead-safe renovation, repair, and painting services through targeted outreach campaigns to contractors.

- In accordance with an order from the Ninth Circuit Court of Appeals, EPA published a proposed rule in the Federal Register on July 2, 2018, to change the dust-lead hazard standard from 40 µg/ft2 and 250 µg/ft2 to 10 µg/ft2 and 100 µg/ft2 on floors and window sills, respectively. EPA did not propose to change the post-abatement clearance levels in

[126] For additional information, please see http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products.
[127] Jacobs, D.E.; Clickner, R.P.; Zhou, J.Y.; Viet, S.M.; Marker, D.A.; Rogers, J.W.; Zeldin, D.C.; Broene, P.; and Friedman, W. (2002). The prevalence of lead-based paint hazard in U.S. housing. *Environmental Health Perspectives*, 110(**10**): A599-A606.
[128] Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (September, 2012). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. http://www.cdc.gov/exposurereport/.
[129] For additional information, please see: https://ssoprod.epa.gov/sso/jsp/flppLogin.jsp.

this proposal; however, the Agency noted that it intended to review the clearance levels at a later date. The court also ordered the Agency to propose a rule on the definition of lead-based paint. In the proposal, EPA proposed to make no change to the definition of lead-based paint because the Agency currently lacks sufficient information to support such a change. In FY 2020, EPA will continue work as necessary to determine if the definition of lead-based paint should be changed as well as if changes to the clearance levels are necessary.

- Per a settlement agreement, in FY 2020, EPA will continue to work on determining the extent to which renovations of pre-1978 public and commercial buildings do or do not create lead-based paint hazards and develop appropriate work practice standards to the extent they are deemed necessary.

Information Technology (IT) in Support of TSCA Implementation

In line with the President's Management Agenda, TSCA IT systems development will continue in FY 2020 with the goal of minimizing reporting burdens on industry, and streamlining data management by EPA, including the following activities:

- Continuing enhancement of the TSCA Chemical Information System (CIS) to reduce manual handling of data, increase internal EPA access to data relevant to chemical assessments, and expedite review of chemicals;

- Continuing integration of TSCA information management, e-Reporting and public access systems with the Agency's E-Enterprise business strategy, leveraging the E-Enterprise portal to provide better customer service for external users;

- Developing new tools for hazard and exposure identification assessment and characterization, while improving existing tools to better assess risks from both new and existing chemicals;

- Maintaining and enhancing the functionality of ChemView and expanding the information it makes available to the public to include newly completed chemical assessments, worker protection information and other new data reported to EPA under TSCA (e.g., Section 5 Pre-manufacture Notices (PMNs), Section 12(b) data, and Section 8 (d), 8(e), and 8(c) submissions).

In FY 2020, the Agency will monitor and evaluate its progress on key metrics related to carrying out its core responsibilities under the amended law in a timely manner. These include TSCA-related external long-term performance goals, annual performance goals, and two-year Agency Priority Goals, supported by internal monthly tracking systems. In accordance with these goals, EPA expects to complete all EPA-initiated risk evaluations and all associated risk management actions for existing chemicals within statutory timelines. In addition, EPA plans to continue to reduce review times for new Pre-manufacture, Microbial Commercial Activity, and Significant New Use Notices so that by FY 2022, EPA will aim to make 80 percent of all final determinations within the initial 90-day review period.

In addition to performance monitoring, EPA will undertake other forms of assessment and evidence gathering in FY 2020. The Agency's ongoing risk evaluation processes for existing chemicals utilizes scientific evidence obtained from data gathered pursuant to TSCA authorities and systematic review of literature sources in making the risk determination required under amended TSCA. EPA's approach to systematic review is described in "Application of Systematic Review in TSCA Risk Evaluations" (May 2018). Additional evidence will be obtained by completing an annual programmatic risk assessment exercise and a statutorily required OIG audit of TSCA user fees to determine whether fee levels are appropriate.

Performance Measure Targets:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	N/A	10	Evaluations
Actual						N/A			

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	N/A	N/A	Actions
Actual						N/A			

(PM TSCA3) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the initial 90-day statutory timeframe.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						65	80	80	Percent
Actual						59.7			
Numerator						46			Final Determinations
Denominator						77			

(PM TSCA3b) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the full timeframes allowable by statute.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							100	100	Percent
Actual									
Numerator									Final Determinations
Denominator									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,665.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$6,150.0 / +20.0 FTE) This reflects an increase to support the implementation of efforts to meet statutory deadlines for prioritization, risk evaluation, and risk management of existing chemicals and to streamline and accelerate the review of premature and significant new use notices for new chemicals. Resources include $3,386.0 in associated payroll.

- (-$2,502.0 / -50.5 FTE) This program change reflects an increase of $8.9M in non-pay resources that is offset by a $11.5M reduction in payroll for appropriated FTE associated with a shift in FTE from appropriated resources to TSCA user fee accounts. Increased non-pay resources support the implementation of efforts to meet statutory deadlines for prioritization, risk evaluation, and risk management of existing chemicals and to streamline and accelerate the review of pre-manufacture and significant new use notices for new chemicals.

Statutory Authority:

Toxic Substances Control Act (TSCA).

Toxic Substances: Lead Risk Reduction Program

Program Area: Toxics Risk Review and Prevention
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$12,523.5***	***$12,627.0***	***$0.0***	***-$12,627.0***
Total Budget Authority	$12,523.5	$12,627.0	$0.0	-$12,627.0
Total Workyears	64.7	66.0	0.0	-66.0

Program Project Description:

EPA is working to reduce the number of children with blood lead levels of five micrograms per deciliter or higher through multiple programs.[130] The Lead Risk Reduction Program also has worked to reduce the disparities in blood lead levels between low-income children and non-low-income children.[131]

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. Lead paint certifications will continue under the Chemical Risk Review and Reduction Program. Other forms of lead exposure are addressed through other targeted programs such as lead pipe replacement with the State Revolving Funds.

EPA will continue to provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as provide for operation and maintenance of the online database (Federal Lead Based Lead Program) that supports the processing of applications for training providers, firms and individuals, through the Chemical Risk Review and Reduction Program.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[130] Jacobs, D.E.; Clickner, R.P.; Zhou, J.Y.; Viet, S.M.; Marker, D.A.; Rogers, J.W.; Zeldin, D.C.; Broene, P.; and Friedman, W. (2002). The prevalence of lead-based paint hazard in U.S. housing. *Environmental Health Perspectives*, 110(**10**): A599-A606.
[131] Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (September, 2012). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. http://www.cdc.gov/exposurereport/.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$12,627.0 / -66.0 FTE) This program change eliminates the Lead Risk Reduction program. Firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts will be funded through the Chemical Risk Review and Reduction Program.

Statutory Authority:

Toxic Substances Control Act (TSCA).

Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$10,812.6***	***$11,295.0***	***$5,996.0***	***-$5,299.0***
Leaking Underground Storage Tanks	$9,731.5	$9,240.0	$6,722.0	-$2,518.0
Total Budget Authority	$20,544.1	$20,535.0	$12,718.0	-$7,817.0
Total Workyears	96.5	98.5	68.8	-29.7

Program Project Description:

Releases of petroleum from Underground Storage Tanks (UST) can contaminate groundwater, the drinking water source for many Americans. Environmental Programs and Management funding helps prevent releases by providing states[132] and tribes with technical assistance and guidance, and by funding work that assists states and tribes.

EPA partners with tribes to maintain information on tribal USTs and is the primary implementer of the UST Program in Indian Country. With few exceptions, tribes do not have independent UST program resources. This funding supports direct implementation of UST Program in Indian Country.

In 2005, Congress passed the Energy Policy Act which, along with other release prevention measures, required states to inspect all facilities in their jurisdictions at least once every three years. EPA has been supporting states in these efforts (and ensuring these requirements are met before continuing to grant additional funding for this). A recent EPA study suggests that increased UST compliance is a result of increasing inspection frequency prompted by the Act. EPA's statistical model, using the State of Louisiana's UST data, showed a positive and statistically significant effect of increased inspection frequency on facility compliance.[133] This evidence supports the data trends the Agency has been witnessing: compliance rates are higher today than they were a decade ago as a result of the three-year inspection requirement.

[132] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[133] Sullivan, K. A. and A. Kafle. Do more frequent inspections improve compliance? Evidence from underground storage tank facilities in Louisiana. OCPA Working Paper No. 2017-05. May 2017. https://www.epa.gov/sites/production/files/2017-06/documents/olem_ocpa_working_paper_do_more_frequent_inspections_improve_compliance.pdf.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018-2022 EPA Strategic Plan.* EPA, with its state and tribal partners, works to prevent releases of contamination and in partnership with tribes, provides training, compliance assistance, and inspection support to implement the 2015 UST regulations in Indian Country. Between the end of FY 2008 and the end of FY 2018, the number of annual confirmed releases has decreased by 23 percent (from 7,364 to 5,654). In FY 2018, EPA made available to the public an inspector training course and an operator exam.

EPA will continue to collect data regarding both the compliance rate and the number of new releases for UST systems in Indian Country. The compliance rate will help determine progress toward meeting EPA's revised regulations, and help identify any areas that need specific attention. In addition, EPA will continue its work to determine the correlation between inspection frequency and compliance rates.

In FY 2020, EPA will:

- Continue to coordinate with state UST prevention programs.

- Provide technical assistance, compliance help, and expert consultation to state, tribal, and stakeholders on both policy and technical matters. This support strives to strengthen our network of federal, state, tribal, and local partners (specifically communities and people living and working near UST sites) and assists implementation of the UST regulations.

- Provide guidance, training and assistance to the regulated community to improve understanding and compliance.

- Work with states and tribes regarding UST compatibility with alternative fuels. Work in this area is important given the national growth in biofuels and other emerging fuels.[134]

- Continue to work with industry, states, and tribes to identify causes and potential solutions for corrosion in diesel tanks. Work in this area is important given the significant findings regarding the increasing prevalence of corrosion of UST system equipment containing ethanol or diesel fuels.135

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[134] See EPA website: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-2.
[135] See EPA website: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$109.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$5,408.0 / -21.5 FTE) This program change reflects a reduced workload due to the proposed elimination of the LUST Prevention and the Categorical Grant Underground Storage Tanks programs. With available resources, the Program will continue to directly implement a targeted compliance and release prevention program in Indian Country, and work with any state partners who choose to maintain an UST program after the elimination of the federal grant funds.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9011.

Water Ecosystems

National Estuary Program / Coastal Waterways
Program Area: Water: Ecosystems
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$25,187.6***	***$26,723.0***	***$0.0***	***-$26,723.0***
Total Budget Authority	$25,187.6	$26,723.0	$0.0	-$26,723.0
Total Workyears	36.2	36.9	0.0	-36.9

Program Project Description:

The National Estuary Program (NEP) / Coastal Waterways Program works to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds to protect and restore water quality, habitat, and living resources.[136]

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$26,723.0 / -36.9 FTE) This program change eliminates the National Estuary Program/Coastal Waterways Program. EPA will encourage states to continue this work and continue to implement conservation management plans.

Statutory Authority:

Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act § 320; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act of 1989.

[136] For more information, please see: https://www.epa.gov/nep.

Wetlands
Program Area: Water: Ecosystems
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$18,528.7***	***$21,065.0***	***$21,578.0***	***$513.0***
Total Budget Authority	$18,528.7	$21,065.0	$21,578.0	$513.0
Total Workyears	120.3	122.3	130.0	7.7

Program Project Description:

EPA's Wetlands Protection Program has two primary components: (1) the Clean Water Act (CWA) section 404 regulatory program and (2) the state and tribal development program. Major activities of the Program include timely and efficient review of section 404 permit applications submitted to the U.S. Army Corps of Engineers (USACE) or authorized states; engaging and partnering with the USACE, states and other stakeholders to develop stream and wetland assessment tools, and improve compensatory mitigation effectiveness and availability of credits; assisting in the development of state and tribal wetland protection programs under the CWA; and providing technical assistance to the public on wetland management and legal requirements.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Working with federal, state, tribal and local partners, EPA will help to ensure an effective, consistent approach to wetlands protection. This is done through both the Agency's work with USACE in federal CWA 404 permitting and in working with states and tribes to build their wetlands programs.

Clean Water Act Section 404

The USACE is responsible for managing the day-to-day permit processes nationwide under section 404 of the CWA. EPA engages in the USACE process to ensure compliance with the CWA section 404(b)(1) guidelines as they formulate their proposed permits. EPA and the USACE will work together to implement the One Federal Decision Executive Order and Memorandum of Understanding and implement activities for: improving efficiencies in federal CWA section 404 permitting that would help reduce potential costs and delays; increase consistency and predictability, improve protection of public health and the environment, and ensure permit decisions are legally defensible. In FY 2020, EPA is planning for potential regulatory revisions to the CWA section 404(c) regulations, which will ensure greater predictability and regulatory certainty. Section 404(c) allows EPA to restrict or prohibit the discharge of dredged or fill material at specified disposal sites. EPA and the USACE also are planning for potential regulatory revisions

to the 2008 Mitigation Rule, which will provide for greater efficiencies in mitigation bank approvals and operations.

EPA also will continue carrying out its responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the RESTORE Act, and as a Natural Resource Damage Assessment (NRDA) Trustee for the Deepwater Horizon oil spill under the Oil Pollution Act (OPA). With specific regard to section 404 of the CWA, the RESTORE Act, and OPA, EPA responsibilities include timely, environmentally-sound, and compliant implementation of National Environmental Policy Act (NEPA) review and associated permitting. Under NRDA, EPA is a cooperating or lead federal agency for NEPA on all Trustee Implementation Group restoration plans, and the appropriate level of NEPA analysis is integrated into those referenced restoration plans. EPA's RESTORE responsibilities include NEPA analysis for projects that EPA has been assigned by the Council. Deepwater Horizon Oil Spill Natural Resource and Damage Assessment Trustees undertake mandatory independent third-party financial audits every three years to ensure accountability regarding the use of funds provided under a 2016 Consent Decree. The first independent third-party financial audit was initiated in FY 2018 and is anticipated to conclude in FY 2019.

Building State and Tribal Wetlands Programs

EPA will continue to work with states and tribes to target Wetlands Protection Program funds to core statutory requirements while providing states and tribes with the flexibility they need to best address their priorities. This includes continued EPA assistance for states and tribes interested in assuming administration of the CWA section 404 program. EPA will propose a rule to update the existing assumption regulations and provide greater clarity to state and tribes on what waters may be assumed. EPA also will continue to administer Wetland Program Development Grants in support of state and tribal wetland programs, with a focus on working more efficiently with states and tribes to achieve specific program development outcomes including supporting state and tribal assumption of the Section 404 program.[137]

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program. EPA will work with interested states and tribes to develop and improve their wetland program capacity and will track progress on an annual basis at the program level.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$657.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

[137] For more information, please see: https://www.epa.gov/wetlands or http://www.cfda.gov.

- (+$2,600.0 / +15.0 FTE) This increase provides support for priority efforts on infrastructure projects, regulatory permitting, and state delegations and certifications. This will improve consistency and efficiency and help ensure predictability and certainty in the CWA section 401 and section 404 programs.

- (-$1,430.0 / -7.3 FTE) This program change is a reduction in the Wetlands program. EPA will work with USACE, states, and tribes to increase consistency and predictability in the Wetlands program as well as streamlining business practices.

Statutory Authority:

Clean Water Act § 404.

Water: Human Health Protection

Beach / Fish Programs
Program Area: Water: Human Health Protection
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$1,777.0***	***$2,014.0***	***$0.0***	***-$2,014.0***
Total Budget Authority	$1,777.0	$2,014.0	$0.0	-$2,014.0
Total Workyears	3.0	4.1	0.0	-4.1

Program Project Description:

The Fish Component of the Beach/Fish Program provides up-to-date-science, guidance, technical assistance, and nationwide information to state, tribal, and federal agencies on the human health risks associated with eating potentially contaminated locally caught fish.

The Beach Component of the Beach/Fish Program provides up-to-date science, guidance, technical assistance and nationwide information to state, tribal, and federal agencies on the human health risks of swimming in pathogen-contaminated waters.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. The Agency will encourage states to continue this work within ongoing core programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$2,014.0 / -4.1 FTE) This program change eliminates the Beach/Fish Program, which is a mature, well-established program with objectives that can continue to be implemented at the local level.

Statutory Authority:

Clean Water Act § 104.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$91,494.4***	***$96,493.0***	***$89,808.0***	***-$6,685.0***
Science & Technology	$3,458.2	$3,519.0	$4,094.0	$575.0
Total Budget Authority	$94,952.6	$100,012.0	$93,902.0	-$6,110.0
Total Workyears	459.0	466.0	457.1	-8.9

Program Project Description:

Safe drinking water is critical for protecting human health and the economic vitality of the Nation. Approximately 320 million Americans rely on the safety of tap water provided by public water systems (PWS) that are subject to national drinking water standards.[138] EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach[139] to protecting public health from contaminants in drinking water. EPA protects public health through: (1) source water assessment and protection; (2) promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs); (3) training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water; (4) underground injection control (UIC) programs; (5) supporting implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and (6) providing states and tribes with resources and tools to support the financing of water infrastructure improvements.[140]

The drinking water issues in Flint, Michigan and East Chicago, Indiana highlighted the need for additional attention to lead in drinking water. In addition per- and polyfluoroalkyl substances (PFAS), such as Perfluorooctanoic acid (PFOA), Perfluorooctane sulfonate (PFOS) and *Gen-X* chemicals, have been detected in drinking water systems and there is increased demand for tools that can help communities across the country protect public health and address these chemicals. These events highlight the importance of safe drinking water to public health and local economies, and in particular, the need to prioritize threats and protect drinking water sources.

In FY 2018, 92.8 percent of the population served by Community Water Systems (CWSs) received drinking water that met all applicable health-based drinking water standards. Ongoing compliance

[138] U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), found at: http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm.
[139] For more information, please see: https://www.epa.gov/sites/production/files/2015-10/documents/guide_swppocket_2002_updated.pdf.
[140] For more information, please see: https://www.epa.gov/ground-water-and-drinking-water and https://www.cfda.gov.

challenges include violations related to the Lead and Copper, revised Total Coliform, Stage 2 Disinfectants and Disinfection Byproducts, and Nitrate Rules. EPA's enhanced oversight of the Lead and Copper Rule for drinking water has identified an increased rate of non-compliance with this rule.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue its core mission to protect the public from contaminants in drinking water by: (1) developing new and revised drinking water standards; (2) supporting states, tribes, and water systems in implementing standards; (3) enabling funding and financing of infrastructure projects while promoting partnerships and sustainable management of drinking water systems; and (4) promoting source water protection and implementing the underground injection control (UIC) program.

In FY 2020, the Agency will continue to streamline its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of regulatory programs for EPA, states, and tribes. EPA also is seeking efficiencies within the Drinking Water Program to support drinking water systems. This includes work with state programs to decrease the number of community water systems out of compliance with health-based standards. Over the 5-year period of the *FY 2018 – 2022 EPA Strategic Plan*, EPA is pursuing a 25 percent reduction in the number systems that have health-based violations from 3,508 in FY 2017 to 2,700 by FY 2022. The Drinking Water Program supports this effort by providing assistance and training to state drinking water programs, tribal drinking water officials, and technical assistance providers on: achieving and maintaining compliance at drinking water systems; developing best practices; strengthening state and tribal Drinking Water Program capacity and certifying drinking water operators.

EPA also is partnering with states to increase the number of community water systems that should have had a sanitary survey within the last three years. The Safe Drinking Water Act (SDWA) requires that primacy agencies conduct a sanitary survey for each drinking water system every three years (five years for outstanding performance). The Agency is working toward the goal of improving the proportion of community water systems that should have had a sanitary survey within the last three years to 98 percent by FY 2022 from the 3-year rolling average of 92 percent in FY 2017. Information gained during on-site sanitary surveys comprise the backbone of state understanding of performance challenges that drinking water systems face.

<u>Water Infrastructure</u>

With the aging of the Nation's critical water infrastructure and a growing need for infrastructure investment, the drinking water and wastewater sectors face a significant challenge to maintain and advance the achievements attained in protecting public health and the environment. In FY 2020, EPA will continue its robust funding of the Nation's drinking water infrastructure, focusing efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure.

The Drinking Water Program also supports the policy and fiduciary oversight of the Drinking Water State Revolving Fund (DWSRF) Program, which provides low-interest loans to help finance drinking water infrastructure improvements needed to achieve compliance with the Safe Drinking Water Act (SDWA). The Program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds.

The FY 2020 budget continues to provide funding for the Environmental Finance Program, which will help communities across the country improve their wastewater, drinking water, and stormwater systems, particularly through innovative financing. EPA will continue to support financing and construction of drinking water infrastructure and encourage public water systems to adopt sustainable management practices by doing the following:

- Providing states with funds, through the DWSRF capitalization grants, for low-interest loans to assist utilities with financing drinking water infrastructure needs and to support utility compliance with SDWA standards.
- Providing non-infrastructure support for states to use the set-asides in the DWSRF to build water system technical and managerial capacity.
- Providing effective oversight of the DWSRF funds.
- Advising states on maintaining their capacity development and operator certification programs to support compliance by public water systems with SDWA and to enable water systems, especially small systems, to meet statutory prerequisites for receiving infrastructure financing.
- Encouraging states to develop state-centric tools, in lieu of national tools, to assist water systems with capacity development.
- Continuing to support close coordination between state infrastructure and PWSS Programs.

In addition, the Agency is requesting over $2 million, not including grants, and 11.6 FTE to begin implementation and administration of the drinking water requirements mandated in the new America's Water Infrastructure Act of 2018 (AWIA). AWIA strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administrator's agenda by increasing water infrastructure investment and improving drinking water and water quality across the country.

Drinking Water Implementation

In FY 2020, the Agency will continue to work with states to implement requirements for all NPDWRs to ensure that systems install, operate, and maintain appropriate levels of treatment and effectively manage their distribution systems. In particular, EPA will continue to focus on working with states to optimize corrosion control treatment and develop other strategies to minimize exposure to lead. EPA also will continue to focus on the reduction of the number of community water systems with health-based violations.

While most small systems consistently provide safe and reliable drinking water to their customers, many small systems face challenges with aging infrastructure, complying with regulatory requirements, workforce shortages and high staff turnover, increasing costs, and declining rate bases. In FY 2018, small community water system violations made up 94 percent of overall violations;[141] and EPA will continue to focus on small systems by strengthening and targeting financial assistance, in coordination with state infrastructure programs, to support rehabilitation of the Nation's infrastructure.

Drinking water system partnerships provide opportunities to increase capacity by working together to solve compliance challenges, share costs of operations and maintenance activities, and leverage other resources. EPA's new website highlights ways partnerships can address these challenges, leading to enhanced public health by working together and sharing information: https://www.epa.gov/dwcapacity/water-system-partnerships. The Agency will continue to promote partnerships among water systems to build capacity and work with states and tribes, as well as with utility associations, third-party technical assistance providers and other federal partners, to promote the sustainability practices that are the foundation for building technical, managerial, and financial capacity, known as Capacity Development.[142]

One key to addressing the most pressing public water system issues is being able to identify which systems have the greatest need. In FY 2020, EPA will continue working with states to transition to the *Safe Drinking Water Information System (SDWIS) Prime* program management and reporting tool. *SDWIS Prime* is a centralized infrastructure technology system that will replace *SDWIS State,* currently used by the majority of state drinking water programs, and other systems that are hosted and operated separately by each primacy agency. Benefits of this transition to *SDWIS Prime* include: 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. While supporting state transition, EPA also will assist states to meet state-specific program needs by making the core SDWIS code available and by utilizing data exchange services that allow states to connect their own applications. Under the E-Enterprise for the Environment shared governance model, EPA has been partnering with the Environmental Council of the States and the Association of State Drinking Water Administrators to maximize the use of shared services. Through this effort, states will be able to leverage services developed by EPA, other states and the private sector to more efficiently meet their state-specific program needs.

EPA continues to support state migration to the Compliance Monitoring Data Portal (CMDP), which enables drinking water utilities and laboratories to report drinking water data electronically. Currently eight states are utilizing the CMDP, and multiple other states are testing the system. The portal increases data accuracy and completeness and, once fully implemented, could decrease the overall reporting burden for primacy agencies by hundreds of thousands of hours. Primacy agencies can use CMDP-reported data to make more informed decisions about water system compliance and focus their limited resources on preventing and responding to public health

[141] For more information, please see: https://www.epa.gov/waterdata/drinking-water-tools.
[142] For more information, please see: http://water.epa.gov/type/drink/pws/smallsystems/index.cfm.

problems. In FY 2020, EPA will continue to assist additional primacy agencies in testing and utilizing CMDP to receive drinking water compliance sampling data electronically.

In FY 2020, EPA also will conduct the following activities to facilitate compliance with rules:

- Oversee the national Public Water System Supervision (PWSS) Program by administering the PWSS grants to states and measuring program results based on state reporting of health-based rule violations at public water systems for over 90 drinking water contaminants (*i.e.*, microbial pathogens and disinfection byproducts, other chemicals, and radiological contaminants).
- Offer training and technical assistance on a prioritized basis to states, tribes, and public water systems for the Lead and Copper Rule (LCR) and other rules with significant noncompliance, including the Stage 2 Disinfectants/ Disinfection Byproducts Rule.
- Directly implement the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the U.S., if necessary to address identified significant risk.
- Directly implement the drinking water program where states and tribes do not have primacy (*e.g.*, Wyoming, the District of Columbia, and tribal lands), focused on actions that are under court order or address significant identified risks.

Drinking Water Standards

To assure the American people that their water is safe to drink, EPA's drinking water regulatory program monitors for a broad array of contaminants, evaluates whether contaminants are of public health concern, and regulates contaminants when there is a meaningful opportunity for health risk reduction for persons served by public water systems. In addition, EPA will work to reduce lead risks by continuing to work on revisions to the LCR, and regulations to implement the Water Infrastructure Improvement for the Nation Act and the Reduction of Lead in Drinking Water Act (RLDWA). EPA will continue its communication with states, tribes, and communities to understand local perspectives on the quality of drinking water.

The Agency also will continue to evaluate and address drinking water risks in FY 2020, including:

- Issuing a final SDWA action on perchlorate in accordance with a consent decree.
- Evaluating input from public commenters and developing final revisions to the LCR.
- Publishing preliminary regulatory determinations for contaminants on the fourth contaminant candidate list (CCL 4) for public comment. Some of the contaminants that will be considered include PFOA, PFOS, and 1-4 dioxane. Continued evaluation of these contaminants in response to public input in FY 2020 is critical for the Agency to publish final determinations by January 2021.
- Developing and publishing the draft fifth contaminant candidate list (CCL 5) based on the analysis of available health effects and occurrence data on unregulated contaminants.
- Initiating the request for states to voluntarily submit compliance monitoring data for regulated contaminants collected between 2012 - 2018 in support of the fourth Six-Year Review of existing National Primary Drinking Water Regulations.

- Continuing to participate in a cross-agency effort to address PFAS, which include PFOA, PFOS and *Gen-X* chemicals to better understand the health impacts, the extent of occurrence in the environment, and exposures to PFAS; to develop tools to support states, tribes and localities in managing PFAS in their communities; and to evaluate the need for a national Maximum Contaminant Level (MCL) for PFOA and PFOS.
- Providing support to - and oversight of - drinking water systems and laboratories as they collect and analyze samples during the implementation of the fourth Unregulated Contaminant Monitoring Rule (UCMR 4). UCMR 4 requires monitoring for 30 chemical contaminants, including cyanotoxins, between FY 2018 and FY 2021.
- Developing and publishing the proposed rule for the next cycle of UCMR monitoring (UCMR 5). This includes evaluating and prioritizing candidate contaminants, such as short-chain PFAS and contaminants on the Agency's CCL, for consideration.

Source Water Protection

EPA will continue to partner with states, federal counterparts, drinking water utilities, and other stakeholders to identify and address current and potential impacts to sources of drinking water. These efforts are integral to the sustainable infrastructure effort because source water protection can reduce the need for additional drinking water treatment and the associated additional infrastructure and technical costs and energy usage, while improving public health protection.

In FY 2020, the Agency will:

- Continue to develop data-layers and decision support tools to assist source water assessment, planning, and emergency preparation efforts. Support users of the Drinking Water Mapping Application for Protecting Source Waters (DWMAPS)[143], an online GIS program available through EPA's *Geoplatform*, through targeted outreach and development of how-to materials. DWMAPS enables states, tribes, utilities and others to combine national datasets previously integrated with DWMAPS with their own datasets, such as chemical storage facilities and sensitive drinking water intakes, to evaluate and prioritize threats to drinking water. DWMAPS also allows users to leverage Clean Water Act (CWA) data to analyze and coordinate water quality assessments, impaired waters, and point source permit information to protect drinking water sources.
- Work with state, federal, utility, and local stakeholder organizations to encourage continuing engagement in the Source Water Collaborative,[144] which works to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts to protect drinking water sources.
- Continue to partner with United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) and state partners to support implementation of the source water protection pilot component of the NRCS's National Water Quality Initiative (NWQI). This presents an opportunity to forge stronger connections between state nonpoint source and source water protection programs and to address agriculture-related impacts to drinking water sources.

[143] For more information, please see: https://www.epa.gov/sourcewaterprotection/dwmaps.
[144] For more information, please see: https://www.epa.gov/sourcewaterprotection/source-water-collaborative.

- Continue to provide support for workshops that promote source water protection at the local level and support the integration of source water protection into related programs at the state and federal levels – including with state and private foresters and the U.S. Forest Service.
- Identify source water protection opportunities to help reduce the number of health-based violations, especially those violations related to disinfection byproducts.
- Continue to serve as experts on sources of emerging drinking water contaminants and options for limiting or preventing such contamination through source water protection and integration of SDWA and the Clean Water Act (CWA).

Underground Injection Control (UIC)

To safeguard current and future underground sources of drinking water from contamination, the UIC Program regulates the permitting, construction, operation, and closure of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. As population growth, land use changes and drought exacerbate water supply challenges in many areas of the country, management of water availability has become increasingly important in providing safe and reliable drinking water to communities.

In FY 2020, EPA will continue to provide technical support to states and tribes in making permitting decisions, providing training for and oversight to implementation of underground injection regulations, and directly implement the UIC regulations where EPA has primary enforcement responsibility (primacy). Activities include:

- Working with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association to identify best practices in oil and gas development, such as reuse and recycling of produced water, that can help safeguard public health, recognizing the important role that energy extraction, including natural gas development plays in our energy future.
- Working with authorized state and tribal agencies in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells in a rapidly growing energy sector to protect underground sources of drinking water.
- Supporting states and tribes in applying for primary enforcement responsibility and those implementing UIC Program revisions.
- Working with the State of California to review and approve aquifer exemptions so that the state program is consistent with the SDWA and UIC regulations.
- Providing technical assistance, tools and strategies to states for improving implementation of UIC Programs, including development of e-learning material and approaches to reduce the number of earthquake events related to underground injection activities.
- Using national UIC data to assist with promoting nationally consistent approaches to program oversight of state and EPA UIC Programs.
- Streamlining EPA UIC Direct Implementation permitting, developing standard work, deploying Lean Management Principles and reducing the permit application backlog. In FY 2018, the backlog of EPA-issued new Underground Injection Control (UIC) permits decreased from 44 to 36.

Performance Measure Targets:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						3,510	3,380	3,280	CWSs
Actual						3,480			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,161.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$1,000.0) This increase advances priority PFAS actions associated with per- and polyfluoroalkyl substances (PFAS), such as Perfluorooctanoic acid (PFOA), Perfluorooctane sulfonate (PFOS) and Gen-X chemicals, in drinking water systems.

- (+$1,500.0) This increase supports the initiation of the seventh Drinking Water Infrastructure Needs Survey. The Survey provides a 20-year capital investment need for public water systems that are eligible to receive funding from state DWSRF programs.

- (+$3,842.0 / +11.6 FTE) This increase supports the implementing and administering of the drinking water requirements of AWIA.

- (-$15,188.0 / -22.8 FTE) This program change is a decrease to reflect the refocusing of Agency efforts to core Drinking Water Program activities and requirements.

Statutory Authority:

Safe Drinking Water Act (SDWA); Clean Water Act.

Water Quality Protection

Marine Pollution
Program Area: Water Quality Protection
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$10,242.6***	***$11,065.0***	***$0.0***	***-$11,065.0***
Total Budget Authority	$10,242.6	$11,065.0	$0.0	-$11,065.0
Total Workyears	42.2	42.5	0.0	-42.5

Program Project Description:

EPA's Marine Pollution Program partners with other agencies, including the Department of Defense, the National Oceanic and Atmospheric Administration, and others to integrate management of oceans and coasts. This program aims to: 1) ensure marine ecosystem protection; 2) manage ocean dumping of dredged material and limit and prevent disposal of wastes and other materials in the ocean; 3) address emerging environmental threats to the marine and coastal water quality; 4) protect sensitive marine habitats; and 5) gather data and undertake research to inform policy and program decisions for protection of the marine and near coastal environment.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. EPA will seek opportunities to continue to meet statutory mandates through the national water program.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$11,065.0 / -42.5 FTE) This program change eliminates the Marine Pollution Program. Other federal agencies may continue to support these efforts.

Statutory Authority:

Clean Water Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

Surface Water Protection
Program Area: Water Quality Protection
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$192,705.9***	***$199,352.0***	***$188,233.0***	***-$11,119.0***
Total Budget Authority	$192,705.9	$199,352.0	$188,233.0	-$11,119.0
Total Workyears	953.3	970.6	959.6	-11.0

Program Project Description:

The Surface Water Protection Program, under the Clean Water Act (CWA), directly supports efforts to protect, improve, and restore the quality of our Nation's coasts, rivers, lakes, and streams. EPA works with states and tribes to make continued progress toward clean water goals.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will work with states and tribes to target funds to core requirements while providing states and tribes with flexibility to best address their priorities for Surface Water Protection.

Program Implementation

Water Quality Criteria. In FY 2020, EPA will continue to develop and publish new or revised water quality criteria reflecting the latest scientific knowledge as required by CWA section 304. EPA also will continue to review and take action on both state and tribal water quality standards and state lists of impaired waters as required by section 303. Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will continue to support state and tribal programs by providing scientific water quality criteria information as required by CWA section 304. EPA also will continue to support states and authorized tribes in adopting and implementing water quality standards in accordance with the water quality standards regulation set forth at 40 CFR part 131.

Effluent Limitations Guidelines (ELGs). As required under the CWA, EPA will continue to annually review industrial sources of pollution and publish a preliminary ELG plan for public review, followed by a final biennial ELG plan informed by public comment. These plans will identify any industrial categories where ELGs need to be revised or where new ELGs need to be developed.

Biosolids. EPA will continue to implement the biosolids (sewage sludge) program as required under CWA Section 405, including reviewing the biosolids regulations not less often than every two years for the purpose of identifying additional toxic pollutants and promulgating regulations for such pollutants consistent with the CWA. EPA also will continue to develop tools to conduct risk assessments for chemicals and pathogens found in biosolids.

Impaired Waters Listings and Total Maximum Daily Loads. EPA will work with states and other partners on identifying impaired waters and Total Maximum Daily Loads (TMDLs), as required by CWA section 303(d), and on other waterbody restoration plans for listed impaired waterbodies. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented through local, state, and federal watershed plans and programs to restore waters. EPA also will work with states and tribes on their section 303(d) program and plans to ensure they are effective. Support will be provided to control nonpoint sources of pollution and ensure the protection of high-quality waters.

Monitoring and National Aquatic Resource Surveys. EPA will continue working with states and tribes to support the National Aquatic Resource Survey's statistically representative monitoring of the condition of the Nation's waters which support CWA section 305(b). EPA also will continue working with states and tribes to support base water quality monitoring and priority enhancements that serve state and tribal CWA programs in a cost-efficient and effective manner. EPA will continue supporting state and tribal water quality data exchange and tools to maximize use of data from multiple organizations to support water quality management decisions.

Waters of the United States. EPA and the Department of the Army will continue to work together to implement the CWA and definition of "waters of the United States." The agencies intend to continue to implement the President's Executive Order 13728 by finalizing a rule to revise the definition of "waters of the United States" following a consideration of the public comments received on the proposed rule. The agencies will jointly develop tools and training to assist states, tribes, and the regulated public to implement the revised definition in a clear and consistent manner.

Water Quality Certification. EPA will assist states, tribes, other federal agencies, and stakeholders in understanding how to implement and navigate the CWA Section 401 water quality certification process. The Agency also will be reviewing options, including rulemaking, on whether and how to provide nationwide consistency and regulatory certainty for states, permit applicants, and other stakeholders under the Clean Water Act program to protect wetlands and other aquatic resources.

Core Water Quality Programs. In FY 2020, EPA will continue to implement and support the core water quality programs that control point source discharges through permitting and pretreatment programs. The National Pollutant Discharge Elimination System (NPDES) program under the CWA works with states to structure the permit program, support its implementation and to better pursue comprehensive protection of water quality on a watershed basis.

Infrastructure

EPA will continue its support of the Nation's infrastructure, focusing on efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure. This program supports the policy and fiduciary oversight of the Clean Water State Revolving Fund Loan (CWSRF) Program, which provides low-interest loans to help finance wastewater treatment facilities and other water quality projects. The Program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds. Since 1987, CWSRF programs have made 39,948 assistance agreements, funding $133 billion in wastewater infrastructure and other water quality projects. The Program also funds implementation of sections of the America's Water Infrastructure Act of 2018 (AWIA).

This program also supports the Clean Watershed Needs Survey (CWNS). The CWNS is an assessment of the capital investment needed nationwide for public-owned wastewater collection and treatment facilities to meet the water quality goals set in the CWA.

The FY 2020 President's Budget supports funding for the environmental finance centers program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing.

Program Oversight/Accountability

States and tribes play a critical role in implementing the CWA. For programs where states and tribes have primacy, the Agency will focus on providing oversight and assistance. The Agency will continue to support states in electronically reporting section 303(d) and section 305(b) assessment conclusions through the Assessment and TMDL Tracking Implementation System (*ATTAINS*) to track improvements in impaired waters. This tool reduces burden on states to track and report progress in meeting water quality standards in waters targeted for local action and greatly improve evidence-based tracking of local actions to improve water quality. In addition, as required under the CWA and Executive Orders 12866, 135638, and 13771, EPA will continue to support cost-benefit analysis for CWA regulatory and deregulatory actions. EPA will work with states, tribes, territories, and local communities to 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.

The Agency initiated a Lean process improvement effort in FY 2018 focused on NPDES permit streamlining. This effort has identified potential hold-ups in the permitting process, estimated timing of individual permit issuance steps, and the ideal timing for each step to meet the goal of issuing permits within six months. After process improvements, the backlog of EPA-issued new NPDES permits decreased from 106 to 62 in FY 2018. Another effort focused on streamlining the flow of data from the lab to state partners and data analysts. Improvements are being tracked through an internal process. The Agency will continue to implement these process improvements and monitor the backlog of water quality standards (WQS) actions. The Agency will continue to work to decrease the number of state and tribal WQS revision actions that have been submitted to EPA since May 2000 that EPA neither approved nor disapproved within the first 60 days after

submittal to EPA, and that have yet to be acted upon. The CWA requires EPA to review state and tribal WQS revisions and either approve within 60 days or disapprove within 90 days.

EPA will continue to track state progress in completing TMDLs, alternative restoration approaches or projection plans with the goal of 100 percent of plans in place at state identified priority waters by 2020. At the end of FY 2018, 33,135 square miles or 33 percent of state priority waters were addressed by a TMDL, other restoration plan or protection approach. EPA has continued to support Lean efforts in the states to improve their water quality monitoring, assessment, and reporting processes. In 2018, EPA supported Lean efforts in New Jersey and Idaho and has received additional requests from states for support in 2019. These streamlining efforts will allow states to reduce the time they spend on administrative reporting and contribute to improved reporting of the Agency's long-term performance goal SWP-01: Reduction in the number of square miles of watershed with surface water not meeting standards.

The FY 2020 President's Budget requests additional resources for the Agency's streamlining efforts. EPA's focus includes establishing clear timelines for permitting processes, ongoing deregulatory efforts, and increasing state delegations. These efforts will continue to advance support for communities and promote economic growth.

Performance Measure Targets:

(PM SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	9,000	18,000	Square Miles
Actual						N/A			

(PM TMDL-02) Progress in putting priority TMDLs, Alternative Restoration plans, and protection approaches in place.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							50	67	Percent
Actual									
Numerator									Square Miles
Denominator									

(PM NPDES-03) EPA Permit Backlog – Existing NPDES.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							360	240	Permits
Actual									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$6,784.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$1,500.0) This change supports EPA's development of the Clean Watersheds Needs Survey.

- (+$671.0 / +2.5 FTE) This change provides additional resources to support the implementation and administration of the requirements of AWIA (such as the Stormwater Infrastructure Funding Task Force and the Water Infrastructure Workforce Development provisions), and additional funds for deregulation, permitting and state delegations.

- (-$20,074.0 / -13.5 FTE) This program change reduces Surface Water Protection program resources, including the elimination of the WaterSense program. EPA will focus remaining resources on statutory requirements and highest priority work.

Statutory Authority:

Clean Water Act; Marine Protection, Research, and Sanctuaries Act (MPRSA); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

Congressional Priorities

Water Quality Research and Support Grants
Program Area: Congressional Priorities
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	***$25,400.0***	***$12,700.0***	***$0.0***	***-$12,700.0***
Science & Technology	$4,094.0	$4,100.0	$0.0	-$4,100.0
Total Budget Authority	$29,494.0	$16,800.0	$0.0	-$16,800.0

Program Project Description:

The purpose of this program is to provide training and technical assistance for small public water systems to help such systems achieve and maintain compliance with the Safe Drinking Water Act (SDWA) and to provide training and technical assistance for small publicly-owned wastewater systems, communities served by onsite/decentralized wastewater systems, and private well owners to improve water quality under the Clean Water Act (CWA).

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF).

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$12,700.0) This funding change eliminates the Water Quality Competitive Grant Program since resources are available through other existing programs and states are best positioned to develop technical assistance plans for their water systems.

Statutory Authority:

Safe Drinking Water Act (SDWA) § 1442(e); Federal Food, Drug and Cosmetic Act (FFDCA); Food Quality Protection Act (EQPA); Endangered Species Act (ESA); Clean Water Act § 104(b)(3).

Table of Contents – Office of Inspector General

APPROPRIATION: Inspector General
Resource Summary Table
(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Inspector General				
Budget Authority	$40,328.4	$41,489.0	$38,893.0	-$2,596.0
Total Workyears	209.4	215.8	201.4	-14.4

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

Bill Language: Inspector General

For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, $38,893,000, to remain available until September 30, 2021.

Program Projects in IG
(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$40,328.4	$41,489.0	$38,893.0	-$2,596.0
TOTAL IG	**$40,328.4**	**$41,489.0**	**$38,893.0**	**-$2,596.0**

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

Audits, Evaluations, and Investigations

Audits, Evaluations, and Investigations
Program Area: Audits, Evaluations, and Investigations
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Inspector General	***$40,328.4***	***$41,489.0***	***$38,893.0***	***-$2,596.0***
Hazardous Substance Superfund	$9,159.7	$8,778.0	$9,586.0	$808.0
Total Budget Authority	$49,488.1	$50,267.0	$48,479.0	-$1,788.0
Total Workyears	260.4	266.0	242.0	-24.0

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget. The OIG conducts and supervises audits and investigations while reviewing existing and proposed legislation and regulations relating to the Agency's programs and operations; provides leadership and coordination, and recommend policies for activities designed to promote economy, efficiency and effectiveness, and to prevent and detect waste, fraud, and abuse in agency, grantee, and contractor operations. The OIG activities add value and enhance public trust and safety by keeping the head of the Agency and Congress fully and immediately informed of problems and deficiencies, and the necessity for and progress of corrective actions. The OIG activities also prevent and detect fraud in EPA's programs and operations, including financial fraud, laboratory fraud, and cybercrime. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. The audit, evaluations and inspection, and investigative services programs are directly supported through the OIG's management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach. EPA's OIG plans its work with a focus on identifying and influencing resolution of the Agency's major management challenges and in support of EPA's goals and objectives.

In addition, EPA's Inspector General was designated by Congress in Fiscal Year 2004 to serve as the Inspector General for the U.S. Chemical Safety and Hazard Investigation Board (CSB) and provides the full range of audit and investigative services specified by the Inspector General Act, as amended. Specifically, the OIG conducts required audits of the CSB's financial statements and of CSB's compliance with the Federal Information Security Management Act. In addition, the OIG performs audits and evaluations of the CSB's programmatic and management activities and follow-up on prior audit recommendations.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan.* The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses resulting in cleaner air, land, and water, and ensured chemical safety for America. In FY 2020, the OIG will continue to recommend improvements to operating efficiency, transparency, secured and trustworthy systems, and the cost-effective attainment of EPA's strategic goals and positive environmental impacts.

The OIG carries out its statutory mission by conducting many types of audits, evaluations, and investigations for both EPA and the CSB. Plans are implemented through audits, evaluations, investigations, inspections, and follow-up reviews in compliance with the Inspector General Act (as amended), the Generally Accepted Government Accounting Standards, and the Quality Standards for Federal Offices of Inspector General of the Council of Inspectors General on Integrity and Efficiency.

The OIG conducts the following types of assignments focused on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, program performance audits, evaluations and inspections are conducted in the areas of EPA's mission objectives for improving and protecting the environment and public health, including: air; water; land cleanup and waste management; toxics, chemical management and pollution prevention; and environmental research programs.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA programs and operations that undermine the organization's integrity and public trust, or create an imminent risk or danger. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Major areas of investigative focus include: financial fraud, program integrity, threats to the Agency's resources, employee integrity, cyber-crimes, and theft of intellectual or sensitive data.

The ten directorates within the Office of Audit and Evaluation are responsible for independent oversight of EPA and CSB programs and recommending improvement to programs and operations. A significant portion of audit resources will be devoted to statutorily mandated work assessing the financial statements of EPA, as required by the Chief Financial Officers Act and the Accountability of Tax Dollars Act of 2002, respectively. The OIG work will also include assessing the information security practices of EPA as required by the Federal Information Security Management Act. The OIG will examine the delivery and performance of national programs, as well as specific cross-regional and single region or place based issues that represent a risk to public health and the environment in response to stakeholder concerns.

As noted above, EPA's OIG continues to balance its workload with the capacity of a reduced workforce, while meeting statutorily-mandated requirements and delivering a strong return on investment. Our average 6-year return on investment is 12.3:1. The Annual Performance Goals are being met or exceeded, however, goals were adjusted to align with available resources.

Based on prior work, cross-agency risk assessment, Agency challenges, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2020:

Sound and Economical Financial Management

- Annual mandated improper payments audit
- Internal controls
- Annual mandated financial statements audits
- Audits of costs claimed by grantees and contractors
- Grant and contract administration
- Maximizing cost efficiencies and process improvement
- Capital investments in information technology, equipment, facilities and other items
- Technological changes create transformation opportunities
- Annual mandated travel card program, including risk assessment in accordance with the Government Charge Card Abuse Prevention Act of 2012
- Annual mandated purchase card and convenience check program, including risk assessment
- Annual mandated toxic substances fees in accordance with the Pesticide Registration Improvement Act and Federal Insecticide, Fungicide, and Rodenticide Act
- Efficiency and effectiveness of collection and payment processes

Efficient Processes and Use of Resources

- Management of the Brownfields Program
- Partnering or coordination with other agencies to maximize efficiencies
- Opportunities to reduce duplication, overlap and fragmentation within EPA
- Grant, Interagency Agreement Grant, and Interagency Agreement Management
- Efficiency and Effectiveness of Human Capital Management programs

Ensuring the Integrity of EPA Information

- Protection from advanced persistent threats to steal/modify data
- Agency efforts to enhance its capability to respond to cyber-attacks
- Cybersecurity/infrastructure development; and assessment of processes to ensure protection and security of information systems from fraud, waste and abuse
- File server security
- Processes for Managing Background Investigations and Plan of Action & Milestones (POA&Ms)
- Annual mandated audit of compliance with the Federal Information Security Modernization Act
- Oversight of Chief Information Officer's responsibilities under the Federal Information Technology Acquisition Reform Act
- Mandated readiness reviews of agency Digital Accountability and Transparency Act of 2014

Assessing Risk Management and Performance Measurement

- Implementation of Federal Managers Financial Integrity Act, Federal Information Security Management Act and Government Performance and Results Act
- Disaster response and homeland security and emergency preparedness and response
- Construction grants and revolving loan funds awarded to states and territories
- Review of contractor federal performance
- Assistance agreements related to cleanup and Brownfields

Assessing Program Integrity, Results, Oversight, Enforcement

- Evaluation of the Management Audit Tracking System
- Evaluation of the Implementation of the Toxic Substances Control Act
- Oversight of Clean Water State Revolving Loan Funds
- Assess EPA's policy, procedures, and internal controls to prevent or reduce improper computer use
- Evaluations of EPA's programs and activities to protect human health and the environment through progress toward air quality goals and compliance with requirements
- Evaluation of EPA's programs and adherence to requirements to protect and restore water that sustains human health and the environment
- Evaluation of EPA's programs, activities, requirements and initiatives to protect human health and the environment through hazardous waste cleanup, waste management, accident prevention and emergency response
- Evaluations of EPA's programs and requirements to protect human health and the environment from chemical risks, including implementation of the TSCA
- Evaluation of controls and processes in EPA's research and development programs that support EPA's core mission to protect human health and the environment

Investigations

The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste and abuse, while protecting the integrity of EPA and CSB programs, operations and resources. Investigations focus on alleged fraud, waste, abuse by EPA and CSB contractors and grantees and misconduct by EPA and CSB employees. The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA programs and operations that undermine the organization's integrity and public trust, or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. Special Agents have been trained as armed law enforcement first responders and are responders in the event of an active shooter or terrorist attack impacting EPA and CSB facilities. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Additionally, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk to the government."

Major areas of investigative focus include: 1) financial fraud relating to agency grants and contracts concerning State Revolving Funds, interagency and cooperative agreements, and fraud related to mischarging, defective pricing, defective products and collusion on contracts; 2) employee integrity and alleged criminal conduct or serious administrative misconduct focusing on activities that could undermine the integrity of agency programs involving safety and public health, and erode confidence in the Agency pursuing its mission; 3) threats directed against EPA and CSB employees, facilities and assets involving threats to the physical assault upon such employees and contractors; 4) program integrity focusing; 5) EPA's OIG hotline, deterrence and oversight focusing on managing EPA's OIG hotline program, which receives complaints, referrals and allegation of fraud, waste, abuse, mismanagement and misconduct involving EPA and the CSB; 6) other investigative activity for which the focus is on providing support to the OIG program offices and participating in multiagency coordination on urgent matters facing EPA and the nation.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity. The results of OI's investigations are published in the OIG's semiannual reports and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved and administrative actions are taken to prevent those involved from further participation in any of EPA's programs or operation. Over the last two fiscal years, OI investigations have yielded over $10 million in recoveries and restitutions and 479 administrative actions. Both represent contributions to the OIG's ability to exceed the performance targets in recoveries and restitutions by 2,820 percent and 229 percent for administrative actions respectively.

Follow-up and Policy/Regulatory Analysis

To further promote economy, efficiency and effectiveness, the OIG will conduct follow-up reviews of agency responsiveness to the OIG's recommendations to determine if appropriate actions have been taken and intended improvements have been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions, and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act (as amended), the OIG also conducts reviews and analysis of proposed and existing policies, rules, regulations and legislation to identify vulnerability to waste, fraud and abuse. These reviews also consider possible duplication, gaps or conflicts with existing authority, leading to recommendations for improvements in their structure, content and application.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$976.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support and benefit costs.

- (-$3,572.0 / -14.4 FTE) This change is a reduction which will focus the amount of audits, program evaluations, and investigative case work on the highest priority work to ensure the protection of critical environmental resources and the health and safety of the American people.

Statutory Authority:

Inspector General Act of 1978.

Inspector General Reform Act:

The following information is provided pursuant to Section 6(g)(2) of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is $58.0 million ($47.6 million Inspector General; $10.4 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $48.5 million ($38.9 million Inspector General; $9.6 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is $700 thousand ($609 thousand Inspector General; $91 thousand Superfund Transfer
- The portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is $126 thousand ($110.5 thousand Inspector General; $15.5 thousand Superfund Transfer)

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2020".

Table of Contents – Buildings and Facilities

Environmental Protection Agency
FY 2020 Annual Performance Plan and Congressional Justification

APPROPRIATION: Building and Facilities

Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Building and Facilities				
Budget Authority	$40,526.8	$34,467.0	$39,553.0	$5,086.0
Total Workyears	0.0	0.0	0.0	0.0

Bill Language: Building and Facilities

For construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities of, or for use by, the Environmental Protection Agency, $39,553,000, to remain available until expended.

Program Projects in B&F

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	$5,921.7	$6,676.0	$6,176.0	-$500.0
Operations and Administration				
Facilities Infrastructure and Operations	$34,605.1	$27,791.0	$33,377.0	$5,586.0
TOTAL B&F	**$40,526.8**	**$34,467.0**	**$39,553.0**	**$5,086.0**

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

Homeland Security

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$5,400.2	$5,405.0	$4,986.0	-$419.0
Science & Technology	$415.0	$416.0	$500.0	$84.0
Building and Facilities	***$5,921.7***	***$6,676.0***	***$6,176.0***	***-$500.0***
Hazardous Substance Superfund	$1,325.5	$968.0	$915.0	-$53.0
Total Budget Authority	$13,062.4	$13,465.0	$12,577.0	-$888.0
Total Workyears	8.0	9.6	12.2	2.6

Program Project Description:

EPA's Buildings and Facilities (B&F) resources in the Homeland Security: Protection of EPA Personnel and Infrastructure Program support the protection of federal employees, contractors, grantees, and private citizens (occupants) who work within or visit EPA facilities nationwide. EPA's buildings are a combination of headquarters and regional administrative offices, program and research laboratories, and support facilities/warehouses. These facilities are either EPA owned/leased or GSA owned/leased. This funding ensures federal mandates are met as they relate to physical security and local emergency preparedness for all Agency locations. These funds support the physical security protection equipment and mechanisms required to protect occupants during facility relocation (e.g., moves, new leases, consolidations, etc.), physical equipment upgrades/modernization, or corrective actions required to address security vulnerabilities identified during security assessments.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will partner with GSA to continue migrating to the Enterprise Physical Access Control System (ePACS), which enables the Agency to modernize its security infrastructure in compliance with Homeland Security Presidential Directive-12 (HSPD-12). ePACS allows the Agency to control access in EPA space, including restricted and secure space. EPA also will ensure the following security projects protect occupants and comply with federal mandates for physical security: (1) relocation of Criminal Investigation Division offices in Philadelphia and Baton Rouge; (2) consolidation of the Corvallis, Willamette, and Richmond labs; (3) fund the second phase of the design of the new entrance for Athens, Georgia; and (4) various closed circuit television and physical security upgrades in response to vulnerabilities identified by previously conducted physical security assessments.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$500.0) This program change will extend the schedule for moving the facility Physical Access Control Systems to an enterprise ePAC solution.

Statutory Authority:

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

Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$292,535.1	$308,701.0	$308,335.0	-$366.0
Science & Technology	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Building and Facilities	***$34,605.1***	***$27,791.0***	***$33,377.0***	***$5,586.0***
Leaking Underground Storage Tanks	$1,056.6	$813.0	$773.0	-$40.0
Inland Oil Spill Programs	$753.8	$584.0	$665.0	$81.0
Hazardous Substance Superfund	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Total Budget Authority	$475,113.4	$481,481.0	$483,964.0	$2,483.0
Total Workyears	321.8	327.6	308.0	-19.6

Program Project Description:

EPA's Buildings and Facilities (B&F) appropriation supports the design, construction, repair, and improvement of EPA's federally owned and leased land and structures in accordance with applicable codes and standards. Construction renovation and alteration projects costing more than $150 thousand must use B&F funding. B&F resources ensure that the Agency complies with various mandates and goals including: The Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 (EISA), and regulatory mandates associated with soil and water pesticides testing.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In accordance with the National Strategy for the Efficient Use of Real Property 2015-2020 and HR 4465,[1] the *Federal Assets Sale and Transfer Act of 2016*, the Agency will continue to review its space needs. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. B&F resources support facility-related construction and the repair and improvement (R&I) of EPA's aging real estate inventory. Good stewardship practices demand that the physical conditions, functionality, safety and health, security, and research capabilities of the Agency's facilities are adequately maintained to ensure successful completion of EPA's mission requirements and goals. Timely repairs save resources in the longer term.

[1] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016.*

Through master planning and nationwide efforts to use space more efficiently, EPA identifies B&F projects to be conducted each fiscal year. Necessary projects usually exceed the amount of funding available; these projects support the long-term conditions and efficiency of EPA facilities. Further, the need for B&F resources will continue to increase to comply with GSA leasing practices requiring agencies to pay for B&F projects including sustainable features[2] as tenant improvements (TI) or up front and ongoing project costs. This requirement significantly increases TI cost for new leases while resources are needed to consolidate space and move into new locations to reduce the Agency's footprint in accordance with the *Federal Asset Sale and Transfer Act of 2016*.

In FY 2020, the Agency will continue to explore opportunities to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires B&F funding.

The FY 2020 request also includes resources for ongoing projects that will provide critical maintenance for aging laboratory facilities and are key to ensuring that the Agency has access to preeminent laboratory science. These projects maintain a safe workplace, provide for high quality science, support agency priorities, and advance the Agency's mission. Delaying essential repairs results in the deterioration of EPA's facilities, which increases long-term repair costs and presents safety risks. In line with the Laboratory Study completed in 2014,[3] EPA will focus on critical facility repairs and infrastructure upgrades to maintain an acceptable Facility Condition Index.

In FY 2020, the Agency proposes to continue or initiate space optimization projects with the potential for the greatest long-term cost and energy savings, including but not limited to the following:

- **Optimizing space at the Athens, GA laboratory.** EPA continues its work to consolidate employees in leased laboratory space into owned space. Prior to optimizing the Agency's space footprint in Athens, however, EPA has begun to invest in the design for the optimized layout. Construction will cost an estimated $13 million in FY 2019 and another $13 million in FY 2020.

- **Willamette and Region 9 Laboratory Consolidation to the Corvallis laboratory.** EPA is in the process of completely renovating the laboratory and office space in Corvallis, OR to accommodate employees from Willamette, OR and the laboratory employees from Richmond, CA while the main infrastructure replacement project is underway. This project will reduce the space footprint by 20,918 square feet from Willamette, and 44,940 square feet from Richmond.

- **Grosse Ile to the National Vehicle Fuel and Emissions laboratory.** EPA will move staff into the owned laboratory facility in Ann Arbor, Michigan. The Agency must modify space at the Ann Arbor laboratory to accommodate staff from Grosse Ile, MI. Release of the Grosse Ile facility will result in a space reduction of approximately 35,000 square feet.

[2] Many of these features are required by EISA or executive orders.

[3] *Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation*, found at: https://www.epa.gov/sites/production/files/2015-03/documents/synthesisreportoftheusepalaboratoryenterprise.pdf.

In FY 2020, EPA will continue its phased approach to accomplish major B&F projects across the country involving mechanical systems nearing the end of their useful life that also will ultimately result in energy savings. Projects include: replacing the mechanical and electrical infrastructure in the Duluth, MN lab; upgrading the air handling unit and replacing the roof at Ft. Meade, MD; and completing HVAC and plumbing upgrades at EPA's Cincinnati, OH lab.

Performance Measure Targets:

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

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$5,586.0) This program change increases funding for the Agency's planned progress in regional space optimization and laboratory upgrade projects in Athens, GA, Corvallis, OR, and Gross Ile, MI.

Statutory Authority:

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

Environmental Protection Agency
2020 Annual Performance Plan and Congressional Justification

Table of Contents – Hazardous Substance Superfund

APPROPRIATION: Hazardous Substance Superfund

Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund				
Budget Authority	$1,207,133.8	$1,154,947.0	$1,045,351.0	-$109,596.0
Cancellation of Funds	$0.0	$0.0	-$16,000.0	-$16,000.0
Budget Authority Post Cancellation of Funds		$1,154,947.0	$1,029,351.0	-$125,596.0
Total Workyears	2,588.1	2,580.3	2,590.6	10.3

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

Bill Language: Hazardous Substance Superfund

For necessary expenses to carry out the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including sections 111(c)(3), (c)(5), (c)(6), and (e)(4) (42 U.S.C. 9611), $1,045,351,000, to remain available until expended, consisting of such sums as are available in the Trust Fund on September 30, 2019, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to $1,045,351,000 as a payment from general revenues to the Hazardous Substance Superfund for purposes as authorized by section 517(b) of SARA: Provided, That funds appropriated under this heading may be allocated to other Federal agencies in accordance with section 111(a) of CERCLA: Provided further, That of the funds appropriated under this heading, $9,586,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2021, and $17,775,000 shall be paid to the "Science and Technology" appropriation to remain available until September 30, 2021.

Program Projects in Superfund

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Indoor Air and Radiation				
Radiation: Protection	$2,176.9	$1,985.0	$1,933.0	-$52.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$9,159.7	$8,778.0	$9,586.0	$808.0
Compliance				
Compliance Monitoring	$943.0	$995.0	$991.0	-$4.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Enforcement				
Criminal Enforcement	$7,336.3	$7,502.0	$8,198.0	$696.0
Environmental Justice	$617.0	$758.0	$0.0	-$758.0
Forensics Support	$1,999.6	$1,824.0	$1,144.0	-$680.0
Superfund: Enforcement	$151,915.5	$150,048.0	$155,059.0	$5,011.0
Superfund: Federal Facilities Enforcement	$5,810.9	$6,243.0	$6,956.0	$713.0
Subtotal, Enforcement	$167,679.3	$166,375.0	$171,357.0	$4,982.0
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$31,102.4	$31,648.0	$31,054.0	-$594.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$1,325.5	$968.0	$915.0	-$53.0
Subtotal, Homeland Security	$32,427.9	$32,616.0	$31,969.0	-$647.0
Information Exchange / Outreach				
Exchange Network	$1,328.6	$1,328.0	$1,293.0	-$35.0
IT / Data Management / Security				
Information Security	$745.8	$661.0	$5,082.0	$4,421.0
IT / Data Management	$14,126.0	$13,824.0	$13,443.0	-$381.0
Subtotal, IT / Data Management / Security	$14,871.8	$14,485.0	$18,525.0	$4,040.0
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$744.3	$748.0	$0.0	-$748.0
Legal Advice: Environmental Program	$914.1	$505.0	$579.0	$74.0
Civil Rights Program	$60.0	$0.0	$0.0	$0.0
Subtotal, Legal / Science / Regulatory / Economic Review	$1,718.4	$1,253.0	$579.0	-$674.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$20,503.7	$22,018.0	$21,340.0	-$678.0
Facilities Infrastructure and Operations	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Acquisition Management	$20,477.3	$21,183.0	$21,541.0	$358.0
Human Resources Management	$6,279.4	$7,044.0	$5,444.0	-$1,600.0
Financial Assistance Grants / IAG Management	$2,498.6	$2,607.0	$2,655.0	$48.0
Subtotal, Operations and Administration	$125,820.2	$128,105.0	$124,520.0	-$3,585.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$11,023.3	$11,463.0	$10,977.0	-$486.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Research: Chemical Safety and Sustainability				
Human Health Risk Assessment	$2,822.9	$2,824.0	$5,338.0	$2,514.0
Superfund Cleanup				
Superfund: Emergency Response and Removal	$200,491.4	$189,917.0	$168,370.0	-$21,547.0
Superfund: EPA Emergency Preparedness	$7,744.0	$7,636.0	$7,396.0	-$240.0
Superfund: Federal Facilities	$21,300.3	$21,125.0	$20,465.0	-$660.0
Superfund: Remedial	$607,626.1	$566,062.0	$472,052.0	-$94,010.0
Subtotal, Superfund Cleanup	$837,161.8	$784,740.0	$668,283.0	-$116,457.0
Cancellation of Funds	$0.0	$0.0	-$16,000.0	-$16,000.0
TOTAL Superfund	**$1,207,133.8**	**$1,154,947.0**	**$1,029,351.0**	**-$125,596.0**

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

***** Fact Sheet tables do not include applicable cancellation of funds *****

Indoor Air and Radiation

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$9,286.8	$9,180.0	$2,307.0	-$6,873.0
Science & Technology	$2,407.4	$2,246.0	$990.0	-$1,256.0
Hazardous Substance Superfund	***$2,176.9***	***$1,985.0***	***$1,933.0***	***-$52.0***
Total Budget Authority	$13,871.1	$13,411.0	$5,230.0	-$8,181.0
Total Workyears	68.5	66.3	25.0	-41.3

Program Project Description:

This program addresses potential radiation risks that may be found at Superfund and hazardous waste sites. Through this program, EPA ensures that Superfund site cleanup activities reduce and/or mitigate the health and environmental risk of radiation to include support of removal actions as needed.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA's National Analytical Radiation Environmental Laboratory in Montgomery, Alabama and National Center for Radiation Field Operations in Las Vegas, Nevada will continue to provide analytical and field support to manage and mitigate radioactive releases and exposures. These two organizations provide analytical and technical support for the characterization and cleanup of Superfund and Federal Facility sites. Support focuses on providing high quality data to support agency decisions at sites across the country.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$49.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$118.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities.

- (+$17.0 / -2.0 FTE) This net funding change focuses this program on core requirements.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Audits, Evaluations, and Investigations

Audits, Evaluations, and Investigations
Program Area: Audits, Evaluations, and Investigations
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Inspector General	$40,328.4	$41,489.0	$38,893.0	-$2,596.0
Hazardous Substance Superfund	***$9,159.7***	***$8,778.0***	***$9,586.0***	***$808.0***
Total Budget Authority	$49,488.1	$50,267.0	$48,479.0	-$1,788.0
Total Workyears	260.4	266.0	242.0	-24.0

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget. The OIG conducts and supervises audits and investigations while reviewing existing and proposed legislation and regulations relating to the Agency's programs and operations; provides leadership and coordination, and recommend policies for activities designed to promote economy, efficiency and effectiveness, and to prevent and detect waste, fraud, and abuse in Agency, grantee, and contractor operations of the Agency's Superfund program. The OIG activities add value and enhance public trust and safety by keeping the head of the Agency and Congress fully and immediately informed about problems and deficiencies, and the necessity for and progress of corrective actions. The OIG activities also prevent and detect fraud in EPA's programs and operations, including financial fraud, laboratory fraud, and cybercrime. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. The audit, and inspection and investigative services programs are directly supported through the OIG's management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach. EPA's OIG plans its work with a focus on identifying and influencing resolution of the Agency's major management challenges and in support of EPA's goals and objectives.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA's OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste and abuse; respond to cybercrimes; and resolve previously identified major

management challenges and internal control weaknesses resulting in cleaner air, land, and water, and ensured chemical safety for America. In FY 2020, the OIG will continue to recommend improvements to operating efficiency, transparency, secured and trustworthy systems, and the cost-effective attainment of EPA's strategic goals and positive environmental impacts related to the Superfund program.

The OIG carries out its statutory mission by conducting many types of audits, evaluations, and investigations for both EPA and the U.S. Chemical Safety and Hazard Investigation Board (CSB). Plans are implemented through audits, evaluations, investigations, inspections, and follow-up reviews in compliance with the Inspector General Act (as amended), the Generally Accepted Government Accounting Standards, and the Quality Standards for Federal Offices of Inspector General of the Council of Inspectors General on Integrity and Efficiency.

The OIG conducts the following types of assignments focused on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, program performance audits, evaluations, and inspections will be conducted in the areas of EPA's mission objectives for improving and protecting the environment and public health, including: air; water; land cleanup and waste management; toxics, chemical management and pollution prevention; and environmental research programs via reviews of Superfund and other land issues.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA's Superfund program and operations that undermine the organization's integrity and public trust, or create an imminent risk or danger. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Major areas of investigative focus include: financial fraud, program integrity, threats to the Agency's resources, employee integrity, cyber-crimes, and theft of intellectual or sensitive data. The OIG continues to balance its workload with the capacity of a smaller workforce, while meeting statutorily-mandated requirements and delivering a strong return on investment.

Audits and Evaluations

The OIG audits and program evaluations and inspections related to Superfund will identify program and management risks and determine if EPA is efficiently and effectively reducing human health risks; taking effective enforcement actions; cleaning up hazardous waste; managing waste, restoring previously polluted sites to appropriate uses; and ensuring long-term stewardship of polluted sites. The OIG assignments will include: assessing the adequacy of internal controls in EPA and its grantees and contractors to protect resources and achieve program results; project management to ensure that EPA and its grantees and contractors have clear plans and accountability for performance progress; enforcement to evaluate whether there is consistent, adequate and appropriate application of the laws and regulations across jurisdictions with coordination between federal, state, and local law enforcement activities; and grants and contracts to verify that such awards are made based upon uniform risk assessment, and that grantees and contractors perform with integrity.

Prior audits and evaluations of the Superfund program have identified numerous barriers to implementing effective resource management and program improvements. Therefore, the OIG will concentrate its resources on efforts in the following assignment areas:

- Human and Environmental Exposure from Superfund Site Contaminants
- Optimization of Superfund financed clean-up remedies
- EPA's progress in ensuring private party Superfund liabilities are adequately covered by sufficient financial assurance mechanisms
- EPA Progress Implementing Recommendations for Superfund Improvement in the 2017 Superfund Task Force Report
- Superfund portion of EPA's financial statement and Federal Information Security Modernization Act (FISMA) audits to include sampling, monitoring, communication, and opportunities for cleanup efficiencies
- Oversight of Superfund remedial activities under state contracts and assistance agreements
- Assess the effectiveness of actions taken as a result of the 2017 Superfund Task Force Report
- The OIG also will evaluate ways to minimize fraud, waste, and abuse, with emphasis on identifying opportunities for cost savings and reducing risk of resource loss, while maximizing results achieved from Superfund contracts and assistance agreements

Investigations

The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA's Superfund program. Investigations focus on alleged fraud, waste, and abuse by EPA contractors and grantees and misconduct by EPA employees. The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA Superfund programs and operations that undermine the organization's integrity and public trust, or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. Special Agents have been trained as armed law enforcement first responders and are responders in the event of an active shooter or terrorist attack impacting EPA and CSB facilities. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Additionally, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk to the government." Investigative focus include: 1) fraudulent practices in awarding, performing, and paying Superfund contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of, or confidence in the Superfund program and create imminent environmental risks; 3) laboratory fraud relating to data, and false claims or erroneous laboratory results that undermine the basis for decision-making, regulatory compliance, or enforcement actions in the Superfund program; 4) violent or criminal threats directed against Superfund program employees or facilities; 5) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund

program; and 6) intrusions into and attacks against EPA's network supporting Superfund program data, as well as incidents of computer misuse and theft of intellectual property or sensitive/proprietary Superfund data. Special attention will be directed towards identifying the tactics, techniques, and procedures that are being utilized by cyber criminals to obtain Superfund program information.

Finally, the OI often makes observations or "lessons learned" for EPA's management which works on the Superfund program to reduce the Agency's vulnerability to criminal activity. The results of OI's investigations are published and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved and administrative actions are taken to prevent those involved from further participation in any Superfund program or operation.

Follow-up and Policy/Regulatory Analysis

To further promote economy, efficiency, and effectiveness, the OIG will conduct follow-up reviews of agency responsiveness to the OIG's recommendations for the Superfund program to determine if appropriate actions have been taken and intended improvements have been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions, and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act (as amended), the OIG also conducts reviews and analysis of proposed and existing policies, rules, regulations and legislation pertaining to the Superfund program to identify vulnerability to waste, fraud and abuse. These reviews also consider possible duplication, gaps or conflicts with existing authority, leading to recommendations for improvements in their structure, content and application.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$809.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, working capital fund, and benefit costs.

- (-$1.0 / -9.6 FTE) This program change is a reduction, which will focus the amount of audits, program evaluations, and investigative case work.

Statutory Authority:

Inspector General Act of 1978; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 111(k).

Inspector General Reform Act:

The following information is provided pursuant to the requirements of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is $58.0 million ($47.6 million Inspector General; $10.4 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $48.5 million ($38.9 million Inspector General; $9.6 million Superfund Transfer
- The portion of the aggregate President's Budget needed for training is $700 thousand ($609 thousand Inspector General; $91 thousand Superfund Transfer)
- The portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is $126 thousand ($110.5 thousand Inspector General; $15.5 thousand Superfund Transfer)

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2020."

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$101,299.2	$101,665.0	$89,644.0	-$12,021.0
Inland Oil Spill Programs	$122.5	$139.0	$0.0	-$139.0
Hazardous Substance Superfund	***$943.0***	***$995.0***	***$991.0***	***-$4.0***
Total Budget Authority	$102,364.7	$102,799.0	$90,635.0	-$12,164.0
Total Workyears	485.9	489.0	428.7	-60.3

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Compliance Assurance Program that allows the controlling regulatory authority to detect noncompliance. The Program also promotes compliance with the nation's environmental laws. The states and EPA use compliance monitoring tools and activities to identify whether regulated entities are in compliance with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as investigations, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment. The Program focuses on providing information and system support for monitoring compliance with Superfund-related environmental regulations and contaminated site cleanup agreements. The Agency also ensures the security and integrity of its compliance information systems. Superfund-related activities are tracked in the Agency's Integrated Compliance Information System (ICIS). Electronic tracking of its Superfund enforcement work allows EPA to better ensure that its enforcement resources are going to address the most significant concerns and facilitates transparency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will support a variety of tools and activities for states and EPA to identify the compliance status of regulated entities with environmental laws enacted by Congress.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	17,000	17,000	15,500	15,500	14,000	10,000	10,000	10,000	Inspections & Evaluations
Actual	18,000	16,000	15,400	13,500	11,800	10,600			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$56.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$52.0 / +0.3 FTE) This net program change reflects adjustments to funding associated with system support for Superfund Compliance Monitoring.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Enforcement

Criminal Enforcement
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$44,334.2	$44,995.0	$44,582.0	-$413.0
Hazardous Substance Superfund	***$7,336.3***	***$7,502.0***	***$8,198.0***	***$696.0***
Total Budget Authority	$51,670.5	$52,497.0	$52,780.0	$283.0
Total Workyears	225.3	235.9	219.6	-16.3

Program Project Description:

The Criminal Enforcement Program investigates and helps prosecute violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice. EPA's criminal enforcement agents (Special Agents) do this through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment.

Within the Criminal Enforcement Program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents. EPA's criminal enforcement attorneys provide legal and policy support for all the Program's responsibilities, including forensics and expert witness preparation, information law, and personnel law to ensure that program activities are carried out in accordance with legal requirements and agency policies. These efforts support environmental crimes prosecutions primarily by the United States Attorneys and the Department of Justice's Environmental Crimes Section. In FY 2018, the conviction rate for criminal defendants was 92 percent.[1]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to streamline its Criminal Enforcement Program and enforce environmental laws to correct noncompliance and promote cleanup of contaminated sites. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment. The Program will focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load.

[1] For additional information, please refer to: https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2018.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$232.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$464.0 / +0.8 FTE) This program change reflects a focus on the most egregious cases and provides additional support for the Agency's investigations of environmental crimes.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Environmental Justice
Program Area: Enforcement
Goal: Cooperative Federalism
Objective(s): Increase Transparency and Public Participation

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$6,436.5	$6,737.0	$2,739.0	-$3,998.0
Hazardous Substance Superfund	***$617.0***	***$758.0***	***$0.0***	***-$758.0***
Total Budget Authority	$7,053.5	$7,495.0	$2,739.0	-$4,756.0
Total Workyears	32.9	35.5	4.0	-31.5

Program Project Description:

EPA's Environmental Justice Program (EJ) fosters environmental and public health and sustainability in communities disproportionately burdened by pollution by integrating and addressing issues of EJ in our programs and policies. The Superfund portion of this program focuses on issues that affect low income and minority communities at or near Superfund sites. The EJ Program complements the Agency's community outreach and other work done under the Superfund program at affected sites. The Environmental Justice Program at EPA is led and supported by the Office of Environmental Justice.

FY 2020 Activities and Performance Plan:

Superfund resources and FTE are proposed for elimination for this program in FY 2020. EJ work impacting the Agency will be incorporated into policy work within EPA's Office of the Administrator.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$758.0 / -4.4 FTE) This change proposes to eliminate Superfund specific funding for the Environmental Justice Program. Environmental Justice work will continue in the Environmental Programs and Management appropriation.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Forensics Support
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	$12,016.5	$13,669.0	$10,883.0	-$2,786.0
Hazardous Substance Superfund	***$1,999.6***	***$1,824.0***	***$1,144.0***	***-$680.0***
Total Budget Authority	$14,016.1	$15,493.0	$12,027.0	-$3,466.0
Total Workyears	65.2	69.0	52.1	-16.9

Program Project Description:

The Forensics Support Program provides expert scientific and technical support for Superfund civil and criminal enforcement cases, as well as technical expertise for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences.[2] The NEIC maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with expertise across media. The NEIC works closely with EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation and testimony) to criminal investigations. The NEIC also works closely with EPA's Headquarters and Regional Offices to provide technical assistance, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Superfund Enforcement Program.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the NEIC will continue to streamline its forensics work and identify enhancements to our sampling and analytical methods, using existing technology. The Program will continue to focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The Forensics Support Program will coordinate its support for the Superfund program with the Agency's Office of Research and Development and Office of Land and Emergency Management. The Forensics Support Program will continue to provide expert scientific and technical support for EPA's criminal and civil enforcement efforts. In support of that effort, NEIC conducted two *kaizen* events in FY 2018 aimed at streamlining the timeline for completion of civil inspection reports and identifying efficiencies in laboratory operations. The results of these efforts will inform EPA's work in FY 2020 and beyond.

[2] *Strengthening Forensic Science in the United States: A Path Forward*, National Academy of Sciences, 2009, available at http://www.nap.edu/catalog.php?record_id=12589.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$2.0) This change to fixed and other costs is an increase due to recalculation of lab utilities.

- (-$678.0 / -4.7 FTE) This change reflects a focus on analyzing material to attribute it to individual sources or facilities and a reduction in other lab support.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Enforcement
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund	***$151,915.5***	***$150,048.0***	***$155,059.0***	***$5,011.0***
Total Budget Authority	$151,915.5	$150,048.0	$155,059.0	$5,011.0
Total Workyears	731.7	749.2	745.3	-3.9

Program Project Description:

The Superfund Enforcement Program protects communities by ensuring that responsible parties conduct cleanups, preserving federal dollars for sites where there are no viable contributing parties. EPA's Superfund Enforcement Program ensures prompt site cleanup and reuse by maximizing the participation of liable and viable parties in performing and paying for cleanups. In both the Superfund Remedial and Superfund Emergency Response and Removal programs, the Superfund Enforcement Program obtains potentially responsible parties' commitments to perform and pay for cleanups through civil judicial and administrative site actions. The Superfund Enforcement Program works closely with the Superfund program and the Department of Justice (DOJ) to combine litigation, legal, and technical skills to bring enforcement actions and address emerging issues.

The Superfund Enforcement Program:

- develops cleanup enforcement policies;
- provides guidance and tools that clarify potential environmental cleanup liability, with specific attention to the cleanup, reuse and revitalization of contaminated properties;
- ensures that responsible parties cleanup sites to reduce direct human exposure to hazardous substances, thereby providing long-term human health protections and making contaminated properties available for reuse;
- negotiates site cleanup agreements with Potentially Responsible Parties (PRPs) and, where negotiations fail, either initiates enforcement actions to require cleanup or initiates cost recovery if EPA expends Superfund appropriated dollars to remediate the sites; and
- addresses liability concerns of parties who want to clean up and reuse Superfund sites.

In 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.

Special accounts are created when funds are received as part of a settlement to fund a site cleanup. Funds received in settlements with PRPs are used to clean up the specific Superfund sites that were

the subject of the settlement agreement. Having the ability to use special accounts provides needed cleanup dollars at many sites that otherwise may not have received funding absent EPA's enforcement efforts.

In FY 2018, EPA created 37 special accounts and collected $197.3 million for response work.[3] The Agency disbursed or obligated $207.6 million from special accounts for response work (excluding reclassifications).

Furthermore, the Superfund Enforcement Program continues to improve and revitalize the Superfund program to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial use as expeditiously as possible. The Superfund Enforcement Program continues to work to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, create oversight efficiencies and promote the redevelopment and reuse of sites by encouraging PRPs to invest in reuse outcomes. In addition, the enforcement program continues to work to encourage private investment in the cleanup and reuse of sites by optimizing tools and realigning incentives to encourage third-party investment. EPA also works to ensure that required legally enforceable institutional controls and financial assurance requirements are in place at Superfund sites to ensure the long-term protectiveness of Superfund cleanup remedies.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the Agency will prioritize its efforts on the most significant sites in terms of environmental impact (particularly those that may present an immediate risk) and on increasing private party funding of cleanups. The Agency will continue its efforts to establish special accounts to facilitate cleanup. As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to the Superfund program to clean up Superfund sites.

DOJ support is statutorily mandated for settlements related to remedial action cleanups, most cost recovery settlements, and is required for all judicial enforcement matters. DOJ's support will be prioritized to negotiate and enter into consent decrees with PRPs to perform remedial actions, to pursue judicial actions to compel PRP cleanup, and to pursue judicial actions to recover monies spent in cleaning up contaminated sites.

Cost Recovery Support

In FY 2019, EPA is implementing the e-Recovery system to replace legacy systems for cost recovery support. This effort will modernize the system and assist with the Agency's burden reduction. The Agency will streamline the financial management aspects of Superfund cost recovery and the collection of related debt to the federal government. EPA's financial,

[3] In addition, in FY 2018 the Agency earned approximately $40.0 million in interest on the total special account funds invested in the Superfund Trust Fund. However, more than $104.6 million in interest was allocated to individual special accounts in FY 2018 due to work OCFO conducted to manually update the calculations required to allocate interest earned to individual special accounts from FY 2016 and FY 2017, in addition to interest earned in FY 2018.

programmatic, and legal offices will continue to maintain the accounting and billing of Superfund oversight costs attributable to responsible parties. These costs represent EPA's cost of overseeing Superfund site cleanup efforts by responsible parties as stipulated in the terms of settlement agreements. In FY 2018, the Agency collected $161.9 million in cost recoveries, of which $40.7 million were returned to the Superfund Trust Fund and $121.2 million were deposited in site-specific, interest bearing special accounts.

Performance Measure Targets:

(PM 441) Number of enforcement tools completed to address cleanup and/or long-term protection, including reuse, of contaminated sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							170	170	Tools
Actual									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$7,107.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$2,096.0 / -3.9 FTE) This program change reflects a focus on sites with significant risks and securing private party funding for cleanups and a reduction in resources for Superfund cost recovery, to be offset in part by streamlining those functions.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Federal Facilities Enforcement
Program Area: Enforcement
Goal: Rule of Law and Process
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund	***$5,810.9***	***$6,243.0***	***$6,956.0***	***$713.0***
Total Budget Authority	$5,810.9	$6,243.0	$6,956.0	$713.0
Total Workyears	30.6	34.4	37.4	3.0

Program Project Description:

EPA's Superfund Federal Facilities Enforcement Program ensures that sites where federal entities are performing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) responses and/or CERCLA sites with federal ownership are monitored and that appropriate enforcement responses are pursued. After years of service and operation, some federal facilities contain environmental contamination such as hazardous wastes, unexploded ordnance, radioactive wastes, or other toxic substances. Enforcement actions can facilitate cleanup and potential redevelopment of these sites.

Pursuant to CERCLA Section 120, EPA must enter into Interagency Agreements, also commonly referred to as Federal Facility Agreements (FFAs), with responsible federal entities to ensure protective and timely cleanup of their National Priorities List (NPL) sites. The agreements provide that EPA oversee the cleanups to ensure that they protect public health and the environment. These FFAs govern cleanups at 174 federal facility Superfund sites, which include many of the nation's largest and most complex cleanup projects.

FY 2020 Activities and Performance Plan:

Work under this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will focus its resources on the highest priority sites, particularly those that may present an imminent and/or substantial endangerment, have human exposure not yet under control or have the potential for redevelopment. EPA also will negotiate FFAs for federal facility sites on the NPL, monitor FFAs for compliance and resolve formal disputes, take enforcement actions at priority sites, and implement the Superfund Task Force recommendations[4] to expedite cleanup and redevelopment of federal facility sites. With regards to Task Force implementation, EPA has collaborated extensively with other federal agencies (OFAs) and states on Recommendations 18 and 30 regarding the development of principles to support adherence to the FFAs by all parties and guidance to encourage redevelopment at federal facilities. Recommendation 41, to enhance collaboration opportunities with OFAs, has been completed by targeting participation and focusing agendas on problem-

[4] For additional information, please refer to: https://www.epa.gov/superfund/superfund-task-force-recommendations.

solving and action-oriented approaches. EPA will continue to seek ways to improve its engagement with OFAs and states, emphasizing protective cleanups and recognizing site reuse opportunities.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$238.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$475.0 / +3.0 FTE) This net change reflects a focus on facility cleanups and redevelopment at sites.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

Homeland Security

Homeland Security: Preparedness, Response, and Recovery
Program Area: Homeland Security
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	$22,767.3	$22,918.0	$24,847.0	$1,929.0
Hazardous Substance Superfund	***$31,102.4***	***$31,648.0***	***$31,054.0***	***-$594.0***
Total Budget Authority	$53,869.7	$54,566.0	$55,901.0	$1,335.0
Total Workyears	117.3	123.3	127.1	3.8

Program Project Description:

EPA leads or supports many aspects of preparing for and responding to a nationally significant incident involving possible chemical, biological, radiological, and nuclear (CBRN) agents. The Homeland Security Preparedness, Response, and Recovery Program implements a broad range of activities for a variety of federal efforts, including: (1) national trainings, (2) participation in national interagency exercises with federal and state partners, (3) support for headquarters and regional Emergency Operations Centers, (4) support for the Agency's continuity of operations devolution site in the EPA Colorado office, (5) enhancements for national information technology systems, (6) secured warehouse space for homeland security operations and storage, and (7) laboratory analysis of environmental samples and site decontamination projects. EPA's homeland security effort develops these responsibilities through research and by maintaining a level of expertise, training, and preparedness specifically focused on threats associated with CBRN. This work is consistent with the Department of Homeland Security's (DHS) National Response Framework (NRF).

EPA assists with multi-media training and exercise development/implementation, for responders, which establish and sustain coordination with states, local communities, tribes, and other federal agencies. The Agency also provides technical assistance to other federal agencies, including DHS, the Department of Defense (DOD), Department of Justice (DOJ), and the Department of Health and Human Services with expertise in environmental characterization, decontamination, and waste disposal methods. In addition, the Program operates a national environmental laboratory for chemical warfare agents and implements EPA's National Approach to Response (NAR).

This Homeland Security Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of Agency program and regional offices, states, and tribes and is implemented with their active collaboration and involvement.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the Homeland Security Preparedness, Response, and Recovery Program will:

- Participate in trainings and exercises on CBRN preparedness and response topics with key federal response partners (e.g., DHS, DOD, and DOJ) on select interagency workgroups.

- Provide expertise on environmental characterization, decontamination, and waste disposal methods following the release of a CBRN agent.

- Maintain operational support for the Emergency Management Portal and *WebEOC* response systems.

- Continue to develop site characterization, decontamination, waste management, and clearance methods and strategies for priority chemical, biological, and radiological threats that enable remediation while reducing time and cost and promote site reoccupation.

- Continue development of sample collection protocols and analysis methods for inclusion in the Environmental Sampling & Analytical Methods (ESAM) on-line tool. The ESAM provides responders and Environmental Response Lab Networks with the single best available sample collection and analysis methods for chemical, biological, and radiological threats in environmental matrices.

- Utilize the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. ASPECT aids first responders by detecting chemical and radiological vapors, plumes, and clouds with real-time data delivery.

- Assist with site characterization during a significant CBRN incident, when EPA mobile lab capabilities are needed. EPA will maintain mobile lab capabilities with the support of EPA's Portable High-Throughput Integrated Identification Systems (PHILIS) units. PHILIS can be deployed to sites for high volume, quick turnaround analyses of chemical and biological capacity and capability. This asset provides high volume, quick turnaround analyses for chemical and biological agents.

- Maintain a highly skilled, well-trained, and well-equipped response workforce that has the capacity to respond to simultaneous incidents as well as threats involving CBRN substances. This includes training On Scene Coordinators and volunteers of the Response Support Corps (RSC) and members of Incident Management Teams (IMTs). These RSC volunteers provide critical support to headquarters and regional Emergency Operations Centers and assist with operations in the field. To ensure technical proficiency, this cadre of response personnel requires initial training and routine refresher training.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$205.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (+$161.0 / -0.2 FTE) This net program change adjusts resources for research related to analysis of chemical agents, decision support for chemical agent remediation, fate and transport of chemical, biological, or radiological (CBR) agents in the environment as well as research related to the treatment of decontamination wash water.

- (-$960.0 / +4.8 FTE) This net program change will result in prioritizing exercises and training held with federal, state, and local partners. The Agency will continue to maintain the operational status of ASPECT and PHILIS.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, and 106; Homeland Security Act of 2002.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$5,400.2	$5,405.0	$4,986.0	-$419.0
Science & Technology	$415.0	$416.0	$500.0	$84.0
Building and Facilities	$5,921.7	$6,676.0	$6,176.0	-$500.0
Hazardous Substance Superfund	***$1,325.5***	***$968.0***	***$915.0***	***-$53.0***
Total Budget Authority	$13,062.4	$13,465.0	$12,577.0	-$888.0
Total Workyears	8.0	9.6	12.2	2.6

Program Project Description:

The federal government develops and maintains Continuity of Operations (COOP) plans and procedures that provide for the continued performance of its essential functions. The Homeland Security COOP Program works with other government and non-government organizations to ensure that Mission Essential Functions (MEFs) and Primary Mission Essential Functions (PMEFs) continue to be performed during emergency situations. The Department of Homeland Security/Federal Emergency Management Agency's (FEMA) Federal Continuity Directive (FCD)-1 requires EPA to develop a continuity plan that ensures that its ability to accomplish its MEFs from an alternate site, during a national disaster, continues and that the Agency be able to do so with limited staffing and without access to resources available during normal activities.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will undertake the following:

- Conduct selected annual reviews of regional COOP plans, PMEFs and MEFs, and make updates as needed.

- Monitor the continuity programs across the Agency, focusing on testing, training, and exercises as related to general COOP awareness and procedures.

- Undergo a monthly evaluation of the headquarters COOP program, including Program Plans and Procedures, Risk Management, Budgeting, and Essential Functions. Further, FEMA performs an in-person biannual review of EPA's COOP program and provides the results to the Administrator and to the Executive Office of the President.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$53.0) This program change will result in reduced support for COOP assessment and updates.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Information Exchange / Outreach

Exchange Network
Program Area: Information Exchange / Outreach
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$17,432.4	$15,956.0	$12,127.0	-$3,829.0
Hazardous Substance Superfund	***$1,328.6***	***$1,328.0***	***$1,293.0***	***-$35.0***
Total Budget Authority	$18,761.0	$17,284.0	$13,420.0	-$3,864.0
Total Workyears	28.5	29.4	30.2	0.8

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal and territorial partners to exchange and share environmental data over the Internet. Capitalizing on advanced technology, data standards, open-source software, shared services for the E-Enterprise business strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision making.

The Central Data Exchange (CDX)[5] is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective enterprise architecture for the Agency by avoiding the creation of duplicative services. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden. Working in concert with CDX are EPA's System of Registries which are shared data services, designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes.

These shared data services catalog entities routinely referenced by EPA and EN partners, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, fosters data consistency and data quality as well as enabling data integration.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to support core functions for the EN IT systems, which is in line with the President's Management Agenda for IT modernization and data, accountability, and transparency.[6]

[5] For more information on the Central Data Exchange, please visit: http://www.epa.gov/cdx/.
[6] For additional information, please refer to: https://www.whitehouse.gov/omb/management/pma/.

The potential for burden reduction and savings from IT improvements are significant. For example, the Virtual Exchange Service (VES) used for facilitating large scale data transactions has been implemented by 58 state and tribal partners. The electronic signature service has been adopted by 58 partners to date and six more expected to join in FY 2019. EPA estimates that implementation of these services has reduced the cost overall for partners to develop, deploy, and operate these services by approximately $7.25 million. These partners would otherwise need to build and manage their own exchange services. EPA will continue to carry out the baseline support for the adoption and onboarding of VES, signature services, and federated identity service for EPA and its partners. In 2019, EPA will deploy EPA's Federal Regulation Finder, which will integrate multiple shared services into a discovery tool that will help industry and the public more easily identify potentially applicable regulations. The Federal Regulation Finder initially will integrate three catalogs: a substance catalog (Substance Registry Services), an Enterprise Vocabulary, and a catalog of federal statutes and regulations (Laws and Regulations Services) to enable a user to search for laws and regulations by substance or keyword. Further, EPA will pursue the development and roll out of a business workflow service that is built once and shared multiple times to support automation of major EPA program initiatives and other streamlining efforts as a result of EPA Lean Management System events. Building and managing a workflow service centrally reduces potential for duplicate and independent development and maintenance of solutions in the Agency.

Multiple performance efforts also use exchange services and registries (shared data services) to improve data quality in EPA, state, and tribal program data, and to reduce reporting burden on the regulated community. Beginning in FY 2019, EPA is promoting adoption of the Tribal Identification (TRIBES) shared service by tracking its use by EPA systems that collect tribal names.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$35.0) This program change is a decrease that reflects anticipated efficiencies in the Central Data Exchange Program.

Statutory Authority:

Federal Information Security Management Act (FISMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

IT/ Data Management/ Security

Information Security
Program Area: IT / Data Management / Security
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$7,016.5	$7,280.0	$13,773.0	$6,493.0
Hazardous Substance Superfund	***$745.8***	***$661.0***	***$5,082.0***	***$4,421.0***
Total Budget Authority	$7,762.3	$7,941.0	$18,855.0	$10,914.0
Total Workyears	16.0	16.6	12.8	-3.8

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Agency's Information Security Program's mission is to protect the confidentiality, availability and integrity of EPA's information assets. The information protection strategy includes, but is not limited to policy, procedure and practice management; information security awareness, training and education; governance and oversight; risk-based weakness management; operational security management; and incident detection, response and recovery.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. Cybersecurity is a serious challenge to our nation's security and economic prosperity. Effective information security requires vigilance and the ability to adapt to new challenges every day. As reported to the Department of Homeland Security (DHS), in FY 2018, EPA experienced 145 known successful attacks against its systems. EPA has identified significant gaps in its ability to detect, respond to, protect against and recover from attacks. These gaps increase the risk to compromise Agency information.

According to the draft FY 2018 Q4 *Cybersecurity Risk Management Assessment* from DHS, EPA is one of the CFO Act agencies, whose cybersecurity posture is "At Risk." In response, in FY 2020 EPA will leverage new capabilities through the Continuous Diagnostics and Mitigation (CDM) program to close existing gaps in the *Cybersecurity Risk Management Assessment* areas of identifying and alerting on the introduction of unauthorized hardware and software into the Agency's networks and systems, checking outbound traffic for unauthorized exfiltration, automated removal media prevention, and assessing systems with a Security Content Automation Protocol (SCAP) product. In addition to protecting EPA information assets, CDM will help the Agency identify and respond to federal-wide cybersecurity threats and incidents quicker and more efficiently, thereby better protecting all federal information assets.

EPA's cost to implement new and maintain existing CDM capabilities as mandated by the Office of Management and Budget is estimated to be over $10 million in FY 2020 across all appropriations. With available resources, EPA also will work to close non-CDM capability gaps essential to adequately protect agency information assets. Such efforts include the *Cybersecurity Risk Management Assessment* area of analyzing malicious email attachments, detecting and mitigating effects of insider threats and advanced persistent threats, and conducting program responsibilities, such as governance, oversight, and risk management.

Cybersecurity Risk Management Assessment metrics developed by the National Institute of Standards and Technology (NIST) and industry best practices help prioritize action to adequately protect agency information assets, and EPA's Information Security Program continues to provide the Agency visibility on vulnerabilities. While EPA's cybersecurity posture is expected to remain at risk in FY 2020, the Agency will continue to conduct risk assessments and alternatives analyses to determine which protections EPA must maintain or implement. For example, the Agency is assessing alternatives for Security Operations as a Service and cloud security options such as Cloud Access Security Brokers Services for possible implementation.

In FY 2020, the Information Security Program will continue to collect Federal Information Security Modernization Act (FISMA) metrics and evaluate related processes, tools, and personnel to continue to identify areas of weakness and opportunities for improvement. The Program will collect phishing test results and evaluate the effectiveness of awareness efforts. With these data, the Agency will identify strategies and prioritize areas to mitigate risks. The Agency will expand strategies for identifying and leveraging common controls and smartly managing system boundaries to reduce associated compliance costs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,503.0) This change to fixed and other costs is a net increase due to the recalculation of essential workforce support costs, including IT security and privacy.

- (+$1,918.0) This program change is an increase needed for mandatory cybersecurity requirements,[7] including CDM funding that will be used to close existing gaps by improving audit capabilities, ensuring accountability, and adding protections directly associated with the information. This change also supports CDM phase three, which will continue implementation in FY 2020.

[7] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$84,464.5	$83,256.0	$71,117.0	-$12,139.0
Science & Technology	$2,296.0	$3,089.0	$2,747.0	-$342.0
Hazardous Substance Superfund	***$14,126.0***	***$13,824.0***	***$13,443.0***	***-$381.0***
Total Budget Authority	$100,886.5	$100,169.0	$87,307.0	-$12,862.0
Total Workyears	412.6	439.9	456.9	17.0

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program is partially funded by the Superfund program. The Program supports human health and the environment by providing critical IT infrastructure and data management. It ensures: access to scientific, regulatory, policy, and guidance information needed by the Agency, the regulated community, and the public; analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; and rapid, secure, and efficient communication.

This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to get the information they need on demand, to understand what it means, and to share environmental data with the least cost and burden. The Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently. In the context of the Federal Information Technology Acquisition Reform Act (FITARA), EPA is examining its IT acquisition, portfolio review, and governance processes to improve service and increase cost-effectiveness.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. The goal of EPA's IT/DM services is to enhance the power of information by delivering on demand data to relevant parties. The Agency's increased investment in Technology Business Management (TBM) will further support its efforts to make sound, data-driven IT investment decisions by providing increased IT spend information, integrating this information into agency Chief Information Officer (CIO) portfolio reviews, and using this information to optimize IT services funded through the Working Capital Fund.

In FY 2020, the Agency will focus on improving customer experiences to allow EPA, its partners, and the public to acquire, generate, manage, use, and share information as a critical resource. In line with the President's Management Agenda for IT modernization and data, accountability, and transparency,[8] EPA will improve how it supports and manages the lifecycle of information and information products. In addition, the Agency will continue to modernize IT/IM infrastructure, applications and services, empower a mobile workforce using innovative and agile solutions, and support state and tribal partnerships using innovative and agile solutions.

In FY 2020, EPA will further strengthen its IT acquisition review process as part of the implementation of federal Common Baseline Controls for FITARA. FITARA controls include an established communication and engagement strategy for the CIO with the Agency's programs and regional offices to ensure that their IT plans are well designed, directly drive agency strategic objectives, and follow best practices. These controls also enable the CIO to engage closely with key IT stakeholders across EPA and to foster plans to refresh IT skills within the Agency.

In FY 2020, the following IT/DM activities will continue:

- **Data Management and Collection**: Data management and collection efforts include support for a variety of essential information management programs, including the National Records Management Program. These national activities include providing regulations, policies/procedures, coordination, and support to help fulfill EPA's statutory obligations to maintain records. Additionally, Discovery Services technology will continue to support the search/collection of agency information needed to help respond to requests for information from external stakeholders. EPA will continue to coordinate and oversee the Agency's Information Collection Request development and approval process, helping to ensure that data collections are approved by the Office of Management and Budget as required by the Paperwork Reduction Act.

- **Mission Software and Digital Services Capabilities:** The FY 2020 budget includes a funding request to enhance the Agency's software development and architecture capability, including application development and deployment approaches and technical platforms. This program continues EPA's adoption of transformative technologies and practices, including cloud computing, agile development methodologies, and shared software development services.

- **Geospatial:** In FY 2020, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications and services, the Agency can integrate and interpret multiple data sets and information sources to support environmental decisions. GeoPlatform will continue to publish internal and public mapping tools, which will better inform the public about EPA's programs to protect the environment and public health. As of December 2018, EPA has over 4,400 GeoPlatform mapping applications created or modified for public and internal use using the GeoPlatform. The number of GeoPlatform users has increased from nearly two thousand users in early calendar year 2015 to over eight thousand users at the end of calendar year 2018.

[8] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- **Information Access and Analysis**: In FY 2020, EPA will focus on providing core support to agency infrastructure and tools that will drive better environmental decision making with data from across the Agency. EPA will provide partnership support to other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze and visualize data. In FY 2020, EPA will continue to support Envirofacts and data visualization applications, which receives over 40 million annual application interface requests.

- **Information Technology and Infrastructure**: EPA will adjust the schedule for replacement or upgrades to align with resources and will continue to maintain and provide: desktop computing equipment, network connectivity, e-mail and collaboration tools, hosting services, remote access, telephone services, web and network services, and other IT-related equipment. In FY 2020, the Agency will continue efforts to consolidate EPA's data centers and computer rooms and to optimize operations within EPA's remaining data centers.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$93.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$474.0 / -4.0 FTE) This net program change reflects a reduction in support for enterprise IT systems/tools and emergency response.

Statutory Authority:

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

Legal / Science / Regulatory / Economic Review

Alternative Dispute Resolution
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$1,155.7	$1,150.0	$0.0	-$1,150.0
Hazardous Substance Superfund	***$744.3***	***$748.0***	***$0.0***	***-$748.0***
Total Budget Authority	$1,900.0	$1,898.0	$0.0	-$1,898.0
Total Workyears	8.0	8.4	0.0	-8.4

Program Project Description:

EPA's General Counsel and Regional Counsel Offices provide environmental Alternative Dispute Resolution (ADR) services and workplace conflict prevention. EPA utilizes ADR as a method for preventing or resolving conflicts prior to engaging in formal litigation. ADR includes the provision of legal counsel, facilitation, mediation and consensus building advice and support. This program oversees a strategically-sourced contract for these services that provides mediation, facilitation, public involvement, training, and organizational development support to all headquarters and regional programs.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020.

Performance Measures Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (–$748.0 / –2.5 FTE) This program change eliminates the centralization of the conflict prevention and ADR program. Programs across the Agency may pursue ADR support services and training individually.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Legal Advice: Environmental Program
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Rule of Law and Process
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$51,344.3	$50,886.0	$48,123.0	-$2,763.0
Hazardous Substance Superfund	***$914.1***	***$505.0***	***$579.0***	***$74.0***
Total Budget Authority	$52,258.4	$51,391.0	$48,702.0	-$2,689.0
Total Workyears	266.4	282.0	242.8	-39.2

Total workyears in FY 2020 include 5.5 FTE funded by TSCA fees.

Program Project Description:

This program provides legal representation, legal counseling, and legal support for environmental activities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Funding supports legal advice needed in the Superfund program's extensive work with Potentially Responsible Parties (PRPs) and other entities and landowners. For example, this program provides legal analysis and advice to help inform EPA's decisions regarding the assessment of certain contaminants at a given Superfund site under federal law, and a party's potential liability under CERCLA.

This program supports EPA's Superfund work at thousands of sites spanning the wide array of Superfund legal issues regarding removal and remedial cleanups costing billions of dollars. This program is essential to providing the high-quality legal work to ensure that EPA's decisions are defensible and upheld by the courts against judicial challenges.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the Program will prioritize its legal support capabilities to focus support on high profile and critical CERCLA cases for the Superfund program. The Program will work within available resources to support CERCLA activities, to include analyzing defensibility of agency actions, drafting significant portions of agency actions, and participating in litigation in defense of agency actions. Legal review is critical to the Superfund program at many points throughout the cleanup process. For example, in support of Goal 1 of EPA's Strategic Plan (Deliver real results to provide Americans with clean air, land, and water) this program provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List.

The following examples illustrate this program's important role in implementing the Agency's core priorities and mission.

- Participating in and providing legal counsel on the Administrator's Superfund Initiative Task Force including the development of the Task Force Report.
- Providing critical legal support and advice to the Superfund Remedial, Removal, and Enforcement programs on complex, high visibility, expensive Superfund cleanups, such as San Jacinto Waste Pits.

Performance Measure Targets:

Work under this program supports performance results in the Legal Advice: Environmental Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$14.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$60.0 / -0.2 FTE) This net program change is a decrease in FTE for legal advice and counseling for the Agency's Superfund activities and a rebalancing of resources.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Operations and Administration

Acquisition Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$27,441.3	$30,210.0	$28,032.0	-$2,178.0
Leaking Underground Storage Tanks	$6.5	$152.0	$138.0	-$14.0
Hazardous Substance Superfund	***$20,477.3***	***$21,183.0***	***$21,541.0***	***$358.0***
Total Budget Authority	$47,925.1	$51,545.0	$49,711.0	-$1,834.0
Total Workyears	263.2	275.1	259.5	-15.6

Program Project Description:

Superfund resources in the Acquisition Management Program support the Agency's contracts activities for Superfund Emergency Response and Removal, Remedial, Emergency Preparedness, and Federal Facilities Response programs. These resources enable the Agency to assess and cleanup Superfund sites, as well as prepare and respond to natural disasters and terrorist incidents.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Federal Procurement Policy (OFPP). EPA is evaluating options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system. The Agency is focusing on a solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Once available, the Agency will plan to migrate to the new contract writing system with a Fit Gap analysis and a "soft" pilot of the system, and will begin data migration. At the same time, the Agency will begin to decommission the legacy EAS system.

In FY 2020, EPA will continue to implement Best-in-Class (BIC) solutions to identify pre-vetted, government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[9] Through BIC solutions, EPA will leverage acquisition experts to optimize spending within the government-wide category management framework and increase the transactional data available for agency level analysis of buying behaviors. In FY 2020, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals.

[9] For additional information, please refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP can transform the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. The Agency has established a goal of obtaining at least five percent savings for all strategically sourced categories of goods and services. Since the SSP's inception at the beginning of FY 2013 through FY 2018, EPA has saved approximately $14.5 million from strategic sourcing initiatives focused on VoIP, laboratory supplies, print, cellular services, shipping, office supplies, equipment maintenance, and software. In FY 2020, EPA anticipates approximately $7.5 million in savings.

In FY 2020, EPA will continue to focus on implementing the Financial Information Technology Acquisition Reform Act (FITARA) by:

- Avoiding vendor lock-in by letting contracts with multiple vendors or confining the scope of the contract to a limited task; and
- Developing acquisition vehicles that support the Agency in FITARA implementation.

In FY 2020, EPA also will continue supporting the Superfund Remedial Acquisition Framework (RAF), which modifies EPA's existing approach for acquiring services to support the Superfund Remedial Program. The RAF consists of three suites of multiple award, indefinite quantity contracts: Design and Engineering Services, Remediation Environmental Services, and Environmental Services and Operations, as the primary means for acquiring remedial services. In addition to providing a variety of acquisition tools for Superfund remedial services, RAF aligns with government-wide directives, maximizes competition to realize cost efficiency, strengthens the Agency's contract management processes, and helps to improve efficiency across the Superfund Remedial Program. The Environmental Services and Operations suite of Remedial Action Framework contracts was awarded on August 1, 2018. This suite was awarded as a total small business set-aside.

Performance Measure Targets:

Work under this program supports performance results in the Acquisition Management Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$676.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$318.0 / -0.7 FTE) This program change streamlines contractor support for: helpdesk services for the EPA's Acquisition System; the closeout of contracts; and the Defense Contract Management Agency for Audit Services and the Virtual Acquisition Office (a source for up-to-date government acquisition news, research, and analysis). It also eliminates funding for Contracts Management Assessment Program Reviews which enable

EPA to self-identify and remedy internal weaknesses, and reduces the Agency's training for its acquisition community. In FY 2020, EPA will utilize available program resources to prepare to transition from its commercial off-the-shelf acquisition system to an approved federal shared service provider for a new contract writing system.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$70,053.3	$72,884.0	$71,100.0	-$1,784.0
Leaking Underground Storage Tanks	$390.3	$387.0	$434.0	$47.0
Hazardous Substance Superfund	***$20,503.7***	***$22,018.0***	***$21,340.0***	***-$678.0***
Total Budget Authority	$90,947.3	$95,289.0	$92,874.0	-$2,415.0
Total Workyears	430.9	448.8	433.3	-15.5

Total workyears in FY 2020 include 1.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.

Program Project Description:

EPA's financial management community maintains a strong partnership with the Superfund program. EPA's Office of the Chief Financial Officer (OCFO) supports this continuing partnership by providing a full array of financial management support services and systems necessary to pay Superfund bills and recoup cleanup and oversight costs for the Trust Fund. EPA's OCFO manages Superfund activities under the Central Planning, Budgeting and Finance Program in support of integrated planning, budget formulation and execution, financial management, performance and accountability processes, financial cost recovery, and the systems to ensure effective stewardship of Superfund resources. This program supports the requirements of the Digital Accountability and Transparency (DATA) Act of 2014 and the Federal Information Technology Acquisition Reform Act (FITARA) of 2015.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will continue to provide direction and support for the Superfund program in financial management activities; implementing cost accounting requirements; financial payment and support services; and Superfund-specific fiscal and accounting services. EPA will maintain key planning, budgeting, and financial management activities. EPA will sustain basic operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System and related financial reporting systems.

EPA will continue to modernize and streamline business processes and operations to promote transparency and efficiency. The Program will apply Lean principles and leverage input from customer-focused councils, advisory groups and technical workgroups to continue improving as a

high-performance organization. EPA will standardize and streamline internal business processes and use additional federal and/or internal shared services when supported by business case analysis. Since 2014, Department of Interior's (DOI) Interior Business Center (IBC) serves as EPA's payroll and HR shared service provider. In FY 2020 or FY 2021, DOI will transition to the New Pay System under GSA's Office of Shared Solutions and Performance Improvement. To prepare for this transition, DOI must decouple its Federal Personnel and Payroll System to manage payroll separately. The Agency may incur costs to facilitate this transition.

In FY 2020, the Program will continue to focus on core responsibilities in the areas of strategic planning and budget preparation; financial reporting; transaction processing and Superfund Cost Recovery. The Program will continue to implement FITARA requirements in accordance with EPA's Implementation Plan.[10] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that IT needs are properly planned and resourced in accordance with FITARA.

During FY 2020, EPA will focus on the Financial Acquisition Modernization Effort (FAME) project. The goal of FAME is to deliver a streamlined approach for the end-to-end delivery of financial transactions for contracts and grants by taking advantage of federal shared services. Among other benefits, EPA seeks to adopt accepted and standardized business processes that will deliver greater streamlining and efficiency and achieve improved financial and programmatic oversight. Equally important is the new system's ability to meet increased transparency standards, such as those prescribed in the DATA ACT, as well as increased compliance and reporting standards.

EPA will continue to follow OMB Circular A-123 guidance, conduct internal program reviews, and use the results and recommendations from the Office of Inspector General (OIG) to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Agency will collect key operational statistics for its financial management program to further evaluate its operations and for management decision making. For example, in FY 2018, EPA tracked the timeliness of employees submitting travel vouchers. Through monthly review of performance, strategies were identified and implemented that resulted in improving compliance from 60 percent to 80 percent.

EPA is dedicated to reducing fraud, waste, and abuse and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002, EPA has reviewed, sampled, and monitored its Superfund contract payments to protect against erroneous payments. The Agency's payment streams are consistently well under the government-wide threshold of 1.5 percent and $10 million of estimated improper payments. EPA conducts risk assessments in its principal payment streams, including grants, contracts, commodities, payroll, travel, and purchase cards. When overpayments are identified, they are promptly recovered. EPA has expanded its risk assessments, performed statistical sampling, set appropriate reduction/recovery targets, and implemented corrective action plans. The Agency conducts these activities to reduce the potential for improper payments and ensure compliance with the Improper Payments Information Act, as amended by the Improper Payments Elimination and Recovery Act

[10] For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

of 2010 (P.L. 111-204) and the Improper Payments Elimination and Recovery Act of 2012 (P.L. 112-248).

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,402.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$2,080.0 / +0.7 FTE) This net program change reflects streamlining and efficiencies in operational costs for travel and other workforce expenses, a rebalancing of resources across the Superfund account, and the retirement of legacy financial feeder systems.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$292,535.1	$308,701.0	$308,335.0	-$366.0
Science & Technology	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Building and Facilities	$34,605.1	$27,791.0	$33,377.0	$5,586.0
Leaking Underground Storage Tanks	$1,056.6	$813.0	$773.0	-$40.0
Inland Oil Spill Programs	$753.8	$584.0	$665.0	$81.0
Hazardous Substance Superfund	***$76,061.2***	***$75,253.0***	***$73,540.0***	***-$1,713.0***
Total Budget Authority	$475,113.4	$481,481.0	$483,964.0	$2,483.0
Total Workyears	321.8	327.6	308.0	-19.6

Program Project Description:

Superfund resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. This program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, printing, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to invest to reconfigure EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[11] the *Federal Assets Sale and Transfer Act of 2016*.

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide. This has the potential to provide a cumulative annual rent avoidance of nearly $28 million across all appropriations. These savings help offset EPA's escalating rent and security costs. Planned consolidations in FY 2020 will allow EPA to release an expected 146,477 square feet of space. For FY 2020, the Agency is requesting $45.37 million for rent, $2.29 million for utilities, and $6.82 million for security in the Superfund appropriation.

[11] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

At the requested resource levels, EPA will continue to manage lease agreements with GSA and other private landlords, maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, On-Scene Coordinators), and track capital equipment of $25 thousand or more. In addition, the Agency will retire EPA's Personal Access and Security System (EPASS) Program and shift to GSA's Managed Service Office, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a shared services solution which is in line with OMB's Federal IT Shared Services Strategy and the President's Management Agenda.[12]

Performance Measure Targets:

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

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$86.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (+$7,922.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.

- (-$9,721.0 / -4.0 FTE) This net program change reflects:
    - an increase for moves and space reconfiguration to assist the Agency in reducing its footprint;
    - a decrease for core operations and maintenance costs at EPA-owned facilities and laboratories; and
    - a decrease in programs associated with environmental management systems, comprehensive facility energy audits, re-commissioning, and sustainable building design.

Statutory Authority:

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

[12] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

Financial Assistance Grants / IAG Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$24,462.0	$24,729.0	$20,202.0	-$4,527.0
Hazardous Substance Superfund	***$2,498.6***	***$2,607.0***	***$2,655.0***	***$48.0***
Total Budget Authority	$26,960.6	$27,336.0	$22,857.0	-$4,479.0
Total Workyears	139.3	142.8	115.7	-27.1

Program Project Description:

Superfund resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs, and suspension and debarment activities. Resources in this program ensure that EPA's management of grants and IAs meets the highest fiduciary standards, that grant and IA funding produces measurable results for environmental programs, and that the suspension and debarment program effectively protects the government's business interest. These objectives are critically important for the Superfund program, as a substantial portion of this program is implemented through IAs with the U.S. Army Corps of Engineers and the U. S. Coast Guard.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In accordance with the overarching 2016-2020 EPA Grants Management Plan (GMP), and EPA's Strategic Plan, EPA will continue to implement activities to achieve efficiencies while enhancing quality and accountability. In FY 2020, EPA will continue investment in modernizing grant and IA IT systems in support of the President's Management Agenda.[13]

In FY 2019, EPA is preparing to deploy *GrantSolutions* software, an OMB-selected grants business leader for end-to-end grants management services provided by the Department of Health and Human Services. *GrantSolutions* will support the full 14 stages of the grants management lifecycle. FY 2020 work will center on streamlining business processing in the new system, and leveraging the full complement of system capabilities, including enhanced reporting and dashboards. For IAs, EPA will maintain and operate an integrated business solution using EPA's Interagency Agreement Payment Tracking System (IA PTS) IA Module, which will be deployed in FY 2019. Benefits of this modernization include:

[13] For more information, please visit: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- Eliminating reliance on paper for records and improving records management. For Grants, EPA will utilize the records management solution provided by the Federal Shared Service – *GrantSolutions*. For IAs, EPA will evaluate options to integrate IA PTS with the Agency's internal electronic records management tool using Documentum technology.

- Strengthening decision making with improved and standardized reporting capabilities. For Grants, EPA will leverage common reporting tools and other capabilities provided by *GrantSolutions* Enterprise Reporting System. For IAs, EPA will consolidate technology and capabilities to leverage the Agency's existing financial reporting system.

In addition to IT-related investments, the GMP focuses on reducing the administrative burden on EPA and grants recipients, and on improving grants management procedures. In FY 2020, the Agency will continue to: 1) fully implement the streamlining reforms in OMB's Uniform Grants Guidance; 2) streamline EPA's grants management policies through utilization of a new comprehensive framework to guide policy development, implementation, compliance, and review; 3) use EPA's Lean Management System to refine grants management processes; and 4) move to a risk-based method of pre- and post-award monitoring for grants to more effectively ensure compliance and also reduce burden.

EPA is a recognized leader in suspension and debarment. The Agency will continue to make use of discretionary debarments and suspensions as well as statutory debarments under the Clean Air Act and Clean Water Act to protect the government's business interests. In FY 2020, EPA will focus suspension and debarment activity to the most egregious violations. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and non-procurement awards (for example: grants, cooperative agreements, loans, and loan guarantees). A number of recent federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs in order to protect the public's interest and the integrity of federal programs.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$89.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$41.0 / +0.5 FTE) This net program change reflects expected efficiencies in the processing of grant and IA awards, lower requested grant funding levels throughout the Agency, and a review of unliquidated obligations. EPA will target funds to core grant and IA activities.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Human Resources Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$43,220.4	$44,227.0	$41,635.0	-$2,592.0
Hazardous Substance Superfund	***$6,279.4***	***$7,044.0***	***$5,444.0***	***-$1,600.0***
Total Budget Authority	$49,499.8	$51,271.0	$47,079.0	-$4,192.0
Total Workyears	217.7	230.9	223.8	-7.1

Program Project Description:

Superfund resources for the Human Resources (HR) Management Program support human capital (HC) activities throughout EPA. As requirements and initiatives change, EPA continually evaluates and improves the Superfund program's human resource functions in recruitment, hiring, and workforce development to help the Agency achieve its mission and maximize employee productivity and job satisfaction. The Agency continues to implement its policy agenda, which began in FY 2018 and guides progress in new and updated HR policies. EPA is on schedule in meeting HR policy agenda milestones. In the first quarter of FY 2019, the Agency deployed *FedTalent* as a Shared Service to manage employee training and development agencywide.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR enterprise risk management are focused on sustaining the workforce, retaining critical expertise, and capturing institutional knowledge. The Agency is developing and deploying management tools to assist EPA in ensuring the right staff with the appropriate skills are placed in the most suitable positions. These tools also will be valuable as an increasing percentage of the workforce becomes retirement eligible in the next five years, which is estimated to be greater than 40 percent. EPA will continue to support efforts that increase the quality of core operations, improve productivity, and achieve cost savings in mission support functions including HC management.

In FY 2020, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate *FedTalent*, a talent management system provided through the Department of Interior (DOI)'s Interior Business Center (IBC), which was deployed in FY 2019. *FedTalent* serves as a valuable tool that assists with developing, delivering, and tracking high-impact training. EPA will continue to migrate and consolidate training data from more than fifteen disparate training repositories to ensure *FedTalent* is a one-stop-shop for all

training needs. The Agency is planning to procure and deploy two additional *FedTalent* modules in FY 2020: the performance management module and the competency assessment module.

In FY 2020, EPA will continue to maintain and operate two other recent workforce planning tools. The Workforce Demographics Dashboard, deployed in FY 2018, provides data visualizations and easy-to-understand information about the current workforce and succession planning and management. It affords managers a strategic view of retirement eligibility, diversity information, occupational series, and grade levels, as well as the ability to drill down and access data at lower organizational levels. The dashboard assists EPA with succession planning by helping anticipate workforce gaps due to anticipated retirements.

The Talent Enterprise Diagnostics (TED) tool, which EPA will fully implement in FY 2019, advances human capital priorities by enhancing EPA's ability to make strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management process to identify potential competency gaps across the Agency and to increase management's understanding of where needed skill sets reside within EPA.

This program also supports the transition from DOI's IBC payroll manager to GSA's New Pay System. The Agency may incur costs to facilitate this transition.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$298.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$1,297.0 / -5.1 FTE) This program change is a decrease that reflects a focus on core human capital activities (e.g. deliver employee services; streamline HR processes; and strengthen performance management); modifies schedules for enhancements and/ or maintenance of EPA's HR IT systems and EPA's University portal that provides online training and professional development; and reduces centrally-provided, non-mandatory training.

- (-$5.0) This program change is a decrease due to recalculation of sign language support costs.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities
Program Area: Research: Sustainable Communities
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	$131,757.3	$134,327.0	$53,631.0	-$80,696.0
Leaking Underground Storage Tanks	$311.3	$320.0	$424.0	$104.0
Inland Oil Spill Programs	$695.6	$664.0	$511.0	-$153.0
Hazardous Substance Superfund	***$11,023.3***	***$11,463.0***	***$10,977.0***	***-$486.0***
Total Budget Authority	$143,787.5	$146,774.0	$65,543.0	-$81,231.0
Total Workyears	439.1	440.9	294.1	-146.8

Program Project Description:

This area of EPA's Sustainable and Healthy Communities (SHC) Research Program responds directly to the Superfund law requirements for a comprehensive and coordinated federal "program of research, evaluation, testing, development, and demonstration of alternative or innovative treatment technologies…which may be utilized in response actions to achieve more permanent protection of human health and welfare and the environment."[14]

SHC's research under the Superfund appropriation provides federal, regional, and community decision-makers with: (1) engineering tools, methods, and information to assess current conditions at Superfund sites; (2) decision support tools to evaluate the implications of alternative remediation approaches and technologies, and reuse of sites; (3) the latest science to support policy development and implementation; and (4) rapid access to technical support through EPA's Superfund Technical Support Centers.

The SHC Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of agency program and regional offices, states and tribes and is implemented with their active collaboration and involvement.

Recent accomplishments of the SHC Program include:

- **Development of a Technical Support Team and Tools:** In response to recommendation Number 10 of the Superfund Task Force Report of July 2017,[15] to inform Remedial Project Managers regarding available resources to assist with best management practice (BMP)

[14] 42 U.S.C. § 9660(b).
[15] For the report, see: https://www.epa.gov/sites/production/files/2017-07/documents/superfund_task_force_report.pdf.

applications, including scoping and targeted technical reviews. Specific accomplishments include:

1. Finalized online catalog of in-house resources using TechHub SharePoint site.
2. Developed analytical and reporting capabilities to evaluate, document, and disseminate information on pilot studies and other demonstrations of innovative tools and technologies.
3. Increased awareness of and expand the existing ORD Technical Support Centers (TSC) SharePoint site for requesting and tracking technical assistance requests for ORD TSCs and Superfund and Technology Liaisons.

- **Pre-remedy Baseline Characterization of the Ottawa River Using Physical, Biological, and Chemical Lines of Evidence (Report):**[16] Building a weight-of-evidence framework allows EPA to ensure remedies are effective and reduce the need for future work at a Superfund site. The Great Lakes National Program Office selected environmental dredging as the remedy of choice for remediation and cleanup of the Ottawa River (near Toledo, Ohio) where the sediments are contaminated with polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and lead.[17] EPA researchers implemented a comprehensive sustained research program (2009-2015) to evaluate and optimize the data that can be used in a weight-of-evidence framework to assess sediment remedies. This report summarizes the Phase 1 work and additional data reports will follow for subsequent phases.

- **Long-term Performance of Permeable Reactive Barriers for Treating Contaminated Ground Water (Report):**[18] To use cleanup resources efficiently, EPA is developing research that builds the Agency's understanding of remediation effectiveness and reduces the need to revisit Superfund sites. This report is a key component for developing this capability. It provides a review of the long-term performance of the East Helena Permeable Reactive Barrier (PRB) for the treatment of arsenic in ground water and reviews contaminant behavior at this PRB using data collected over 10 years. The results of this study are highly significant because they represent the longest available performance record of a PRB for treating arsenic in ground water. EPA will produce a fact sheet summary in FY 2019.

- **Superfund Technical Support Center for Engineering and Groundwater:** EPA's Engineering Technical Support Center (ETSC) services both National Priorities List Superfund and Resource Conservation and Recovery Act (RCRA) sites and prepares Engineering Impact Papers on six critical topics of broad application to site remediation across the United States. The ETSC typically responds to more than 300 requests each fiscal year.[19] The Ground Water Technical Support Center (GWTSC) consists of a group of scientists and engineers with broad expertise who provide help with subsurface contamination, contaminant fluxes from groundwater to other media, and ecosystem

[16] *Pre-remedy Baseline Characterization of the Ottawa River Using Physical, Biological, and Chemical Lines of Evidence*. (EPA/600/R-17/355) September 2017.
[17] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=342250.
[18] *Field Application of a Permeable Reactive Barrier for Treatment of Arsenic in Ground Water* (EPA/600/R-08/093) September 2008
[19] For more information, please see: https://www.epa.gov/superfund/superfund-technical-support-and-resource-centers.

restoration issues. The GWTSC responds to about 100 requests for assistance each fiscal year.[20]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3 Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. EPA research personnel and associated support staff will analyze existing research data on vapor intrusion, contaminated groundwater and sediments, and innovative technologies for site characterization and remediation; and publish scientific journal articles to disseminate findings associated with the data.

Research Planning: EPA's Board of Scientific Counselors (BOSC) evaluates research dimensions, performance and provides feedback to the Agency for the SHC Program. The SHC Program, BOSC, and Science Advisory Board will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising EPA on developing its strategic research direction and StRAPs for FY 2019-2022.

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA's state engagement program is designed to inform states about EPA's research programs and their role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

Work under this program supports performance results in the Sustainable and Healthy Communities Program under the Science and Technology appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$129.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$615.0 / +9.6 FTE) This program change streamlines the Agency's scientific and engineering expertise provided to address environmental problems via the three Technical Support Centers.

[20] For more information, please see: https://www.epa.gov/water-research/ground-water-technical-support-center-gwtsc.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5 App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Research: Chemical Safety and Sustainability

Human Health Risk Assessment

Program Area: Research: Chemical Safety and Sustainability
Goal: Rule of Law and Process
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	$33,568.7	$36,523.0	$22,689.0	-$13,834.0
Hazardous Substance Superfund	***$2,822.9***	***$2,824.0***	***$5,338.0***	***$2,514.0***
Total Budget Authority	$36,391.6	$39,347.0	$28,027.0	-$11,320.0
Total Workyears	152.8	150.2	111.6	-38.6

Program Project Description:

EPA's Human Health Risk Assessment (HHRA) Research Program supports the risk assessment needs of the Agency's Superfund program and regional risk assessors. With funding from Superfund, the HHRA Program provides Provisional Peer-Reviewed Toxicity Values (PPRTVs) and rapid risk assessments to respond to emergent scenarios, and technical support on the application of human health and ecological risk assessment practices at hazardous waste sites for Superfund. These assessment tools and activities support risk-based management decisions at contaminated Superfund and hazardous waste sites.

The HHRA Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement.

HHRA supports the Agency's mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals of concern to the Superfund program and responding to technical requests on topics relevant to human health or ecological risk assessment at hazardous waste sites. Scientists in the HHRA Program synthesize available scientific information on the potential health and environmental impacts of exposures to individual chemicals and chemical mixtures in the environment to assist in the Agency's chemical safety work. PPRTVs are an important source of toxicity information and toxicity values to ensure measurable improvements in environmental and human health in communities near Superfund sites.

Priorities for PPRTV development are based on the needs of the Agency's Land and Emergency Management Program and are evaluated annually. Active areas of research in the HHRA Program include applying new data streams, read-across approaches and computational tools, enhancement of the supporting data/knowledge bases, and efficiency of derivation for PPRTV values. Lessons learned from this research are leveraged and applied to other assessments, including in support of Toxic Substances Control Act implementation.

There are over 1,300 Superfund sites on the National Priorities List (NPL).[21] Communities near Superfund sites or in emergency situations are faced with an urgent need for coordinated assistance to assess and address issues of environmental contamination. In addition, these communities are being presented with new sensing and monitoring information that is difficult to interpret and apply to decision making. The HHRA Program develops approaches to respond to these emerging, often crisis-level, environmental contamination issues, with scientific information that supports quick action, decisions and effective solutions. The HHRA Program anticipates developing new assessment approaches to enhance rapid response and screening capabilities, and to augment toxicity value derivation procedures for health assessments.

Recent Accomplishments in the HHRA Research Program include:

- Completed six PPRTV documents[22] based on needs and priorities of EPA's Superfund program, including PPRTV Assessment for Technical Toxaphene, Weathered Toxaphene, and Toxaphene Congeners.

- Fielded more than 25 requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center (STSC) and Ecological Risk Assessment Support Center (ERASC).

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan.* The HHRA Program's work in FY 2020 will focus explicitly on efforts integral to achieving the Agency's priorities and informing EPA's implementation of key environmental regulations. Examples of this work include:

- **PPRTV Assessments:** Provide at least six additional PPRTV assessments of variable scale as prioritized by the Land and Emergency Management Program.

- **Portfolio of Chemical Evaluation Products:** Complement the PPRTVs by providing additional fit-for-purpose assessment products for priority chemicals, such as for up to five perfluorinated compounds and lead as prioritized by the Land and Emergency Management Program.

- **Linking Databases and Management Tools:** Continue to collaborate with the Chemical Safety for Sustainability (CSS) Research Program to link the architecture of assessment databases and literature management tools, including *Health and Environmental Research Online* (HERO), with the RapidTox Dashboard being developed in CSS. A case study application developed for enhancing emergency response will be delivered in FY 2020.

- **Rapid Risk Evaluations:** Continue essential technical assistance across EPA to provide rapid risk evaluations and technical support. This will combine problem formulation and

[21] For more information, please refer to: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.
[22] Provisional Peer-Reviewed Toxicity Values for Toxaphene: https://cfpub.epa.gov/ncea/pprtv/recordisplay.cfm?deid=342137.

tools with hazard information for evaluating chemical specific exposures at Superfund and contaminated sites, and by evaluating case-specific information related to urgent situations.

Research Planning: EPA's Board of Scientific Counselors (BOSC) will evaluate this program's performance and provide feedback. The BOSC will meet regularly to seek input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on developing its strategic research direction and Strategic Research Action Plans for FY 2019-2022.

EPA collaborates with several science agencies and the research community to assess our research performance such as the National Institutes of Health, the National Science Foundation, the Department of Energy, and the Department of Agriculture. The Agency also will work with the White House's Office of Science and Technology Policy. EPA's state engagement program is designed to inform states about EPA's research programs and their role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, the Association of State and Territorial Health Officials, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials

Performance Measure Targets:

Work under this program supports performance results in the Human Health Risk Assessment Program under the Science and Technology appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$74.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$68.0) This program change reduces support for Superfund related research within the area of human health risk assessment.

- (+$2,508.0 / +15.2 FTE) This rebalances resources from the Science and Technology appropriation to the Superfund appropriation for work related to IRIS Assessments.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund Cleanup

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund	***$200,491.4***	***$189,917.0***	***$168,370.0***	***-$21,547.0***
Total Budget Authority	$200,491.4	$189,917.0	$168,370.0	-$21,547.0
Total Workyears	302.5	231.0	244.7	13.7

Program Project Description:

The Emergency Response and Removal Program is a key part of the foundation of federal emergency response to releases of hazardous substances, pollutants or contaminants and is essential to managing the associated risks. In the case of a national emergency, EPA is charged with preventing, limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.[23] Further, this program is responsible for the Agency's only Primary Mission Essential Function.

Over the last 10 years (FY 2009 – FY 2018), EPA completed or oversaw over 3,427 Superfund (SF) removal actions across the country. SF Removal sites can be found in remote rural areas as well as large urban settings. Approximately 11 million people live within three miles of 221 SF Removal sites where EPA completed a removal action in FY 2016 – equal to about 3 percent of the total U.S. population.[24] SF Removal cleanups vary in complexity and contain a wide variety of contaminants including mercury, lead, and asbestos.[25]

The Program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the Agency's effort to ensure national safety and security for chemical and oil responses. EPA trains, equips, and deploys resources to manage, contain, and remove contaminants. These substances, until contained or removed, have the potential to significantly damage property, endanger public health, and have critical environmental impact on communities.

Agency On-Scene Coordinators (OSCs) make up the core of this program. These trained and equipped EPA personnel respond to, assess, mitigate, and cleanup up environmental releases

[23] For additional information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.
[24] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes (1) site information as of the end of FY 2016 and (2) census data from the 2011-2015 American Community Survey.
[25] Data from U.S. EPA's Superfund Enterprise Management System (SEMS).

regardless of the cause. States, local, and tribal communities rely upon the OSCs' expertise and support to deal with environmental emergencies that are beyond their capabilities and resources. For example, in 2017 and 2018, EPA deployed its National Incident Management Assistance Team (N-IMAT) to help with the long-term strategic planning and response efforts that occurred for Hurricanes Harvey, Irma, Maria, and the California Wildfires. For Hurricane Harvey, N-IMAT staff were responsible for working with the Texas Immediate Disaster Case Management Program, developing health and safety plans for the cities of Houston and Corpus Christi. For Hurricanes Irma and Maria, N-IMAT staff helped with long-term planning and response efforts that are still ongoing in Puerto Rico and other parts of the Caribbean.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Superfund Removal Program will:

- Respond to, and provide technical assistance for, emergency responses, removal assessments, and limited time critical response actions (non-emergency responses).

- Conduct and participate in selected multi-media training and exercises for emergency responders. These events ensure readiness by focusing on necessary coordination and consistency across the Agency, enhance specialized technical skills and expertise, and strengthen partnerships with state, local, tribal, and other federal responders.

- Support the Environmental Response Team (ERT), which provides nationwide assistance and consultation for emergency response actions, including unusual or complex incidents. In such cases, the ERT supplies the OSC, or lead responder, with special equipment and technical or logistical assistance.

- Continue to deploy the N-IMAT to set up organizational systems that help with the long-term strategic planning and response efforts.

Performance Measure Targets:

(PM 137) Number of Superfund removals completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target			275	275	275	175	175	141	Removals
Actual			278	226	255	242			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,047.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefits costs.

- (-$23,594.0 / +13.7 FTE) EPA will prioritize its resources on sites which pose an immediate threat to human health and the environment.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 104, 105, 106.

Superfund: EPA Emergency Preparedness
Program Area: Superfund Cleanup
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund	***$7,744.0***	***$7,636.0***	***$7,396.0***	***-$240.0***
Total Budget Authority	$7,744.0	$7,636.0	$7,396.0	-$240.0
Total Workyears	30.7	33.8	37.4	3.6

Program Project Description:

The Superfund Emergency Preparedness Program provides for EPA's engagement on the National Response Team (NRT) and Regional Response Teams (RRT) where it ensures federal agencies are prepared to respond to national incidents, threats, and major environmental emergencies. EPA implements the Emergency Preparedness Program in coordination with the Department of Homeland Security and other federal agencies to deliver federal hazard assistance to state, local, and tribal governments.

The Agency carries out its responsibility under multiple statutory authorities as well as the National Response Framework (NRF), which provides the comprehensive federal structure for managing national emergencies. EPA is the designated lead for the NRF's Oil and Hazardous Materials Response Annex - Emergency Support Function #10 which covers responsibilities for responding to releases of hazardous materials, oil, and other contaminants that are a threat to human health and the environment. As such, the Agency participates and leads applicable interagency committees and workgroups to develop national planning and implementation policies at the operational level.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. EPA continuously works to improve its management of emergency response assets to be better prepared to handle large unprecedented incidents in order to increase cost effectiveness and avoid costly cleanup actions. The Superfund Emergency Preparedness Program participates in national and local exercises and drills, coordinates with stakeholders to develop Area and Regional Contingency Plans (ACPs), and provides technical assistance to industry, states, tribes, and local communities. Specific activities include:

- Chair the NRT[26] and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally-focused interagency executive committees addressing oil and hazardous

[26] For additional information, refer to: https://www.nrt.org/.

substance emergencies. They serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams.

- Participate in the development of limited, scenario-specific exercises and regional drills designed to assess national emergency response management capabilities. These activities will involve the RRTs, NRT, and/or principal level participants.

- Continue to implement the National Incident Management System (NIMS)[27] which provides the approach to manage incidents and works hand in hand with the NRF.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$62.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$302.0 / +3.6 FTE) This net program change will result in streamlined exercises and training held with federal, state, and local partners.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

[27] For additional information, please refer to: http://www.fema.gov/national-incident-management-system.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund	***$607,626.1***	***$566,062.0***	***$472,052.0***	***-$94,010.0***
Total Budget Authority	$607,626.1	$566,062.0	$472,052.0	-$94,010.0
Total Workyears	928.0	876.1	868.8	-7.3

Program Project Description:

The Superfund Remedial Program addresses many of the worst contaminated areas in the United States by investigating and implementing long-term cleanup remedies. The Program also oversees response work conducted by potentially responsible parties (PRPs) at National Priorities List (NPL) and Superfund Alternative Approach (SAA) sites. Completing relatively straightforward response actions, such as soil excavation or capping remedies, can take a few months, while implementing remedies at complex, large area-wide groundwater, sediment, or mining sites may take decades.

By addressing the human health and environmental risks posed by releases at NPL and SAA sites, the Superfund Remedial Program strengthens the economy and spurs economic growth by returning Superfund sites to productive use. As of FY 2017, EPA data show that at 487 Superfund sites in reuse, approximately 6,622 businesses are generating $43.6 billion in sales and employing 156,352 people who earn a combined income of $11.2 billion.[28] While conducting cleanup at NPL and SAA sites, Superfund remedial construction projects can enhance our national infrastructure while addressing harmful exposures. Cleanup work under the Superfund Remedial Program also improves property values. A study conducted by researchers at Duke University and University of Pittsburgh found that residential property values within three miles of Superfund sites increased between 18.7-24.4 percent when sites were cleaned up and deleted from the NPL.[29]

In July 2017, EPA's Superfund Task Force developed a report containing recommended actions in five goal areas: 1) Expediting Cleanup and Remediation; 2) Re-Invigorating Responsible Party Cleanup and Reuse; 3) Encouraging Private Investment; 4) Promoting Redevelopment and Community Revitalization; and 5) Engaging Partners and Stakeholders.[30] Since then, Superfund

[28] For more information on Redevelopment Economics, please see https://www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.
[29] Shanti Gamper-Rabindran and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," *Journal of Environmental Economics and Management* 65(**3**): 345-360, http://dx.doi.org/10.1016/j.jeem.2012.12.001.
[30] The Superfund Task Force Report can be found at: https://www.epa.gov/sites/production/files/2017-07/documents/superfund_task_force_report.pdf.

Task Force workgroups have worked to efficiently implement the recommendations and reach outcome-driven results aimed at expediting site cleanup, redevelopment, and community revitalization. For example, EPA completed multiple soil gas, sub-slab, and indoor air sampling events at 40 residences near the Galen Myers Dump/Drum Salvage Superfund site. The sampling indicated that vapor intrusion (VI) was occurring at a number of residences via the presence of volatile organic compounds above screening levels. EPA performed an emergency action to install VI mitigation systems and the site was subsequently designated "Human Exposure Under Control (HEUC)."

Key accomplishments to date under these goals include:

- Achieved HEUC at a net total of 24 sites in FY 2017 and 32 sites in FY 2018;
- Improved Public Access to Information on Human Exposure Status;
- Moved Sites Toward Deletion/Partial Deletion from the NPL;
- Implemented Administrator Review of Remedy Decisions Equal to or Greater than $50 million;
- Focused Optimization Evaluations on Priority Sites;
- Furthered use of new remediation technologies by developing technical information and presenting webinars and training; and
- Made information on Superfund sites with reuse potential more widely available.

Additional Superfund Task Force accomplishments, including detailed information on implementation efforts, can be found in the Superfund Task Force Recommendations 2018 Update Report[31] and the latest Superfund Task Force Quarterly Reports.[32]

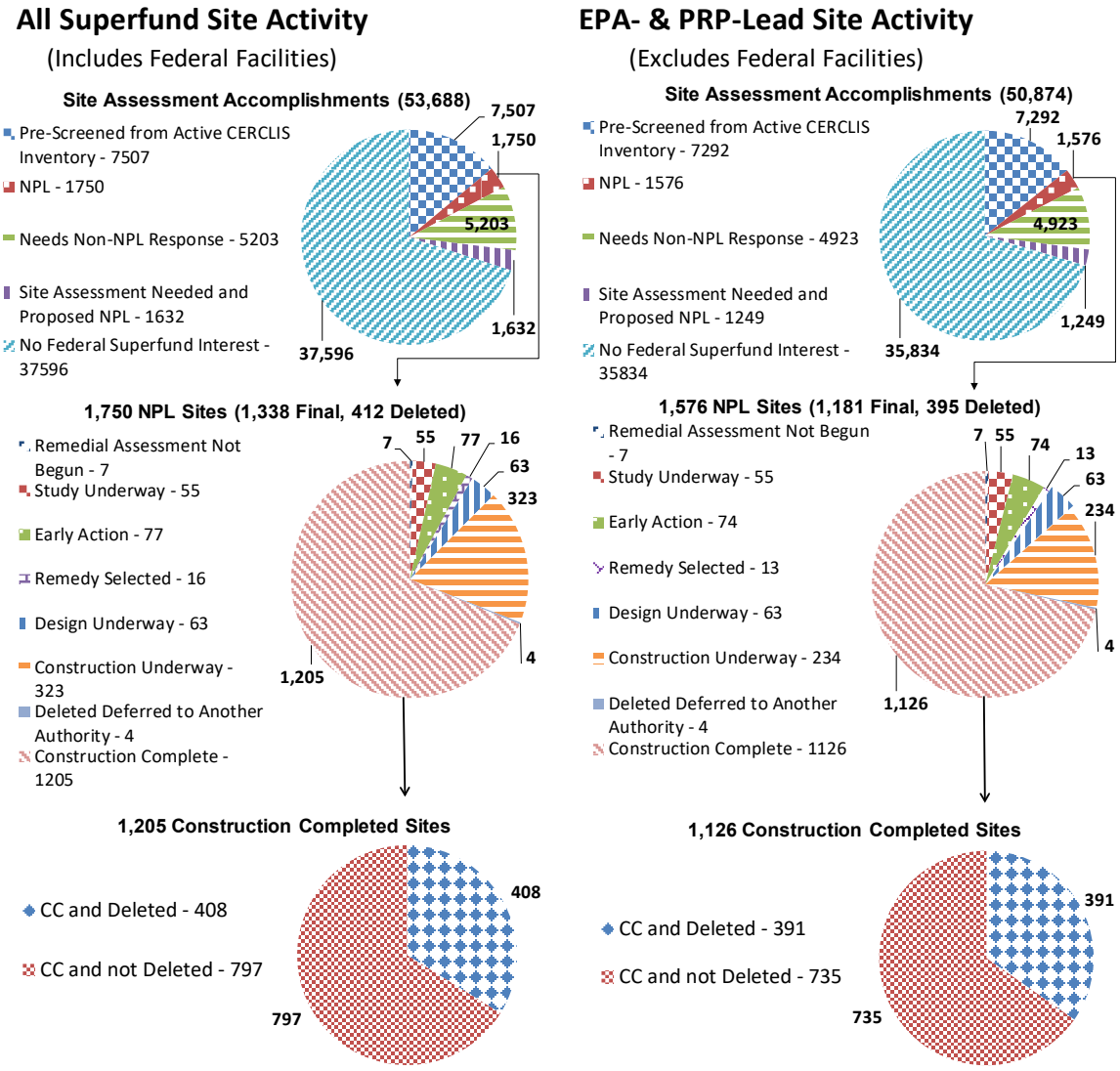
FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. For example, EPA made 51 additional Superfund sites ready for anticipated use in FY 2018 toward a two-year FY 2018-2019 Agency Priority Goal of 102 sites. In FY 2020, EPA will prioritize resources to execute its non-delegable, federal responsibility to clean up sites and protect human health and the environment. The Superfund Remedial Program endeavors to maximize the use of special account resources collected from PRPs for site-specific response actions as stipulated in settlement agreements. More than half of non-federal sites on the final NPL do not have an associated open special account and must rely on annually appropriated funds.

In FY 2020, EPA plans to fully implement the Superfund Task Force recommendations to expedite cleanup while continuing to encourage private investment, promote Superfund site redevelopment, and build and strengthen partnerships. EPA also will continue to prioritize ongoing fund-lead investigation, remedial design, construction, and long-term response actions to bring human exposure and groundwater migration under control. The following chart is a high-level description

[31] The Superfund Task Force (SFTF) Recommendations 2018 Update Report can be found at: https://www.epa.gov/superfund/superfund-task-force-recommendations-2018-update.
[32] SFTF Quarterly Reports can be found at: https://www.epa.gov/superfund/superfund-task-force-status-recommendations#quarterly.

of Superfund remedial site activity that shows how sites progress through the remedial pipeline from site assessment through NPL deletion.[33]



* Remedial Assessment Not Begun - Final NPL. No RI/FS, Removal, ROD, RD, RA, or CC.
* Study Underway - Final NPL. RI/FS action started. No Removal, ROD, RD, RA, or CC.
* Early Action - Final NPL. Removal action started. No ROD, RD, RA, or CC.
* Remedy Selected - Final NPL. ROD completed. No RD, RA, or CC.
* Design Underway - Final NPL. RD action started. No RA or CC.
* Construction Underway - Final NPL. RA action started. Not CC.
* Deleted Deferred To Another Authority - Deleted NPL and not CC.
* Construction Complete - CC flag and date
* Source: SEMS End-of-Year FY 2018 data
*The Superfund Federal Facilities program provides additional information on Superfund Federal Facility Site Activity.

[33] Chart was developed from Superfund Enterprise Management System data as of end of calendar year 2018.

Performance Measure Targets:

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	60	55	45	45	45	51	51	51	Sites
Actual	56	45	45	41	43	51			

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	10	10	9	9	9	8	12	10	Sites
Actual	14	9	10	12	24	32			

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	115	115	105	105	105	95	95	80	Projects
Actual	121	115	104	105	97	86			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$4,105.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$98,115.0 / -7.3 FTE) This program change is a decrease to the Superfund Remedial Program, reflecting the impact of the additional infrastructure funding provided by the budget addendum in FY 2018. Funds will be prioritized for NPL sites that present the highest risk to human health and the environment, while modifying timelines for completing remedial investigation/feasibility study, remedial design and new construction projects for other sites, and reducing discretionary activities.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Federal Facilities
Program Area: Superfund Cleanup
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Substance Superfund	***$21,300.3***	***$21,125.0***	***$20,465.0***	***-$660.0***
Total Budget Authority	$21,300.3	$21,125.0	$20,465.0	-$660.0
Total Workyears	106.8	105.0	111.7	6.7

Program Project Description:

The Superfund Federal Facilities Program oversees and provides technical assistance for the protective and efficient cleanup and reuse of Federal Facility National Priorities List (NPL) sites, pursuant to CERCLA Section 120. Program responsibilities include: 1) inventory and assess potentially contaminated sites; 2) implement protective remedies; 3) facilitate early transfer of property; and 4) ensure ongoing protectiveness of completed cleanups.

The Federal Facility NPL sites are among the largest in the Superfund program and can encompass specialized environmental contaminants such as munitions and radiological waste, and contaminants of emerging concern such as per-and polyfluoralkyl substances (PFAS). To ensure efficiencies and consistent approaches to cleanup, the Program collaborates with the other federal agencies and states. The Federal Facilities Program will continue to work with our federal partners to target high priority sites, to consider best practices, to develop innovative solutions to emerging and unique contaminants, to implement strategies to reach cleanup completion at sites, and to bring contaminated land into beneficial reuse.[34]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. One of the Agency's top priorities is accelerating progress on Superfund sites. The Program will focus on Superfund Task Force recommendations including engaging with state, local, and tribal partners; and creating sensible approaches that enhance economic growth. A program goal is to achieve sites ready for anticipated use (RAU) and promote the reuse and restoration of Federal Facility sites by prioritizing resources to focus on remedial actions and construction completions to accelerate Site-Wide Ready for Anticipated Use (SWRAU) determinations and deletions.

EPA also will continue to oversee complex cleanups at Federal Facility NPL sites, such as contamination in groundwater, munitions and explosives of concern (MEC), and contamination from legacy nuclear weapons development and energy research. While the Department of Energy

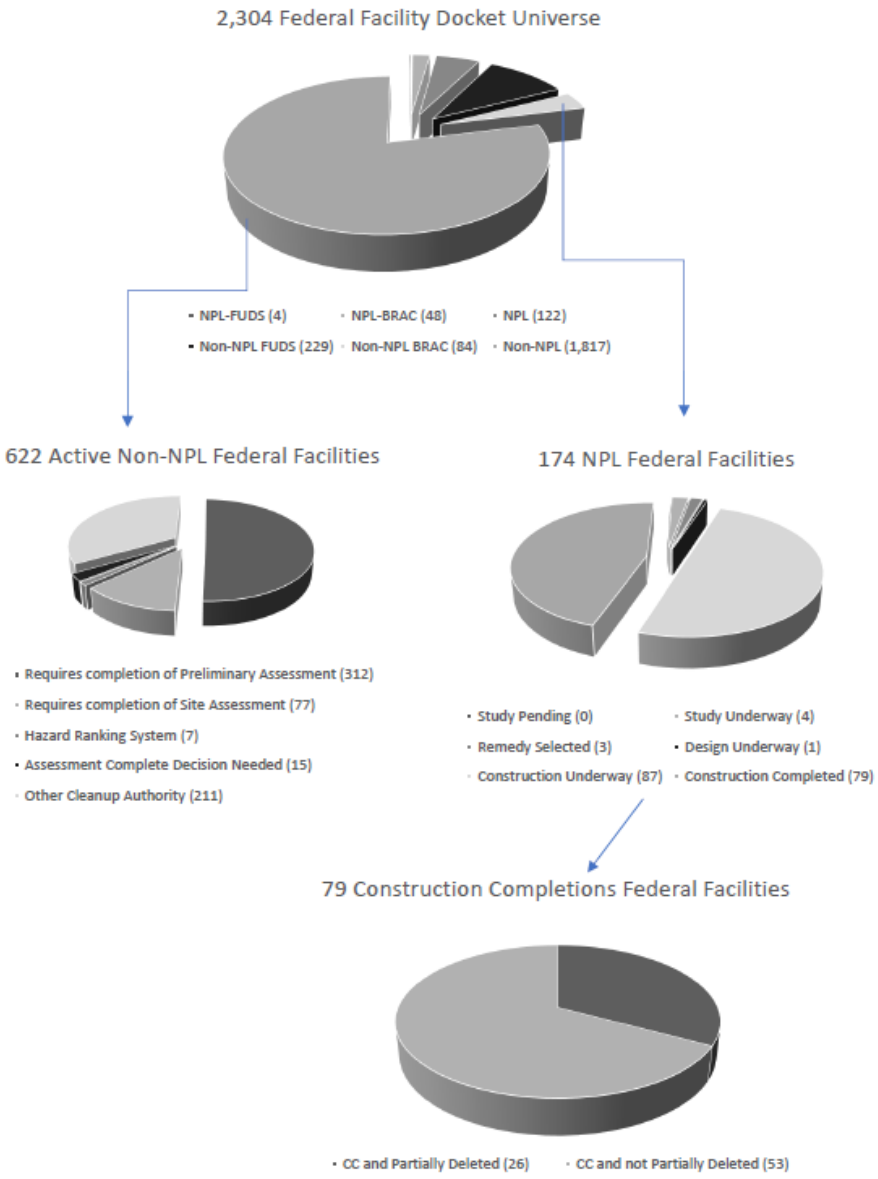
[34] For additional information, please refer to: https://www.epa.gov/fedfac.

(DOE) has completed cleanup work at many of its sites, DOE estimates that the remaining legacy Cold War sites will take decades to complete, due to groundwater, soil, and waste processing. Similarly, the Department of Defense's (DOD's) inventory includes sites that contain chemical and explosive compounds which require special handling, storage, and disposal practices, as well as cleanup. EPA will continue to provide oversight and technical assistance at DOD's military munitions response sites and support DOD's development of new technologies to streamline cleanups.

In FY 2018, the Program designated remedial decisions at 52 federal facility sites to address environmental contamination. The Program also completed 27 Remedial Actions, ensuring protective remedies are in place, and made over 100,000 acres ready for anticipated use over the last two years. The Program also facilitated PFAS engagement at 63 Federal Facility NPL sites, ensuring consistent and effective approaches to cleanups.

In FY 2020, the Federal Facilities Program will prioritize the highest risk sites and focus on activities that bring human exposure and groundwater migration under control. In addition, EPA manages the Federal Agency Hazardous Waste Compliance Docket (Docket) which contains information reported by federal facilities that manage hazardous waste or from which hazardous substances, pollutants, or contaminants have been or may be released. The Docket: 1) identifies all federal facilities that must be evaluated through the site assessment process; 2) determines whether they pose a risk to human health and the environment sufficient to warrant inclusion on the NPL; and 3) provides a mechanism to make the information available to the public.[35] The Docket is updated semi-annually and has over 2,300 facilities listed. To ensure the long-term protectiveness of the cleanup remedies, EPA will continue monitoring, overseeing progress, and improving the quality and consistency of five-year reviews conducted at NPL sites where waste has been left in place and land use is restricted as required under Section 121(c) of CERCLA. The following chart is a high-level description of Superfund federal facilities universe that shows how sites progress through the pipeline.[36]

[35] EPA developed a website called FEDFacts, where all sites are mapped and linked to available environmental information, which may be found at: https://www.epa.gov/fedfac/fedfacts.
[36] Chart was developed from Superfund Enterprise Management System data as of end of calendar year 2018.



Performance Measure Targets:

Work under this program supports performance results in the Superfund Remedial Program under the Superfund appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$1,119.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$1,779.0 / -1.8 FTE) This program change reflects a reduction in funding and may modify project schedules and cleanup milestones. The Program will prioritize resources on those facilities that present the highest risk to human health and the environment.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

Superfund Special Accounts

Background

EPA has the authority to collect funds from parties to support Superfund investigations and cleanups. Section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorizes EPA to retain and use funds received pursuant to a settlement agreement with a party to carry out the purpose of that agreement. Funds are deposited in Superfund special accounts for cleanup at the sites designated in individually negotiated settlement agreements. Through the use of special accounts, EPA ensures responsible parties pay for cleanup so that annually appropriated resources from the Superfund Trust Fund are generally conserved for sites where no viable or liable potentially responsible parties (PRPs) can be identified. Each account is set up separately and distinctly and may only be used for the sites and uses outlined in the settlement(s) with the party.

Special accounts are sub-accounts in the Superfund Trust Fund. Pursuant to the specific agreements, which typically take the form of an Administrative Order on Consent or Consent Decree, EPA uses special account funds to finance site-specific CERCLA response actions at the site for which the account was established. Of the 1,338 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use (as of October 1, 2018). As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to the Superfund program to clean up Superfund sites.

Special account funds are used to conduct many different site-specific CERCLA response actions, including, but not limited to, investigations to determine the nature and extent of contamination and the appropriate remedy, design, construction and implementation of the remedy, enforcement activities, and post-construction activities. EPA also may provide special account funds as an incentive to another PRP(s) who agrees to perform additional work beyond the PRP's allocated share at the site, which EPA might otherwise have to conduct. Because response actions may take many years, the full use of special account funds also may take many years. Pursuant to the settlement agreement and in accordance with EPA policy, once site-specific work is complete and site risks are addressed, special account funds may be used to reimburse EPA for site-specific costs incurred using appropriated resources (i.e., reclassification), allowing the latter resources to be allocated to other sites. Any remaining special account funds are transferred to the Superfund Trust Fund, where they are available for future appropriation by Congress to further support response work.

EPA, through the Superfund Task Force, is working to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial use as expeditiously as possible. Maximizing the use of special accounts to facilitate site cleanup and/or redevelopment is one of the Task Force's recommendations we continue to work on. The "Guidance on Disbursement of Funds from EPA Special Accounts to Entities Performing CERCLA Response Actions" was issued on March 27, 2018.[37] The guidance document addressed

[37] For a copy of the guidance, please see: https://semspub.epa.gov/work/HQ/100001089.pdf.

the Superfund Task Force report's recommendation specific to special accounts with a more robust discussion about providing special account funds, as appropriate, to bona fide prospective purchasers (BFPPs) and PRPs to facilitate site work and reuse.

FY 2018 Special Account Activity

Since the inception of special accounts through the end of FY 2018, EPA has collected over $7.0 billion from parties and earned more than $548.3 million in interest. Approximately 56 percent of the funds have been disbursed or obligated for response actions at sites and plans have been developed to guide the future use of the remaining 44 percent of available special account funds. In addition, at sites with no additional work planned or costs to be incurred by EPA, EPA has transferred approximately $33.1 million to the Superfund Trust Fund. As of the end of FY 2018, approximately $3.8 billion has been disbursed for site response actions and $456.9 million has been obligated but not yet disbursed.

The Agency continues to receive site-specific settlement funds that are placed in special accounts each year, so progress on actual obligation and disbursement of funds may not be apparent upon review solely of the cumulative available balance. In FY 2018, EPA deposited more than $197.3 million into special accounts and disbursed and obligated over $223.2 million from special accounts (including reclassifications). At the end of FY 2018, the cumulative amount available in special accounts was $3.28 billion.

Special accounts vary in size. A limited set represent the majority of the funds available. At the end of FY 2018, 4 percent of open accounts had greater than $10 million available and hold more than 72 percent of all available funds in open accounts. There are many accounts with lower available balances. 73 percent of all open accounts with $1 million available represent only 6 percent of available funds in all open accounts.

The balance of more than $3.28 billion is not equivalent to an annual appropriation. The funds collected under settlements are intended to finance future response work at particular sites for the length of the project. EPA is carefully managing those funds that remain available for site response work and develops plans to utilize the available balance. EPA will continue to plan the use of funds received to conduct site-specific response activities, or reclassify and/or transfer excess funds to the Superfund Trust Fund to make annually appropriated funds available for use at other Superfund sites.

For some Superfund sites, although funds are readily available in a special account, remedial action may take time to initiate and complete. This is due to site-specific conditions such as the specific requirements for special account use set forth in the settlement agreement, the stage of site cleanup, the viability of other responsible parties to conduct site cleanup, and the nature of the site contamination. EPA has plans to spend approximately $1.3 billion of currently available special account funds over the next 5 years, but funds also are planned much further into the future to continue activities such as conducting five year reviews or remedy optimization where waste has been left in place.

In FY 2018, EPA disbursed and obligated more than $207.6 million from special accounts (excluding reclassifications) for response work at more than 650 Superfund sites. Some examples include more than $15.7 million to support work at the Welsbach & General Gas Mantle (Camden Radiation) site in New Jersey, more than $12 million for the Cornell Dubilier Electronics Inc. site in New Jersey, and more than $11.4 million for the U.S. Smelter and Lead Refinery, Inc. (East Chicago) site in Indiana. Without special account funds being available, appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund more than $207.6 million in response work at sites in addition to the work funded through appropriated funds obligated or disbursed in FY 2018.

The summary charts below provide additional information on the status of special accounts. Exhibit 1 illustrates the cumulative status of open and closed accounts, FY 2018 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2018), current year (FY 2019), and estimated future budget year (FY 2020) activity for special accounts. Exhibit 3 provides prior year data (FY 2018) by EPA regional offices to exhibit the geographic use of the funds.

Exhibit 1: Summary of FY 2018 Special Account Transactions and Cumulative Multi-Year Plans for Using Available Special Account Funds

Account Status[1]	**Number of Accounts**
Cumulative Open	1,051
Cumulative Closed	373
FY 2018 Special Account Activity	**$ in Thousands**
Beginning Available Balance	$3,210,855.5
FY 2018 Activities	
+ Receipts	$197,342.5
- Transfers to Superfund Trust Fund (Receipt Adjustment)	($1,711.1)
+ Net Interest Earned	$104,558.3
- Net Change in Unliquidated Obligations	$91,934.0
- Disbursements - For EPA Incurred Costs	($291,821.8)
- Disbursements - For Work Party Reimbursements under Final Settlements	($7,717.9)
- Reclassifications	($15,564.4)
End of Fiscal Year (EOFY) Available Balance[2]	$3,287,875.2
Multi-Year Plans for EOFY 2018 Available Balance[3]	**$ in Thousands**
2018 EOFY Available Balance	$3,287,875.2
- Estimates for Future EPA Site Activities based on Current Site Plans[4]	$3,054,364.6
- Estimates for Potential Disbursement to Work Parties Identified in Final Settlements[5]	$57,590.3
- Estimates for Reclassifications for FYs 2019-2021[6]	$119,145.1
- Estimates for Transfers to Trust Fund for FYs 2019-2021[6]	$37,262.5
- Available Balance to be Planned for Site-Specific Response[7]	$19,512.7

[1] FY 2018 data is as of 10/01/2018. The Beginning Available Balance is as of 10/01/2017.

[2] Numbers may not add due to rounding.

[3]Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 10/29/2018 in reference to special account available balances as of 10/01/2018.

[4] "Estimates for EPA Future Site Activities" includes all response actions that EPA may conduct or oversee in the future, such as removal, remedial, enforcement, post-construction activities as well as allocation of funds to facilitate a settlement to encourage PRPs to perform the cleanup. Planning data are multi-year and cannot be used for annual comparisons.

[5] "Estimates for Potential Disbursements to Work Parties Identified in Finalized Settlements" includes those funds that have already been designated in a settlement document, such as a Consent Decree or Administrative Order on Consent, to be available to a PRP for reimbursements but that have not yet been obligated.

[6] "Reclassifications" and "Transfers to the Trust Fund" are estimated for three FYs only. These amounts are only estimates and may change as EPA determines what funds are needed to complete site-specific response activities.

[7] These include resources received by EPA at the end of the fiscal year and will be assigned for site-specific response activities.

Exhibit 2: Actual and Estimated Special Account Transactions FY 2018 – FY 2020

	FY 2018	FY 2019 estimate	FY 2020 estimate
	$ in Thousands		
Beginning Available Balance	$3,210,855.5	$3,287,875.2	$3,295,785.2
Receipts[1]	$197,342.5	$250,000.0	$250,000.0
Transfers to Trust Fund (Receipt Adjustment)[2]	($1,711.1)	($1,765.0)	($1,765.0)
Net Interest Earned[3]	$104,558.3	$41,000.0	$41,000.0
Net Obligations[2,4]	($207,605.7)	($284,865.0)	($284,865.0)
Reclassifications[2]	($15,564.3)	($19,460.0)	($19,460.0)
End of Year Available Balance[5]	$3,287,875.2	$3,295,785.2	$3,303,695.2

[1]The estimates for Receipts are in line with more typical years.

[2]The estimates for Transfers to Trust Fund, Net Obligations, and Reclassifications are based on a 3-year historical average.

[3]Net interest earned for FY 2018 was approximately $40 million. However, in FY 2018 an update to the Agency's financial system captured and made available net interest earned from FY 2016 ($26.4 million) and FY 2017 ($38.5 million). Net interest earned in FY 2019 and FY 2020 are estimated utilizing economic assumptions for the FY 2020 President's Budget.
[4]Net Obligations reflect special account funds no longer available for obligation, excluding reclassifications and receipts transferred to the Trust Fund.

[5]Numbers may not add due to rounding.

Exhibit 3: FY 2018 Special Account Transactions by EPA Regional Offices

(Dollars in Thousands)

	Beginning Available Balance	Receipts	Transfers to Trust Fund (Receipt Adjustment)	Net Interest Earned	Net Obligations	Reclassifications	End of Year Available Balance[2]
Region 1	$218,058.4	$6,193.0	($1.2)	$11,452.7	($8,827.3)	($1,556.5)	$225,319.0
Region 2	$516,516.0	$51,337.8	$0.0	$15,960.6	($59,441.0)	$0.0	$524,373.3
Region 3	$144,868.5	$5,107.8	($713.9)	$3,788.1	($11,939.0)	($2,986.8)	$138,124.8
Region 4	$76,240.6	$4,077.6	($249.3)	$2,158.2	($2,523.6)	($4,795.6)	$74,907.9
Region 5	$381,396.7	$37,273.0	($283.6)	$11,904.8	($27,196.8)	($2,713.1)	$400,381.1
Region 6	$88,972.5	$25,727.5	$0.0	$2,739.2	($10,584.8)	($653.6)	$106,200.8
Region 7	$157,127.8	$14,500.9	($362.2)	$5,053.0	($24,660.4)	($918.9)	$150,740.2
Region 8	$209,456.7	$8,722.8	($1.1)	$7,768.4	($19,894.9)	($1,573.6)	$204,478.3
Region 9	$1,283,195.4	$22,320.6	($99.8)	$36,961.1	($24,287.8)	($296.0)	$1,317,793.5
Region 10	$135,022.9	$22,081.4	$0.0	$6,772.3	($18,250.0)	($70.3)	$145,556.2
Total	$3,210,855.5	$197,342.5	($1,711.1)	$104,558.3	($207,605.7)	($15,564.3)	$3,287,875.2

[1] FY 2018 data is as of 10/01/2018. The Beginning Available Balance is as of 10/01/2017.

[2] Numbers may not add due to rounding.

Table of Contents – Leaking Underground Storage Tanks

APPROPRIATION: Leaking Underground Storage Tanks
Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Leaking Underground Storage Tanks				
Budget Authority	$94,437.6	$91,941.0	$47,801.0	-$44,140.0
Total Workyears	46.9	48.6	40.7	-7.9

Bill Language: Leaking Underground Storage Tank Trust Fund Program

For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, $47,801,000, to remain available until expended, of which $47,801,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act: Provided, That the Administrator is authorized to use appropriations made available under this heading to implement section 9013 of the Solid Waste Disposal Act to provide financial assistance to federally recognized Indian tribes for the development and implementation of programs to manage underground storage tanks.

Program Projects in LUST

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Enforcement				
Civil Enforcement	$619.8	$620.0	$470.0	-$150.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$390.3	$387.0	$434.0	$47.0
Facilities Infrastructure and Operations	$1,056.6	$813.0	$773.0	-$40.0
Acquisition Management	$6.5	$152.0	$138.0	-$14.0
Subtotal, Operations and Administration	$1,453.4	$1,352.0	$1,345.0	-$7.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	$9,731.5	$9,240.0	$6,722.0	-$2,518.0
LUST Cooperative Agreements	$58,088.1	$55,040.0	$38,840.0	-$16,200.0
LUST Prevention	$24,233.5	$25,369.0	$0.0	-$25,369.0
Subtotal, Underground Storage Tanks (LUST / UST)	$92,053.1	$89,649.0	$45,562.0	-$44,087.0

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$311.3	$320.0	$424.0	$104.0
TOTAL LUST	**$94,437.6**	**$91,941.0**	**$47,801.0**	**-$44,140.0**

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

Enforcement

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$164,266.9	$171,283.0	$147,647.0	-$23,636.0
Leaking Underground Storage Tanks	***$619.8***	***$620.0***	***$470.0***	***-$150.0***
Inland Oil Spill Programs	$2,464.8	$2,413.0	$2,373.0	-$40.0
Total Budget Authority	$167,351.5	$174,316.0	$150,490.0	-$23,826.0
Total Workyears	995.5	1,000.8	857.1	-143.7

Program Project Description:

The Civil Enforcement Program's goal is to ensure compliance with the Nation's environmental laws to protect human health and the environment. The Program collaborates with the United States Department of Justice, states, local agencies, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

To protect our nation's groundwater and drinking water from petroleum releases from Underground Storage Tanks (UST), the Civil Enforcement Program provides guidance, technical assistance, and training to promote and enforce cleanups at sites with UST systems.[1] The Enforcement and Compliance Assurance program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

FY 2020 Activities and Performance Plan:

Work in this Program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Agency will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

[1] For more information, refer to: www.epa.gov/swerust1/cat/index.htm.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						325	325	325	Millions of Pounds
Actual	1,425	1,221	1,030	62,223	461	810			

(PM 436) Number of all referred no complaint (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							129	129	Cases
Actual									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$31.0) This net change to fixed and other costs is a reduction due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$119.0) EPA will target funds to the highest priority sites.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic authority); Subtitle I of the Solid Waste Disposal Act.

Operations and Administration

Acquisition Management
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$27,441.3	$30,210.0	$28,032.0	-$2,178.0
Leaking Underground Storage Tanks	***$6.5***	***$152.0***	***$138.0***	***-$14.0***
Hazardous Substance Superfund	$20,477.3	$21,183.0	$21,541.0	$358.0
Total Budget Authority	$47,925.1	$51,545.0	$49,711.0	-$1,834.0
Total Workyears	263.2	275.1	259.5	-15.6

Program Project Description:

Leaking Underground Storage Tanks (LUST) resources in the Acquisition Management Program support the Agency's contract activities.

FY 2020 Activities and Performance Plan:

Work in this program supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Acquisition Management resources in LUST support information technology needs and the training and development of EPA's acquisition workforce.

Performance Measure Targets:

Work under this program supports performance results in the Acquisition Management Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$14.0) This program change reflects a reduction in contractual resources from more effective business practices in the Acquisition Management Program.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$70,053.3	$72,884.0	$71,100.0	-$1,784.0
Leaking Underground Storage Tanks	***$390.3***	***$387.0***	***$434.0***	***$47.0***
Hazardous Substance Superfund	$20,503.7	$22,018.0	$21,340.0	-$678.0
Total Budget Authority	$90,947.3	$95,289.0	$92,874.0	-$2,415.0
Total Workyears	430.9	448.8	433.3	-15.5

Total workyears in FY 2020 include 1.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.

Program Project Description:

EPA's financial management community maintains a strong partnership with the Leaking Underground Storage Tanks (LUST) programs. Activities under the Central Planning, Budgeting and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, and systems to ensure effective stewardship of LUST resources. This includes developing, managing, and supporting a performance management system consistent with the Government Performance and Results Modernization Act of 2010 that involves: strategic planning and accountability for environmental, fiscal, and managerial results; providing policy, systems, training, reports, and oversight essential for the financial operations of EPA; managing the agencywide Working Capital Fund; providing financial payment and support services for specialized fiscal and accounting services for the LUST programs; and managing the Agency's annual budget process.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA will continue to ensure sound financial and budgetary management of the LUST programs through the use of routine and ad hoc analysis, statistical sampling, and other evaluation tools. Building on the work begun in previous years, EPA will continue to monitor and strengthen internal controls with a focus on sensitive payments and property. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$8.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support and benefit costs.

- (+$55.0 / +0.3 FTE) This program change increases ad hoc analysis capability as part of the LUST financial management efforts.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$292,535.1	$308,701.0	$308,335.0	-$366.0
Science & Technology	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Building and Facilities	$34,605.1	$27,791.0	$33,377.0	$5,586.0
Leaking Underground Storage Tanks	***$1,056.6***	***$813.0***	***$773.0***	***-$40.0***
Inland Oil Spill Programs	$753.8	$584.0	$665.0	$81.0
Hazardous Substance Superfund	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Total Budget Authority	$475,113.4	$481,481.0	$483,964.0	$2,483.0
Total Workyears	321.8	327.6	308.0	-19.6

Program Project Description:

EPA's Facilities Infrastructure and Operations Program in the Leaking Underground Storage Tank (LUST) appropriation supports the Agency's rent, transit subsidy, and facilities management services. Funding is allocated for such services among the major appropriations for the Agency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and other private landlords. For FY 2020, EPA is requesting a total of $0.60 million for rent in the LUST appropriation.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1.0) This change to fixed and other costs is a decrease due to the recalculation of transit subsidy.

- (-$39.0) This program change is a decrease to basic operations and maintenance costs.

Statutory Authority:

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

Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$10,812.6	$11,295.0	$5,996.0	-$5,299.0
Leaking Underground Storage Tanks	***$9,731.5***	***$9,240.0***	***$6,722.0***	***-$2,518.0***
Total Budget Authority	$20,544.1	$20,535.0	$12,718.0	-$7,817.0
Total Workyears	96.5	98.5	68.8	-29.7

Program Project Description:

The Leaking Underground Storage Tank (LUST) resources in the LUST/Underground Storage Tank (UST) Program ensures that petroleum contamination is properly assessed and cleaned up. Under this program, EPA issues, monitors, and oversees LUST cleanup cooperative agreements to states.[2] EPA also provides technical assistance and training to states and tribes on how to conduct cleanups and improve the efficiency of state programs. As of September 2018, approximately 65,450 LUST sites had not achieved cleanup completion.[3]

In addition, EPA has direct implementation authority and responsibilities in Indian Country. In that role, EPA oversees cleanups by responsible parties, conducts site assessments, remediates contaminated water and soil, and provides alternative sources of drinking water when needed. EPA's funding for Indian Country is the primary source of money for these activities. With few exceptions, tribes do not have independent program resources to pay for assessing and cleaning up UST releases, and in many cases, there are no responsible parties available to pay for the cleanups at sites in Indian Country.

Cleaning up LUST sites protects people from exposure to contaminants such as benzene, a known carcinogen, and makes land available for reuse. In 2016, EPA released a study called "Property Value Study of High-Profile UST Release Sites." The purpose of the study was to determine the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 2 to 6 percent. Then, once a cleanup is completed, nearby property values rebound by a similar margin.[4] In FY 2018, cleanups were completed at 8,128 LUST sites.

[2] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[3] Please see the EPA website at: http://www.epa.gov/ust/ust-performance-measures.
[4] 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.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan.* EPA will continue to collect and analyze information about the initiation and cleanup of UST releases. This information will chart progress toward achieving its annual performance goal of completing 11,200 cleanups in FY 2020, and inform EPA's work with its state partners to increase the number of cleanups completed. As part of that effort, EPA and individual states may initiate *kaizen* process improvement events if EPA and the state determine the *kaizen* event will help streamline a state's process.

In FY 2020, EPA will:

- Work with states and tribes within available resources to implement strategies to reduce the number of sites that have not reached cleanup completion and to address new releases as they continue to be confirmed.

- Provide targeted training to states and tribes, such as remediation process optimization and rapid site assessment techniques.

- Monitor the soundness of financial mechanisms, in particular, insurance and state cleanup funds that serve as financial assurance for LUST releases; ensuring that money is available to pay for cleanups. In addition, EPA will continue to provide analysis and technical assistance to states to help them improve the environmental and financial performance of their cleanup funds.

- Provide support in Indian Country for site assessments, investigations, and remediation of high priority sites; enforcement against responsible parties; cleanup of soil and groundwater; alternate water supplies; cost recovery against UST owners and operators; oversight of responsible party lead cleanups; and technical expertise and assistance to tribal governments.

- Provide resources and support to states and tribes to quickly address emergency responses from releases to the environment. Releases from USTs can result in imminent threats to public safety when petroleum or petroleum vapors reach explosive levels in sewers, utility corridors, underground parking structures, and basements near a LUST site. Emergency response incidents across the country show that reporting, initial abatement measures, and free product removal activities may need to be implemented immediately upon discovery of a release to protect human health and the environment.[5]

Performance Measure Targets:

Work under this program supports performance results in the LUST Cooperative Agreements program under the LUST appropriation.

[5] For more information, please see: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$267.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

- (-$2,785.0 / -8.2 FTE) This program change reflects a focus on cleaning up the highest priority LUST sites in Indian Country and a reduction in resources that provide subject matter and technical expertise to states and tribes.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9014.

LUST Prevention

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Leaking Underground Storage Tanks	***$24,233.5***	***$25,369.0***	***$0.0***	***-$25,369.0***
Total Budget Authority	$24,233.5	$25,369.0	$0.0	-$25,369.0

Program Project Description:

The Leaking Underground Storage Tank (LUST) Prevention Program works to ensure that groundwater is protected from petroleum and associated chemicals leaking from underground storage tanks (USTs), while the LUST Cooperative Agreement Program provides funding to states to assess and clean up LUST sites. This program has provided funding to states,[6] tribes, and/or intertribal consortia to inspect, prevent releases, ensure compliance with federal and state laws, and enforce these laws for the 550,379 federally regulated active USTs.[7] The Energy Policy Act (EPAct) of 2005 requires EPA or states to inspect every UST once every three years.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. States could elect to maintain core program work with state resources rather than federal.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$25,369.0) This program change proposes to eliminate the LUST Prevention Program.

Statutory Authority:

Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.

[6] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[7] Please see the EPA website at: http://www.epa.gov/ust/ust-performance-measures.

LUST Cooperative Agreements
Program Area: Underground Storage Tanks (LUST / UST)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Leaking Underground Storage Tanks	***$58,088.1***	***$55,040.0***	***$38,840.0***	***-$16,200.0***
Total Budget Authority	$58,088.1	$55,040.0	$38,840.0	-$16,200.0

Program Project Description:

This funding is used to award cooperative agreements to states[8] to implement the Leaking Underground Storage Tank (LUST) Program. The LUST Program ensures that petroleum contamination is properly assessed and cleaned up by providing states with funding to address releases, including in groundwater.[9] LUST funding supports states in managing, overseeing, and enforcing cleanups at LUST sites. This is achieved by focusing on increasing the efficiency of LUST cleanups nationwide, leveraging private and state resources, and enabling community redevelopment. Cleaning up LUST sites protects people from exposure to contaminants and makes land available for reuse.

EPA's backlog study characterized the national inventory of sites that have not reached cleanup completion. The study found that almost half of the releases were 15 years old or older, and that groundwater was contaminated at 78 percent of these sites. Remediating groundwater contamination is often more technically complex, takes longer, and is more expensive than remediating soil contamination.[10] Potential adverse health effects from chemicals in gasoline such as benzene as well as methyl-tertiary-butyl-ether (MTBE), alcohols, or lead scavengers contribute to the importance of cleaning up these contaminants and increase the cost of cleaning up these sites.[11]

In 2016, EPA released a study called "Property Value Study of High-Profile UST Release Sites." The purpose of the study was to determine the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 2 to 6 percent. Once a cleanup is completed, nearby property values rebound by a similar margin.[12]

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[8] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[9] Almost half of the nation's overall population and 99 percent of the population in rural areas rely on groundwater for drinking water. (See, *EPA 2000 Water Quality Inventory Report*, https://archive.epa.gov/water/archive/web/html/2000report_index.html).
[10] See *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities.
[11] See *Technologies for Treating MtBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, https://clu-in.org/download/remed/542r04009/542r04009.pdf.
[12] Guignet, D. 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.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases. This information will chart progress toward achieving its annual performance goal of completing 11,200 cleanups in FY 2020 and inform EPA's work with its state partners to increase the number of cleanups completed. As part of that effort, EPA and individual states may initiate *kaizen* process improvement events, if EPA and the state determine the *kaizen* event will help streamline a state's process.

In FY 2020, EPA will:

- Collaborate with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion. Through the cooperative efforts between EPA and states, the backlog was reduced by 36 percent between the end of FY 2008 and the end of FY 2018 (from 102,798 to 65,446). As of September 2018, approximately 65,450 releases remain that have not reached cleanup completion.[13]

- Provide resources to states to perform core cleanup work. Some states also may be able to pursue other means to maximize the effectiveness or efficiency in protectively completing cleanups and reducing their backlogs.

- Leverage funding by developing best practices and supporting management, guidance, and enforcement activities through LUST Cleanup Cooperative Agreements. LUST Cleanup Cooperative Agreements help achieve more than 8,000 cleanups annually, whereas, if EPA were to apply the funding directly, only about 350 cleanups would occur annually (assuming an average cleanup cost of $155,000 per site).[14]

- Provide resources and support to states to quickly address emergency responses from releases to the environment. Emergency response incidents across the country show that reporting, initial abatement measures, and free product removal activities need to be implemented immediately upon discovery of a release to protect human health and the environment.[15]

The Energy Policy Act (EPAct) of 2005 requires that states receiving LUST Cooperative Agreements funding meet certain release prevention requirements, such as inspecting every facility at least once every three years. In FY 2020, EPA will continue to factor state compliance with EPAct requirements into LUST Cleanup Cooperative Agreement decisions.

[13] Please see the EPA website at: http://www.epa.gov/ust/ust-performance-measures.
[14] Average cleanup cost per site based on ASTSWMO's 2016 Annual State Fund Survey Results at: http://astswmo.org/annual-state-fund-survey-results/.
[15] For more information, please see: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

Performance Measure Targets:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	10,100	9,000	8,600	8,600	8,600	11,200	11,200	11,200	Cleanups
Actual	11,582	10,393	9,869	8,977	8,775	8,128			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$16,200.0) This program change reflects a focus on cleaning up the highest priority sites.

Statutory Authority:

Resource Conservation and Recovery Act § 9003(h)(7).

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	$131,757.3	$134,327.0	$53,631.0	-$80,696.0
Leaking Underground Storage Tanks	***$311.3***	***$320.0***	***$424.0***	***$104.0***
Inland Oil Spill Programs	$695.6	$664.0	$511.0	-$153.0
Hazardous Substance Superfund	$11,023.3	$11,463.0	$10,977.0	-$486.0
Total Budget Authority	$143,787.5	$146,774.0	$65,543.0	-$81,231.0
Total Workyears	439.1	440.9	294.1	-146.8

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program under the Leaking Underground Storage Tanks (LUST) appropriation provides federal, regional and community decision-makers with tools, methods, and information to prevent and control pollution at LUST sites. Specifically, this research enables decision-makers to better:

- Assess sites and evaluate the implications of alternative remediation techniques, policies, and management actions to assess and cleanup leaks at fueling stations.
- Identify the environmental impacts and unintended consequences of existing and new biofuels available in the marketplace.
- Protect America's land and groundwater resources and drinking water supplies that could be impacted by the nation's more than 550 thousand underground fuel storage tanks.[16]

The SHC Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement.

[16] For more information, please see: https://www.epa.gov/ust.

Recent accomplishments in this research area include:

- **Report evaluating gasoline composition, including expanded information for state agency use:** [17] In recent years, varying fuel composition has been associated with vapor and liquid releases from underground storage tanks and corrosion of tank components. For instance, not all underground storage tank (UST) equipment in the ground today, especially older USTs, is totally compatible with some newer biofuel blends.[18] This report describes data on gasoline composition from various nationwide data sources to provide better information for state program implementers.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan.* Specifically, this work will aim to characterize sites and contaminants released from leaking USTs identified under the LUST trust fund with an emphasis on assisting the Agency and the states in addressing the backlog of sites for remediation. Also, this research will help communities remediate contaminated sites at an accelerated pace and lower costs while reducing human health and ecological impacts. Resulting methodologies and tools will help localities and states return properties to productive use, thus supporting the Agency's mission of protecting human health and the environment in the context of communities. Such work is integral to achieving EPA's priority of revitalizing land and preventing contamination.

EPA scientists will continue to work with the Agency's USTs program to deliver improved characterization and remediation methods for fuels released from leaking underground storage tanks. Research will address contaminant plume elongation and the associated risks to communities from the many USTs at fueling stations located near residences and residential water supplies.[19] This research will inform development of tools to assist communities, states, and tribes to determine what remediation is needed to protect local ground water resources and reduce the potential for vapor intrusion into buildings. The improved risk management and remediation resulting from these tools will likely reduce long term costs to communities while better protecting future drinking water resources and preventing vapor intrusion. EPA scientists produce software and user guides for evaluating transport from released gasoline. These models will provide technical guidance for LUST remediation efforts and inform future research.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) evaluates performance and provides feedback to the Agency for the SHC Program. The SHC Program, BOSC, and Science Advisory Board will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising EPA on developing its strategic research direction and Strategic Research Action Plans for FY 2019-2022.

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[17] Weaver, James W. *Gasoline Composition in the U.S. from Three Datasets 1976-2017* (EPA/600/R-18/258). US EPA/NRMRL. Ada, OK, August 2018.
[18] For more information, please see: https://www.epa.gov/sites/production/files/2016-07/documents/diesel-corrosion-supplements.pdf.
[19] For an example of groundwater contamination due to proximity of gas stations, please see: https://www.des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-22-20.pdf.

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA's state engagement program is designed to inform states about EPA's research programs and role within EPA, and to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

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

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$127.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$23.0) This program change decreases research to characterize and remediate contaminated leaking UST sites.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5 App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

Table of Contents – Inland Oil Spill Programs

APPROPRIATION: Inland Oil Spill Programs

Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Inland Oil Spill Programs				
Budget Authority	$18,727.0	$18,209.0	$15,962.0	-$2,247.0
Total Workyears	84.4	86.8	75.7	-11.1

Bill Language: Inland Oil Spill Programs

For expenses necessary to carry out the Environmental Protection Agency's responsibilities under the Oil Pollution Act of 1990, $15,962,000, to be derived from the Oil Spill Liability trust fund, to remain available until expended.

Program Projects in Inland Oil Spill Programs

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Compliance				
Compliance Monitoring	$122.5	$139.0	$0.0	-$139.0
Enforcement				
Civil Enforcement	$2,464.8	$2,413.0	$2,373.0	-$40.0
Oil				
Oil Spill: Prevention, Preparedness and Response	$14,690.3	$14,409.0	$12,413.0	-$1,996.0
Operations and Administration				
Facilities Infrastructure and Operations	$753.8	$584.0	$665.0	$81.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$695.6	$664.0	$511.0	-$153.0
TOTAL Inland Oil Spill Programs	**$18,727.0**	**$18,209.0**	**$15,962.0**	**-$2,247.0**

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

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$101,299.2	$101,665.0	$89,644.0	-$12,021.0
Inland Oil Spill Programs	***$122.5***	***$139.0***	***$0.0***	***-$139.0***
Hazardous Substance Superfund	$943.0	$995.0	$991.0	-$4.0
Total Budget Authority	$102,364.7	$102,799.0	$90,635.0	-$12,164.0
Total Workyears	485.9	489.0	428.7	-60.3

Program Project Description:

The Compliance Monitoring Program is a component of EPA's Compliance Assurance Program that allows the Agency to detect noncompliance and promotes compliance with the Nation's environmental laws.

Under this program, EPA integrates the data from the Facility Response Plans and Spill Prevention, Control, and Countermeasure systems into EPA's Integrated Compliance Information System. As a result of this data integration, EPA is able to focus compliance monitoring resources on areas of highest risk and increase transparency to the public. It also provides a more complete set of information for this program and improves data quality.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination from this program in FY 2020. Work will be maintained under the Oil Spill: Prevention, Preparedness, and Response Program under the Inland Oil Spill Programs appropriation.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	17,000	17,000	15,500	15,500	14,000	10,000	10,000	10,000	Inspections and Evaluations
Actual	18,000	16,000	15,400	13,500	11,800	10,600			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$139.0 / -0.6 FTE) This eliminates funding to the Compliance Monitoring Program under the Inland Oil Spill Programs appropriation.

Statutory Authority:

Oil Pollution Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Oil

Oil Spill: Prevention, Preparedness and Response
Program Area: Oil
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Inland Oil Spill Programs	***$14,690.3***	***$14,409.0***	***$12,413.0***	***-$1,996.0***
Total Budget Authority	$14,690.3	$14,409.0	$12,413.0	-$1,996.0
Total Workyears	71.2	72.6	62.3	-10.3

Program Project Description:

The Oil Spill Prevention, Preparedness and Response Program protects the American people by preventing, preparing for, responding to, and monitoring inland oil spills. EPA is the lead federal responder for inland oil spills, including transportation related spills from pipelines, trucks, railcars, and other transportation systems. In addition, the Program may provide technical assistance, assets, and outreach to industry, states, and local communities as part of the Agency's effort to ensure national safety and security for chemical and oil incidents.[1]

There are approximately 540,000 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 3,800 Facility Response Plan (FRP) facilities identified as high risk due to their size and location. The Oil Pollution Act requires certain facilities that store and use oil to prepare response plans that are reviewed by EPA to ensure availability of response resources in the event of a discharge.

To minimize the potential impacts to human health and the environment, the Agency will target inspection at facilities that pose the highest risk. The Agency currently inspects approximately 0.08 percent of SPCC facilities per year. In FY 2018, EPA found 87 percent of SPCC and 62 percent of FRP facilities to be out of compliance at the time of the inspection.[2] Inspections are essential in ensuring that facility staff is knowledgeable about prevention and response plans, and quickly able to put these plans into action.

EPA is the lead federal response agency for oil spills occurring in inland waters. EPA receives all spill notifications at the National Response Center and retains the responsibility to ensure that all inland oil spills are responded to within 12 hours. EPA works closely with state and local first responders on smaller spills and leads the response on larger spills. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement funds for site specific oil spill response activities. In FY 2018, EPA has responded to approximately 80 oil spills across the nation.

[1] For additional information, please refer to: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations.
[2] Information from EPA Oil database.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Oil Spill Prevention, Preparedness and Response Program will:

- Inspect oil facilities to ensure compliance with preventive measures. Inspections involve reviewing the facility's preparedness and response plans, discussing key aspects of these plans with facility staff, and conducting unannounced exercises that test the facility owner's ability to put these preparedness and response plans into action. EPA will focus inspections at high risk FRP facilities.

- Maintain the National Contingency Plan's Subpart J product schedule, which identifies a list of products that may be used to clean oil spills.

- Maintain the National Oil Database, which compiles data for the Program. The database manages information obtained from new and historical inspections and has streamlined the process for assisting facilities with compliance and equip inspectors with more efficient inspection processes.

- Deliver required annual oil spill inspector training to federal and state inspectors.

EPA is proposing to develop a new program that would authorize EPA to collect and use fees for compliance assistance to assist FRP and SPCC facilities in complying with EPA regulations. This fee and service will be voluntary.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$263.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to the adjustments in salary, essential workforce support, and benefit costs.

- (-$2,259.0 / -10.3 FTE) This program change is to focus on SPCC and FRP facility inspections on facilities that pose the highest risk. It also reduces specialized training opportunities for the Agency's On Scene Coordinators and updates to regional Area Contingency Plans.

Statutory Authority:

Oil Pollution Act.

Enforcement

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$164,266.9	$171,283.0	$147,647.0	-$23,636.0
Leaking Underground Storage Tanks	$619.8	$620.0	$470.0	-$150.0
Inland Oil Spill Programs	***$2,464.8***	***$2,413.0***	***$2,373.0***	***-$40.0***
Total Budget Authority	$167,351.5	$174,316.0	$150,490.0	-$23,826.0
Total Workyears	995.5	1,000.8	857.1	-143.7

Program Project Description:

The Civil Enforcement Program's goal is to ensure compliance with the nation's environmental laws to protect human health and the environment. The Program collaborates with the United States Department of Justice, states, local agencies, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

The Civil Enforcement Program's enforcement of Section 311 of the Clean Water Act, as amended by the Oil Pollution Act of 1990, is designed to ensure compliance with the prohibition against oil and hazardous substance spills, as well as the oil spill prevention, response planning, and other regulatory requirements. The Civil Enforcement Program develops policies, issues administrative orders or penalty actions, and refers civil judicial actions to the Department of Justice to address spills, violations of spill prevention regulations, response planning regulations and other violations (e.g., improper dispersant use or noncompliance with orders). The Program also assists in the recovery of cleanup costs expended by the government. The Program provides support for field investigations of spills, Spill Prevention, Control, and Countermeasure, Facility Response Plan and other requirements.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to streamline the Civil Enforcement Program, prioritize resources to achieve regulatory compliance, and address oil or hazardous substance spills in violation of the statute and deter future spills. Civil Enforcement efforts will focus on facilities where enforcement will promote deterrence, and ensure that spills are prevented, cleaned up, and, where appropriate, mitigated. The Civil Enforcement Program also will continue to coordinate with the Criminal Enforcement Program, as appropriate.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						325	325	325	Millions of Pounds
Actual	1,425	1,221	1,030	62,223	461	810			

(PM 436) Number of all referred no complaint (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							129	129	Cases
Actual									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$87.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary and benefit costs.

- (-$127.0 / -0.2 FTE) This change reflects efficiencies gained through improved coordination with the Criminal Enforcement Program in carrying out enforcement of the Oil Pollution Act of 1990.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Oil Pollution Act.

Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Rule of Law and Process
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$292,535.1	$308,701.0	$308,335.0	-$366.0
Science & Technology	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Building and Facilities	$34,605.1	$27,791.0	$33,377.0	$5,586.0
Leaking Underground Storage Tanks	$1,056.6	$813.0	$773.0	-$40.0
Inland Oil Spill Programs	***$753.8***	***$584.0***	***$665.0***	***$81.0***
Hazardous Substance Superfund	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Total Budget Authority	$475,113.4	$481,481.0	$483,964.0	$2,483.0
Total Workyears	321.8	327.6	308.0	-19.6

Program Project Description:

EPA's Facilities Infrastructure and Operations Program in the Inland Oil Spill Programs appropriation supports the Agency's rent, transit subsidy, and facility operations. Funding is allocated for such services among the major appropriations for the Agency.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and other private landlords. For FY 2020, EPA is requesting $0.50 million for rent in the Inland Oil Spill Programs appropriation.

Performance Measures Target:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3.0) This change to fixed and other costs is a decrease due to the recalculation of transit subsidy.

- (+$84.0) This program change is an increase for facility operations.

Statutory Authority:

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

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology	$131,757.3	$134,327.0	$53,631.0	-$80,696.0
Leaking Underground Storage Tanks	$311.3	$320.0	$424.0	$104.0
Inland Oil Spill Programs	***$695.6***	***$664.0***	***$511.0***	***-$153.0***
Hazardous Substance Superfund	$11,023.3	$11,463.0	$10,977.0	-$486.0
Total Budget Authority	$143,787.5	$146,774.0	$65,543.0	-$81,231.0
Total Workyears	439.1	440.9	294.1	-146.8

Program Project Description:

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills.[3] EPA therefore is charged with responsibilities for oil spill preparedness and response and associated research. EPA's research, planned in concert with partner agencies (United States Coast Guard, United States Department of the Interior, United States Department of Transportation, and United States Department of Commerce), is an important part of EPA's lead role in developing protocols for testing spill response products and agents.

The Sustainable and Healthy Communities (SHC) Research Program for inland oil spills, funded through the Oil Spill Liability Trust Fund,[4] provides federal, regional, state, tribal, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA provides assistance to communities by supporting local officials in their response to a spill. As a result of EPA research, responders can make more informed decisions on approaches and methods to reduce the spread and impact of coastal and inland oil spills, including pipeline and railway spills. Additionally, EPA's remediation expertise is critical in addressing potential impacts to communities and their environmental resources associated with pipeline and railway oil spills.

In support of these response efforts, EPA conducts research related to the Agency's National Contingency Plan (NCP) Product Schedule.[5] The NCP is used nationwide by emergency responders and federal agencies in responding to oil spills. EPA's role is to develop and evaluate response approaches involving bioremediation, dispersants, and other additives, and to assess impacts to surface water and groundwater, especially as they affect drinking water supplies. EPA

[3] For more information, please see: https://www.epa.gov/emergency-response/epas-scene-coordinators-oscs.
[4] For more information, please see: https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About_NPFC/OSLTF/.
[5] For more information, please see: http://www2.epa.gov/emergency-response/national-contingency-plan-subpart-j.

relies on this research to provide testing procedures that inform cleanup decisions during an emergency spill response.

The SHC Program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that reflects the science needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement.

Accomplishments in this research area include:

- **Published report[6] on wave tank simulations characterizing the effect of dispersant on dispersion effectiveness during surface and deep ocean spills.** Dispersants are key tools for addressing oil spills, though there are ongoing questions about how they behave in the water. SHC found that the dispersion of oil (both natural and enhanced) due to dispersants, is influenced by factors such as water temperature, dispersant type and concentration, and jet release pressure. Undersea jet oil plumes simulated within wave/flume tanks offer an opportunity to monitor the movement of dispersed oil droplets. The results further inform aquatic spill preparedness efforts by EPA. End users are states, EPA program and regional offices, the National Oceanic and Atmospheric Administration, United States Coast Guard, United States Department of the Interior-Bureau of Safety and Environmental Enforcement (DOI-BSEE) and the oil industry.

- **Screening of two potential reference oils for dispersant effectiveness, chemical characterization and toxicity.[7]** Because different types of oil respond differently to various dispersants, oil spill cleanup crews need concrete information to guide their decisions about the dispersants they use and how they can inform the public about the cleanup process. This effort helps to build that knowledge and directly responds to EPA needs.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3 Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. Specifically, SHC's FY 2020 research will focus on conducting research to support regulatory activities and protocol development for EPA's program and regional offices, and in support of state-delegated programs. The SHC research program will provide on-demand technical support at federal, tribal, or state-managed cleanup sites, as well as assistance during emergencies. The Program 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.

[6] For more information, please see: SHC Poster - *Actionable Science for Communities: Wave Tank Oil Plume Simulations*. https://www.epa.gov/sites/production/files/2016-11/documents/bosc_3_62_hot_topic_poster_conmy.pdf.
[7] For more information, please see: https://www.epa.gov/land-research/oil-spills-research-recent-publications.

Specific SHC activities in FY 2020 include:

- Developing or revising protocols to test oil spill control agents or products for listing on the NCP Product Schedule and other research, as needed by EPA oil programs.
- Conducting studies on the effectiveness of bioremediation of petroleum-based oil, vegetable oil, and biodiesel. Bioremediation is a treatment that uses naturally occurring organisms to break down hazardous substances into less toxic or nontoxic substances to improve clean up.
- Researching dispersants' performance and behavior in deep water and arctic spills, in collaboration with DOI-BSEE and Canada's Department of Fisheries and Oceans.

EPA scientists will produce a report on surface washing agents, solidifiers, and oil herding agents used in salt and freshwater responsive to Subpart J of the NCP. EPA also will expand research efforts regarding oil biodegradation and the characterization of crude oil.

Research Planning:

EPA is reconstituting a subcommittee under the Agency's Board of Scientific Counselors (BOSC) for the SHC Program to evaluate its performance and provide feedback to the Agency. The SHC Program will meet regularly with both the BOSC and Science Advisory Board over the next several years to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on developing its strategic research direction and StRAP for FY 2019-2022.

EPA collaborates with the National Institutes of Health, the National Science Foundation, Department of Energy, and U.S. Department of Agriculture to assess research performance. EPA's state engagement program is designed to inform states about EPA's research programs, and to enable EPA to better understand the science needs of state environmental agencies.

Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

Work under this program supports performance results in the Sustainable and Healthy Communities Program under the Oil appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$11.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.

- (-$164.0) This program change streamlines research to study the performance and behavior of oil dispersants in deep water and arctic spills, as well as revised protocols for testing oil spill control agents pursuant to the NCP Product Schedule.

Statutory Authority:

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

Table of Contents – State and Tribal Assistance Grants

APPROPRIATION: State and Tribal Assistance Grants

Resource Summary Table
(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants				
Budget Authority	$4,067,093.9	$4,212,161.0	$2,774,602.0	-$1,437,559.0
Cancellation of Funds	$0.0	-$96,198.0	-$142,000.0	-$45,802.0
Budget Authority Post Cancellation of Funds		$4,115,963.0	$2,632,603.0	-$1,483,360.0
Total Workyears	5.5	6.6	0.4	-6.2

Bill Language: State and Tribal Assistance Grants

For environmental programs and infrastructure assistance, including capitalization grants for State Revolving Funds and performance partnership grants $2,774,602,000, to remain available until expended, of which—

(1) $1,119,772,000 shall be for making capitalization grants for the Clean Water State Revolving Funds under title VI of the Federal Water Pollution Control Act; and of which $863,233,000 shall be for making capitalization grants for the Drinking Water State Revolving Funds under section 1452 of the Safe Drinking Water Act: Provided, That notwithstanding section 603(d)(7) of the Federal Water Pollution Control Act, the limitation on the amounts in a State water pollution control revolving fund that may be used by a State to administer the fund shall not apply to amounts included as principal in loans made by such fund in fiscal year 2020 and prior years where such amounts represent costs of administering the fund to the extent that such amounts are or were deemed reasonable by the Administrator, accounted for separately from other assets in the fund, and used for eligible purposes of the fund, including administration:

Provided further, That for fiscal year 2020, notwithstanding the provisions of subsections (g)(1), (h), and (l) of section 201 of the Federal Water Pollution Control Act, grants made under title II of such Act for American Samoa, Guam, the commonwealth of the Northern Marianas, the United States Virgin Islands, and the District of Columbia may also be made for the purpose of providing assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments:

Provided further, That for fiscal year 2020, notwithstanding the provisions of such subsections (g)(1), (h), and (l) of section 201 and section 518(c) of the Federal Water Pollution Control Act, funds reserved by the Administrator for grants under section 518(c) of the Federal Water Pollution Control Act may also be used to provide assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment

works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments:

Provided further, That for fiscal year 2020, notwithstanding any provision of the Federal Water Pollution Control Act and regulations issued pursuant thereof, up to a total of $2,000,000 of the funds reserved by the Administrator for grants under section 518(c) of such Act may also be used for grants for training, technical assistance, and educational programs relating to the operation and management of the treatment works specified in section 518(c) of such Act:

Provided further, That for fiscal year 2020, funds reserved under section 518(c) of such Act shall be available for grants only to Indian tribes, as defined in section 518(h) of such Act, and former Indian reservations in Oklahoma (as determined by the Secretary of the Interior) and Native Villages as defined in Public Law 92–203:

Provided further, That for fiscal year 2020, notwithstanding the limitation on amounts in section 518(c) of the Federal Water Pollution Control Act, up to a total of 2 percent of the funds appropriated, or $30,000,000, whichever is greater, and notwithstanding the limitation on amounts in section 1452(i) of the Safe Drinking Water Act, up to a total of 2 percent of the funds appropriated, or $20,000,000, whichever is greater, for State Revolving Funds under such Acts may be reserved by the Administrator for grants under section 518(c) and section 1452(i) of such Acts:

Provided further, That for fiscal year 2020, notwithstanding the amounts specified in section 205(c) of the Federal Water Pollution Control Act, up to 1.5 percent of the aggregate funds appropriated for the Clean Water State Revolving Fund program under the Act less any sums reserved under section 518(c) of the Act, may be reserved by the Administrator for grants made under title II of the Federal Water Pollution Control Act for American Samoa, Guam, the Commonwealth of the Northern Marianas, and United States Virgin Islands:

Provided further, That for fiscal year 2020, notwithstanding the limitations on amounts specified in section 1452(j) of the Safe Drinking Water Act, up to 1.5 percent of the funds appropriated for the Drinking Water State Revolving Fund programs under the Safe Drinking Water Act may be reserved by the Administrator for grants made under section 1452(j) of the Safe Drinking Water Act:

Provided further, That notwithstanding 22 U.S.C. 1383(i)(3)(A), not less than 10 percent but not more than 20 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and not less than 20 percent but not more than 30 percent of the funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants shall be used by the State to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these), and shall be so used by the State only where such funds are provided as initial financing for an eligible recipient or to buy, refinance, or restructure the debt obligations of eligible recipients only where such debt was incurred on or after the date of enactment of this Act;

(2) $3,000,000 shall be for grants to the State of Alaska to address drinking water and wastewater infrastructure of rural and Alaska Native Villages: Provided, That of these funds: (A) the State of Alaska shall provide a match of 25 percent; (B) no more than 5 percent of the funds may be used for administrative and overhead expenses; and (C) the State of Alaska shall make awards consistent with the Statewide priority list established in conjunction with the Agency and the U.S. Department of Agriculture for all water, sewer, waste disposal, and similar projects carried out by the State of Alaska that are funded under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301) or the Consolidated Farm and Rural Development Act (7 U.S.C. 1921 et seq.) which shall allocate not less than 25 percent of the funds provided for projects in regional hub communities;

(3) $62,000,000 shall be to carry out section 104(k) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including grants, interagency agreements, and associated program support costs shall be for grants under title VII, subtitle G of the Energy Policy Act of 2005;

(4) $580,347,000 shall be for grants, including associated program support costs, to States, federally recognized tribes, interstate agencies, tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104–134, and for making grants under sections 103 and 105 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator, of which: $31,791,000 shall be for carrying out section 128 of CERCLA; $6,422,000 shall be for Environmental Information Exchange Network grants, including associated program support costs; $11,884,000 of the funds available for grants under section 106 of the Federal Water Pollution Control Act shall be for State participation in national- and State-level statistical surveys of water resources and enhancements to State monitoring programs; and $10,000,000 shall be for Multipurpose Grants to States and federally recognized Indian tribes for the implementation of mandatory statutory duties in delegated environmental programs;

(6) $50,000,000 shall be for grants to States, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations, for detection, assessment, prevention, control, or abatement of pollution and other environmental hazards in school buildings as defined in 20 U.S.C. 3610(6), and related activities: Provided, That the Federal share of the costs of such activities shall not exceed 75 percent: Provided further, That the Administrator may waive such cost share requirement in the case of schools located in economically distressed communities;

(7) $2,000,000 shall be for grants under section 1459A(l) of the Safe Drinking Water Act (42 U.S.C. 300j-19a(l)), as amended by section 2005 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(8) $5,000,000 shall be for grants under section 1465 of the Safe Drinking Water Act (42 U.S.C. 300j-25), as added by section 2006(b) of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(9) $7,500,000 shall be for grants under section 104(b)(8) of the Federal Water Pollution Control Act (33 U.S.C. § 1254(b)(8)), as added by section 4103 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(10) $61,450,000 shall be for grants under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301), as amended by section 4106 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(11) $300,000 shall be for grants authorized in section 4304 of the America's Water Infrastructure Act of 2018 (Public Law 115–270); and

(12) $10,000,000 shall be for grants under section 1464(d) of the Safe Drinking Water Act (42 U.S.C. 300j-24(d)), as amended by section 2107 of the Water Infrastructure Improvements for the Nation Act (Public Law 114–322) and section 2006(a) of the America's Water Infrastructure Act of 2018 (Public Law 115–270).

Program Projects in STAG

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	$19,543.0	$20,000.0	$3,000.0	-$17,000.0
Brownfields Projects	$84,310.3	$80,000.0	$62,000.0	-$18,000.0
Infrastructure Assistance: Clean Water SRF	$1,657,428.2	$1,693,887.0	$1,119,772.0	-$574,115.0
Infrastructure Assistance: Drinking Water SRF	$1,128,161.0	$1,163,233.0	$863,233.0	-$300,000.0
Infrastructure Assistance: Mexico Border	$11,524.6	$10,000.0	$0.0	-$10,000.0
Diesel Emissions Reduction Grant Program	$72,668.1	$75,000.0	$10,000.0	-$65,000.0
Targeted Airshed Grants	$29,479.0	$40,000.0	$0.0	-$40,000.0
GKM Water Monitoring	$3,092.6	$4,000.0	$0.0	-$4,000.0
Safe Water for Small & Disadvantaged Communities	$0.0	$20,000.0	$0.0	-$20,000.0
Reducing Lead in Drinking Water	$0.0	$10,000.0	$0.0	-$10,000.0
Lead Testing in Schools	$0.0	$20,000.0	$10,000.0	-$10,000.0
Healthy Schools	$0.0	$0.0	$50,000.0	$50,000.0
Drinking Water Infrastructure Resilience and Sustainability	$0.0	$0.0	$2,000.0	$2,000.0
Drinking Fountain Lead Testing	$0.0	$0.0	$5,000.0	$5,000.0
Technical Assistance for Treatment Works	$0.0	$0.0	$7,500.0	$7,500.0
Sewer Overflow Control Grants	$0.0	$0.0	$61,450.0	$61,450.0
Water Infrastructure and Workforce Investment	$0.0	$0.0	$300.0	$300.0
Subtotal, State and Tribal Assistance Grants (STAG)	$3,006,206.8	$3,136,120.0	$2,194,255.0	-$941,865.0
Categorical Grants				

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Categorical Grant: Nonpoint Source (Sec. 319)	$167,592.8	$170,915.0	$0.0	-$170,915.0
Categorical Grant: Public Water System Supervision (PWSS)	$98,978.8	$101,963.0	$67,892.0	-$34,071.0
Categorical Grant: State and Local Air Quality Management	$229,030.4	$228,219.0	$151,961.0	-$76,258.0
Categorical Grant: Radon	$8,198.0	$8,051.0	$0.0	-$8,051.0
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	$17,766.8	$17,848.0	$11,884.0	-$5,964.0
Categorical Grant: Pollution Control (Sec. 106) (other activities)	$211,267.6	$212,958.0	$141,799.0	-$71,159.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	$229,034.4	$230,806.0	$153,683.0	-$77,123.0
Categorical Grant: Wetlands Program Development	$15,111.2	$14,661.0	$9,762.0	-$4,899.0
Categorical Grant: Underground Injection Control (UIC)	$10,130.3	$10,506.0	$6,995.0	-$3,511.0
Categorical Grant: Pesticides Program Implementation	$12,728.1	$12,701.0	$8,457.0	-$4,244.0
Categorical Grant: Lead	$13,016.2	$14,049.0	$0.0	-$14,049.0
Categorical Grant: Hazardous Waste Financial Assistance	$97,994.5	$99,693.0	$66,381.0	-$33,312.0
Categorical Grant: Pesticides Enforcement	$17,924.6	$18,050.0	$10,531.0	-$7,519.0
Categorical Grant: Pollution Prevention	$4,115.9	$4,765.0	$0.0	-$4,765.0
Categorical Grant: Toxics Substances Compliance	$4,685.5	$4,919.0	$3,276.0	-$1,643.0
Categorical Grant: Tribal General Assistance Program	$65,266.1	$65,476.0	$44,233.0	-$21,243.0
Categorical Grant: Underground Storage Tanks	$1,320.0	$1,498.0	$0.0	-$1,498.0
Categorical Grant: Tribal Air Quality Management	$12,767.9	$12,829.0	$8,963.0	-$3,866.0
Categorical Grant: Environmental Information	$9,550.3	$9,646.0	$6,422.0	-$3,224.0
Categorical Grant: Beaches Protection	$9,552.0	$9,549.0	$0.0	-$9,549.0
Categorical Grant: Brownfields	$46,941.8	$47,745.0	$31,791.0	-$15,954.0
Categorical Grant: Multipurpose Grants	$56.1	$10,000.0	$10,000.0	$0.0
Categorical Grant: Sector Program	$103.4	$0.0	$0.0	$0.0
Subtotal, Categorical Grants	$1,054,098.3	$1,076,041.0	$580,347.0	-$495,694.0
Congressional Priorities				
Congressionally Mandated Projects	$6,788.8	$0.0	$0.0	$0.0
Cancellation of Funds	$0.0	-$96,198.0	-$142,000.0	-$45,802.0
TOTAL STAG	**$4,067,093.9**	**$4,115,963.0**	**$2,632,602.0**	**-$1,483,361.0**

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

***** Fact Sheet tables do not include applicable cancellation of funds *****

Categorical Grants

Categorical Grant: Beaches Protection

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$9,552.0***	***$9,549.0***	***$0.0***	***-$9,549.0***
Total Budget Authority	$9,552.0	$9,549.0	$0.0	-$9,549.0

Program Project Description:

EPA's Beaches Protection Program awards grants to eligible coastal states, territories, and tribes to monitor water quality at beaches and to notify the public, through beach advisories and closures, when water quality exceeds applicable standards.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. EPA will encourage states to continue beach monitoring and notification programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$9,549.0) This program change eliminates the Beaches Protection Grant Program, which is a mature well-established program supporting state beach monitoring and notification programs that can continue to be implemented at the local level.

Statutory Authority:

Clean Water Act § 406; Beach Act of 2000; Appropriation Act: FY 2018 (Public Law 115-141).

Categorical Grant: Brownfields
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$46,941.8***	***$47,745.0***	***$31,791.0***	***-$15,954.0***
Total Budget Authority	$46,941.8	$47,745.0	$31,791.0	-$15,954.0

Program Project Description:

EPA's Brownfields Program is a successful model of the Agency working cooperatively with states, tribes, local governments, and other agencies to help communities oversee, plan, assess, and cleanup brownfield properties. State and Tribal Response Programs address contaminated sites that do not require federal action but need assessment and/or cleanup before they can be considered ready for reuse. This program allocates funding to states and tribes to establish core capabilities and enhance their response programs.

Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[1] Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of the end of 2017, the State and Tribal Response Programs have leveraged more than 9,916 jobs and $790 million in other funding. In FY 2018, EPA provided funding to 165 states, tribes, territories, and the District of Columbia.[2]

This funding is a critical source for state and tribal partners to establish and grow their brownfields programs. Over 100 tribes have received Brownfields funding to build their programs, and cumulatively cleaned up over 1,515 properties and made over 38,168 acres ready for reuse. Addressing brownfields on tribal lands also has leveraged over 878 jobs and $139 million. [3]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1 / Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will allocate funding support to approximately 170 state and tribal response programs to oversee the cleanup at approximately 24,817 properties. In FY 2018, the Brownfields Program participated in a *kaizen* event which led to increased reporting of sites made ready for reuse by brownfields cooperative

[1] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016; and (2) census data from the 2011-2015 American Community Survey.
[2] Data from U.S. EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES).
[3] Data from U.S. EPA ACRES.

agreement recipients. In FY 2020, the Program will continue to use the results of the *kaizen* event to improve brownfields data reporting.

States and tribes may use categorical grant funding provided under this program in the following ways:

- Conducting site-specific activities, such as assessments and cleanups at brownfields sites;[4]
- Developing mechanisms and resources to provide meaningful opportunities for public participation;
- Developing mechanisms for approval of cleanup plans, and verification and certification that cleanup efforts are complete;
- Creating an inventory of brownfields sites;
- Capitalizing a Revolving Loan Fund for brownfields-related work;
- Developing a public record;
- Developing oversight and enforcement authorities, or other mechanisms and resources;
- Purchasing environmental insurance;
- Developing state and tribal tracking and management systems for land use, institutional and engineering controls; and
- Conducting public education and outreach efforts to ensure that tribal communities are informed and able to participate in environmental decision-making.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$15,954.0) This program change reduces federal resources for cleanup oversight by states and tribes. EPA will work with states and tribes to prioritize funds to establish core capabilities, enhance their response programs, and identify program efficiencies.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128(a).

[4] For more information, please see Brownfields State & Local Tribal Information.

Categorical Grant: Environmental Information

Program Area: Categorical Grants
Goal: Rule of Law and Process
Objective(s): Streamline and Modernize

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$9,550.3***	***$9,646.0***	***$6,422.0***	***-$3,224.0***
Total Budget Authority	$9,550.3	$9,646.0	$6,422.0	-$3,224.0

Program Project Description:

Funds provided under this categorical grant support the Environmental Information Exchange Network (EN) which is a critical component of the Agency's data strategy. The EN is a standards-based, secure approach for EPA and its state, tribal and territorial partners to exchange and share environmental data over the Internet. Through its use of technology and data standards, open-source software, shared services and reusable tools and applications, the EN, in tandem with the Agency's E-Enterprise efforts, offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently.

The Exchange Network Grants Program provides funding to states, territories, federally recognized Indian tribes, and tribal consortia to support their participation in the EN. These grants help EN partners acquire and develop the hardware and software needed to: connect to the EN; use the EN to collect, report and access the data they need with greater efficiency; conduct mappings from one system to another with XML schemas; and integrate environmental data across programs. In collaboration with EPA, the Environmental Council of the States (ECOS) agreed upon the EN as the standard approach for EPA, state, tribe, and territorial data sharing. The Exchange Network Grant Program provides the funding to make this approach a reality.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 3 / Objective 3.4, Streamline and Modernize in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Environmental Information programs and activities will continue focus on state, local, and tribal partnerships in supporting government agencies' delivery of environmental protection. Under this strategy, the Agency will continue to advance its business processes and systems to reduce reporting burden on states and regulated facilities, as well as to improve the effectiveness and efficiency of environmental protection programs for EPA, states, and tribes. Currently a total of sixty-three state, tribal, and territorial partners administer qualified EN grants projects. Many will apply results of Lean efforts conducted by those agencies to implement these projects. EPA anticipates awarding fifteen EN grants in FY 2020 that will assist states, tribes, and territories to perform the following activities, which will be prioritized based on core requirements:

- Data Access and Availability: These activities create services and tools that make state, tribal, or territorial data available on demand to other partners. Providing data through web services and application programming interfaces (APIs) helps facilitate the sharing of information with the public, with private sector entities, and among state, tribal, and territorial agencies and EPA. The development of an API and web services approach, in collaboration with EN partners, advances the EN's goal of expanding access to environmental data and enhancing inter- and intra-partner data sharing. Grant activities may include mobile and desktop applications, executive and program dashboards, and publishing environmental information to public sites.

- New EPA Reporting Data Flows: Grant projects will support developing and implementing new EN data flows that enable automated reporting to EPA systems (e.g., NPDES).

- Partner Data Sharing: These activities support the partners' ability to share cross-state, cross-tribal or state-tribal data, such as institutional controls at contamination sites, data on cleanup sites, and datasets of national significance to tribes (e.g., open dumps).

- Virtual Exchange Services (VES) support for states, tribes, and territories: This program supports EN Partners transitioning from using individually-operated nodes to leveraging EPA-hosted VES. Moving to VES supports the transition to a cloud-based network infrastructure, which provides more cost-efficient ways for EN partners to manage nodes, thereby decreasing development and operational costs (including licensing, server, and administration costs). This cloud-based model provides a simplified and standardized development environment, creates greater economies of scale, and reduces the administration burden on partners.

- Sharing Cross-Media Electronic Reporting Rule (CROMERR) services and components: This supports state and tribal adoption and implementation of a suite of Central Data Exchange services that EPA has centrally developed for CROMERR functions. Specific Shared Services include electronic signature for submissions from regulated entities, Copy of Record management, and identity management within the registration process. States and tribes will use these services that are centrally hosted by EPA, replacing individually developed system functions. The use of shared services will reduce states and tribes' time to prepare and review applications and develop systems, and the cost to develop, operate, and maintain CROMERR-compliant e-reporting systems.

- Support for the EN and E-Enterprise business strategy through a cooperative agreement with ECOS under the associated program support cost authority (Public Law 113-76[5]). This includes direct support to both EN and E-Enterprise joint governance, each of which represents a cross-section of EPA, state, and tribal organizations.

The "National Environmental Information Exchange Network Grant Program Solicitation Notice" sets forth the process for awarding grant funding to states, tribes, and territories.[6] It is an annual

[5] For additional information, please refer to: https://www.gpo.gov/fdsys/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf.
[6] For additional information, please refer to: https://www.epa.gov/exchangenetwork/exchange-network-grant-program.

guidance document that describes eligibility requirements, the process for application preparation and submission, evaluation criteria, award administration information, and post-award monitoring procedures.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3,224.0) This focuses funding for states, tribes, and territories to develop tools, services, and core capabilities, to increase their ability to share data through the EN and to improve the effectiveness and efficiency of their environmental program management.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Appropriation Act: FY 2018 (Public Law 115-141).

Categorical Grant: Hazardous Waste Financial Assistance

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$97,994.5***	***$99,693.0***	***$66,381.0***	***-$33,312.0***
Total Budget Authority	$97,994.5	$99,693.0	$66,381.0	-$33,312.0

Program Project Description:

The Hazardous Waste Financial Assistance Grants help states[7] implement the Resource Conservation and Recovery Act (RCRA). Through RCRA, EPA and states protect human health and the environment by minimizing waste generation, preventing the release of millions of tons of hazardous wastes, and cleaning up land and water. Authorized states conduct the direct implementation of permitting, corrective action, and enforcement components of the RCRA Hazardous Waste Management Program.

This grant funding supports all 50 states and six territories. Currently, 48 states and two territories are authorized to implement the RCRA program. In addition, EPA directly implements the RCRA program in the states of Iowa and Alaska. To ensure statutory requirements are successful, EPA partners with state and local governments, as well as American businesses and non-governmental organizations, to significantly improve waste and material management practices. In FY 2019 EPA will begin revising the state allocation formula for Hazardous Waste Financial Assistance Grants that will take effect in FY 2021. The Agency will pursue appropriate updates, including using the most recent data, to better align cooperative agreement funding to state needs, maximizing the environmental benefits and program performance of this funding.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, the Agency (and authorized states) will:

- Issue and renew permits to a portion of the 6,600 hazardous waste treatment, storage and disposal facilities. This includes working with industry, the public, and states to address issues related to management of hazardous waste through development and application of standards, permits, guidance, and training;

[7] When appropriate, these grants also are used to support tribes in conducting hazardous waste work in Indian Country. For additional information, refer to: https://www.epa.gov/tribal/solid-and-hazardous-waste-indian-country-resource-conservation-and-recovery-act-rcra.

- Process permit modifications to keep pace with evolving business practices, technology, market conditions, and cleanup decisions;

- Update controls to encourage facilities to modernize technological systems, expand waste management capability, improve hazardous waste management practices, and make timely cleanup decisions;

- Inspect facilities to ensure compliance and safety;

- Oversee cleanups at hazardous waste management facilities, and focus on completing cleanup of the 3,779 priority 2020 Baseline facilities;

- Oversee cleanups at high priority contaminated hazardous waste management facilities and return cleaned up property to productive use. This includes working with state partners to ensure that responsible parties conduct effective and efficient cleanups that are protective of human health and the environment, and reduce the burden on federal taxpayers;

- Draft implementation documents such as permits and orders, review site assessment plans and results, review remedy selection documents, oversee remedy implementation, oversee public participation, and track progress of cleanups;

- Continue to improve cleanup approaches, share best practices and cleanup innovations, such as RCRA FIRST,[8] and address issues of emerging science; and

- Under EPA's Lean Management System, EPA will monitor progress in issuing permits more quickly without sacrificing permit integrity. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner.

Performance Measure Targets:

Work under this program also supports performance results in the RCRA Corrective Action Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$33,312.0) This program change modifies timelines for reaching cleanup milestones and reviewing facility data, cleanup plans, and permit modifications. Assistance to tribal communities also is curtailed. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Appropriation Act: FY 2018 (Public Law 115-141).

[8] For more information, visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

Categorical Grant: Lead
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$13,016.2***	***$14,049.0***	***$0.0***	***-$14,049.0***
Total Budget Authority	$13,016.2	$14,049.0	$0.0	-$14,049.0

Program Project Description:

EPA's Lead Paint Program is working to reduce the number of children with blood lead levels of five micrograms per deciliter or higher. The Program also works to reduce the disparities in blood lead levels between low-income children and non-low-income children,[9] and provides support to authorized states and tribal programs that administer training and certification programs for lead professionals and contractors.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. Lead paint certification will continue under the Chemical Risk Review and Reduction Program.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$14,049.0) This program change eliminates the Categorical Grant: Lead Program.

Statutory Authority:

Toxic Substances Control Act (TSCA) §§ 401-412.

[9] Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (September, 2012). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. http://www.cdc.gov/exposurereport/.

Categorical Grant: Multipurpose Grants
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$56.1***	***$10,000.0***	***$10,000.0***	***$0.0***
Total Budget Authority	$56.1	$10,000.0	$10,000.0	$0.0

Program Project Description:

EPA and its partners have made enormous progress in protecting air, water, and land resources. The recently created Multipurpose Grants Program will differ from prior iterations by supporting states, tribes, and territories in the implementation of mandatory statutory duties in environmental programs delegated by EPA. Recognizing that environmental challenges differ due to variations in geography, population density, and other factors, the Program provides EPA's partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

FY 2020 Activities and Performance Plan:

Work in this program directly supports multiple objectives under Goal 1, Core Mission in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, these funds will support the implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws. States, tribes, and territories will have the flexibility to apply the funds toward activities required in a broad array of environmental statutes, depending on local needs and priorities. Results will be tracked as required by the Environmental Results Order and could support critical work across multiple environmental programs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

Appropriation Act: FY 2018 (Public Law 115-141); Indian Environmental General Assistance Program Act (GAP); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide, and

Rodenticide Act (FIFRA); Clean Air Act (CAA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, and Compensation and Liability Act (CERCLA); Marine Protection Research and Sanctuaries Act (MPRSA); Indoor Radon Abatement Act.

Note: EPA is currently seeking appropriations language to support this program: "Provided further; That of the funds otherwise available under the heading State and Tribal Assistance Grants; $27,000,000 shall be for multi-purpose grants for the implementation of mandatory statutory duties in delegated environmental programs."

Categorical Grant: Nonpoint Source (Sec. 319)

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$167,592.8***	***$170,915.0***	***$0.0***	***-$170,915.0***
Total Budget Authority	$167,592.8	$170,915.0	$0.0	-$170,915.0

Program Project Description:

Section 319 of the Clean Water Act (CWA) authorizes states, territories, and tribes to use a range of tools to implement their Nonpoint Source Programs.[10] Grants under Section 319 are provided to states, territories, and tribes to help them implement their EPA approved Nonpoint Source Management Programs.

FY 2020 Activities and Performance Plan:

Resources for this program are proposed for elimination in FY 2020. The Agency will continue to coordinate with the United States Department of Agriculture (USDA) on targeting funding where appropriate to address nonpoint sources.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$170,915.0) This program change eliminates the Nonpoint Source Grant Program. There are other sources of funding that support this type of work across government and the Agency will partner with USDA to target such efforts.

Statutory Authority:

Clean Water Act § 319.

[10] For more information, see: https://www.cfda.gov.

Categorical Grant: Pesticides Enforcement
Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$17,924.6***	***$18,050.0***	***$10,531.0***	***-$7,519.0***
Total Budget Authority	$17,924.6	$18,050.0	$10,531.0	-$7,519.0

Program Project Description:

The Pesticides Compliance Monitoring and Enforcement Cooperative Agreement Program supports pesticide product and user compliance with provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through cooperative agreements[11] with states and tribes.

The cooperative agreements support state and tribal compliance and enforcement activities under FIFRA. Enforcement and pesticides program cooperative agreement guidance is issued to focus regional, state, and tribal efforts on the highest priorities. EPA's support to state and tribal pesticide programs[12] emphasizes reducing chemical risks by ensuring compliance with: worker protection standards, pesticide applicator certification and training requirements, pesticide use requirements designed to protect water quality, pesticide product integrity, and border compliance.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will prioritize and award state and tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA within our resource levels.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$7,519.0) This change reflects EPA's efforts to work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

[11] For additional information, please refer to: http://www2.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-state-and-tribal-assistance-grant.
[12] For additional information, please refer to: http://www2.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §23(a)(1); Appropriation Act: FY 2018 (Public Law 115-141).

Categorical Grant: Pesticides Program Implementation

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$12,728.1***	***$12,701.0***	***$8,457.0***	***-$4,244.0***
Total Budget Authority	$12,728.1	$12,701.0	$8,457.0	-$4,244.0

Program Project Description:

The purpose of the pesticide program implementation grants is to translate pesticide regulatory decisions made at the national level into results at the local level. Under the pesticide statutes, responsibility for ensuring proper pesticide use is in large part delegated to states and tribes. Grant resources allow states and tribes to be more effective regulatory partners.

EPA's mission, as related to pesticides, is to protect human health and the environment from pesticide risk and to realize the value of pesticide availability by considering the economic, social, and environmental costs and benefits of the use of pesticides.[13] The Agency provides grants to states, tribes, and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, environmental groups, and other entities, as necessary, to assist in strengthening and implementing EPA's pesticide programs. This STAG program focuses on areas such as worker safety activities (including worker protection and certification and training of pesticide applicators), protection of endangered species,[14] protection of water resources from pesticides, protection of pollinators, and promotion of environmental stewardship and Integrated Pest Management related activities. These Agency activities are achieved through implementation of EPA statutes and regulatory actions by states and tribes.

EPA supports implementation of Tribal Pesticide Programs through grants. Tribal Program outreach activities support tribal capacity to protect human health by reducing risks from pesticides in Indian Country. This task is challenging given that certain aspects of Native Americans' lifestyles, such as subsistence fishing or consumption of plants that were not grown as food and possibly exposed to pesticides, may increase exposure to some chemicals or create unique chemical exposure scenarios.[15]

[13] Federal Insecticide, Fungicide and Rodenticide Act, as amended. Section 3(a), Requirement of Registration (7 U.S.C. 136a). Available online at https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.
[14] The Endangered Species Act of 1973 sections 7(a)1 and 7 (a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at U.S. Fish and Wildlife Service, Endangered Species Act of 1973 internet site: http://www.fws.gov/endangered/laws-policies/section-7.html
[15] For additional information, please see http://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

The Agency also funds a multi-year grant in support of the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Issues Research and Evaluation Group. The grant ensures the close coordination of states and EPA on pesticide issues.

FY 2020 Activities and Performance Plan:

Work in this program supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*.

Worker Protection Standard and Certification and Training Program

Through the Certification and Training Program and the Worker Protection Standard, EPA protects workers, pesticide applicators and handlers, employers, and the public from the potential risks posed by pesticides in their work environments. In FY 2020, EPA will continue to provide assistance and grants to implement the Certification and Training Program and Worker Protection Standard, and to address changes to the federal regulations for these programs. In FY 2020, states, territories, and tribes will have submitted their revised Certification and Training plans to address the new regulations and will begin planning for implementation to their certification programs that may be needed to comply with the 2017 final rule. For worker protection, the states, territories, and tribes also will train their program and inspection staff on the 2017 final revisions to the Worker Protection Standard, conduct outreach and training programs, and plan for inspections under the new rule.[16]

Endangered Species Protection Program

The Endangered Species Protection Program protects federally listed, threatened or endangered animals and plants whose populations are threatened by risks associated with pesticide use.[17] EPA complies with Endangered Species Act requirements to ensure that its regulatory decisions will not likely jeopardize the continued existence of species listed as endangered and threatened, or destroy or adversely modify habitat designated as critical to those species' survival. EPA will provide grants to states and tribes, as described above, for projects supporting endangered species protection. Program implementation includes outreach, communication, education related to use limitations, review and distribution of endangered species protection bulletins, and mapping and development of endangered species protection plans. In FY 2020, these activities will continue to support the Agency's mission to protect the environment from pesticide risk.

Protection of Water Sources from Pesticide Exposure

Protecting the nation's water sources from possible pesticide contamination is another component of EPA's environmental protection efforts. In FY 2020, EPA will provide funding, through cooperative agreements, to states, tribes, and other partners to investigate and respond, as needed, to address water resources contaminated by pesticides. Stakeholders and partners, including states and tribes, are expected to evaluate local pesticide uses that have the potential to contaminate water

[16] For more information, please see: https://www.epa.gov/pesticide-worker-safety/how-epa-protects-workers-pesticide-risk.
[17] For more information, please see: http://www.epa.gov/oppfead1/endanger/species-info.htm.

resources and take steps to prevent or reduce contamination where pesticide concentrations approach or exceed levels of concern.

Integrated Pest Management

In FY 2020, EPA will continue to support risk reduction by providing assistance to promote the use of safer alternatives to traditional chemical pest control methods including Integrated Pest Management techniques.[18] EPA supports the development and evaluation of new pest management technologies that contribute to reducing both health and environmental risks from pesticide use.

Pollinator Health

In FY 2020, EPA will continue to work with state and tribal agencies to promote the development of locally-based plans to help improve pollinator health. State pollinator protection plans in place in several states have been an effective communication and collaboration mechanism between stakeholders at the local level that can lead to reduced pesticide exposure and protection of honey bees, while maintaining the flexibility needed by growers. EPA believes that these plans, developed through a robust stakeholder engagement process at the local level, serve as good models for enhanced local communication and can help accomplish EPA's overall goal of mitigating exposure of bees to acutely toxic pesticides.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,244.0) This program change will streamline core activities, find efficiencies, and leverage available resources. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 23(a)(1); Federal Food, Drug and Cosmetic Act (FFDCA); Food Quality Protection Act (FQPA) of 1996; Endangered Species Act (ESA).

[18] For additional information, please see http://www.epa.gov/pesp/.

Categorical Grant: Pollution Control (Sec. 106)
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$229,034.4***	***$230,806.0***	***$153,683.0***	***-$77,123.0***
Total Budget Authority	$229,034.4	$230,806.0	$153,683.0	-$77,123.0

Program Project Description:

Section 106 of the Clean Water Act (CWA) authorizes EPA to provide federal assistance to states (including territories and the District of Columbia), tribes qualified under CWA section 518(e), and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources. Prevention and control activities supported through these grants include: providing National Pollutant Discharge Elimination System (NPDES) permits, conducting ambient water quality monitoring, assessing and listing impaired waters, developing water quality standards and Total Maximum Daily Loads (TMDLs), surveillance, and enforcement.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The Section 106 Grant Program supports prevention and control measures that improve water quality. In FY 2020, EPA will focus on core statutory requirements while continuing to provide states and tribes with flexibility to best address their specific priorities.

Monitoring and Assessment

EPA is working with states and tribes to provide monitoring and assessment information to support multiple CWA programs in a cost-efficient and effective manner. The intent is to have scientifically defensible monitoring data that is needed to address priority problems at state, tribal, national, and local levels and to track national water quality improvements over time.

In FY 2020, EPA will continue working with states and tribes to support their water quality monitoring programs. Monitoring Initiative funds for states and tribes will support the National Aquatic Resource Surveys (NARS) and the enhancement of state and tribal monitoring programs.[19] In FY 2020, the Monitoring Initiative will be funded at $11.9 million for participation in the NARS and for monitoring program priority enhancements. EPA is implementing

[19] For more information, please refer to: https://www.epa.gov/water-pollution-control-section-106-grants/monitoring-initiative-grants-under-section-106-clean.

recommendations from a Lean exercise to improve the timeliness of monitoring data processed for NARS partnerships. Through the Monitoring and Assessment Partnership, EPA will work with states to develop and apply innovative and efficient monitoring tools and techniques to optimize availability of high-quality data to support priority CWA program needs.

Reviewing and Updating Water Quality Standards

States and authorized tribes will review and update their water quality standards as required by the CWA and EPA regulations at 40 CFR part 131. EPA also will work with tribes that want to establish water quality standards. Through EPA's Lean Management System, the Agency will continue to monitor the number of backlogged water quality standards actions. The Agency is working to decrease the number of state and tribal standards revisions that EPA neither approved nor disapproved within the first 60 days after submittal and that have yet to be so acted upon. The Agency also is tracking progress by states in completing the triennial reviews of applicable standards on time as required by the CWA.

Developing Total Maximum Daily Loads

EPA will work with states, territories, and authorized tribes to develop and implement TMDLs for CWA section 303(d) listed impaired waterbodies as a tool for meeting water quality restoration goals. TMDLs focus on achieving clearly defined environmental standards and establishing a pollutant budget, which is then implemented via permit requirements and through local, state, and federal watershed plans and programs to restore waters. EPA will continue to track state progress in completing TMDLs, alternative restoration approaches or projection plans with a goal of 100 percent of priority plans in place at state identified priority waters under the State-EPA 303(d) Program Vision by 2022.[20] As of the end of FY 2018, 33,135 square miles, or 33 percent of state priority waters, were addressed by a priority TMDL, other restoration plan or protection approach.

Issuing Permits

The NPDES Program requires point source dischargers to be permitted and pretreatment programs to control discharges from industrial and other facilities to the nation's wastewater treatment plants. Through EPA's Lean Management System, this program is working with the states[21] to balance competing opportunities; identify opportunities to enhance the integrity and effectiveness of NPDES permits, set schedules to address significant action items, and map out programmatic permitting reforms and revisions. After Lean Management improvements, the FY 2018 backlog of EPA-issued new NPDES permits decreased from 106 to 62.

Conducting Compliance Monitoring and Enforcement

EPA will work with NPDES-authorized states to implement the 2014 CWA Act NPDES Compliance Monitoring Strategy (CMS).[22] The NPDES CMS establishes national standards for

[20] Read more on the 303(d) Program Vision at: https://www.epa.gov/tmdl/new-vision-implementing-cwa-section-303d-impaired-waters-program-responsibilities.
[21] Currently there are no tribes having authority to implement the NPDES Program.
[22] For more information, please refer to: https://www.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring.

allocation of inspection resources across all NPDES regulated entities in order to best protect water quality.

EPA works with states on advanced technologies, such as remote water monitoring sensors to collect discharge data, to more efficiently identify problem areas. The Agency expects that these technologies will improve the analytical capabilities of both EPA and states and enhance the public's knowledge about the quality of their environment.

Currently, EPA and states are implementing the NPDES Electronic Reporting Rule through the Integrated Compliance Information System.[23] Phase 1 of the rule was implemented in FY 2017 for NPDES Discharge Monitoring Reports, and Phase 2 began cooperatively with our state partners in FY 2018. In FY 2020, EPA will continue to work with states in the development of electronic reporting tools and data sharing. For example, approximately 22 states currently use EPA's electronic reporting tool to collect Discharge Monitoring Reports. This saves a significant amount of resources in development, and operations and maintenance costs for state programs.

Working with Tribal Water Pollution Control Programs

In FY 2020, EPA will work with tribal programs on activities that address water quality and pollution problems on tribal lands. Tribes will continue to implement and expand their Water Pollution Control Programs pursuant to section 518(e) of the CWA.

Performance Measure Targets:

(PM SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						No Target Established	9,000	18,000	Square Miles
Actual						N/A			

(PM TMDL-02) Progress in putting priority TMDLs, Alternative Restoration plans, and protection approaches in place.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target							50	67	Percent
Actual									
Numerator									Square Miles
Denominator									

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$77,123.0) This program change reduces the Section 106 grants. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Clean Water Act § 106.

[23] For more information, please refer to: https://www.epa.gov/compliance/npdes-ereporting.

Categorical Grant: Pollution Prevention

Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$4,115.9***	***$4,765.0***	***$0.0***	***-$4,765.0***
Total Budget Authority	$4,115.9	$4,765.0	$0.0	-$4,765.0

Program Project Description:

The Pollution Prevention (P2) Categorical Grants Program augments the counterpart P2 Program under the Environmental Programs and Management (EPM) account.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. Based on previous investments in P2 solutions made under this program project, partners are expected to be able to continue to share best practices and pursue additional pollution prevention solutions.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,765.0) This program change eliminates the Categorical Grant: Pollution Prevention Program.

Statutory Authority:

Pollution Prevention Act of 1990 (PPA) § 6605; Appropriation Act: FY 2018 (Public Law 115-141).

Categorical Grant: Public Water System Supervision (PWSS)

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$98,978.8***	***$101,963.0***	***$67,892.0***	***-$34,071.0***
Total Budget Authority	$98,978.8	$101,963.0	$67,892.0	-$34,071.0

Program Project Description:

The Public Water System Supervision (PWSS) Program provides grants to states and tribes with primary enforcement authority (primacy) to implement and enforce the National Primary Drinking Water Regulations under the Safe Drinking Water Act. These grants support the safety of the Nation's drinking water resources. EPA works closely with states and tribes to implement the Safe Drinking Water Act and to protect public health and the environment. Under the Safe Drinking Water Act, EPA grants the states with primary enforcement responsibility of their drinking water program.

The National Primary Drinking Water Regulations set forth health-based standards, monitoring, reporting and record keeping, sanitary surveys, compliance tracking, and enforcement elements to ensure that the Nation's drinking water supplies do not pose adverse health risks. The PWSS Program supports state and tribal roles in partnering with EPA to ensure safe drinking water supplies to the public. States and tribes with primary enforcement authority use these grant funds to fund drinking water program personnel who:

- Provide training and technical assistance to owners and operators of public water systems;
- Conduct sanitary surveys (*i.e.*, on-site reviews conducted to determine and support a facility's capacity to deliver safe drinking water) and address significant deficiencies that may compromise the quality of the finished water;
- Train and certify public water system operators;
- Manage public water system data, facilitate electronic reporting of compliance monitoring data, and submit compliance data to the database of record, the Safe Drinking Water Information System (SDWIS);
- Ensure that public water systems conduct the required public notifications to consumers, so they are aware of problems with their drinking water;
- Respond to violations and issue enforcement actions;
- Certify laboratories;
- Conduct laboratory analyses; and
- Provide training and technical assistance to public water system operators and managers to build water system technical, managerial, and financial capacity.

Some states and tribes do not have primary enforcement authority. Funds allocated to the State of Wyoming, the District of Columbia, and Indian tribes without primacy are used to support direct implementation activities by EPA or for developmental grants to Indian tribes to develop capacity for primacy.[24]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will work with states and tribes to target funds to core statutory requirements while providing states and tribes with flexibility to best address their priorities. In addition, EPA will provide funds to support state and tribal efforts to assist the most vulnerable water systems in meeting drinking water regulations and in developing financial and managerial capacity needed to protect federal investments that remedy aging or inadequate infrastructure (e.g., pipe replacement to prevent failures in distribution systems, installation of treatment to remove drinking water contaminants). Through these activities, EPA will encourage states and tribes to use funds to focus, to the extent possible, on the most immediate challenges public water systems are currently facing.

EPA also is seeking efficiencies within the PWSS Program by working with states to pursue a reduction of the number systems that have health-based non-compliance events. This includes striving to decrease the number of community water systems out of compliance with health-based standards. Over the 5-year period of the *FY 2018- 2022 EPA Strategic Plan*, EPA is pursuing a 25 percent reduction in the number systems that have health-based violations from 3,508 in FY 2017 to 2,700 by FY 2022. At the end of FY 2018, 3,480 community water systems were out of compliance with health-based standards. The PWSS Program helps to facilitate this effort by supporting state drinking water programs, tribal drinking water officials, and technical assistance providers in achieving and maintaining compliance at drinking water systems, developing best practices, strengthening state capacity, and certifying drinking water operators.

Finally, EPA is partnering with states to increase the number of community water systems that had a sanitary survey within the last three years. SDWA requires that primacy agencies conduct a sanitary survey for each drinking water system every three years (five years for outstanding performance). The Agency is working toward the goal of improving the proportion of community water systems that had a sanitary survey within the last three years to 98 percent by FY 2022 from the 3-year rolling average of 92 percent in FY 2017. Information gained during on-site sanitary surveys comprise the backbone of state understanding of performance challenges that drinking water systems face and potential public health risks.

[24] For more information, please see:
http://www.epa.gov/dwreginfo/public-water-system-supervision-pwss-grant-program and
https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=cca066b833c552bdf3c9ff011e576c7f.

Performance Measure Targets:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						3,510	3,380	3,280	CWSs
Actual						3,480			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$34,071.0) This program change reflects a reduction in the PWSS Grants Program. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Safe Drinking Water Act § 1443.

Categorical Grant: Radon
Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$8,198.0***	***$8,051.0***	***$0.0***	***-$8,051.0***
Total Budget Authority	$8,198.0	$8,051.0	$0.0	-$8,051.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities to address the public health risks posed by exposures to indoor radon. Under the statute, EPA has assisted states and tribes through technical support and the State Indoor Radon Grants (SIRG) Program, which provided categorical grants to develop, implement, and enhance programs that assess and mitigate radon risk. For over 30 years, EPA's Radon Program has provided important guidance, technical assistance, and funding to help states establish and support their own programs. EPA also provided technical support to transfer "best practices" among states that promote effective program implementation across the nation.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$8,051.0) Resources for this program are proposed for elimination in FY 2020.

Statutory Authority:

Toxic Substances Control Act (TSCA) § 306; Clean Air Act (CAA); Radon Gas and Indoor Air Quality Research Act; Title IV of the Superfund Amendments and Reauthorization Act (SARA).

Categorical Grant: State and Local Air Quality Management

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$229,030.4***	***$228,219.0***	***$151,961.0***	***-$76,258.0***
Total Budget Authority	$229,030.4	$228,219.0	$151,961.0	-$76,258.0

Program Project Description:

This program provides funding for state air programs, as implemented by state, multi-state, and local air pollution control agencies. Section 103 of the Clean Air Act (CAA) provides EPA with the authority to award grants to air pollution control agencies, other public or nonprofit private agencies, institutions, and organizations, to conduct and promote certain types of research, investigations, experiments, demonstrations, surveys, studies, and training related to air pollution. Section 105 of the CAA provides EPA with the authority to award grants to state and local air pollution control agencies to develop and implement continuing environmental and public health programs, such as: prevention and control of air pollution, implementation of National Ambient Air Quality Standards (NAAQS) set to protect public health and the environment, and improving visibility in our national parks and wilderness areas (Class I areas). The continuing activities funded under Section 105 include: development and implementation of preconstruction permit programs; emission reduction measures; development and operation of air quality monitoring networks, and other air program activities, including training. Section 106 of the CAA provides EPA with the authority to fund interstate air pollution transport commissions to develop or carry out plans for designated air quality control regions.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. This program also supports the Agency Priority Goal, "Improve Air Quality by Implementing Pollution Control Measures to Reduce the Number of Nonattainment Areas," and the long-term performance goal, "By September 30, 2022, reduce the number of nonattainment areas to 101."[1] In FY 2020, at least $5 million in state and local air quality management grant funding will support efforts to improve children's health through state, local, and tribal efforts to attain and maintain the NAAQS.

States will continue to be responsible for State Implementation Plans (SIPs), which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility improvement obligations. In FY 2020, EPA anticipates submission of SIPs addressing the Northeast States' Ozone Transport Region requirements for the 2015 ozone NAAQS. Also, affected states will be completing development or revision of attainment SIPs for

areas classified "Moderate" or higher for the 2015 ozone NAAQS, and reclassified to "Serious" for the 2008 ozone NAAQS; and areas designated nonattainment effective April 2018 for the 2010 sulfur dioxide (SO_2) NAAQS. States also have SIP obligations associated with visibility improvement requirements, among other requirements identified in the CAA. In FY 2020, EPA will work with states to prioritize activities needed to meet obligations for SIP development and in implementing their plans for attaining and maintaining the NAAQS and achieving regional haze goals, adjusting schedules, and identifying streamlining options. In FY 2020, states will work collaboratively to support SIP submissions associated with the second planning period of the regional haze program under the visibility improvement requirements of the CAA. Comprehensive regional haze SIP revisions are due in FY 2021. In addition, states will be implementing control measures required from their first planning period SIPs.

States also will continue implementing the 2008 8-hour ozone NAAQS, the 2008 lead NAAQS, the 2010 1-hour nitrogen dioxide (NO_2) NAAQS, and the 2010 1-hour SO_2 NAAQS. As appropriate, states also will continue implementing the previous $PM_{2.5}$ and ozone NAAQS, including the 1997 annual and 24-hour $PM_{2.5}$ NAAQS, the 2006 24-hour $PM_{2.5}$ NAAQS, the 2012 annual $PM_{2.5}$ NAAQS, and the 1-hour and 1997 8-hour ozone NAAQS (through anti-backsliding requirements).

States, as part of their continuing environmental programs, will operate and maintain their air monitoring networks to the extent possible, balancing competing priorities. Air monitoring is typically the largest part of a state's overall air program, and includes the collection, quality assurance, and submittal of ambient air quality data. In FY 2020, for purposes of implementing the 2010 1-hour SO_2 NAAQS, states will continue operating monitoring networks in accordance with the requirements of the SO_2 NAAQS Data Requirements Rule in certain locations.

The multi-pollutant monitoring site network (NCore) serves multiple objectives such as measuring long-term trends of air pollution, validating models, and providing input to health and atmospheric science studies. EPA will provide assistance to states to operate this network of approximately 80 stations across the nation that provides measurements for particles, including filter-based and continuous mass for $PM_{2.5}$; chemical speciation for $PM_{2.5}$; and PM_{10} - $PM_{2.5}$ mass. Stations also measure gases, such as carbon monoxide (CO), SO_2, NO_2, and ozone, and record basic meteorology.

In FY 2020, EPA will continue to work with states to support the operation of monitoring sites in the near-road environment – a source of concentrated mobile source emissions. Data collected from these monitoring sites implemented under phases 1 and 2 of the near-road monitoring network requirements will be used to assess compliance with the NAAQS, support public information based on the Air Quality Index (AQI), and support short- and long-term studies of health impacts of near-road exposure. EPA also proposes to transition the funding of the $PM_{2.5}$ monitoring network from Section 103 authority of the CAA, which provides 100 percent federal funding, to Section 105 authority of the CAA, which provides a maximum federal share of 60 percent.

In FY 2020, states will continue to implement approved or delegated air permitting programs. EPA will continue to undertake actions, as necessary, in accordance with the Supreme Court's 2014

decision on EPA's Tailoring Rule, as well as the April 2015 D.C. Circuit Amended Judgment implementing the Supreme Court's decision.

In FY 2020, states will continue to develop emission inventories and submit data to EPA under an adjusted schedule for the next release of the National Emission Inventory (NEI). EPA plans to release the 2017 NEI in calendar year 2020. The development of a complete emission inventory is an important step in an air quality management process. These inventories are used to help determine significant sources of air pollutants and establish emission trends over time, target regulatory actions, and estimate air quality through dispersion and photo-chemical modeling. An emission inventory includes estimates of the emissions from various pollution sources in a specific geographical area.

State and local agencies also will use federal funding to support capabilities to provide air quality forecasts for ozone and $PM_{2.5}$ that provide the public with information they can use to make daily lifestyle decisions to protect their health. This information allows people to take precautionary measures to avoid or limit their exposure to unhealthy levels of air quality. In addition, many communities use forecasts for initiating air quality "action" or "awareness" days that allow for public action to reduce pollution and improve local air quality. EPA will update data on an adjusted schedule to allow for state and local agencies to provide important public health information to the public.

This program also supports state and local efforts to characterize air toxics problems and take measures to reduce health risks to children and to the population at large from air toxics. This funding also supports characterization work that includes collection and analysis of emissions data and monitoring of ambient air toxics. In FY 2020, funds also will support the National Air Toxics Trends Stations, consisting of 27 air toxics monitoring sites operated and maintained by state and local air pollution control agencies across the country, including the associated quality assurance, data analysis, and methods support.

In FY 2020, states and multi-jurisdictional organizations will continue to use this funding to establish and maintain training priorities for air quality-related subjects; develop new and update existing air quality-related training materials; and, provide classroom and other types of training for air quality professionals.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$76,258.0) This program change is a reduction to state environmental programs responsible for carrying out air quality implementation activities. EPA will work with states to target funds to core requirements while providing flexibility to address particular state priorities.

Statutory Authority:

Clean Air Act, §§ 103, 105, 106.

Categorical Grant: Toxics Substances Compliance

Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$4,685.5***	***$4,919.0***	***$3,276.0***	***-$1,643.0***
Total Budget Authority	$4,685.5	$4,919.0	$3,276.0	-$1,643.0

Program Project Description:

The Toxic Substances Control Act (TSCA) Compliance Monitoring Program builds environmental partnerships[25] with states, tribes, and territories to strengthen their ability to address environmental and public health threats from toxic substances. This assistance is used to prevent or eliminate unreasonable risks to health or the environment and to ensure compliance with toxic substance regulations. The grants support inspection programs associated with lead-based paint (§402(a), §406(b), and the Renovation, Repair, and Painting rule), the Asbestos Hazard Emergency Response Act, and Polychlorinated biphenyls (PCBs).

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhanced Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to award state and tribal assistance grants to assist in the implementation of compliance and enforcement provisions of TSCA.

Over the past two years, the Agency has consulted with its state partners in the development of a new allocation formula for the TSCA State and Tribal Assistance Grants. EPA will begin implementing the new formula in FY 2019, using a phased approach over three fiscal years (FY 2019 - FY 2021). This approach establishes a new weighted formula that better aligns the distribution of funding with the national program priorities including reducing risks from: (1) lead poisoning or elevated blood-lead levels; (2) exposure to asbestos, and (3) exposure to PCBs.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[25] For additional information, please refer to: https://www.epa.gov/compliance/toxic-substances-compliance-monitoring-grant-guidance-fiscal-year-2018.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,643.0) This change reflects a focus on reducing risks from lead-based paint and maximizing environmental benefits and program performance. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Toxic Substances Control Act.

Categorical Grant: Tribal Air Quality Management

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$12,767.9***	***$12,829.0***	***$8,963.0***	***-$3,866.0***
Total Budget Authority	$12,767.9	$12,829.0	$8,963.0	-$3,866.0

Program Project Description:

This program includes funding for tribal air pollution control agencies and/or tribes implementing projects and programs to address air pollution issues in Indian Country. Using section 105 authority of the CAA, tribal air pollution control agencies and tribes may develop and implement programs for the prevention and control of air pollution and implementation of national primary and secondary National Ambient Air Quality Standards (NAAQS). Using section 103 authority of the CAA, tribal air pollution control agencies or tribes, colleges, universities, and multi-tribe jurisdictional air pollution control agencies may conduct and promote research, investigations, experiments, demonstrations, surveys, studies, and training related to ambient or indoor air pollution in Indian Country. EPA provides technical assistance and resources to help tribes build their program capacity and ensure successful project completion.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. Tribes will assess environmental and public health conditions in Indian Country by developing emission inventories and, where appropriate, siting and operating air quality monitors. Tribes will continue to develop and implement air pollution control programs for Indian Country to prevent and address air quality concerns. EPA will continue to fund organizations for the purpose of providing technical support, tools, and training for tribes to build capacity to develop and implement programs at reduced levels. Currently, there are 573 federally recognized tribes. Of those, 53 tribes have treatment in a manner similar to a state status or Treatment as a State (TAS) with regard to implementing functions pertaining to the management and protection of air resources within reservation boundaries or other areas under the tribe's jurisdiction and have the capability to implement the CAA program(s) for which they have received approval. In addition, EPA awards financial support under Sections 103 and 105 of the Clean Air Act to help build tribal knowledge and increase tribes' capacity to manage air quality issues and encourages tribes to partner with EPA to carry out Clean Air Act protections within reservations and tribal communities.

In FY 2020, a key activity is to work to reduce the number of days in violation of the NAAQS. This program supports the Agency's priority of building strong partnerships with individual tribes

and with the National Tribal Air Association (NTAA), whose priorities include tribes' ability to collect and provide monitoring data and to protect the health of their tribal members.

In FY 2020, EPA will continue to implement the Tribal New Source Review rule. Under this rule, tribes may opt to take an active role in implementation by developing a Tribal Implementation Plan, managing the Program under EPA's authority, or by actively participating in the permit review and outreach process.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management Program under the Environmental Programs and Management appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3,866.0) This program change is a reduction in federal support for CAA grants to tribal air pollution control agencies and/or tribes. EPA will work with tribes to target funds to core requirements, while providing flexibility to best address tribal priorities.

Statutory Authority:

Clean Air Act §§ 103, 105.

Categorical Grant: Tribal General Assistance Program

Program Area: Categorical Grants
Goal: Cooperative Federalism
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$65,266.1***	***$65,476.0***	***$44,233.0***	***-$21,243.0***
Total Budget Authority	$65,266.1	$65,476.0	$44,233.0	-$21,243.0

Program Project Description:

In 1992, Congress established the Indian Environmental General Assistance Program (GAP) that provides grants and technical assistance to tribes to plan, develop, and establish tribal environmental protection programs consistent with other applicable provisions of law administered by EPA. The Agency works collaboratively with tribal partners on mutually identified envrionmental and health priorities to achieve these aims. Funding provided under GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that EPA may delegate to tribes. Please see https://www.epa.gov/tribal/indian-environmental-general-assistance-program-gap for more information.

Some uses of GAP funds include:

- Assessing the status of a tribe's environmental conditions;
- Developing appropriate environmental programs, codes and ordinances;
- Developing the capacity to administer environmental regulatory programs that EPA may delegate to a tribe;
- Conducting public education and outreach efforts to ensure that tribal communities (including non-members residing in Indian Country) are informed and able to participate in environmental decision-making; and
- Establishing tribal program capacity to communicate and coordinate with federal, tribal, state, and local government officials on environmental and public health actions and issues.

GAP supports tribal capacity development through financial assistance to approximately 525 tribal governments and inter-tribal consortia. GAP has helped tribes receive 78 program delegations to administer a variety of programs across a number of statutes, including the Clean Water Act, Safe Drinking Water Act, and the Clean Air Act. Tribes also have developed their capacity to assist EPA in implementing federal environmental programs in the absence of an EPA-approved tribal program through Direct Implementation Tribal Cooperative Agreements (DITCAs). In FY 2018 there were 22 active DITCAs supporting EPA's direct implementation activities. Furthermore, GAP funds have helped to train tribal government inspectors who are able to conduct compliance monitoring activities under tribal laws and also may have EPA federal inspector credentials. In

addition, GAP also supports tribes with the development of their waste management programs with over 241 tribes having Integrated Waste Management Plans.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, GAP grants will continue to assist tribal governments in developing environmental protection program capacity to assess environmental conditions, use relevant environmental information to improve long-range strategic environmental program development planning, and develop programs tailored to tribal government needs consistent with those long-range strategic plans.

The Agency's *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia*[26] establishes an overall framework for tribes and EPA to follow in developing tribal environmental program capacity under GAP. Specifically, the guidance strengthens joint strategic planning through development and implementation of EPA-Tribal Environmental Plans (ETEPs) to document intermediate and long-range tribal environmental program development priorities. These tribe-specific strategic planning documents inform funding decisions by linking annual GAP assistance agreement work plans to ETEP goals and provide a mechanism to measure tribal progress in meeting their program development goals.

In FY 2018 and 2019, EPA is evaluating implementation of the Program under the current GAP guidance to identify improvements. The evaluation involves gathering evidence from EPA project officers and tribal recipients of GAP funding based on their experience using the current guidance. This evidence will inform EPA's understanding of how the program guidance and implementation approaches are contributing to intended results of tribal capacity development related to EPA-administered programs. The evidence will ultimately be used to inform decisions on whether and how to revise the GAP guidance and make improvements to national program implementation activities. During the evaluation, EPA is specifically requesting input related to using the guidance to develop work plans, connecting GAP funding to tribal environmental program goals, and approaches for national program performance measurement and reporting.

In FY 2020, EPA will continue to implement GAP under a national framework set forth in program guidance, as modified during FY 2019, and maintain an emphasis on training (internal and external) to support nationally consistent GAP guidance interpretation and implementation. In supporting a strong GAP management framework (as referenced under Tribal Capacity Program [EPM Appropriation]), EPA will continue to establish and refine tools to track the progress tribes achieve toward developing and implementing environmental protection programs in Indian Country.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[26] The GAP Guidance is available at https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$21,243.0) This reduces funding for tribes to develop the capacity to implement environmental protection programs in Indian Country. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Indian Environmental General Assistance Program Act.

Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$10,130.3***	***$10,506.0***	***$6,995.0***	***-$3,511.0***
Total Budget Authority	$10,130.3	$10,506.0	$6,995.0	-$3,511.0

Program Project Description:

EPA's Underground Injection Control (UIC) Grant Program funds federal, state, and tribal government agencies that oversee underground injection activities to prevent contamination of underground sources of drinking water from fluid injection practices, as established by the Safe Drinking Water Act.

EPA regulates the permitting, construction, operation, and closure of injection wells used to place fluids underground for storage, disposal, enhanced recovery of oil and gas, and mineral recovery. In FY 2020, EPA will provide financial assistance in the form of grants to states and tribes that have primary enforcement authority (primacy) to implement and manage UIC programs and ensure safe injection well operations that prevent contamination of underground source of drinking water. Eligible Indian tribes that demonstrate an intent to achieve primacy also may receive grants for the initial development of UIC programs and be designated for "Treatment as a State" if their programs are approved. Where a jurisdiction does not have primacy, EPA uses these funds for direct implementation of federal UIC requirements.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The requested funding supports implementation of the UIC Program, which manages approximately 740,000 injection wells[27] across six well types to protect our groundwater resources. EPA directly implements UIC programs in eight states and two territories and shares responsibility in eight states and two tribes. EPA also administers the UIC programs for all other tribes and for Class VI wells in all states but North Dakota.[28] EPA will continue its support of state oil and gas programs as they implement or assume responsibility for UIC Class II programs.

The UIC Program is improving efficiency by reducing the UIC permit application processing time to 180 days or fewer. The Program will continue implementing the UIC Class II well permit review

[27] As represented in calendar year 2017 annual inventory.
[28] For more information, please visit: https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program.

process developed as part of the Agency's 2018 *kaizen* process in both its headquarters and regional offices. EPA's *kaizen*, or rapid improvement process, is the fundamental step of all Lean Management/production activities that focuses on eliminating waste, improving productivity, and achieving sustained continual improvement in targeted activities and processes. For the UIC Program, this includes applying identified permit review and processing efficiencies from the Class II effort to all other well classes, modifying common definitions, as appropriate, to provide greater clarity for all well classes so that improvements in processing permit applications can be attained. In FY 2018, the backlog of EPA-issued new UIC permits decreased from 44 to 36.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$3,511.0) This program change reduces UIC grants. EPA will work with states and tribes to target funds to core statutory requirements while providing flexibility to address particular priorities.

Statutory Authority:

Safe Drinking Water Act § 1443.

Categorical Grant: Underground Storage Tanks

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$1,320.0***	***$1,498.0***	***$0.0***	***-$1,498.0***
Total Budget Authority	$1,320.0	$1,498.0	$0.0	-$1,498.0

Program Project Description:

Releases of petroleum from underground storage tanks (UST) can contaminate groundwater, the drinking water source for many Americans. The State and Tribal Assistance Grant (STAG) program provides funding to states[29] to bring UST systems into compliance with release prevention and release detection requirements.

STAG funds are used by states to fund such activities as: seeking state program approval to operate the UST program in lieu of the federal program; approving specific technologies to detect leaks from tanks; ensuring that tank owners and operators are complying with notification and other requirements; ensuring equipment compatibility; conducting inspections; and implementing operator training.

FY 2020 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2020. States could elect to maintain core program work with state resources rather than federal.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$1,498.0) This funding change proposes to eliminate the Categorical Grant: Underground Storage Tanks Program.

Statutory Authority:

Solid Waste Disposal Act § 2007(f); Appropriation Act: FY 2018 (Public Law 115-141).

[29] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

Categorical Grant: Wetlands Program Development

Program Area: Categorical Grants
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$15,111.2***	***$14,661.0***	***$9,762.0***	***-$4,899.0***
Total Budget Authority	$15,111.2	$14,661.0	$9,762.0	-$4,899.0

Program Project Description:

The Wetland Program Development Grants Program assists states, tribes, and local governments with building or enhancing their wetland protection and restoration programs. The Program's grants are used to develop new or refine existing state and tribal wetland programs in one or more of the following areas: (1) monitoring and assessment; (2) voluntary restoration and protection; (3) regulatory programs, including Section 401 certification and Section 404 assumption;[30] and (4) wetland water quality standards.

States and tribes develop program elements based on their goals and resources. The grants support development of state and tribal wetland programs that further the goals of the Clean Water Act (CWA) and improve water quality in watersheds throughout the country. The grants are awarded on a competitive basis under the authority of Section 104(b)(3) of the Clean Water Act. The grant funding is split among EPA's ten Regional Offices according to the number of states and territories per region. Each region is required, by regulation, to compete the award of these funds to states, tribes, local governments, interstate agencies, and inter-tribal consortia.[31] In addition, EPA sets aside 10 percent of the appropriation for a grant competition specifically for tribes and inter-tribal consortia.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. EPA will continue to assist states and tribes in their efforts to protect and manage wetlands through documenting stresses or improvements to wetland condition, developing tools for wetland restoration and the use of natural infrastructure to mitigate flooding hazards, and developing regulatory controls to avoid, minimize, and compensate for

[30] State and tribal assumption of Section 404 is an approach that can be useful in streamlining 404 permitting in coordination with other environmental regulations. When states or tribes assume administration of the federal regulatory program, Section 404 permit applicants seek permits from the state or tribe rather than the federal government. States and tribes are in many cases located closer to the proposed activities and are often more familiar with local resources, issues, and needs. Even when a state assumes permitting under Section 404, the U.S. Army Corps of Engineers retains jurisdiction for a certain portion of waters under the CWA as well as those waters subject to Section 10 of the River and Harbors Act for permits.

[31] For more information, please see: http://water.epa.gov/grants_funding/wetlands/estp.cfm.

wetland impacts. EPA also will work with interested states and tribes to develop and improve their wetland program capacity and will track progress on an annual basis at the program level.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,899.0) This program change reduces the Wetland Program Development Grants Program. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Clean Water Act § 104(b)(3).

State and Tribal Assistance Grants (STAG)

Diesel Emissions Reduction Grant Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$72,668.1***	***$75,000.0***	***$10,000.0***	***-$65,000.0***
Total Budget Authority	$72,668.1	$75,000.0	$10,000.0	-$65,000.0

Program Project Description:

The Diesel Emissions Reduction Act (DERA) Grant Program provides support for emission reductions from existing diesel engines through engine retrofits, rebuilds, and replacements; switching to cleaner fuels; idling reduction; and other clean diesel strategies. The DERA Program was initially authorized in Sections 791-797 of the Energy Policy Act of 2005 and reauthorized by the Diesel Emission Reduction Act of 2010.

Diesel engines are the modern-day workhorse of the American economy (e.g., goods movement, construction, public transportation). Diesel engines are extremely efficient and power nearly every major piece of equipment on farms, construction sites, in ports, and on highways. As the Agency's heavy-duty highway and nonroad diesel engines emissions standards came into effect in 2007 and 2008 respectively, new cleaner diesel engines started to enter the nation's fleet. However, there are still more than 10 million older engines in use that will continue to emit large amounts of nitrogen oxides and particulate matter. EPA's DERA Program promotes strategies to reduce these emissions and protect public health by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations, and state and local officials. While the DERA grants accelerate the pace at which dirty engines are retired or retrofitted, pollution emissions from the legacy fleet also will be reduced over time as portions of the fleet are replaced with new engines that meet modern emission standards. However, even with attrition through fleet turnover, the Agency estimates that more than one million old diesel engines will remain in use in 2030.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will continue to target its discretionary funding to direct DERA grants and rebates to reduce diesel emissions in priority areas and areas of highly concentrated diesel pollution with a primary focus on ports and school buses. Specifically, the Agency is prioritizing at least $5 million to be used for clean school bus retrofits and rebates to support improved children's health by reducing harmful emissions from older school buses.

EPA estimates that about 39 million people in the U.S. currently live close to ports. These people can be exposed to air pollution associated with emissions from diesel engines at ports including particulate matter, nitrogen oxides, ozone, and air toxics, which can contribute to significant health problems—including premature mortality, increased hospital admissions for heart and lung disease, increased cancer risk, and increased respiratory symptoms – especially for children, the elderly, outdoor workers, and other sensitive populations.[32] School buses provide the safest transportation to and from school for more than 25 million American children every day. However, diesel exhaust from these buses has a negative impact on human health, especially for children, whose lungs are not yet fully developed and who have a faster breathing rate than adults.[33]

Using the formula outlined in the Energy Policy Act of 2005, eligible states and territories receive 30 percent of the annual DERA appropriation for the establishment of clean diesel grant, rebate and loan programs. The remaining DERA funding is split into two categories. The first category allocates funds to a rebate program that was first established under DERA's 2010 reauthorization. Through the rebate mechanism, the Agency will more efficiently and precisely target the awards toward improving children's health and turning over the nation's school bus fleet. In addition, this rebate mechanism can be used to provide funding directly to private fleets. The second category allocates funds toward national grants focusing on areas with poor air quality, especially those impacted most severely by ports and goods movement. EPA also will continue to track, assess, and report the results of DERA grants, such as numbers of engines, emissions benefits, and cost-benefit information.[34] Finally, EPA will continue to provide diesel emission reduction technology verification and evaluation and provide that information to the public.[35]

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$65,000.0) This program change is a reduction in the overall amount of DERA grant funding, directing DERA grants and rebates to reduce diesel emissions in priority areas, such as clean school bus retrofits and rebates.

Statutory Authority:

Diesel Emissions Reduction Act; Energy Policy Act of 2005, Title VII, Subtitle G.

[32] EPA's National Port Strategy Assessment report of 2016, found at: https://www.epa.gov/ports-initiative/national-port-strategy-assessment.
[33] For more information, please visit: https://www.epa.gov/cleandiesel/clean-school-bus.
[34] List of all grant awards under DERA can be found at: https://www.epa.gov/cleandiesel/clean-diesel-national-grants.
[35] For more information, please visit: https://www.epa.gov/cleandiesel.

Brownfields Projects
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$84,310.3***	***$80,000.0***	***$62,000.0***	***-$18,000.0***
Total Budget Authority	$84,310.3	$80,000.0	$62,000.0	-$18,000.0

Program Project Description:

The Brownfields Program awards grants and provides technical assistance to help states, tribes, local communities, and other stakeholders involved in environmental revitalization and economic redevelopment to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[36] This idle land drags down property values and can slow down a local economy. Brownfields redevelopment is a key to revitalizing main streets, neighborhoods, and rural communities; increasing property values and creating jobs. Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of 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.[37] By awarding brownfields grants, EPA makes investments in communities so that they can realize their own visions for land reuse, infrastructure development, economic growth, and job creation.

Under this program, EPA will focus on core activities, providing funding for: 1) assessment cooperative agreements and Targeted Brownfields Assessments (TBAs); 2) cleanup and Revolving Loan Fund (RLF) cooperative agreements; and 3) research, training, and technical assistance to communities for brownfields-related activities, including land revitalization.

A 2017 study found that housing property values increased 5 to 15.2 percent near brownfield sites when cleanup was completed.[38] Analysis of the data near 48 brownfields sites shows that an estimated $29 to $97 million in additional tax revenue was generated for local governments in a single year after cleanup. This is 2 to 7 times more than the $12.4 million EPA contributed to the cleanup of those brownfields.[39] In addition, based on historical data provided by the Assessment

[36] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016; and (2) census data from the 2011-2015 American Community Survey.
[37] EPA's ACRES database.
[38] Haninger, K., L. Ma, and C. Timmins. 2017. The Value of Brownfield Remediation. *Journal of the Association of Environmental and Resource Economists,* 4(**1**): 197-241, https://www.journals.uchicago.edu/doi/pdfplus/10.1086/689743.
[39] Sullivan, K. A. 2017. Brownfields Remediation: Impact on Local Residential Property Tax Revenue. *Journal of Environmental Assessment Policy and Management, 19(3),* http://dx.doi.org/10.1142/S1464333217500132.

Cleanup and Redevelopment Exchange System (ACRES) database, $1 of EPA's Brownfields funding leverages between $16 and $17 in other public and private funding.[40]

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. For example, EPA made 861 additional brownfields sites ready for anticipated use in FY 2018 toward a two-year FY 2018-2019 Agency Priority Goal of 1,368 sites. In FY 2020, EPA will build on current work to revitalize communities across the country by providing financial and technical assistance to assess, cleanup, and plan reuse at brownfields sites. The Brownfields Program will continue to foster federal, state, tribal, local, and public-private partnerships to return properties to productive economic use. The activities described below will leverage approximately 5,500 jobs and $1 billion in other funding sources.[41]

- Funding will support at least 71 assessment cooperative agreements that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites. Approximately 420 site assessments will be completed under these agreements.

- EPA will provide funding for TBAs in up to 40 communities without access to other assessment resources or those that lack the capacity to manage a brownfields assessment grant. There is special emphasis for small and rural communities to submit requests for this funding to ensure equal access to brownfields assessment resources. These assessments will be performed through contracts and interagency agreements.

- Funding will support 20 direct cleanup cooperative agreements to enable eligible entities to clean up recipient owned properties.

- The Agency will provide funding for 10 new RLF cooperative agreements. The funding enables recipients to make loans and subgrants for the cleanup of brownfield sites and establishes a sustainable RLF program. Additionally, the Agency will provide supplemental funding to approximately 13 existing high performing RLF recipients. These awards will lead to approximately 20 and 26 additional sites cleaned up, respectively.

- Funding will support 20 Environmental Workforce Development & Job Training cooperative agreements. This funding will provide environmental job training for citizens to take advantage of new jobs created as a result of brownfield assessment, cleanup, and revitalization in their communities. The request will lead to approximately 980 people trained and 680 placed in jobs.

- Funding also will support assessment and cleanup of abandoned underground storage tanks and other petroleum contamination found on brownfields properties for up to 66 brownfields assessment cooperative agreements and two cleanup cooperative agreements, as authorized under CERCLA 104(k)(2) and (3).

[40] For more information, please visit: www.epa.gov/brownfields.
[41] U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's ACRES database.

- Funding also will support training, research, technical assistance cooperative agreements, interagency agreements, and contracts to support states, tribes, and communities for both the Brownfields and Land Revitalization programs and other assistance mechanisms, as authorized under CERCLA 104(k)(7).

- Funding will be provided for technical assistance to an estimated 75 small and disadvantaged communities as defined in the recently passed BUILD Act and as authorized in Section 128(a)(B)(III).

In FY 2018, the Brownfields Program participated in a *kaizen* performance improvement event which led to increased reporting of sites made ready for reuse by cooperative agreement recipients. In FY 2020, the Program will continue to use the results of the *kaizen* event to improve brownfields data reporting. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via the ACRES database and analyzed by EPA. Maintenance of ACRES, focus on the input of high quality data, and robust analysis regarding program outcomes and performance will continue to be priorities during FY 2020.

Performance Measure Targets:

(PM B30) Number of brownfields sites made ready for anticipated use.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						684	684	684	Sites
Actual						861			

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target	1.2	1.2	1.1	1.1	1.1	1.1	1.3	1.3	Billions of Dollars
Actual	1.2	1.54	1.71	1.47	1.7	2.2			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$18,000.0) This program change reflects a focus on assessment and direct cleanup grants, while reducing TBAs and other program activities.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 101(39), 104(k), and 128(a)(1)(B)(ii)(III).

Infrastructure Assistance: Alaska Native Villages
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$19,543.0***	***$20,000.0***	***$3,000.0***	***-$17,000.0***
Total Budget Authority	$19,543.0	$20,000.0	$3,000.0	-$17,000.0

Program Project Description:

A priority for this administration is modernizing the outdated water infrastructure on which the American public depends. The Alaska Rural and Native Village (ANV) Program reduces disease and health care costs by providing critical basic drinking water and sanitation infrastructure (*i.e.*, flushing toilets and running water) in vulnerable rural and Native Alaska communities that lack such services disproportionately when compared to the rest of the country. Alaskan rural and native water and sewer systems face not only the typical challenges associated with small system size, but also the challenging climactic and geographic conditions, such as permafrost, shortened construction seasons, and extremely remote locations.

EPA's grant to the State of Alaska funds improvements and construction of drinking water and wastewater treatment facilities for these underserved communities. Investments in wastewater and drinking water infrastructure in rural Alaskan communities contributed to an increase of access to water and sewer service from 60 percent in the late 1990s to 97 percent more recently.[42] While the gains in the Program have been significant, ANV communities continue to trail behind the non-tribal/non-native population in the U.S. in access to water and sanitation. In Alaska, approximately 3 percent of native and rural serviceable households[1] are without complete indoor plumbing, a much higher figure than the national average of 0.4 percent[43] of occupied homes that lack complete indoor plumbing.

ANV communities are often looking to EPA as a last-resort funding source when they or the State of Alaska are not able to fully finance the needed water infrastructure improvements. The Program serves communities that often lack the debt capacity to apply for other funding sources, including EPA State Revolving Loan Funds. The results from the Indian Health Service's (IHS) November 2018 analysis exemplify the need to assist these communities – the IHS identified $248 million of need for water and wastewater infrastructure in Alaska in FY 2018. Many communities on the prioritized list have not been able to advance their projects due to lack of funding.

In addition to funding system upgrades and construction to address the aforementioned challenges Alaskans face, the ANV Program, uniquely supports training, technical assistance, and educational

[42] Based on data from IHS and the State of Alaska (2018).
[43] See, U.S. Census Survey, 2012.

programs to improve the financial management and operation and maintenance of sanitation systems. This is done through leveraging prioritization and implementation expertise from the State of Alaska[44] with ANV program funds.

The ANV technical assistance program helps to improve the long-term sustainability of the rural utilities, creating transferable job skills in construction, operation and maintenance activities. The Program also has helped to nearly double the number of properly certified drinking water treatment plant operators in Alaskan rural villages since FY 1992, and the number of non-compliant systems has decreased by close to 80 percent since FY 2006.[45] Since 2005, the Program, in collaboration and combination with other federal agencies, has shown significant progress documenting the number of projects and ANV homes with increased access to safe water and sanitation. Over this period, the ANV Program contributed about 35 percent[46] of all available funding from federal agencies.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2020 request of $3 million will provide water services for additional homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards. Based on data from the past three years of funding to the ANV Program, it is expected that $3 million in ANV funds in FY 2020 would improve the drinking water and/or wastewater services to about 350 homes in rural Alaska and continue to support training, technical assistance, and educational programs that protect existing federal investments in infrastructure by improving operation and maintenance of the systems.

In FY 2020, the Agency will continue to work with the State of Alaska to address sanitation conditions and maximize the value of the federal investment in rural Alaska. EPA will continue to implement the Alaska Rural and Native Village "Management Controls Policy," adopted in June 2007, to ensure efficient use of funds by allocating them to projects that are ready to proceed or progressing satisfactorily. The Agency has made great strides in implementing more focused and intensive oversight of the ANV grant program through cost analyses, post-award monitoring, and timely closeout of projects.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

[44] The State of Alaska uses a risk-based prioritization process to fund projects that will have the greatest public health and environmental benefit. Further, the State delivers these services to ANV communities by coordinating across federal agencies and programs to achieve a holistic series of solutions.
[45] As reported by the State of Alaska Department of Environmental Conservation Remote Maintenance Worker program outcome reports (November 2018).
[46] Including the required state match.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$17,000.0) This program change reduces support for the Alaska Rural and Native Villages Program. EPA estimates that the remaining request level ($3 million) will improve the drinking water and/or wastewater services to approximately 350 homes in rural Alaska. The State Revolving Funds are an additional source of infrastructure funding that can continue to fund water system improvements in Alaska.

Statutory Authority:

Safe Drinking Water Act Amendments of 1996 § 303; Clean Water Act § 1263a.

Infrastructure Assistance: Clean Water SRF
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$1,657,428.2***	***$1,693,887.0***	***$1,119,772.0***	***-$574,115.0***
Total Budget Authority	$1,657,428.2	$1,693,887.0	$1,119,772.0	-$574,115.0
Total Workyears	3.8	3.9	0.0	-3.9

Program Project Description:

The Clean Water State Revolving Fund (CWSRF) Program capitalizes state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. These funds directly support the Agency's goal to ensure waters are clean through improved water infrastructure and sustainable management.

The CWSRF is the largest source of federal funds for states to provide loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, green infrastructure projects, and agricultural best management practices. The Program also includes a provision for set-aside funding for tribes to address serious wastewater infrastructure needs and associated health impacts. It also provides direct grant funding for the District of Columbia and for territories. This federal investment is designed to be used in concert with other sources of funds to address water quality needs.[47] Additional tools, such as additional subsidization, are available to assist small and disadvantaged communities. The CWSRF Program is a key component of EPA's efforts to achieve innovative solutions to wastewater infrastructure needs and realize economic and environmental benefits that will continue to accrue for years in the future.

The revolving nature of the funds and substantial state contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far the nation has received approximately three dollars of investment in water infrastructure. As of June 2018, the state CWSRFs have provided nearly $133 billion in affordable financing for a wide variety of wastewater infrastructure and other water quality projects.[48] In the past year alone, over 1,500 assistance agreements went to communities of all sizes, funding nearly $6.8 billion in projects aimed at treating wastewater, addressing stormwater runoff, tackling non-point source pollution, and addressing a myriad of other environmental issues.[49]

[47] For additional information, please see: http://www.epa.gov/cwsrf.
[48] Clean Water State Revolving Fund National Information Management System. U.S. EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2018).
[49] Clean Water State Revolving Fund National Information Management System. U.S. EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2018).

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. This federal investment will continue to enable progress toward the Nation's clean water needs and infrastructure priorities and will contribute to the long-term environmental goal in the reduction in the number of square miles of watershed with surface water not meeting standards. EPA continues to work with states to meet several key objectives, such as:

- Linking projects to environmental results;
- Targeting assistance to small and underserved communities with limited ability to repay loans; and
- Ensuring the CWSRFs remain reliable sources of affordable funding.

The Agency is requesting over $1.119 billion in the FY 2020 President's Budget to provide funding for critical wastewater infrastructure. In FY 2020, EPA requests nearly $2.0 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs), combined. These funding levels further infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high-priority infrastructure investments that protect human health.

EPA requests that 10-20 percent of the total CWSRF funds made available to each state be used to provide additional subsidization to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these). The CWSRF Program also implements American Iron and Steel requirements, as required by law.

In addition to capitalizing the CWSRF, a portion of the appropriation also will provide direct grants to communities within the tribes and territories. These communities are in great need of assistance given that their sanitation infrastructure lags behind the rest of the country, causing significant public health concerns. To ensure that sufficient resources are directed toward these communities that face additional challenges, EPA continues to request a tribal set-aside of 2 percent, or $30 million, whichever is greatest, of the funds appropriated in FY 2020. EPA also continues to request a territories set-aside of 1.5 percent of the funds appropriated from the CWSRF for American Samoa, Guam, the Commonwealth of Northern Marianas, and the United States Virgin Islands.

EPA requests that up to $2 million of the tribal set-aside be used for training and technical assistance related to the operation and management of tribal wastewater treatment works. EPA also requests the ability to use the tribal and territorial set-asides to support planning and design of treatment works and for the construction, repair, or replacement of privately owned decentralized wastewater treatment systems serving one or more principal residences or small commercial establishments (e.g., septic systems), authority similar to that already available to states. Expanded support for planning and design will protect the federal investment in wastewater infrastructure and ensure access to safe wastewater treatment for tribes and territories that face significant challenges with sanitation infrastructure. The ability for both the tribes and territories to construct, repair, or replace decentralized wastewater treatment systems will allow the flexibility that these communities require to provide wastewater infrastructure that is appropriate for the unique circumstances of each community.

EPA will partner with states to ensure that the CWSRF continues to play an important role in promoting efficient system-wide planning; improvements in technical, financial and managerial capacity; and the design, construction and ongoing management of sustainable water infrastructure. To streamline data collection and reduce reporting burden, EPA is working to redesign the databases currently used to collect performance information about the CWSRF and the DWSRF Programs. The aim is for this effort to reduce reporting burden by eliminating redundancy and providing a more user-friendly interface for states to submit data.

Elsewhere in the FY 2020 budget, EPA requests $25 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Through WIFIA, EPA will make direct loans to regionally or nationally significant water infrastructure projects. These combined investments, the SRFs and WIFIA, further the Agency's ongoing commitment to infrastructure repair and replacement. These investments also will complement infrastructure funding requested through the President's Infrastructure Initiative.

Performance Measure Targets:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						8.0	8.0	8.0	Billions of Dollars
Actual						9.7			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

The FY 2020 capitalization of the SRFs would supplement more than $171.2 billion in assistance provided over the life of the programs. The assistance provided in 2018 from capitalization and the state's current revolving levels was $9.6 billion. Changes from levels included in the FY 2019 Annualized Continuing Resolution include:

- (-$129,434.0) This reflects a shift in resources from the Clean Water SRF Program to priority infrastructure activities authorized under the new AWIA legislation and a targeted initiative to support healthy schools.

- (-$444,681.0 / -3.9 FTE) This program change reflects a decrease to the Clean Water SRF Program, in large part from the additional infrastructure funding provided by the budget addendum in FY 2018 and carried forward in the FY 2019 Annualized CR, which EPA will apply based on the Clean Water Act formula. Investments in the two SRFs, combined with the WIFIA Program, promote water and wastewater infrastructure improvements.

Statutory Authority:

Title VI of the Clean Water Act; Title V of the Water Resources Reform and Development Act of 2014.

Infrastructure Assistance: Drinking Water SRF
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$1,128,161.0***	***$1,163,233.0***	***$863,233.0***	***-$300,000.0***
Total Budget Authority	$1,128,161.0	$1,163,233.0	$863,233.0	-$300,000.0
Total Workyears	0.7	0.9	0.4	-0.5

Program Project Description:

EPA's Drinking Water State Revolving Fund (DWSRF) is designed to assist public water systems to finance the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements, to protect public health, and to support state and local efforts to protect drinking water. The 2015 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA), conducted every four years, indicated a 20-year capital investment need of $472.6 billion for public water systems that are eligible to receive funding from state DWSRF programs. The capital investment need covers 49,250 community water systems (CWSs), 21,400 not-for-profit non-community water systems (NPNCWSs), American Indian water systems, and Alaska Native Village (ANV) water systems. The 2015 DWINSA was primarily a statistical survey of public water systems with a response rate of 99.7 percent, the highest response rate in the history of the assessment, providing a high degree of confidence in the statistical precision of the assessment's findings.[50] The need reflects costs for repairs and replacement of leaking transmission pipes and deteriorated storage and treatment equipment, as well as new infrastructure and other projects required to protect public health and to ensure compliance with the SDWA. The DWSRF can help communities replace lead service lines by providing principal forgiveness and low interest loans, and the DWSRF set-asides could be used to fund corrosion control studies for water systems when an action level exceedance is triggered.

To reduce public health risks and to help ensure safe and reliable delivery of drinking water nationwide, EPA makes capitalization grants to states so that they can provide low-cost loans and other assistance to eligible public water systems and maintain robust drinking water protection programs. The Program emphasizes that, in addition to maintaining the statutory focus on addressing the greatest public health risks first, states can utilize set-asides to assist small systems and those most in need on a per household basis according to state affordability criteria.

The DWSRF Program provides communities access to critical low-cost financing and offers a limited subsidy to help utilities address long-term needs associated with water infrastructure. Most DWSRF assistance is offered in the form of loans which water utilities repay from the revenues

[50] For more information, please see: https://www.epa.gov/drinkingwatersrf/epas-6th-drinking-water-infrastructure-needs-survey-and-assessment.

they generate through the rates they charge their customers for service. Water utilities in many communities may need to evaluate the rate at which they invest in drinking water infrastructure repair and replacement to keep pace with their aging infrastructure, much of which may be approaching the end of its useful life.

To protect public health and wellbeing, utilities must provide continuous access to safe drinking water. The delivery of safe drinking water is often taken for granted and is frequently undervalued, which presents considerable challenges to the completion of infrastructure upgrades that are necessary to protect public health. More than 149 thousand public water systems provide drinking water to the approximately 320 million persons in the U.S. More than 97 percent of these public water systems serve fewer than ten thousand persons.[51] While most small systems consistently provide safe, reliable drinking water to their customers, many small systems face a few significant challenges in their ability to achieve and maintain system sustainability. EPA is focusing on the needs of these small community systems, while retaining state flexibility in the management of their funds. EPA continues its small systems emphasis by working closely with state programs to improve public water system sustainability and public health protection for persons served by small water systems.

State Set-Asides

States have considerable flexibility to tailor their DWSRF Program to their unique circumstances. This flexibility ensures that each state can carefully and strategically consider how best to achieve the maximum public health protection. To achieve this, states may set aside and award funds for targeted activities that can help them implement and expand their drinking water programs. The four DWSRF set-asides[52] are: Small System Technical Assistance (up to 2 percent), Administrative and Technical Assistance[53] (up to 4 percent, $400,000 or 1/5th percent of the current valuation of the fund, whichever is greater), State Program Management (up to 10 percent), and Local Assistance and Other State Programs (up to 15 percent). Taken together, approximately 31 percent of a state's DWSRF capitalization grant may be set aside for activities other than infrastructure construction. These set asides enable states to improve water system operation and management, emphasizing institutional capacity as a means of achieving sustainable water system operations. Historically, the states have set aside an annual average of 16 percent of the funds awarded to them for program development, of which approximately 4 percent is used to administer the program; however, over the past three years, states have increased their set-asides taken to around 20 percent.

The federal investment is designed to be used in concert with other sources of funds to address drinking water infrastructure needs. States are required to provide a 20 percent match for their capitalization grant. Some states elect to leverage their capitalization grants through the public debt markets to enable the state to provide more assistance. These features, including state match leveraging, and the revolving fund design of the Program, have enabled the states to provide assistance equal to 195 percent of the federal capitalization invested in the Program since its

[51] For more information, please see: https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&PortalPath=/shared/SFDW/_portal/Public&Page=Summary.
[52] For more information, please see: https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-5.
[53] For more information, please see: https://www.congress.gov/bill/114th-congress/senate-bill/612/text.

inception in 1997. In other words, for every one dollar the federal government invests in this program, the states, in total, have been able to deliver $1.95 in assistance to water systems. In addition, the DWSRF's rate of funds utilized[54] was 96 percent in 2018, meeting its target of 96 percent.

National Set-Asides

Prior to allotting funds to the states, EPA is required to reserve certain national level set-asides.[55] Two million dollars must, by statute, be allocated to small systems monitoring for unregulated contaminants to facilitate small water system compliance with the monitoring and reporting requirements of the Unregulated Contaminant Monitoring Regulation (UCMR). Historically, a three-year sampling period occurs within each five-year monitoring cycle. During the sampling period, fund utilization exceeds the annual appropriation of $2 million and the carry-over reserve funds from non-sampling years become essential to complete the small system monitoring efforts.

EPA will reserve up to 2 percent, or $20 million, whichever is greater, of appropriated funds for tribes and ANVs. These funds are awarded either directly to tribes or, on behalf of tribes, to the Indian Health Service through interagency agreements. Additionally, EPA will continue to set aside up to 1.5 percent for territories.

In addition, the Law requires that none of the funds made available by a state DWSRF as authorized by SDWA Section 1452 (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system unless all of the iron and steel products used in the project are produced in the United States. The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean Water and Drinking Water State Revolving Funds for carrying out the provisions for management and oversight of the requirements of this section.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. For FY 2020, EPA requests $863 million for the DWSRF to help finance critical infrastructure improvement projects to public drinking water systems. In FY 2020, EPA requests over $2.1 billion for the Drinking Water and Clean Water State Revolving Funds (SRFs), combined. The budget provides robust funding for critical drinking and wastewater infrastructure. These funding levels further the President's ongoing commitment to infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high priority infrastructure investments that protect human health. In addition, these funds directly support the Agency's goal to ensure waters are clean through improved drinking water infrastructure and sustainable drinking water infrastructure management.

The requested funding level reflects the documented needs for drinking water infrastructure and the need to improve infrastructure in small communities, and will help the programs reach more communities due to the revolving nature of the funds. EPA will continue to foster its strong

[54] The cumulative dollar amount of loan agreements divided by cumulative funds available for projects.
[55] Safe Drinking Water Act Sections 1452(i)(1), 1452(i)(2), 1452(j), and 1452(o), as amended.

partnership with the states to provide small system technical assistance, with a focus on compliance with rules, operational efficiencies, and system sustainability to ensure clean and safe water. In FY 2020, EPA also will continue its effort to build the capacity of local utilities and existing state programs to expand their knowledge of the wide array of funding options available to meet future infrastructure needs. The requested funding for this program will support critical infrastructure investments to rebuild and enhance America's drinking water infrastructure.

In FY 2020, appropriated DWSRF funds will be allocated to the states in accordance with each state's proportion of total drinking water infrastructure need based on the latest DWINSA. EPA also has published data concerning the drinking water infrastructure needs of water systems serving tribes and ANVs. The statutory requirement that each state and the District of Columbia receive no less than one percent of the allotment will be met.

EPA will continue to work to target a significant portion of assistance from SRFs to small and underserved communities with limited ability to repay loans. In FY 2020, EPA will work with states to ensure not less than 20 and not more than 30 percent of a state's capitalization grant is provided as additional subsidization. EPA encourages states to utilize subsidization to assist disadvantaged communities and sustainability efforts. In addition, the America's Water Infrastructure Act of 2018 requires that states provide subsidization to assist disadvantaged communities of 6 percent to 35 percent of the state's capitalization grant.

EPA's efforts with state governments to fully utilize available DWSRF funds, resulted in unliquidated obligations (ULOs) decreasing by 80 percent, or approximately $1.6 billion, from FY 2012 to FY 2018. EPA will continue to work with states with higher ULOs to address institutional obstacles to eliminate or minimize their ULO amounts on an ongoing basis.

In FY 2020, the DWSRF Program will continue to: implement the Clean Water and Drinking Water Infrastructure Sustainability Policy. This policy focuses on promoting system-wide planning that helps align water infrastructure system goals, analyzing a range of infrastructure alternatives, including energy efficient alternatives, and ensuring that systems have the financial capacity and rate structures to construct, operate, maintain, and replace infrastructure over time. As part of that strategy, the federal dollars provided through the SRFs also will act as a catalyst for efficient system-wide planning, improvements in technical, financial and managerial capacity; and the design, construction and ongoing management of sustainable water infrastructure.

In FY 2020, EPA is continuing emphasis on strengthening small system technical, managerial and financial capability through the implementation of the Capacity Development Program, the Operator Certification Program, the Public Water System Supervision state grant program, and the DWSRF. The Capacity Development Program establishes a framework within which states and water systems can work together to help these small systems achieve the SDWA's public health protection objectives. The state Capacity Development Programs are supported federally by the Public Water System Supervision state grant funds and the set-asides established in the DWSRF. Since the 1996 Amendments, states have implemented a variety of activities to assist small systems with their compliance challenges and enhance their technical, managerial, and financial capacity.

In addition to the robust funding for critical drinking and wastewater infrastructure, EPA requests $25 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program in the FY 2020 budget request. Through WIFIA, EPA will make direct loans to regionally or nationally significant water infrastructure projects. These combined investments, the SRFs and WIFIA, further the Agency's ongoing commitment to infrastructure repair and replacement.

EPA also is seeking more efficient use of federal infrastructure funds by empowering communities to increase water infrastructure investments and non-federal dollars leveraged by water infrastructure finance programs (Clean Water and Drinking Water SRF and WIFIA) to repair and modernize the outdated American water infrastructure. In addition, EPA is working to increase the fund utilization rate for the DWSRF. The rate of funds utilization is calculated as funds in executed loans as a percent of funds available. The measure is indicative of states maximizing application of grant dollars to infrastructure projects that support the public health of the nation's drinking water consumers. At the end of FY 2018, DWSRF programs had executed loans accounting for 96 percent of all funds available nationally.

Performance Measure Targets:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						8.0	8.0	8.0	Billions of Dollars
Actual						9.7			

(PM DW-01) Number of community water systems out of compliance with health-based standards

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						3,510	3,380	3,280	CWSs
Actual						3,480			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

The FY 2020 capitalization of the SRFs would supplement more than $171.2 billion in assistance provided over the life of the programs. The assistance provided in 2018 from capitalization and the state's current revolving levels was $9.6 billion. Changes from levels included in the FY 2019 Annualized Continuing Resolution include:

- (+$64.0 / +0.4 FTE) This change provides FTE and funds to implement American Iron and Steel requirements.

- (-$300,064.0 / -0.9 FTE) This program change is a decrease to the Drinking Water SRF Program, in large part from the additional infrastructure funding provided by the budget addendum in FY 2018. Investments in the two SRFs, combined with the WIFIA Program, promote water and wastewater infrastructure improvements.

Statutory Authority:

Safe Drinking Water Act § 1452.

GKM Water Monitoring

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$3,092.6***	***$4,000.0***	***$0.0***	***-$4,000.0***
Total Budget Authority	$3,092.6	$4,000.0	$0.0	-$4,000.0
Total Workyears	1.0	0.6	0.0	-0.6

Program Project Description:

The Gold King Mine Water Monitoring Program supports the development and implementation of a monitoring program for rivers contaminated by the Gold King Mine Spill.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$4,000.0 / -0.6 FTE) This program change eliminates the Gold King Mine Water Monitoring Program. There are other sources of funding that support water monitoring activities, including the Pollution Control (Section 106) Grants Program.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, § 5004(d); Clean Water Act § 106.

Infrastructure Assistance: Mexico Border
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$11,524.6***	***$10,000.0***	***$0.0***	***-$10,000.0***
Total Budget Authority	$11,524.6	$10,000.0	$0.0	-$10,000.0

Program Project Description:

The U.S.-Mexico Border Water Infrastructure Program supports the planning, design, and construction of water and wastewater treatment facilities along the border with all projects benefiting communities on the U.S. side of the border.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$10,000.0) This program change proposes to eliminate the U.S.-Mexico Border Water Infrastructure Program. Other sources of funding are available to support these efforts in U.S. communities along the border, most notably the Clean Water and Drinking Water State Revolving Funds.

Statutory Authority:

Treaty entitled "Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, August 14, 1983."

Targeted Airshed Grants
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$29,479.0***	***$40,000.0***	***$0.0***	***-$40,000.0***
Total Budget Authority	$29,479.0	$40,000.0	$0.0	-$40,000.0

Program Project Description:

In FY 2017, this program awarded approximately $30 million in competitive grant funding to reduce air pollution in nonattainment areas that were ranked as the top five most polluted areas relative to annual ozone or $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS); as well as the top five areas relative to the 24-hour $PM_{2.5}$ NAAQS. In FY 2018, an additional $40 million in competitive grant funds was allocated for this program for the same purpose. This program assists air control agencies in developing plans, conducting demonstrations, and implementing projects to reduce air pollution in these nonattainment areas.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$40,000.0) This funding change eliminates the Targeted Airshed Grants program.

Statutory Authority:

Clean Air Act § 105; Appropriation Act: FY 2018 (Public Law 115-141).

Safe Water for Small & Disadvantaged Communities
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$20,000.0***	***$0.0***	***-$20,000.0***
Total Budget Authority	$0.0	$20,000.0	$0.0	-$20,000.0
Total Workyears	0.0	0.4	0.0	-0.4

Program Project Description:

The Safe Water for Small and Disadvantaged Communities Program provides grants to eligible entities for use in carrying out projects and activities to assist public water systems.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$20,000.0 / -0.4 FTE) EPA will continue to work on awarding funds appropriated by Congress in FY 2018 and FY 2019; however, in FY 2020, EPA will continue to request flexible subsidization funding to target small and disadvantaged communities through the State Revolving Funds.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2104; Consolidated Appropriations Act, 2018, P. L. 115-141.

Reducing Lead in Drinking Water
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$10,000.0***	***$0.0***	***-$10,000.0***
Total Budget Authority	$0.0	$10,000.0	$0.0	-$10,000.0
Total Workyears	0.0	0.4	0.0	-0.4

Program Project Description:

The Reducing Lead in Drinking Water Program provides grants to eligible entities for lead reduction projects in the United States.

FY 2020 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$10,000.0 / -0.4 FTE) EPA will continue to work on awarding the funds appropriated by Congress in FY 2018 and FY 2019. In FY 2020, lead reduction efforts may continue through the State Revolving Fund mechanisms, WIFIA, and the newly proposed America's Water Infrastructure Act of 2018 programs.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2105; Consolidated Appropriations Act, 2018, P. L. 115-141.

Lead Testing in Schools
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$20,000.0***	***$10,000.0***	***-$10,000.0***
Total Budget Authority	$0.0	$20,000.0	$10,000.0	-$10,000.0
Total Workyears	0.0	0.4	0.0	-0.4

Program Project Description:

The Nation must rebuild portions of its aging water infrastructure, and a priority for this administration is modernizing the outdated water infrastructure on which the American public depends. The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure issues. WIIN includes the Water Resource Development Act of 2016, which includes provisions to improve water infrastructure around the country. The Act specifically authorizes $100 million for communities facing drinking water emergencies, including helping communities recover from lead contamination. In addition, WIIN amended several parts of the Safe Drinking Water Act including provisions regarding the Drinking Water State Revolving Fund Program, the Tribal Drinking Water Infrastructure Grants funds, and aspects of public notification. The America's Water Infrastructure Act (AWIA) also strengthened many existing programs within EPA and various sections of WIIN while creating new programs to tackle significant public health concerns and environmental needs.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2020 President's Budget requests $10 million for the Voluntary School and Child Care Lead Testing grant program established in Section 2107 of WIIN and amended by Section 2006 of AWIA. Funding will be used to provide grants to assist local educational agencies in voluntary testing of lead contamination in drinking water at schools and child care programs. Objectives of the grant program are to reduce childhood exposure to lead in drinking water, help states target funding to schools unable to pay for testing, establish best practices for preventing lead in drinking water, and foster sustainable relationships at the state and local level to allow for efficient use of existing resources and information sharing among educational and health care experts.

States had until mid-February 2019 to respond to EPA's invitation to participate in the Program. EPA plans to award the grant(s) for this new program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (-$10,000.0 / -0.4 FTE) This program change reflects a decrease to the Lead Testing in Schools Program. Investments in the two SRFs, combined with the WIFIA Program, are expected to promote water and wastewater infrastructure improvements in ways that will allow this program to refocus on schools with the greatest lead testing needs.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, § 5004(d); Clean Water Act § 106.

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$50,000.0***	***$50,000.0***
Total Budget Authority	$0.0	$0.0	$50,000.0	$50,000.0

Program Project Description:

EPA is committed to protecting children where they live, learn, and play. The Agency understands that to be protective of children's health, as highlighted by the President's Task Force on Environmental Health Risks and Safety Risks to Children, it is essential that children be safe from environmental hazards. Although EPA provides grant funding to a wide range of initiatives focused on addressing risks to children's health, the Agency has no comprehensive environmental health management program to support school administrators and others in identifying and addressing some of the most common areas of environmental health concerns found in schools.

The newly proposed Healthy Schools Grant Program 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. Recognizing that school environmental health challenges differ due to variations in geography, age of school infrastructure, population density, and other factors, the Program would provide EPA and its partners with flexibility to target funds to their highest priority efforts to protect human health and the environment in school settings. Under this program, funding would be available to identify and help prevent, reduce and/or resolve environmental hazards and/or 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.

FY 2020 Activities and Performance Plan:

Work in this program supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, funds would support the implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws in relation to comprehensive school environmental health programs. States, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations would have the flexibility to apply the funds toward school environmental health activities required in a broad array of environmental statutes, depending on local needs and priorities. Results would be tracked as required by the Environmental Results

Order and could support critical children's health work across multiple environmental programs in school settings.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$50,000.0) This provides grant funding focused on addressing risks to children's health across multiple environmental programs to identify and help prevent, reduce, and/or resolve environmental hazards in schools in ways responsive to local needs and priorities.

Statutory Authority:

Annual Appropriation Acts; Indian Environmental General Assistance Program Act (GAP); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (1972), Section 20; Toxic Substances Control Act (TSCA), Section 10; the Safe Drinking Water Act (SDWA), as amended by section 2104, 2105 and 2107 of the Water Infrastructure Improvements for the Nation Act (WIIN); Resource Conservation and Recovery Act (RCRA) of 1976, enacted as amendments to SWDA, the Comprehensive Environmental Response, and Compensation and Liability Act (CERCLA).

Note: EPA is currently seeking appropriations language to support this program: "$50,000,000 shall be for grants to States, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations, for detection, assessment, prevention, control, or abatement of pollution and other environmental hazards in school buildings as defined in 20 U.S.C. 3610(6), and related activities; Provided*, that the Federal share of the costs of such activities shall not exceed 75 percent;* Provided further*, that the Administrator may waive such cost share requirement in the case of schools located in economically distressed communities."*

Drinking Water Infrastructure Resilience and Sustainability

Program Area: State and Tribal Assistance Grants (STAG)

Goal: Core Mission

Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$2,000.0***	***$2,000.0***
Total Budget Authority	$0.0	$0.0	$2,000.0	$2,000.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. EPA looks forward to implementing the Act, 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 strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. The FY 2020 President's Budget requests $2 million to create the new Drinking Water Infrastructure Resilience and Sustainability competitive grant program. Section 2005 of AWIA requires EPA to establish a competitive grant program to assist eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards. AWIA mandates will be critical to achieving the Administrator's agenda by increasing water infrastructure investment and improving drinking water and water quality across the country.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Authorized activities in FY 2020 include the conservation of water or the enhancement of water use efficiency; the modification or relocation of existing drinking water system infrastructure made, or that is at risk of being, significantly impaired by natural hazards, including risks to drinking water from flooding; the design or construction of desalination facilities to serve existing communities; the enhancement of water supply through the use of watershed management and source water protection; the enhancement of energy efficiency or the use and generation of renewable energy in the conveyance or treatment of drinking water; or the development and implementation of activities to increase the resilience of the eligible entity to natural hazards. EPA plans to award the grant(s) for this new program in FY 2020.

Performance Measure Targets:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						3,510	3,380	3,280	CWSs
Actual						3,480			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$2,000.0) This funds the creation of the new Drinking Water Infrastructure Resilience and Sustainability Program under AWIA in support of section 2005 of the Law.

Statutory Authority:

America's Water Infrastructure Act (AWIA), P.L. 115-270, Section 2005.

Drinking Fountain Lead Testing

Program Area: State and Tribal Assistance Grants (STAG)

Goal: Core Mission

Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$5,000.0***	***$5,000.0***
Total Budget Authority	$0.0	$0.0	$5,000.0	$5,000.0

Program Project Description:

The Nation must rebuild portions of its aging water infrastructure and a 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. EPA looks forward to implementing the Act, which strengthens the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our nation's waterways can remain clean and free from pollution. AWIA strengthened many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. The FY 2020 President's Budget requests $5 million to create the new Drinking Water Fountain Replacement and Lead Testing grant program. Section 2006 of AWIA requires EPA to establish a grant program to provide assistance to local educational agencies for the replacement of drinking water fountains manufactured prior to 1988. AWIA mandates will be critical to achieving the Administrator's agenda by increasing water infrastructure investment and improving drinking water and water quality across the country, while also supporting the Administrator's commitment to protecting children where they live, learn, and play.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, priority will be given to local educational agencies based on economic need. Funds awarded under this grant program will be used to pay the costs of replacement of drinking water fountains in schools. In addition, the funds may be used to pay the costs of monitoring and reporting of lead levels in the drinking water of schools and local educational agencies receiving the funding. EPA plans to award the grant(s) for this new program in FY 2020.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$5,000.0) This funds the creation of the new Drinking Water Fountain Lead Testing Program under AWIA in support of section 2006 of the Law.

Statutory Authority:

America's Water Infrastructure Act (AWIA), P.L. 115-270, Section 2006.

Technical Assistance for Treatment Works
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$7,500.0***	***$7,500.0***
Total Budget Authority	$0.0	$0.0	$7,500.0	$7,500.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. EPA looks forward to implementing the Act, 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 strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administrator's agenda by increasing water infrastructure investment and improving drinking water and water quality across the country.

The FY 2020 President's Budget requests $7.5 million to create the new Technical Assistance for Treatment Works Grant Program. Section 4103 of AWIA authorizes EPA to provide grants to nonprofit organizations to help rural, small, and tribal municipalities obtain Clean Water State Revolving Fund (CWSRF) financing, protect water quality and ensure Clean Water Act compliance, and share information on planning, design, construction, and operation of wastewater systems.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2020, the Program will provide grants to nonprofit organizations to help rural, small, and tribal municipalities obtain CWSRF financing, protect water quality and ensure Clean Water Act compliance, and share information on planning, design, construction, and operation of wastewater systems. EPA plans to issue grant awards for this new program in FY 2020.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund under the STAG appropriation and the Water Infrastructure Finance and Innovation Program under the WIFIA appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$7,500.0) This funds the creation of the new Technical Assistance for Treatment Works Program created by AWIA Section 4103.

Statutory Authority:

America's Water Infrastructure Act (AWIA), P.L. 115-270, Section 4103.

Sewer Overflow Control Grants
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$61,450.0***	***$61,450.0***
Total Budget Authority	$0.0	$0.0	$61,450.0	$61,450.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. EPA looks forward to implementing the Act, which strengthens the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our nation's waterways can remain clean and free from pollution. AWIA strengthened many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administrator's agenda by increasing water infrastructure investment and improving drinking water and water quality across the country.

The FY 2020 President's Budget requests $61.45 million to create the Sewer Overflow Control Grants Program. This program will support grants to fund projects at treatment works that will reduce the incidence of combined sewer overflows, sanitary sewer overflows, and stormwater problems.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Section 4106 of AWIA re-authorizes and amends the Clean Water Act grant program components for addressing sewer overflows and stormwater management. EPA would award grants with a to-be-developed formula that captures stormwater needs. To the extent eligible projects exist, 20 percent of the appropriated funds must be for projects utilizing green infrastructure, water and energy efficiency improvements, or other innovative activities. EPA plans to issue grant awards for this new program in FY 2020.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Program under the WIFIA appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$61,450.0) This change reflects the creation of the new Sewer Overflow Control Grants program.

Statutory Authority:

America's Water Infrastructure Act (AWIA), P.L. 115-270, Section 4106.

Water Infrastructure and Workforce Investment
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$300.0***	***$300.0***
Total Budget Authority	$0.0	$0.0	$300.0	$300.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. EPA looks forward to implementing the Act, 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 strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administrator's agenda through increasing water infrastructure investment and improving drinking water and water quality across the country. The FY 2020 President's Budget requests $300 thousand to create the new Water Infrastructure and Workforce Investment Grant Program.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Section 4304 of AWIA requires EPA, in consultation with the United States Department of Agriculture, to establish a competitive grant program to promote water utility workforce development and increase public awareness of water utilities and careers. AWIA authorizes EPA to select non-profit, labor, or educational institutions that are experienced and qualified and that will address diverse types of water utilities. EPA plans to issue the grant awards for this new program in FY 2020.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Program under the WIFIA appropriation.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$300.0) This funds the creation of the new Water Infrastructure and Workforce Investment Program under AWIA in support of Section 4304 of the Law.

Statutory Authority:

America's Water Infrastructure Act (AWIA), P.L. 115-270, Section 4304.

Table of Contents – Water Infrastructure Finance and Innovation Fund

APPROPRIATION: Water Infrastructure Finance and Innovation Fund
Resource Summary Table
(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Water Infrastructure Finance and Innovation Fund				
Budget Authority	$12,235.8	$63,000.0	$25,000.0	-$38,000.0
Total Workyears	11.7	12.8	12.0	-0.8

Bill Language: WIFIA

For the cost of direct loans and for the cost of guaranteed loans, as authorized by the Water Infrastructure Finance and Innovation Act of 2014, $20,000,000, to remain available until expended: Provided, That such costs, including the cost of modifying such loans, shall be as defined in section 502 of the Congressional Budget Act of 1974: Provided further, That these funds are available to subsidize gross obligations for the principal amount of direct loans, including capitalized interest, and total loan principal, including capitalized interest, any part of which is to be guaranteed, not to exceed $4,170,000,000.

In addition, fees authorized to be collected pursuant to sections 5029 and 5030 of the Water Infrastructure Finance and Innovation Act of 2014 shall be deposited in this account, to remain available until expended, for the purposes provided in such sections.

In addition, for administrative expenses to carry out the direct and guaranteed loan programs, notwithstanding section 5033 of the Water Infrastructure Finance and Innovation Act of 2014, $5,000,000, to remain available until September 30, 2021.

Program Projects in WIFIA
(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Water Quality Protection				
Water Infrastructure Finance and Innovation	$12,235.8	$63,000.0	$25,000.0	-$38,000.0
TOTAL WIFIA	**$12,235.8**	**$63,000.0**	**$25,000.0**	**-$38,000.0**

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

Water Quality Protection

Water Infrastructure Finance and Innovation
Program Area: Water Quality Protection
Goal: Core Mission
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Water Infrastructure Finance and Innovation Fund	***$12,235.8***	***$63,000.0***	***$25,000.0***	***-$38,000.0***
Total Budget Authority	$12,235.8	$63,000.0	$25,000.0	-$38,000.0
Total Workyears	11.7	12.8	12.0	-0.8

Program Project Description:

The WIFIA Program provides and services direct loans to cover up to 49 percent of eligible costs for drinking water and wastewater infrastructure projects of regional or national significance. The Program also is designed to offer credit assistance with flexible terms in order to attract private participation, encourage new revenue streams for infrastructure investment, and allow public agencies to get more projects done. The WIFIA Program requires a small appropriation compared to its potential loan volume and is expected to leverage significant funding for infrastructure. For instance, the second round of selections from the FY 2018 appropriations has the potential, when combined with other funding sources, to support over $10 billion in water infrastructure projects. With the $25 million, including $20 million in credit subsidy, proposed in the FY 2020 President's Budget, EPA could provide up to $2 billion in direct credit assistance, which, when combined with other funding sources, could potentially help spur over $4 billion in total infrastructure investment.[1] This makes WIFIA Program credit assistance a powerful tool to help address a variety of water infrastructure needs.

For the FY 2018 appropriated funds, EPA issued a Notice of Funding Availability on April 12, 2018, requesting prospective borrowers to submit Letters of Interest (LOI). EPA received 62 LOIs for direct loans and selected 39 projects to continue with the application process.[2] Once reviewed and approved, the selected projects could benefit approximately 22 million people in 16 states and Washington D.C., and they address two national water priorities: (1) providing for clean and safe drinking water (including reducing exposure to lead and other contaminants) and (2) addressing aging water infrastructure. As the Program grows and matures, EPA will seek opportunities to introduce efficiencies in the review processes for WIFIA LOIs and loan applications.

Eligible assistance recipients include: corporations and partnerships, municipal entities, and State Revolving Fund (SRF) programs. The WIFIA Program will complement the existing SRF programs as an additional source of low-cost capital to help meet the growing water infrastructure needs of the United States and address key national infrastructure priorities. Entities with complex

[1] The actual subsidy cost will be determined on a loan-by-loan basis.
[2] For more information, please see: https://www.epa.gov/wifia.

water and wastewater projects are attracted to the WIFIA Program, and EPA expects to provide assistance to a diverse set of projects.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2020 request of $25 million supports WIFIA drinking water and wastewater infrastructure projects (following the requirements of the Federal Credit Reform Act of 1990 and OMB Circulars A-11 and A-129). While the WIFIA Program provides expansive project eligibilities, particular project attributes will be emphasized in the project selection process. These attributes will be identified in the Notice of Funding Availability, published after appropriations, and may include attributes such as the extent of private financing, the ability to serve regions with significant water resource challenges, the regional or national significance, the likelihood that the project can proceed at an earlier date due to WIFIA financing, and the extent to which the project uses new or innovative approaches, among others.

Of the total $25 million request to implement the Program, $5 million is for EPA's management and operation administrative expenses, including contract support and associated program payroll. The request level coupled with the fee expenditure authority allows EPA to undertake the independent aspects of loan intake and origination; project technical evaluation, including credit review, engineering feasibility review, and loan term negotiation; risk management; portfolio management and surveillance; and loan servicing for an initial set of projects. The funds associated with the management and operation of the program will be available for two years.

The FY 2020 budget also includes authority to use fee revenue as outlined in Water Resources Reform and Development Act, Sections 5029(a), 5030 (b), and 5030(c). EPA plans to collect fees in FY 2020.[3] Fee revenue is for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms. The fee expenditure authority for the Program is in addition to the $5 million request for management and operations administrative expenses.

Performance Measure Targets:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units
Target						8.0	8.0	8.0	Billions of Dollars
Actual						9.7			

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+$192.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.

[3]For more information, please see EPA Fee Rule: https://www.federalregister.gov/documents/2017/06/28/2017-13438/fees-for-water-infrastructure-project-applications-under-wifia.

- (-$38,192.0 / -0.8 FTE) This program change reflects a decrease to the amount of credit subsidy funding available to make loans and the management and operation of the WIFIA program. This change reflects a decrease due in large part from the additional infrastructure provided by the budget addendum in FY 2018 and carried forward in the FY 2019 Annualized CR.

Statutory Authority:

Water Infrastructure Finance and Innovation Act of 2014.

Table of Contents – Hazardous Waste Electronic Manifest System Fund

Environmental Protection Agency
FY 2020 Annual Performance Plan and Congressional Justification

APPROPRIATION: Hazardous Waste Electronic Manifest System Fund
Resource Summary Table

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Hazardous Waste Electronic Manifest System Fund				
Budget Authority	$2,146.2	$0.0	$0.0	$0.0
Total Workyears	7.4	7.9	11.0	3.1

Bill Language: E-Manifest

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2020.

Note —This language is proposed under the FY 2020 Administrative Provisions.

Program Projects in e-Manifest

(Dollars in Thousands)

Program Project	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	$2,146.2	$0.0	$0.0	$0.0
TOTAL e-Manifest	**$2,146.2**	**$0.0**	**$0.0**	**$0.0**

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

Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Programs & Management	$58,434.1	$60,791.0	$46,813.0	-$13,978.0
Hazardous Waste Electronic Manifest System Fund	***$2,146.2***	***$0.0***	***$0.0***	***$0.0***
Total Budget Authority	$60,580.3	$60,791.0	$46,813.0	-$13,978.0
Total Workyears	296.9	289.7	227.2	-62.5

Total workyears in FY 2020 include 10.0 FTE funded by e-Manifest fees.

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) requires companies that ship hazardous waste to track and report the estimated two million shipments each year. The Hazardous Waste Electronic Manifest Establishment Act (e-Manifest Act, Public Law 112-195), enacted on October 5, 2012, required EPA to develop a fee-based electronic hazardous waste manifest system. EPA launched the e-Manifest system on June 30, 2018. From the e-Manifest Program launch in June 2018 through the end of calendar year 2018, EPA received over 750,000 manifests.

EPA estimates the e-Manifest system will reduce the burden associated with paper manifests by between 300,000 and 700,000 hours, saving state and industry users more than $90 million annually, once electronic manifests are widely adopted.[1] The e-Manifest system will provide better knowledge of waste generation and final disposition; enhanced access to manifest information; and greater transparency for the public about hazardous waste shipments.

In FY 2014, Congress established the "Hazardous Waste Electronic Manifest System Fund" to carry out the activities necessary to implement the e-Manifest Program, including system development, fee collection authority, rulemaking, and advisory committee establishment. Beginning in FY 2019, the Program is fully funded by fees deposited into this fund, including the continued development and operation of the system and agency personnel that support and enhance the e-Manifest Program.

FY 2020 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2020, EPA will operate the

[1] From a 2009 programmatic estimate, cited in *Hazardous Waste Management System; Modification of the Hazardous Waste Manifest System; Electronic Manifests; Final Rule.* 40 CFR § 260, 262, 263, 264, 265, and 271.

e-Manifest system and will collect and deposit user fees into the Hazardous Waste Electronic Manifest System Fund (approximately $24 million is anticipated). Fees will be used to operate the system and address necessary program expenses, including agency personnel. The authority to collect and spend fees requires authorization from Congress in annual appropriations bills.

In FY 2020, EPA plans to perform the following key activities:

- Operate the e-Manifest system and accept both electronic and paper manifests. The Agency will explore considerations for (and, potentially, a timeline for) phasing out the use of paper manifests;
- Provide outreach to stakeholders on the e-Manifest system;
- Operate appropriate accounting and financial reporting interfaces needed to collect and manage user fees, manage and adjust fees as appropriate, and comply with the auditing requirements of the Hazardous Waste Electronic Manifest Act;
- Hold periodic meetings of the e-Manifest Advisory Board, consisting of state and industry stakeholders and IT experts, to provide input on system operation and implementation of the user fee regulation; and
- Develop and enhance the e-Manifest system software to expand capabilities, improve user acceptance, and enhance overall program efficiencies.

Performance Measure Targets:

EPA's FY 2020 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2020 Change from FY 2019 Annualized Continuing Resolution (Dollars in Thousands):

- (+2.1 FTE) This net program change reflects an increase in fee-funded reimbursable FTE that will support and enhance the e-Manifest program in FY 2020.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous Waste Electronic Manifest Establishment Act.

Environmental Protection Agency
2020 Annual Performance Plan and Congressional Justification

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FY 2020 Annual Performance Plan

Goal 1 Core Mission: *Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.*

Objective 1.1 – Improve Air Quality: Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.

Long-Term Performance Goal - By September 30, 2022, reduce the number of nonattainment areas to 101[1].

Annual performance goals that support this long-term performance goal:

(PM NA1) Number of Nonattainment Areas.

	FY 2019	FY 2020	Units	Preferred Direction
Target	138	136	Nonattain-ment Areas	Decrease

Metric Details: This measure tracks the status of 166 areas that were designated nonattainment and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017 are not included. Nonattainment areas are areas that EPA has determined do not meet a primary or secondary NAAQS, or that contribute to air quality in a nearby area that does not meet a non-revoked primary or secondary NAAQS. Areas are considered redesignated based on the effective date of the redesignation. For multi-state nonattainment areas, all state portions of the area must be redesignated to attainment for the area to be removed from the list of nonattainment areas. Under the CAA, states are responsible for initiating the redesignation process and EPA's authority to approve a state's request to redesignate nonattainment areas hinges on the state meeting the minimum requirements of the CAA, which include: (1) a demonstration that the area has air quality that is attaining the NAAQS; (2) establishing that pollution reductions are due to implementing permanent and enforceable measures; (3) a 10-year maintenance plan that includes contingency measures to be triggered in the event of a re-violation of the NAAQS; and (4) satisfying any other applicable and outstanding attainment planning and emissions control requirements. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce.

	FY 2019	FY 2020	Units	Preferred Direction
Target	5,000	5,000	Certificates	Increase

Metric Details: This measure reports the number of certificates of conformity issued in a given year. The CAA requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction to U.S. commerce. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer has demonstrated compliance with all applicable

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

requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is dictated by the product planning of manufacturers and will fluctuate from year to year.

Objective 1.2 – Provide for Clean and Safe Water: Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.

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

Annual performance goal that supports this long-term performance goal:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2019	FY 2020	Units	Preferred Direction
Target	3,380	3,280	CWSs	Decrease

Metric Details: This measure tracks CWSs out of compliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year. A CWS is a public water system that supplies water to the same population year-round. There are approximately 50,000 CWSs. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations by public water systems as reported to EPA by the primacy agencies (states and tribes with EPA-delegated enforcement responsibility).

Long-Term Performance Goal - By September 30, 2022, increase by $40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA)[3].

Annual performance goal that supports this long-term performance goal:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2019	FY 2020	Units	Preferred Direction
Target	8.0	8.0	Billions of Dollars	Increase

Metric Details: Combined, the three primary water infrastructure programs, Drinking Water State Revolving Fund (DWSRF), Clean Water State Revolving Fund (CWSRF), and Water Infrastructure Finance and Innovation Act (WIFIA) Program, represent the largest federal source of funds to address this critical

[2] 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*.)

[3] Baseline is $32 billion in non-federal dollars leveraged from the CWSRF and DWSRF between FY 2013 and FY 2017 (i.e., loans made from recycled loan repayments, bond proceeds, state match, and interest earnings). The baseline does not include WIFIA leveraged dollars because no loans were closed prior to FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

component of our nation's drinking water and clean water infrastructure. Non-federal dollars are loans made from recycled loan repayments, bond proceeds, state match, and interest earnings. The baseline is $32 billion in non-federal dollars leveraged from the DWSRF and CWSRF between FY 2013 and FY 2017. SRF data are tracked in the Clean Water and Drinking Water National Information Management Systems (NIMS). The baseline does not include WIFIA leveraged dollars. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles[4].

Annual performance goals that support this long-term performance goal:

(PM SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).

	FY 2019	FY 2020	Units	Preferred Direction
Target	9,000	18,000	Square Miles	Increase

Metric Details: This measure will track the progress of water quality standards attainment in waters previously identified as impaired in the Integrated Report as of October 1, 2018. Progress will be evident by a positive trend in previously impaired waters attaining water quality standards. Water quality standards attainment means that (1) the impairments have been effectively removed; and (2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for which it had been impaired. Data will be tracked in the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS). States will submit to EPA their Integrated Report which will include information on the status of their waters, and state geospatial data will be used to calculate results.

(PM TMDL-02) Progress in putting priority TMDLs, Alternative Restoration plans, and protection approaches in place.

	FY 2019	FY 2020	Units	Preferred Direction
Target	50	67	Percent	Increase

Metric Details: This measure tracks state priority waters with a Total Maximum Daily Load (TMDL), alternative restoration or protection plan in place. EPA, states and tribes cooperatively developed A Long-Term Vision for Assessment, Restoration and Protection under the Clean Water Act (CWA) Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by 2022. Data are tracked in ATTAINS. In

[4] 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 EPA Strategic Plan*.)

2018, 33.3% of state priority waters had TMDLs, alternative restoration or protection plans in place. The universe of waters associated with this measure is subject to change to better reflect state priorities.

(PM NPDES-03) EPA Permit Backlog – Existing NPDES.

	FY 2019	FY 2020	Units	Preferred Direction
Target	360	240	Permits	Decrease

Metric Details: This measure tracks existing EPA-issued NPDES individual permits that are administratively continued because they have passed their expiration date and are awaiting reissuance. The CWA limits the length of NPDES permits to five years. A permit can be administratively continued if the facility reapplies more than 180 days before the permit expires, and EPA does not renew the permit before its expiration date through no fault of the permittee. This means that the conditions of the expired permit continue in force until the effective date of the new or reissued permit. For purposes of this measure, permits are removed from the backlog as soon as the agency takes final action on the permit (issuance or denial). Data are tracked in EPA's ICIS-NPDES Database.

Objective 1.3 – Revitalize Land and Prevent Contamination: Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.

Long-Term Performance Goal - By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide[5].

Annual performance goals that support this long-term performance goal:

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2019	FY 2020	Units	Preferred Direction
Target	51	51	Sites	Increase

Metric Details: The SWRAU measure tracks EPA's progress in cleaning up and preparing Superfund sites for reuse, while ensuring human health and environmental protection. It measures the number of construction complete National Priorities List (NPL) or Superfund Alternative Approach (SAA) sites for which all cleanup goals in the Record(s) of Decision (ROD) or other remedy decision document(s) have been achieved for media that may affect current and reasonably anticipated future land uses of the site, so that there are no unacceptable risks; and that all institutional or other controls required in the ROD or other remedy decision document(s) have been put in place. The SWRAU determination is made directly in Superfund Enterprise Management System (SEMS) once it is determined that the site meets all required criteria and has been approved by appropriate EPA regional personnel. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. Through FY 2017, EPA ensured that a total of 836 sites, including 828 final and deleted sites and 8 non-NPL sites with SAA agreements in place, met the criteria to be determined SWRAU. As of the end of FY 2017, there were 1,342 sites on the NPL and 51 non-NPL sites with active SAA agreements. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2019	FY 2020	Units	Preferred Direction
Target	95	80	Projects	Increase

Metric Details: This measure augments the construction completion measure and documents the completion of a discrete scope of activities supporting a Superfund cleanup. The measure documents incremental progress in reducing risk to human health and the environment at Superfund cleanups. Multiple remedial action projects may be necessary to achieve site-wide construction completion. Regional remedial action project completion (RAPC) data are tracked in SEMS. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. The target decreases in FY 2020 due to lower funding levels.

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

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2019	FY 2020	Units	Preferred Direction
Target	12	10	Sites	Increase

Metric Details: This measure documents progress achieved in controlling unacceptable human exposures to contamination at sites and denotes a site-wide accomplishment. Human exposure determinations for sites can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into SEMS. It is important to note that results are expressed as a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The change in status often occurs when a previously unknown exposure pathway (e.g., vapor intrusion) or contaminant is discovered and a reasonable expectation exists that people could be exposed or there is insufficient data to make such a determination until further investigation takes place. The universe of sites tracked for this measure includes final and deleted NPL sites and since FY 2014, non-NPL sites with SSA agreements. The FY 2019 target was increased from 8 to 12 sites due to higher performance in FY 2017 and FY 2018 because of the Superfund Task Force's emphasis placed on this measure. However, the target decreases in FY 2020 due to lower funding levels.

(PM 137) Number of Superfund removals completed.

	FY 2019	FY 2020	Units	Preferred Direction
Target	175	141	Removals	Increase

Metric Details: This measure is a tabulation of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and PRP-lead. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Data are tracked in SEMS. The target decreases in FY 2020 due to lower funding levels.

Long-Term Performance Goal - By September 30, 2022, make 3,420 additional brownfields sites RAU[6].

Annual performance goals that support this long-term performance goal:

(PM B30) Number of brownfields sites made ready for anticipated use.

	FY 2019	FY 2020	Units	Preferred Direction
Target	684	684	Sites	Increase

Metric Details: This measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This activity is expected to result in additional sites available for productive reuse, while also helping to quantify the impact of funding from EPA's Brownfields Program. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2019	FY 2020	Units	Preferred Direction
Target	1.3	1.3	Billions of Dollars	Increase

Metric Details: This measure tracks the number of additional dollars leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database. The FY 2019 target increased from $1.1 to $1.3 billion dollars based upon a review of results trends and data cleanup efforts. The data cleanup initiative has resulted in greatly exceeding the FY 2018 target for this measure and is anticipated to have an impact on FY 2019 results, as well. This effort, once completed, will clean up the backlog of data in ACRES to ensure data reported in future fiscal years is as up-to-date as possible.

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

Long-Term Performance Goal - By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU[7].

Annual performance goals that support this long-term performance goal:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2019	FY 2020	Units	Preferred Direction
Target	91	107	Facilities	Increase

Metric Details: This measure tracks the number of RCRA corrective action facilities made RAU. To be determined RAU, facilities must meet the following criteria: human exposure under control, final cleanup goals achieved for media that would impact the anticipated use, and if needed, controls in place to ensure long-term protectiveness. The universe for this measure is the Agency's list of 3,779 high priority facilities subject to RCRA corrective action. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2019	FY 2020	Units	Preferred Direction
Target	98	98	Facilities	Increase

Metric Details: This measure tracks the number of RCRA corrective action facilities with final remedies constructed. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

(PM HW5) Number of permit renewals issued at hazardous waste facilities.

	FY 2019	FY 2020	Units	Preferred Direction
Target	64	64	Facilities	Increase

Metric Details: This measure tracks RCRA hazardous waste permit renewals or clean-closures in the universe of permitted facilities using EPA's RCRAInfo system. This does not include all permit maintenance since permit modifications cannot be projected and are not included. Maintaining updated permits ensures that permitted facilities have consistent and protective standards to prevent release; proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated substantial costs. Annual targets for the number of permit renewals or clean-closures are estimated from projections of available workload, such as pending permit applications.

[7] From FY 1987 through FY 2017, 1,232 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

Long-Term Performance Goal - By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration[8].

Annual performance goal that supports this long-term performance goal:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2019	FY 2020	Units	Preferred Direction
Target	11,200	11,200	Cleanups	Increase

Metric Details: This measure tracks the number of petroleum-contaminated sites where the states, tribes and EPA have completed cleanup activities. The states and EPA regional offices report the number of cleanups completed within the reporting period (every six months based on the fiscal year). The state totals and EPA regional totals of cleanups completed in Indian country are added together to determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

[8] By the end of FY 2017, 469,898 LUST cleanups had been completed.

Objective 1.4 – Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.

Long-Term Performance Goal - By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines[9].

Annual performance goal that supports this long-term performance goal:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

	FY 2019	FY 2020	Units	Preferred Direction
Target	N/A	10	Evaluations	Increase

Metric Details: This measure tracks new risk evaluation activity under TSCA, as amended in 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. A risk evaluation is considered complete when the final risk evaluation is published in the Federal Register. The risk evaluation process is the second step, following prioritization and before risk management, in EPA's existing chemical process under TSCA. The purpose of risk evaluation is to determine whether a chemical substance presents an unreasonable risk to health or the environment, under the conditions of use. As part of this process, EPA must evaluate both hazard and exposure, and ensure decisions are based on the weight-of-scientific-evidence. To count toward the target, an evaluation must be completed within three years. While the statute allows for a six-month extension, this measure tracks performance against the initial deadline. Accordingly, the expected completion date for the first 10 risk evaluations, which were commenced on December 19, 2016, is December 19, 2019. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines[10].

Annual performance goal that supports this long-term performance goal:

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.

	FY 2019	FY 2020	Units	Preferred Direction
Target	N/A	N/A	Actions	Increase

Metric Details: This measure tracks the number of risk management actions promulgated within statutory limits under TSCA, as amended by the Lautenberg Act. Statute requires EPA to propose a rule under TSCA Section 6 for certain PBT chemicals by June 21, 2019 (in FY 2019), with a final rule to be issued by December 21, 2020 (in FY 2021). For risk management actions following identification of unreasonable risk to human health or the environment in a risk

[9] There is no baseline for this measure, as the program is operating under new statutory authority.
[10] There is no baseline for this measure, as the program is operating under new statutory authority.

evaluation, final risk management actions must be completed within two years after publication of the final risk evaluation. While the statute allows for a two-year extension, this measure tracks the performance against the initial deadline only. This measure also encompasses TSCA risk management actions promulgated for other reasons, such as to address risks from exposure to chemicals for which risk assessments were completed prior to enactment of the Lautenberg Act. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines[11].

Annual performance goals that support this long-term performance goal:

(PM TSCA3) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the initial 90-day statutory timeframe.

	FY 2019	FY 2020	Units	Preferred Direction
Target	80	80	Percent	Increase

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. The statute requires a base review period of 90 days and allows EPA to extend this period another 90 days. While EPA has the authority to agree to voluntary suspensions at the request of a submitter to provide additional time to complete the required review pending receipt of additional information that is needed, this measure tracks performance against the initial 90-day deadline only. This measure tracks final determinations for submissions received by EPA in a single fiscal year. Additional information and statistics about the New Chemicals Program are available at: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM TSCA3b) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the full timeframes allowable by statute.

	FY 2019	FY 2020	Units	Preferred Direction
Target	100	100	Percent	Increase

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals

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

reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. EPA has the authority to agree to voluntary suspensions at the request of a submitter; these provide additional time to complete the required review pending receipt of additional information that is needed. This measure tracks performance against the full timeframes authorized under the statute. A performance result of 100% indicates that there were no instances in which EPA failed to complete a final determination within the period of review agreed to, including any voluntary suspensions. The baseline is 100% of determinations made within full timeframes allowable by statute in FY 2017.

Long-Term Performance Goal - By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program[12].

Annual performance goals that support this long-term performance goal:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2019	FY 2020	Units	Preferred Direction
Target	75	75	Decisions	Increase

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first 15-year cycle of registration review by October 1, 2022. The baseline is 239 decisions of a known universe of 725 cases (33%) completed through FY 2017. Universe is finite. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.

	FY 2019	FY 2020	Units	Preferred Direction
Target	72	75	Risk Assessments	Increase

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first

[12] 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*.)

15-year cycle of registration review by October 1, 2022. The baseline is 351 draft risk assessments of a known universe of 725 cases (48%) completed through FY 2017.

Long-Term Performance Goal - By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days[13].

Annual performance goals that support this long-term performance goal:

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.

	FY 2019	FY 2020	Units	Preferred Direction
Target	631	619	Days	Decrease

Metric Details: To expedite the review and licensing of pesticides' new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017. There are 36 different PRIA categories that relate to new active ingredients, with statutory time frames ranging from 7-24 months.

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2019	FY 2020	Units	Preferred Direction
Target	99	99	Percent	Increase

Metric Details: Whereas PM PRIA1 tracks performance for new active ingredient decisions only, this measure relates to all PRIA categories described in the fee tables in FIFRA section 33(b)(3). Additionally, FIFRA section 33(f)(5) allows that EPA and the applicant may mutually agree to extend a decision time review period. Decisions completed on or before the negotiated due date but after the original PRIA due date are still considered "on-time" under this measure. More information on PRIA can be found on https://www.epa.gov/pria-fees/pria-overview-and-history. The baseline is 94% average of decisions completed on-time from FY 2014-2016.

[13] Baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017.

Goal 2 Cooperative Federalism: *Rebalance the power between Washington and the states to create tangible environmental results for the American people.*

Objective 2.1 – Enhance Shared Accountability: Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.

Long-Term Performance Goal - By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities[14].

Annual performance goal that supports this long-term performance goal:

(PM ST1) Number of grant commitments achieved by states, tribes, and local communities.

	FY 2019	FY 2020	Units	Preferred Direction
Target	No Target Established	TBD	Commit-ments	Increase

Metric Details: Grant commitments are jointly negotiated by EPA and the state, tribal, or local grant recipient. The objective of this measure is to provide a clear and up-to-date report-out of state-EPA grant commitments. The universe (number of commitments contained in PPGs) and FY 2020 target will be determined in FY 2019. No target is established for FY 2019, but results will be reported.

Long-Term Performance Goal - By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews[15].

Annual performance goal that supports this long-term performance goal:

(PM ST2) Number of alternative shared governance approaches to address state, tribal, and local community reviews.

	FY 2019	FY 2020	Units	Preferred Direction
Target	3	3	Alternative Approaches	Increase

Metric Details: This measure tracks the number of program areas where EPA has launched the new oversight framework. EPA will define, develop, pilot, evaluate, and launch a comprehensive system to evaluate state and local implementation of federal environmental programs by 2020. The "comprehensive system" is defined as the overarching principles as laid out in the principles memo, coupled with a template populated with state-and regional specific details on

[14] 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*.)
[15] There is no baseline for this measure. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

the review activity in question. The purpose of this effort is twofold: to begin to standardize EPA's oversight work across EPA regions, and to maximize state and federal resources by focusing on the most important work. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

Other Core Work supporting Objective 2.1:

Annual performance goal:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2019	FY 2020	Units	Preferred Direction
Target	10,000	10,000	Inspections & Evaluations	Increase

Metric Details: This measure includes new data elements, such as off-site compliance monitoring activities (e.g., record reviews), not previously tracked or counted, and reflects a recognition that states conduct the vast majority of inspections and an EPA focus on direct implementation programs. The target is the same for FY 2019 and FY 2020 based on available resources.

Objective 2.2 – Increase Transparency and Public Participation: Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.

Long-Term Performance Goal - By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests[16].

Annual performance goal that supports this long-term performance goal:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2019	FY 2020	Units	Preferred Direction
Target	25	50	Percent	Increase

Metric Details: For purposes of this measure, overdue requests are defined as those that are not indicated as closed in EPA's FOIAonline tracking system after 20 working days. EPA will focus on reducing the FOIA backlog the Agency has built up over the years and enhancing the FOIA process which gives the public the right to make requests for federal agency records. The complexity and volume of electronic documents that must be searched, collected, and reviewed has increased over time. The Agency will ensure that it can support the timely searching and collection of electronically-stored information for purposes of responding to FOIA requests and other information needs in a cost-effective and sustainable manner. This should not only help the Agency provide the public with the information requested, but also reduce the fees and lawsuits the Agency incurs from missing FOIA response deadlines. As of April 2018, there were 2,537 overdue FOIA requests in the backlog. In FY 2019, EPA will reduce that number by 25% (635) to 1,902, and by 50% (1,269) to 1,268 in FY 2020.

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

Goal 3 Rule of Law and Process: *Administer the law as Congress intended, to refocus the Agency on its statutory obligations under the law.*

Objective 3.1 – Compliance with the Law: Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.

Long-Term Performance Goal - By September 30, 2022, reduce the average time from violation identification to correction.

Annual performance goal that supports this long-term performance goal:

(PM 436) Number of all referred no complaint (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2019	FY 2020	Units	Preferred Direction
Target	129	129	Cases	Decrease

Metric Details: This measure represents the number of all open civil judicial cases that are more than 2.5 years old without a complaint filed. 2.5 years is the average time from referral to complaint for a complaint filed between FY 2013 and FY 2017. Excludes Superfund, bankruptcy collection action, and access order cases. This measure is still early in the implementation and therefore the target remains the same until it is demonstrated that results can be improved.

Long-Term Performance Goal - By September 30, 2022, increase the environmental law compliance rate[17].

Annual performance goal that supports this long-term performance goal:

(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2019	FY 2020	Units	Preferred Direction
Target	TBD	TBD	Percent	Decrease

Metric Details: This measure tracks the annual SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees. Major and minor permittees that were in SNC/Category 1 noncompliance at any time during the one-year period will be counted in the percentage denominator. SNC/Category 1 noncompliance are a specific type of violation, the severity of which are classified based on duration, severity, and type of violation. For more information, see: https://echo.epa.gov/help/facility-search/npdes-program-search-criteria-help. EPA is updating the baseline and related

[17] 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*.)

targets due to the discovery of facilities erroneously included in the universe of regulated entities counted in the denominator. The baseline and targets will be determined in FY 2019. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Other Core Work supporting Objective 3.1:

Annual performance goals:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2019	FY 2020	Units	Preferred Direction
Target	325	325	Millions of Pounds	Increase

Metric Details: This measure combines environmental benefits from pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions. Prior to FY 2018, pounds of pollutants reduced, treated, or eliminated for different media were tracked using separate measures.

(PM 441) Number of enforcement tools completed to address cleanup and/or long-term protection, including reuse, of contaminated sites.

	FY 2019	FY 2020	Units	Preferred Direction
Target	170	170	Tools	Increase

Metric Details: For Superfund private sites, this measure includes: completed private party enforcement agreements for the performance of site study and cleanup, agreements that make cash payments toward future site work cost recovery settlements with funds dedicated for future work; completed agreements with third-party prospective purchasers to help remove liability barriers to contaminated properties and facilitate redevelopment; and assurances to parties interested in cleaning up, purchasing and developing certain properties (comfort/status letter). This measure also counts Superfund Federal Facility Agreements (FFAs) and FFA amendments, Record of Decision (RODs) and ROD amendments, Explanation of Significant Differences (ESDs), and RCRA Corrective Action cleanup orders. Potentially Responsible Parties and other parties made an average of 170 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2014 to FY 2018. The target is the same for FY 2019 and FY 2020 based on available resources.

Objective 3.2 – Create Consistency and Certainty: Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.

Long-Term Performance Goal - By September 30, 2022, meet 100% of legal deadlines imposed on EPA[18].

Annual performance goal that supports this long-term performance goal:

(PM RG1) Percentage of legal deadlines met by EPA.

	FY 2019	FY 2020	Units	Preferred Direction
Target	No Target Established	TBD	Percent	Increase

Metric Details: This measure tracks progress toward EPA meeting its statutory, regulatory, and court-ordered deadlines. EPA is reinvigorating its approach to regulatory development and prioritizing meeting legal deadlines to ensure that expectations for the regulated community and the public are clear and comprehensive and that the Agency can achieve its core mission in a manner that is defensible and consistent with its authorities. This measure will not track critical deadlines and duties reported elsewhere, e.g., legal obligations relating to: Clean Air Act (CAA) State Implementation Plans (SIPs), Title V Petitions, and Prevention of Significant Deterioration (PSD) Permits; Clean Water Act (CWA) Total Maximum Daily Loads (TMDLs); FOIA responses; and legal obligations under Consent Decrees. Baseline and FY 2020 target will be determined in FY 2019. No target is established for FY 2019, but results will be reported.

Long-Term Performance Goal - By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours[19].

Annual performance goal that supports this long-term performance goal:

(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.

	FY 2019	FY 2020	Units	Preferred Direction
Target	2,000,000	2,000,000	Hours	Increase

Metric Details: To promote the Agency's goal of efficiency, the measure will not track critical deadlines and duties reported in other Agency measures. These include, for example, legal obligations relating to: CAA SIPs, Title V Petitions, and the PSD permits; CWA TMDLs; FOIA responses; and legal obligations under Consent Decrees. EPA will engage in continuous improvement for managing the paperwork burden on regulated entities associated with EPA's Information Collection Rules and reduce the burden where possible with a goal of eliminating 2,000,000 hours of unnecessary or duplicative reporting per year toward the goal of 10,000,000 hours by the end of FY 2022. Annual increments represent permanent changes in reporting burden. The data are tracked in OMB's RegInfo.gov database. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

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

Other Core Work supporting Objective 3.2:

Annual performance goals:

(PM RG3) Number of EO 13771 regulatory actions issued.

	FY 2019	FY 2020	Units	Preferred Direction
Target	No Target Established	No Target Established	Actions	Increase

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established, but results are reported.

(PM RG4) Number of EO 13771 deregulatory actions issued.

	FY 2019	FY 2020	Units	Preferred Direction
Target	No Target Established	No Target Established	Actions	Increase

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established, but results are reported.

(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.

	FY 2019	FY 2020	Units	Preferred Direction
Target	-50	No Target Established	Millions of Dollars	Decrease

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23. In FY 2017, the total incremental cost of all EO 13771 regulatory and deregulatory actions was -$21.5 million. The incremental cost values are annualized values in 2016 dollars applying a 7% discount rate, discounted to the year 2016 and assuming a perpetual time horizon. Incremental benefits are not included in this total.

Objective 3.3 – Prioritize Robust Science: Refocus the EPA's robust research and scientific analysis to inform policy making.

Long-Term Performance Goal - By September 30, 2022, increase the percentage of research products meeting customer needs[20].

Annual performance goal that supports this long-term performance goal:

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

	FY 2019	FY 2020	Units	Preferred Direction
Target	77	80	Percent	Increase

Metric Details: Beginning in FY 2018, ORD initiated a survey to measure customer satisfaction of users of its research products. Customer satisfaction is derived through the distribution of over 200 surveys to key users of ORD products, evaluating the scientific rigor of the research products, relevance of the products, and timeliness of the product delivery to support the continuous improvement of research product development. The survey is estimated at a 90% confidence interval of ±10 products. ORD is evaluating modifications to improve its survey methodology and is considering modifications to the measure that will take effect beginning in FY 2020 reporting.

[20] 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*.)

Objective 3.4 – Streamline and Modernize: Issue permits more quickly and modernize our permitting and reporting systems.

Long-Term Performance Goal - By September 30, 2022, reach all permitting-related decisions within six months[21].

Annual performance goal that supports this long-term performance goal:

(PM PE2) Number of permit applications in backlog.

	FY 2019	FY 2020	Units	Preferred Direction
Target	No Target Established	TBD	Permits	Decrease

Metric Details: This measure tracks the sum of new permit applications that are over six months old, and existing permits that have passed their expiration date and are awaiting reissuance. The time for a permitting-related decision is calculated from the date a permit application is received or as soon as an existing permit passes its expiration date, to the date of a permit issuance or denial. No FY 2019 target is established, but results will be reported. The baseline and FY 2020 target will be determined in FY 2019. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

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

Objective 3.5 – Improve Efficiency and Effectiveness: Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

Long-Term Performance Goal - By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet[22].

Annual performance goal that supports this long-term performance goal:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2019	FY 2020	Units	Preferred Direction
Target	163,626	146,477	Square Feet	Increase

Metric Details: This measure tracks usable square feet of office and warehouse space released with data collected from EPA facility manager notifications, and reports generated when there is a modification to an Occupancy Agreement. Space consolidation efforts will result in EPA becoming a more efficient and effective Agency by reducing lease, utility, security and other facility management costs, which will enable the Agency to direct resources to core environmental work.

Long-Term Performance Goal - By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT)[23].

Annual performance goal that supports this long-term performance goal:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.

	FY 2019	FY 2020	Units	Preferred Direction
Target	85	90	Percent	Increase

Metric Details: For FY 2018, this measure tracked the timeliness of the Agency's processing of contract actions for Simplified Acquisitions (SA), Competitive Proposals (CP), and Funding and Administrative Actions (FAA) with data collected from EPA's Acquisition System (EAS) and information from EPA contract officer representatives (CORs) and contract officers (COs). Timeliness is measured in processing days from the time the procurement request (PR) is released in EAS to the date the contract is awarded. PALT Standards are outlined in Section 7.1.1 of the EPA Acquisition Guide. As a result of these efforts, EPA will become a more efficient and effective agency by reducing processing time and costs. Beginning in FY 2019, EPA will begin reporting results for all acquisition categories in a single percentage, not just SA, CP, and FAA. Baseline as of January 1, 2018 is: 47% SA; 65% CP; and 67% FAA. Baseline as of September 30, 2018 is 77% for all contract actions awarded within PALT.

[22] Baseline is 5,264,846 square feet as of FY 2017.
[23] Baseline, as of September 30, 2018 is 77% for all contract actions awarded within PALT. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

Long-Term Performance Goal - By September 30, 2022, improve 250 operational processes.

Annual performance goal that supports this long-term performance goal:

(PM OP1) Number of operational processes improved.

	FY 2019	FY 2020	Units	Preferred Direction
Target	50	50	Operational Processes	Increase

Metric Details: EPA is applying Lean principles to improve the efficiency and cost effectiveness of its operations. An operational process is a sequence of activities that results in the delivery of a service. Initially, EPA counted an operational process as improved following a completed Lean/Kaizen event that meets a three-part test: (1) the work of the process has been standardized; (2) visual management has been put in place and used; and (3) performance has improved. EPA completed 11 of these events in FY 2018. EPA is currently refining the definition to include other key tools of ELMS, in addition to Lean/Kaizen events, to achieve process improvements that meet a more stringent requirement for improvement.

Long-Term Performance Goal - By September 30, 2022, increase enterprise adoption of shared services by four[24].

Annual performance goals that support this long-term performance goal:

(PM CF1) Number of administrative shared services.

	FY 2019	FY 2020	Units	Preferred Direction
Target	7	8	Shared Services	Increase

Metric Details: EPA will use additional federal and/or internal shared services when supported by business case analysis. Enterprise adoption of shared services will ensure consistency and scalability in tools and services, enabling the Agency to standardize internal operational processes, control costs, and improve data quality. The five administrative shared services in place as of the end of FY 2017 were: Interior Business Center (HR/payroll), Concur (travel), Compass (core financial management), human resources shared service centers, and finance centers.

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

(PM CF2) Number of Agency administrative subsystems.

	FY 2019	FY 2020	Units	Preferred Direction
Target	22	20	Subsystems	Decrease

Metric Details: Reducing the number of administrative system interfaces allows EPA users to more easily input and access data and standardizes reporting as payment processing is moved to a federal shared service provider. This has a positive impact on streamlining operational processes and drives the integration of financial transactions across multiple administrative systems, reducing manual entry, and improving data quality. The focus is currently on establishing an integrated end-to-end delivery of financial transactions for contracts, grants, and Interagency Agreements into Compass. In FY 2017, the Agency had 26 administrative subsystems.

Table of Contents –Program Performance and Assessment

FY 2018 Annual Performance Report

Introduction

EPA's *FY 2018 Annual Performance Report* (APR) describes the first year of progress toward the strategic goals and objectives in the *FY 2018-2022 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/strategicplan. This APR presents results against the annual performance goals and targets in the Agency's *FY 2018 Annual Performance Plan and Congressional Justification* (APP/CJ) as updated in the FY 2019 APP/CJ. Please also refer to EPA's *FY 2018 Agency Financial Report* (AFR), available at https://www.epa.gov/planandbudget/fy-2018-agency-financial-report, for information on financial performance results.

In FY 2018, EPA's Chief of Operations introduced the EPA Lean Management System (ELMS), which has enhanced the Agency's performance management framework. ELMS is a set of practices and tools that supports Agency employees in identifying and solving problems for optimal performance results. As part of ELMS, the Agency's senior leaders hold monthly business meetings to discuss performance results and actions needed to make improvements.

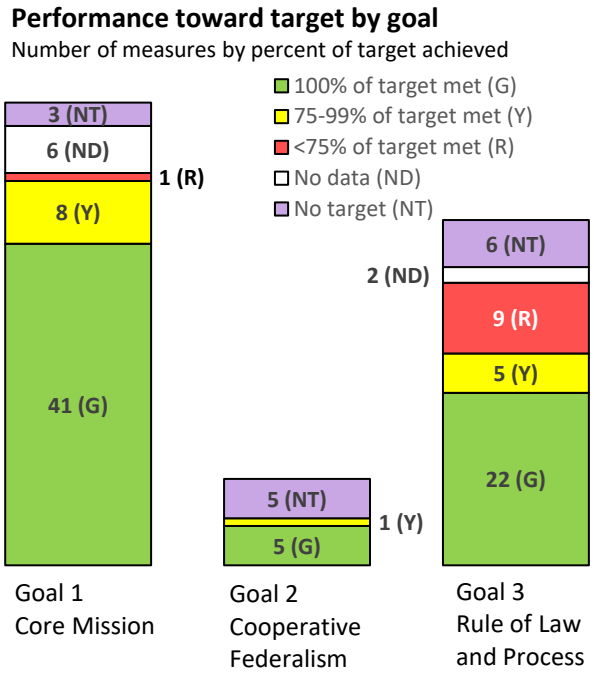
Organization of the FY 2018 APR

The Program Performance and Assessment section (Tab 14) is the primary component of EPA's FY 2018 APR. This section is organized by strategic goal. For each strategic goal, there is a Goal-at-a-Glance Overview and a detailed multi-year table with results, graphs, and key takeaways for the Agency's strategic objectives and annual performance goals. This section adopts the terminology and color coding used to measure progress under ELMS. FY 2018 performance results are also integrated throughout the FY 2020 APP/CJ.

FY 2018 Performance Data

FY 2018 Annual Performance Goal Results

EPA met 74% of the targets in their entirety for annual performance goals with FY 2018 targets and data available (68 of 92). For 14 of its annual performance goals (15%), the Agency achieved between 75-99% of the target. For 10 of its annual performance goals (11%), the Agency achieved less than 75% of the target.



The Agency strives to set ambitious, yet realistic targets. While EPA is making significant progress toward a broad range of policy outcomes, some results show less progress than expected due to delays in program implementation, Agency focus on other priorities, or factors outside of the Agency's control. More detail is available in the multi-year table that follows this introduction.

No data were available for 16 of the Agency's annual performance goals as of March 2019. Reasons for missing data include additional time needed for data collection from external sources, out of sync reporting cycles, and data quality assurance/quality control processes. As additional data are received for FY 2018 annual performance goals, the Agency will include the results in future APRs.

Fiscal Year 2017 Data Now Available

EPA has received final results for four of the 41 annual performance goals with missing data at the end of FY 2017. EPA met the targets in their entirety for three of these annual performance goals and achieved less than 75% of the target for the other annual performance goal. The Agency has no data for the other 37 annual performance goals.

Verification/Validation of Performance Data

EPA maintains Data Quality Records (DQRs) to ensure consistency and quality of data used for annual performance goal reporting. These DQRs outline the results being measured; data sources and limitations; methods for calculating results; and controls to ensure good data quality. The Agency has developed DQRs for all 26 of the long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/results.

FY 2018-2019 Agency Priority Goals

EPA met FY 2018 targets for three of the six FY 2018-2019 Agency Priority Goals (APGs) in the *FY 2018-2022 EPA Strategic Plan* (water infrastructure, site cleanups, and permitting decisions) and missed FY 2018 targets for two of the six APGs (air quality attainment, and chemical safety). Data are incomplete for one of the APGs (environmental compliance). Complete FY 2018-2019 APG Action Plans and Quarterly Progress Updates are available at https://www.performance.gov/EPA/APG_epa_1.html.

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

  Missed FY 2018 target. At the end of FY 2018, the number of nonattainment areas was 159. EPA took final action on state requests to redesignate 11 areas to attainment with National Ambient Air Quality Standards (NAAQS) as projected, but fell short of meeting the FY 2018 target of 155 areas in nonattainment because four of the 11 redesignations became effective after September 30, 2018. Looking forward, EPA is poised to: (1) work with states to update nonattainment area projections and identify states that intend to submit

redesignation requests; (2) encourage states with eligible nonattainment areas that are eligible to seek redesignation to attainment through submission of approvable requests and accompanying 10-year maintenance plans, as required by the Clean Air Act (CAA); and (3) prioritize approval of state-submitted redesignation requests.

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

  Met FY 2018 target. EPA and its partners leveraged $9.7 billion in non-federal dollars through the Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act (WIFIA) Program, exceeding the FY 2018 target of $8 billion. EPA deployed strategies to increase leveraging by conducting 25 water infrastructure community engagements; providing 15 tools, trainings, and resources; and conducting all 102 state reviews for the State Revolving Funds. EPA will continue to implement effective strategies to engage with partners to meet the two-year APG target of $16 billion.

- **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).*

  Met FY 2018 targets. EPA returned 51 Superfund sites to RAU, meeting the FY 2018 target, and exceeded the brownfields target of 684 by making 861 brownfields sites RAU. The Agency continues to implement recommendations from EPA's Superfund Task Force Report, including completion of nearly 20 optimization projects and project scoping best management practices to accelerate site cleanup progress; launching a mapping tool to support redevelopment; and developing a Regional Best Management Practices document. Utilizing Lean practices, EPA reduced brownfields data entry backlogs and provided training to communities, states, and tribes on use of the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. The Agency has committed to conducting additional redevelopment training and providing brownfield communities with technical assistance for redevelopment plans.

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

  Missed FY 2018 target; some data not available. EPA achieved 58.4 of TSCA premanufacture notice final determinations within 90 days, falling short of the FY 2018 target of 65% due to the increased complexity of new chemical reviews under amended TSCA. The Agency streamlined processes by implementing recommendations from Lean

events, which yielded significant performance improvements with 33% of final determinations made within 90 days in FY 2018 Q4, and 71.4% made within 90 days in September 2018. EPA maintains a perfect record of completing final determinations within the timeframe allowable by law, including any EPA-approved submitter requests for suspension of review.

FY 2018 results are not reported for risk evaluations or risk management actions because the first of these are not expected until FY 2019.

- **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%.*

  Incomplete data. 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 based on these revisions. The Agency also established an EPA-state workgroup to outline strategies for achieving long-term reductions while addressing permits with significant impacts on the environment. Some challenges include EPA's and the states' limited capacity to inspect, enforce, or provide compliance assistance; and infrastructure needs and availability of skilled operators for publicly-owned wastewater facilities which constitute a large portion of the facilities in significant noncompliance with their permit limits. EPA has identified a problem with the data used to calculate the baseline and targets for this measure and is working to revise these calculations. we will update the APG baseline and targets once we are able to correct for the erroneous data.

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

  Met target. EPA reduced the number of backlogged permit decisions in FY 2018 to 136, an 18% reduction from the baseline of 166 as of June 30, 2018. Building on experience in EPA and state environmental agencies, the Agency developed strategies and shifted resources to address the backlog of new applications. Specifically, EPA created standard work templates for use by permit writers, established communities of practice, and work-sharing agreements for improved utilization of permit writers' expertise. EPA has developed a centralized system to track pending permit applications and an approach to render timely decisions on incomplete permit applications to improve permitting efficiency agencywide.

Evidence and Evaluation

Summaries of program evaluations completed during FY 2018, and additional FY 2018 contributions to EPA's portfolio of Evidence are available at https://www.epa.gov/planandbudget/results. EPA uses program evaluations and other evidence to

ensure programs are meeting Agency goals, to improve mission delivery, and to bring evidence to bear in decision making. Program evaluations and other evidence help EPA identify activities that benefit human health and the environment, provide the roadmap needed to replicate successes, and identify areas needing improvement. This is particularly important for fostering transparency and accountability.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE ADMINISTRATOR

Reliability of the EPA's Performance Data

I attest to the reliability and completeness of the performance data presented in the U.S. Environmental Protection Agency's Fiscal Year 2018 Annual Performance Report. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data for some of our performance measures for this reporting year. When possible, however, we have portrayed trend data to illustrate progress over time. We also report final performance results for previous years that became available in FY 2018.

Andrew R. Wheeler
Administrator

MAR - 7 2019
Date

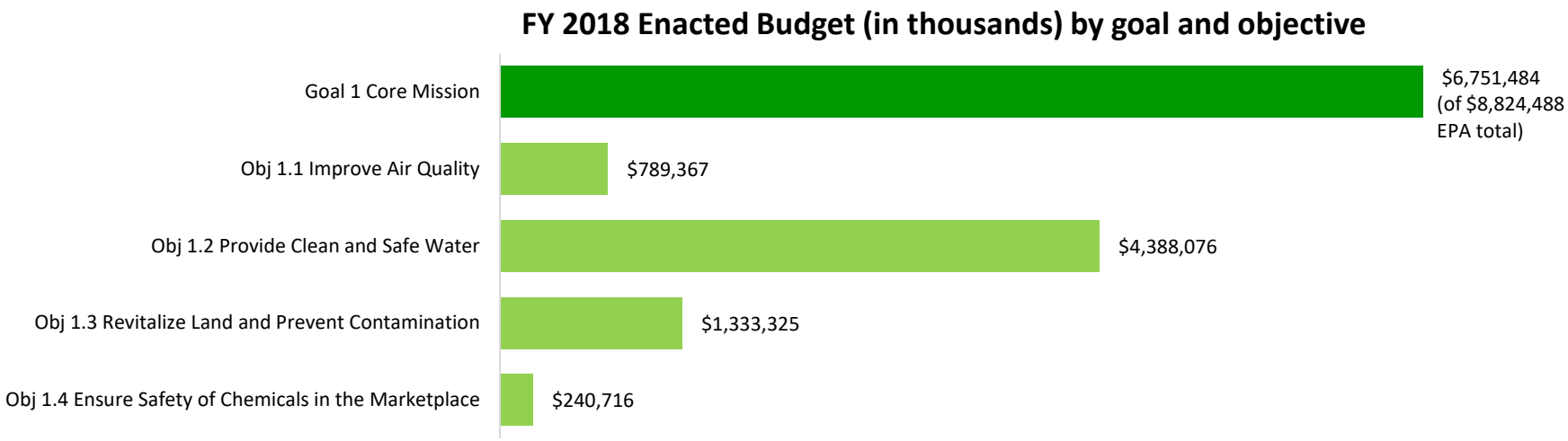
Key to Multi-Year Table Annual Performance Goal Data Presentation

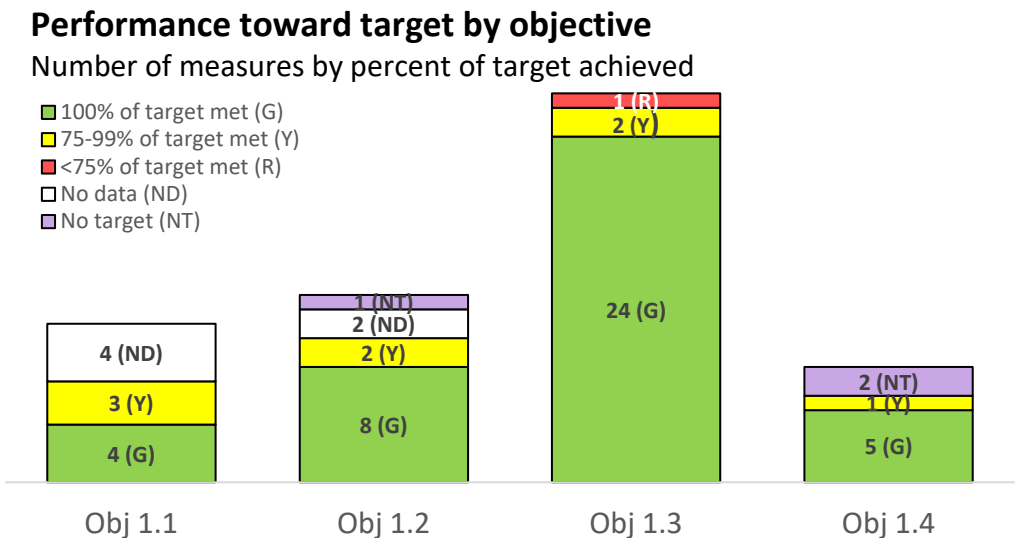
(PM #) Annual performance goal language here.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		15	13	13	13	No Target Established	11	9	Sites	Increase	
Actual		8	14	13	10	12					

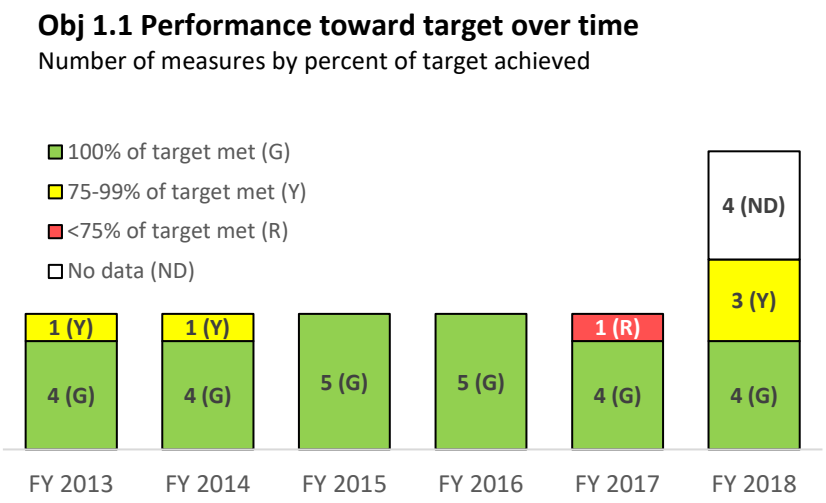
Goal 1 at a Glance

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




Performance toward target by objective
Number of measures by percent of target achieved
100% of target met (G)
75-99% of target met (Y)
<75% of target met (R)
No data (ND)
No target (NT)
4 (ND)
3 (Y)
4 (G)
1 (NT)
2 (ND)
2 (Y)
8 (G)
1 (R)
2 (Y)
24 (G)
2 (NT)
1 (Y)
5 (G)
Obj 1.1
Obj 1.2
Obj 1.3
Obj 1.4

Objective 1.1 – Improve Air Quality: Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Took final action on state requests to redesignate 11 areas to attainment with National Ambient Air Quality Standards (NAAQS), as projected. Four of the redesignations became effective after September 30, 2018 (FY 2018-2019 APG).
- More than 85% of counties in the U.S. met the 2015 ozone NAAQS and 94% of counties met the 2010 sulfur dioxide (SO2) NAAQS.
- Took timely action on State Implementation Plans (SIPs) consistent with Clean Air Act (CAA) deadlines and reducing the SIP backlog by working closely with state and local air agencies. Acted on 360 SIPs, 182 of which were in the backlog.
- Issued over 4,800 certificates of conformity for engines, vehicles, and complementary pieces of equipment allowing manufacturers to enter products into commerce in the U.S.
- Hydrochlorofluorocarbons (HCFCs) consumption is well below levels required by Montreal Protocol, showing that the U.S. continues to outperform international commitments. U.S. consumption has fallen more than 74% in the past five years.
- Proposed Affordable Clean Energy (ACE) Rule, which would reduce carbon dioxide (CO2) emissions in 2025 by up to 30 million short tons.
- Proposed Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, to adjust national automobile fuel economy and greenhouse gas (GHG) emissions standards.
- Proposed targeted improvements to 2016 New Source Performance Standards for oil and gas industry that streamline implementation, reduce duplicative EPA and state requirements, and decrease burdens on domestic energy producers.
- Reviewed New Source Review (NSR) Program and identified opportunities for streamlining and clarifying regulatory permitting requirements.
- In 2016, ENERGY STAR helped Americans save over $30 billion in energy costs and 400 billion kilowatt hour (kWh) of electricity with reductions of 320 million metric tons of GHG emissions, 300,000 short tons of SO2, 220,000 short tons of NOX, and 23,000 short tons of fine particulate matter (PM2.5) (most recent data).

Challenges:

- While EPA is making steady and expected progress redesignating areas to NAAQS attainment, under the CAA, states are responsible for initiating the redesignation process, a process that demands time and resources from states.

Long-Term Performance Goal - By September 30, 2022, reduce the number of nonattainment areas to 101[1].

Annual performance goals that support this long-term performance goal:

(PM NA1) Number of Nonattainment Areas.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						155	138	136	Nonattain-ment Areas	Decrease	
Actual						159					

Key Takeaways:

- In FY 2018, EPA took final action on state requests to redesignate 11 nonattainment areas to attainment as projected. The effective date for seven of these areas occurred in FY 2018, and the effective date for four of those areas occurred in the first month of FY 2019.
- Focusing efforts on reducing the number of nonattainment areas helps ensure that states and EPA, in the spirit of cooperative federalism, prioritize taking timely and necessary actions to improve air quality in nonattainment areas through the implementation of permanent and enforceable pollution control measures, so that states can submit, and EPA can approve, redesignation requests for areas once they attain a NAAQS.
- Looking ahead, EPA will: (1) work with States to update FY 2019 - FY 2022 nonattainment area projections to identify which states intend to submit approvable redesignation requests; and (2) continue to encourage states with nonattainment areas that are eligible for redesignation to attainment to develop and submit approvable redesignation requests and accompanying 10-year maintenance plans, as required by the CAA.

Metric Details: This measure tracks the status of 166 areas that were designated nonattainment and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017 are not included. Nonattainment areas are areas that EPA has determined do not meet a primary or secondary NAAQS, or that contribute to air quality in a nearby area that does not meet a non-revoked primary or secondary NAAQS. Areas are considered redesignated based on the effective date of the redesignation. For multi-state nonattainment areas, all state portions of the area must be redesignated to attainment for the area to be removed from the list of nonattainment areas. Under the CAA, states are responsible for initiating the redesignation process and EPA's authority to approve a state's request to redesignate nonattainment areas hinges on the state meeting the minimum requirements of the CAA, which include: (1) a demonstration that the area has air quality that is attaining the NAAQS; (2) establishing that pollution reductions are due to implementing permanent and enforceable measures; (3) a 10-year maintenance plan that includes contingency measures to be triggered in the event of a re-violation of the NAAQS; and (4) satisfying any other applicable and outstanding attainment planning and emissions control requirements. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM NA2) Percentage of U.S. Population Living in Nonattainment Areas.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						36			Percent	Decrease	
Actual						37					
Numerator						114,329,000			People		
Denominator						308,746,000					

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

Key Takeaways:

- As described in PM NA1, EPA took final action to redesignate 11 nonattainment areas to attainment. The effective date for seven of these areas occurred in FY 2018, and the effective date for four of those areas occurred in the first month of FY 2019.
- Most of the seven areas that were redesignated to attainment effective in FY 2018 were small population centers.

Metric Details: The percentage of the U.S. population living in a nonattainment area represents the number of people out of the total U.S. population living in an area that is designated nonattainment for at least one of the NAAQS. If an area is designated nonattainment for multiple NAAQS, the population residing in the area is counted only once. For example, the Los Angeles area is currently in nonattainment for five NAAQS, but the population living in the area is counted only once. This measure tracks population living in areas that remain in nonattainment from the baseline population of 37 percent living in nonattainment areas and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017, and areas designated nonattainment for revoked NAAQS, are not included in this measure. The data source for this measure is EPA's "Summary Nonattainment Area Population Exposure Report," available at (https://www.epa.gov/green-book), which groups nonattainment areas by geographic locations and estimates the total population for nonattainment areas for a single NAAQS, and across all NAAQS. The percentage of the estimated population for nonattainment areas and across all NAAQS is calculated based on the U.S. population from the 2010 census.

(PM DV) Percent of measured air quality improvement in counties not meeting the NAAQS from the 2016 baseline.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						2			Percent	Increase	
Actual					3	Data Avail 12/2019					

Key Takeaways:

- EPA continues to make progress in reducing pollutant concentrations in counties not meeting one or more NAAQS.
- The 2017 average design value concentration among the baseline counties improved for all pollutants, except for ozone which remained the same, resulting in an aggregate improvement of 3% from the 2016 baseline.
- A design value is a statistic that describes the air quality status of a given location relative to the level of the NAAQS.

Metric Details: This measure shows progress in reducing pollutant concentrations in counties not meeting one or more NAAQS relative to the 2016 calculated baseline. The measure is presented as the aggregate percent change in design value concentrations – a statistic that describes the air quality status of a given location relative to the NAAQS – since the baseline year. The aggregate percent change is weighted by the number of counties violating for each pollutant, so more weight is given to pollutants with more violating counties. All counties met the NAAQS for carbon monoxide and nitrogen dioxide in 2016, so those two pollutants are not considered in this measure. The other criteria pollutants (ozone, PM2.5, PM10, SO2, and lead) are part of this measure. For ozone and PM2.5, targets are based on predictions of future year concentrations resulting from the Community Multi-Scale Air Quality model which estimates the impact of existing and future control strategies. For the other pollutants (PM10, SO2, and lead), such modeling predictions are unavailable. Therefore, targets for those pollutants are based on a regression curve using historical data. The results for this measure are updated annually based on design values computed from actual monitored concentrations. Counties are used for this measure to provide finer resolution in the air quality data.

(PM SIP) Number of SIPs acted on by the regional offices.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						150			SIPs	Increase	
Actual						360					

Key Takeaways:

- In FY 2018, EPA acted on 360 SIPs. Of those 360, 182 were backlogged at the time of final action (about 51%).
- Over the past year, EPA worked collaboratively with state and local air agencies on setting priorities to ensure EPA took action on the SIPs that matter most for cleaner air.
- The Agency also focused on improving the efficiency of the SIP review and approval process, including development of an electronic system to facilitate SIP submittal and processing.
- Looking ahead, EPA expects that implementation of 2018 Lean event recommendations will result in more consistently timely SIP approvals and further reductions in the SIP backlog.

Metric Details: The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to EPA for approval. SIPs vary in type and complexity. The CAA requires EPA to review SIP submittals consistent with applicable requirements, and to take action on submissions within 18 months of receipt before they are considered backlogged (The CAA provides EPA six months to determine submission completeness and an additional 12 months to act upon the submission.). Each year, EPA identifies the number of active SIPs, current and backlogged, and considers a range of anticipated incoming SIPs for that year. The number of SIPs in the pipeline changes year to year depending on actions taken in the prior year as well as new SIP submittals. The estimated number of actions will also vary year to year depending on the status of EPA rulemakings, state priorities identifying the SIPs on which they want actions taken, and potential new SIPs or SIP revisions.

(PM M92) Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	80	80	80	81	83	67			Percent	Increase (Greater Reduction)	
Actual	74	79	82	82	62	Data Avail 12/2019					
Numerator					7.0 Billion				Days		
Denominator					11.2 Billion						

Key Takeaways:

- The overall trend is largely driven by national ozone and PM2.5 concentrations which have generally decreased at a rate consistent with the estimated impacts of existing and future control strategies, continuing the trend of long-term improvement. The national 2017 result was influenced by large wildfires in the northwestern U.S. and parts of California in 2017 which contributed to higher AQI values.
- Results can also vary from one year to the next because meteorological and exceptional events, like wildfires, can play a significant role in ozone and PM2.5 formation, both of which impact the respiratory system.

Metric Details: The AQI is an index for reporting daily air quality. An AQI value of 100 generally corresponds to the NAAQS standard and are generally thought of as satisfactory for each of the five pollutants (ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide) included in the index. When AQI values are above 100, air quality is considered unhealthy for certain sensitive groups of people and then for everyone as AQI values get higher. This measure assigns more weight to higher AQI values and counties

with more people. Because ozone and PM2.5 typically account for the vast majority of AQI values above 100, this measure largely tracks changes in those two pollutants. The targets for this measure are based on a regression curve using historical data. The results are updated annually based on the actual monitored concentrations. (Note: Since the original development of this measure, three data inputs have changed, and this measure reflects those new inputs, starting with the calculation of the FY 2017 result (data became available in December 2018) and FY 2018 and subsequent targets. First, EPA has revised the ozone and PM2.5 standards, along with their respective AQI breakpoints. An AQI value or breakpoint of 100 generally corresponds to the national air quality standard for the pollutant, which is the level EPA has set to protect public health. The AQI is revised when the air quality standards are revised and if the standards are more stringent, the AQI breakpoints are lower, effectively increasing the number of days with AQI greater than 100. Second, the population numbers used for weighting are now updated to 2010 census data from 2000 census data. Third, data from continuous PM2.5 monitors are now included. Data from these monitors was not included when the measure was initially developed, but they now make up a large part of the PM2.5 network.

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						5,200	5,000	5,000	Certificates	Increase	
Actual		4,225	4,360	4,453	5,109	4,869					

Key Takeaways:

- The total number of certificates issued by EPA in FY 2018 was 240 less than in FY 2017 (when 5,109 certificates were issued) and reflects approximately 220 fewer manufacturer applications for certification.
- EPA continues to issue vehicle and engine certificates of conformity in a timely manner and in pace with the numbers of requests received.

Metric Details: This measure reports the number of certificates of conformity issued in a given year. The CAA requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction to U.S. commerce. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer has demonstrated compliance with all applicable requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is dictated by the product planning of manufacturers and will fluctuate from year to year.

(PM NOX) Ozone Season emissions of nitrogen oxides (NOx) from electric power generation sources.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						590,000			Tons	Decrease	
Actual	735,799	683,409	616,815	554,206	466,237	Data Avail 04/2019					

Key Takeaways:

- These reductions have occurred while electricity demand (measured as heat input) remained relatively stable, indicating that the emission reductions were not driven by decreased electric generation.
- These emission reductions are a result of actions taken at affected sources such as power generators installing or improving operation of controls, switching to lower emitting fuels, or otherwise reducing their ozone season NOx emissions while meeting relatively steady electricity demand.

Metric Details: EPA operates seven nationwide and/or multi-state Clean Air Allowance Trading Programs that help address air pollutants from large stationary sources. This measure tracks the ozone season NOx emissions from sources in four of those programs: an annual NOx Budget Trading Program and two ozone season NOx Budget Trading

Programs operated by EPA on behalf of 27 states in the eastern U.S. under Title I of the CAA, as well as a national NOx Emissions Reduction Program for the power sector operated by EPA under Title IV of the CAA, the Acid Rain Program. NOx emissions are precursors for PM2.5 and ground-level ozone (O3). Researchers associate PM2.5 and O3 exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to PM2.5 and O3 contributes to human health benefits. The ozone season corresponds to the warm summer months when ozone formation is highest (May 1 – September 30). Reductions in NOx emissions during the ozone season help areas attain ozone standards.

Other Core Work supporting Objective 1.1

Annual performance goals:

(PM G18) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	93	95	95	95	95	65			Percent	Increase	
Actual	96	98	97	97	96	97					
Numerator						7,827			Reports		
Denominator						8,061					

Key Takeaways:

- EPA continues to meet its performance targets for this activity, providing high quality, timely, and verified data to the public.

Metric Details: The GHG Reporting Program requires reporting of GHG data and other relevant information from large GHG emission sources, fuel and industrial gas suppliers, and CO2 injection sites in the U.S. These data can be used by businesses and others to track and compare facilities' greenhouse gas emissions, identify opportunities to reduce pollution, minimize energy use, and save money. The GHG Reporting Program has 41 sectors that include more than 8,000 facilities and suppliers. Both facilities and suppliers are required to report their data annually by March 31st. After submission of the data, the Agency conducts a verification review that lasts approximately 150 days and includes a combination of electronic checks; staff review; and follow-up with facilities to identify any reporting errors and have them corrected before publication. The 150-day period includes 60 days for EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for EPA to review responses or resubmitted reports. EPA typically publishes the data by October 1st each year (see: https://www.epa.gov/ghgreporting).

(PM S01) Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, measured in tons of Ozone Depleting Potential (ODP).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	3,700	3,700	1,520	1,520	1,520	1,520			Tons	Decrease	
Actual	1,640	1,374	584	486	375	Data Avail 12/2019					

Key Takeaways:

- FY 2017 results show that the U.S. continues to significantly outperform international commitments under the Montreal Protocol, and is on track to meet future obligations.
- The results are achieved primarily through limits achieved by EPA in cooperation with industry on the amount of HCFCs that can be produced and imported in a given calendar year.

- EPA supports the transition to safer alternative to HCFCs by reviewing and listing alternatives for HCFCs under the Significant New Alternatives Policy (SNAP) Program, as well as developing regulations establishing refrigerant management, labeling, and other HCFC requirements.
- Industry innovation in developing new alternatives to meet the needs of consumers and industry sectors continues to be critical as the U.S. adopts and promotes these new alternatives in the transition from ODS.

Metric Details: The base of comparison for assessing progress is the domestic consumption cap of Class II HCFCs as set by the Parties to the Montreal Protocol. Each ozone-depleting substance is weighted based on its ODP, the damage it does to the stratospheric ozone layer. The natural layer of ozone in the stratosphere shields and protects the Earth's surface from the sun's harmful ultraviolet (UV) rays, which can lead to more cases of skin cancer, cataracts and other health problems. Beginning on January 1, 1996, the cap was set at the sum of 2.8% of the domestic ODP-weighted consumption of chlorofluorocarbons (CFCs) in 1989 plus the ODP-weighted level of HCFCs in 1989 (a total of 15,240 tons). As defined by the Montreal Protocol, the amount of consumption equals the amount of production plus imports minus exports.

(PM R35) Level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	90	93	93	93	93	80			Score	Increase	
Actual	99	94	93	95	96	83.4					

Key Takeaways:

- The decrease in readiness from FY 2017 to FY 2018 is a function of the changes in the assessment methodology upon which this measure is based and does not indicate an actual year-to-year drop in emergency response readiness.
- At a score of over 83, the FY 2018 results show that EPA continues to be ready for a radiological emergency.

Metric Details: The emergency response readiness assessment provides a measure of key aspects of EPA's Radiological Emergency Response Program. The level of readiness of radiation personnel and assets is based on preparedness metrics such as exercise and drill performance, training completed, procedures developed, and equipment maintained. The level of readiness is based on a score ranging from 0-100 and is dependent upon an annual evaluation of specific criteria that identify progress in six categories: (1) RadNet; (2) Field Support; (3) Analytical Support; (4) Public Information; (5) Data Management; and (6) Science Team. In FY 2018, EPA refined the measure methodology for determining OAR readiness of radiological assets to more accurately reflect EPA's current Radiological Emergency Preparedness and Response Program's resources, readiness and better identify areas for improvement.

(PM R36) Average number of days before availability of quality assured ambient radiation air monitoring data during an emergency.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	0.5	0.5	0.3	0.3	0.3	0.3			Days	Decrease	
Actual	0.3	0.3	0.3	0.1	0.1	0.1					

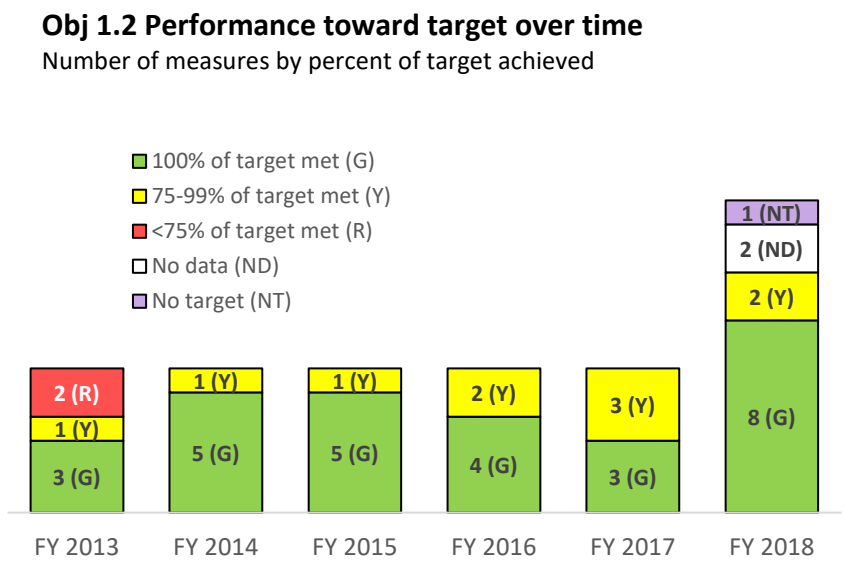
Key Takeaways:

- Over time, improvements in data processing and review processes have reduced the time to release data to the public.

Metric Details: EPA's RadNet system has 140 radiation air monitors in 50 states. RadNet runs 24 hours a day, seven days a week collecting near-real-time measurements of gamma radiation. Over time, RadNet sample testing and monitoring results demonstrate the normal background levels and fluctuations of environmental radiation. RadNet has tracked radiation from both atmospheric nuclear weapons tests and nuclear reactor accidents, including Chernobyl (Ukraine) and Fukushima (Japan). During a radiological incident, public officials use RadNet data to help make science-based decisions about protecting the public. In emergencies, EPA provides quality assured data as quickly as

possible. Scientists use RadNet air monitoring data to help estimate the potential radiation dose to humans. In 2005, the average time between collection and availability of data for release by EPA during emergency operations was 2.5 days.

Objective 1.2 – Provide for Clean and Safe Water: Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Leveraged $9.7 billion in non-federal funds for water infrastructure, exceeding $8 billion target. Of the $9.7 billion, the Water Infrastructure Finance and Innovation Act (WIFIA) Program leveraged $1.1 billion in nonfederal funds (creating up to 5,500 jobs) and the State Revolving Funds leveraged $8.6 billion in non-federal funds. (FY 2018-2019 APG)
- The backlog of EPA-issued new Underground Injection Control (UIC) and National Pollutant Discharge Elimination System (NPDES) permits decreased from 44 to 36 and 106 to 62 after EPA Lean improvements.
- Assisted emergency response during Hurricanes Harvey, Irma and Maria by assessing public health risks and water sector damages.
- Trained more than 6,000 utilities, state officials, and federal emergency responders on resilience to natural or manmade events that endanger water and wastewater services.
- Initiated several rulemakings to provide clarity and regulatory certainty regarding the jurisdictional scope of "Waters of the US" under the Clean Water Act (CWA).
- Planned potential rulemaking to advance state and tribal assumption of the CWA 404(g) Program to protect wetlands from dredge and fill.

Challenges:

- The 2015 Drinking Water Needs Survey, released in FY 2018, showed $472.6 billion is needed to maintain and improve the nation's drinking water infrastructure over the next 20 years.
- Nutrient pollution remains an EPA priority because it is one of America's most widespread, costly and challenging environmental problems. EPA worked with all states to help them make progress on this challenging problem.
- EPA's enhanced oversight of the Lead and Copper Rule for drinking water has resulted in an increased rate of non-compliance with this rule.
- Drinking water rule compliance is more difficult during warmer months due to microbial growth and greater use of disinfection chemicals, leading to harmful disinfection by-products. Extreme weather events add additional pressures.
- The rate at which new waters are listed for water quality impairments exceeds the pace at which restored waters are removed from the list.

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

Annual performance goals that support this long-term performance goal:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						3,510	3,380	3,280	CWSs	Decrease	
Actual						3,480					

Key Takeaways:

- EPA met the FY 2018 target but faces challenges relative to the Long-Term Performance Goal due to increased oversight of the Lead and Copper Rule implementation. Of the 3,508 community water systems (CWS) with health-based violations in FY 2017, 1,919 had all their FY 2017 health-based violations corrected in FY 2018, and 216 had at least 1 corrected. Separately, 1,416 had at least one new health-based violation since July 1, 2017. These two sets are not mutually exclusive.
- Lead enters drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage. The treatment technique for the rule requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 15 parts per billion in more than 10% of customer taps sampled, the system must undertake additional actions to control corrosion.
- Drinking water rule compliance is more difficult during warmer months due to microbial growth and greater use of disinfection chemicals, leading to harmful disinfection by-products.

Metric Details: This measure tracks CWSs out of compliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year. A CWS is a public water system that supplies water to the same population year-round. There are approximately 50,000 CWSs. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations by public water systems as reported to EPA by the primacy agencies (states and tribes with EPA-delegated enforcement responsibility).

(PM DW-02) Number of community water systems without a sanitary survey within the last three years (five years for outstanding performance).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						4,473			CWSs	Decrease	
Actual						3,281					

Key Takeaways:

- EPA and states are working together to identify ways to accelerate the completion and reporting of sanitary surveys into SDWIS. This effort is evident by the fact that reporting of sanitary surveys tripled in the last quarter. The Agency will continue to work with states to provide sanitary survey training and address questions regarding rule requirements.
- States consistently prioritize sanitary surveys as a tool to encourage, and assist, drinking water systems to use proper monitoring and sampling procedures.

[2] 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*.)

Metric Details: A sanitary survey is an on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water. The Interim Enhanced Surface Water Treatment Rule (IESWTR) and the Ground Water Rule (GWR) require primacy agencies to conduct a sanitary survey of each CWS at least once every three years (or every five years for CWSs with outstanding performance).

(PM DW-03) Percentage of population served by CWSs that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	92	92	92	92	92	92			Percent	Increase	
Actual	92	93	91	91.2	91.8	91					
Numerator						282,504,970			People		
Denominator						310,445,023					

Key Takeaways:

- Six out of 10 EPA regions had above 92% population served that met all standards. However, Region 2 faced additional compliance challenges exemplified by a system violation in New York City which serves 8.2 million customers.
- The Stage 2 Disinfectants and Disinfection Byproduct Rule can pose challenges to consecutive water systems, those who purchase treated water from another public water system, as they have little control over the treatment processes of the water they receive, yet they must comply with maximum contaminant levels for total trihalomethanes and haloacetic acids. Approximately 30% of the CWSs are categorized as consecutive systems. EPA continues to work jointly with our state and tribal partners to evaluate this compliance challenge and share lessons learned and best practices among primacy agencies.

Metric Details: This measure tracks percentage of population served by CWSs not out of compliance with health-based drinking water standards during any part of the year. Data are derived from SDWIS-FED.

(PM DW-04) Percentage of population in Indian Country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	87	87	87	87	87	87			Percent	Increase	
Actual	77	89	88	88	90.5	89.1					
Numerator						918,562			People		
Denominator						1,030,934					

Key Takeaways:

- The tribal population affected by GWR violations in EPA Region 6 increased from 5,945 in FY 2017 to 36,419 in FY 2018.
- Many of the additional GWR violations stem from completion of sanitary surveys which identified more significant deficiencies at tribal water systems. Deficiencies that require funding often aren't corrected until financial resources become available.
- Small ground water systems face limited financial capacity to hire certified/qualified operators that can address the degradation of sources of drinking water, pressures from extreme weather events and the ability to make operational changes to the water treatment to address unexpected changes in water quality that will result in finished water that meets the national primary drinking water regulations.

Metric Details: This measure tracks percentage of population served by CWSs not out of compliance with health-based drinking water standards during any part of the year. Data are derived from SDWIS-FED.

Long-Term Performance Goal - By September 30, 2022, increase by $40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA)[3].

Annual performance goals that support this long-term performance goal:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						8.0	8.0	8.0	Billions of Dollars	Increase	
Actual						9.7					

Key Takeaways:

- The WIFIA Program closed four transactions totaling over $1 billion in loans. The $1 billion in WIFIA loans leveraged a total of $1.1 billion in non-federal funds to help finance $2.1 billion for water infrastructure projects and create up to 5,500 jobs.
- The Clean Water State Revolving Fund (CWSRF) programs made 1,532 assistance agreements that provided $6.8 billion for wastewater infrastructure and other water quality projects, of which $5.5 billion were non-federal dollars leveraged by this Program. In addition to the $5.5 billion in non-federal CWSRF dollars, the Program leveraged $500 million in non-federal funds from sources outside the CWSRF, including state grants, local contributions, and other sources of non-SRF funding.
- The Drinking Water State Revolving Fund (DWSRF) programs made 814 assistance agreements that provided $2.8 billion for drinking water infrastructure, of which $2.2 billion were non-federal dollars leveraged by this Program. In addition to the $2.2 billion in non-federal DWSRF dollars, the Program leveraged $400 million in non-federal funds from sources outside the DWSRF, including state grants, local contributions, and other sources of non-SRF funding.

Metric Details: Combined, the three primary water infrastructure programs, DWSRF, CWSRF, and Water Infrastructure Finance and Innovation Act (WIFIA) Program, represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. Non-federal dollars are loans made from recycled loan repayments, bond proceeds, state match, and interest earnings. The baseline is $32 billion in non-federal dollars leveraged from the DWSRF and CWSRF between FY 2013 and FY 2017. SRF data are tracked in the Clean Water and Drinking Water National Information Management Systems (NIMS). The baseline does not include WIFIA leveraged dollars. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

[3] Baseline is $32 billion in non-federal dollars leveraged from the CWSRF and DWSRF between FY 2013 and FY 2017 (i.e., loans made from recycled loan repayments, bond proceeds, state match, and interest earnings). The baseline does not include WIFIA leveraged dollars because no loans were closed prior to FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

(PM INFRA-02) Fund utilization rate for the DWSRF.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	89	89	89	89	89	96			Percent	Increase	
Actual	91	92	94	95	96	96					
Numerator						38.2			Billions of Dollars		
Denominator						39.8					

Key Takeaways:

- The fund utilization rate continues to be strong. Since FY 2014 states signed a record amount of funds into new loans. This resulted from EPA and state implementation of the FY 2014 Unliquidated Obligation (ULO) Strategy, which led many states to develop agile cash flow models to more accurately balance fund inflows and outflows.

Metric Details: The fund utilization rate shows dollars of assistance provided for each dollar made available for projects. It measures all funds (federal and non-federal) signed into loans against all funds (federal and non-federal) made available for projects. Data are collected annually from all 51 state DWSRF programs (50 states and Puerto Rico), reported by municipal and other facility operators, and EPA's regional staff to the NIMS database.

(PM INFRA-03) Fund utilization rate for the CWSRF.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	94.5	94.5	94.5	95	95	98			Percent	Increase	
Actual	97	98	98	98	98	99					
Numerator						133.0			Billions of Dollars		
Denominator						134.7					

Metric Details: The fund utilization rate shows dollars of assistance provided for each dollar made available for projects. It measures all funds (federal and non-federal) signed into loans against all funds (federal and non-federal) made available for projects. Data are collected annually from all 51 state CWSRF programs (50 states and Puerto Rico), reported by municipal and other facility operators, and EPA's regional staff to the NIMS database. In FY 2002, the fund utilization rate was 91%.

(PM INFRA-04) Number of American Indian and Alaska Native homes provided access to safe drinking water in coordination with other federal agencies (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						148,100			Homes	Increase	No Trend Data
Actual						162,016					

Key Takeaways:

- EPA exceeded the target because the projects that were completed covered more homes than expected.

Metric Details: This measure tracks the number of homes provided with access to potable water as a result of receiving federal assistance, based on data obtained from the Indian Health Service's (IHS) Project Data System (PDS). Many benefiting communities are in remote regions that cannot easily connect to larger water systems and, due to their small population sizes, often lack economies of scale and capacities found in larger utilities. Additionally, many of these communities experience arid or permafrost conditions, which make water sources difficult to find. EPA's Drinking Water Infrastructure Grants Tribal Set-Aside (DWIG-TSA) is used to provide additional sources of drinking water, construct

or update treatment and storage facilities, install or upgrade transmission and distribution lines, provide homes with initial access to drinking water, and replace aged water system infrastructure. As of FY 2014, 113,656 American Indian and Alaska Native homes had access to safe drinking water. There were 400,096 American Indian and Alaska Native homes as of January 1, 2017.

(PM INFRA-05) Number of American Indian and Alaska Native homes provided access to basic sanitation in coordination with other federal agencies (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						105,764			Homes	Increase	
Actual						107,462					

Key Takeaways:

- EPA exceeded the target because the projects that were completed covered more homes than expected. 6,398 homes were provided access in FY 2018. The project types could range from a large wastewater treatment plant that will treat wastewater for hundreds of homes, to a smaller project to build on-site septic systems for 2 or 3 homes.

Metric Details: This measure tracks the number of homes provided with access to basic sanitation (wastewater treatment service) as a result of federal assistance, based on data obtained from IHS's PDS. There was a total of 400,096 American Indian and Alaska Native homes as of January 1, 2017.

Long-Term Performance Goal - By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles[4].

Annual performance goals that support this long-term performance goal:

(PM SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	9,000	18,000	Square Miles	Increase (Greater Reduction)	
Actual						N/A					

Key Takeaways:

- At the end of FY 2018, 50 state 303(d) lists of impaired waters remain to be submitted to EPA, out of a total of 70 outstanding lists (i.e., 14 from 2016 or prior + 56 303(d) lists, which were due April 1, 2018). EPA has been working to improve the reporting process and facilitate communication regarding water quality attainment by moving towards electronic reporting. During FY 2018, states began submitting integrated reports electronically.
- A baseline will be established in FY 2019.

Metric Details: This measure will track the progress of water quality standards attainment in waters previously identified as impaired in the Integrated Report as of October 1, 2018. Progress will be evident by a positive trend in previously impaired waters attaining water quality standards. Water quality standards attainment means that (1) the impairments have been effectively removed; and (2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for

[4] 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 EPA Strategic Plan*.)

which it had been impaired. Data will be tracked in the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS). States will submit to EPA their Integrated Report which will include information on the status of their waters, and state geospatial data will be used to calculate results.

(PM TMDL-01) Square miles associated with state priority waters addressed by a TMDL, other restoration plan, or protection approach.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						35,000			Square Miles	Increase	
Actual						33,135					

Key Takeaways:

- EPA increased the percentage of state priority water with progress toward putting a Total Maximum Daily Load (TMDL), alternative restoration or protection plan in place from 25% in May 2018 to 33% in September 2018, narrowly missing the target.
- Results were lower than expected as the target does not reflect shifting state priorities during the year. States requested an opportunity to update their long-term priorities under the State-EPA 303(d) Program Long-Term Vision to reflect shifting water quality needs and goals. EPA provided the states an "open season" to submit updated priorities.
- Some results may have been delayed by manual data entry and calculation of results. The Agency is updating the ATTAINS database to streamline reporting and calculate results automatically.

Metric Details: This measure tracks state priority waters projected to have a TMDL, alternative restoration or protection plan in place. EPA, states and tribes cooperatively developed a Long-Term Vision for Assessment, Restoration and Protection under the CWA Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by 2022. Data are tracked in ATTAINS. In 2017, there were 100,275 square miles of state priority waters.

(PM TMDL-02) Progress in putting priority TMDLs, Alternative Restoration plans, and protection approaches in place.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							50	67	Percent	Increase	
Actual											
Numerator									Square Miles		
Denominator											

Metric Details: This measure tracks state priority waters with a TMDL, alternative restoration or protection plan in place. EPA, states and tribes cooperatively developed A Long-Term Vision for Assessment, Restoration and Protection under the CWA Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by 2022. Data are tracked in ATTAINS. In 2018, 33.3% of state priority waters had TMDLs, alternative restoration or protection plans in place. The universe of waters associated with this measure is subject to change to better reflect state priorities.

(PM NPDES-01) Percentage of high-priority state NPDES permits that are issued in the fiscal year.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	80	80	80	80	80	80			Percent	Increase	
Actual	55	80	82	80	77.7	N/A					
Numerator									Permits		
Denominator											

Key Takeaways:

- No data are available for FY 2018 as this measure is discontinued. The Agency has shifted focus to making all permitting decisions within 180 days, with initial efforts focused on reducing the backlog of new EPA-issued permits.
- The priority permits measures focused on backlog reduction, but only for permits expired for two years or more that were deemed high priority. This limited focus is no longer sufficient to meet Agency goals as described in the *FY 2018-2022 EPA Strategic Plan*. As a result, data collection efforts and work planning have also shifted focus to examining all causes for delay in issuing permits, and EPA regions are developing backlog elimination strategies to address these for all EPA-issued permits.

Metric Details: Results are calculated by dividing the number of high-priority NPDES permits issued during the current fiscal year by the total number of permits selected by states as high-priority for that fiscal year. High-priority permits are those in need of reissuance that have been identified by states as environmentally or programmatically significant. Data are derived from EPA's Permit Management Oversight System (PMOS) database, which incorporates data from EPA's NPDES Database, and the Integrated Compliance Information System (ICIS-NPDES).

(PM NPDES-02) Percentage of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	80	80	80	80	80	80			Percent	Increase	
Actual	55	77	81	78	74.3	N/A					
Numerator									Permits		
Denominator											

Key Takeaways:

- No data are available for FY 2018 as this measure is discontinued. The Agency has shifted focus to making all permitting decisions within 180 days, with initial efforts focused on reducing the backlog of new EPA-issued permits.
- The priority permits measures were focused on backlog reduction, but only for permits expired for two years or more that were deemed high priority. This limited focus is no longer sufficient to meet Agency goals as described in the *FY 2018-2022 EPA Strategic Plan*. As a result, data collection efforts and work planning have also shifted focus to examining all causes for delay in issuing permits, and EPA regions are developing backlog elimination strategies to address these for all EPA-issued permits.

Metric Details: Results are calculated by dividing the number of high-priority NPDES permits issued during the current fiscal year by the total number of permits selected as high-priority for that fiscal year. High-priority permits are those in need of reissuance that have been identified by states or EPA regional offices as environmentally or programmatically significant. Data are derived from EPA's Permit Management Oversight System (PMOS) database, which incorporates data from EPA's ICIS-NPDES Database.

(PM NPDES-03) EPA Permit Backlog – Existing NPDES.

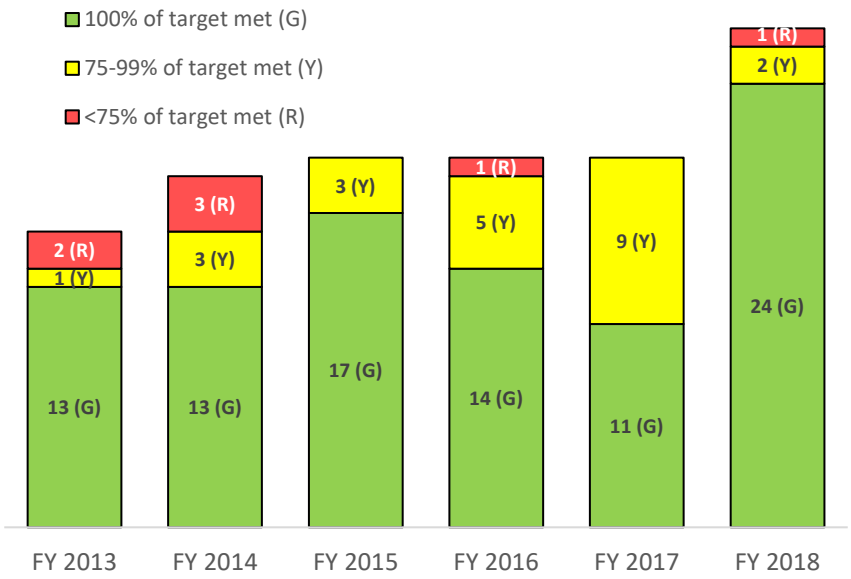
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							360	240	Permits	Decrease	
Actual											

Metric Details: This measure tracks existing EPA-issued NPDES individual permits that are administratively continued because they have passed their expiration date and are awaiting reissuance. The CWA limits the length of NPDES permits to five years. A permit can be administratively continued if the facility reapplies more than 180 days before the permit expires, and EPA does not renew the permit before its expiration date through no fault of the permittee. This means that the conditions of the expired permit continue in force until the effective date of the new or reissued permit. For purposes of this measure, permits are removed from the backlog as soon as the agency takes final action on the permit (issuance or denial). Data are tracked in EPA's ICIS-NPDES Database.

Objective 1.3 – Revitalize Land and Prevent Contamination: Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.

Obj 1.3 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Made 51 Superfund sites Ready for Anticipated Use (RAU), meeting the target, and 861 brownfields RAU, exceeding target of 684. (FY 2018-2019 APG). Also made 117 RCRA corrective action sites RAU, exceeding target of 75.
- Continued to implement the 42 Superfund Task Force recommendations to streamline and improve the cleanup process. Completed nearly 20 optimization projects and project scoping Best Management Practices; and launched a new site mapping tool to support site redevelopment.
- EPA brownfields funding leveraged 11,197 jobs (60% above target) and $2.2 billion in cleanup and redevelopment funding (100% above target).
- Used the EPA Lean Management System (ELMS) to improve effectiveness and efficiency: increased coordination among the Agency's national and regional offices on five-year reviews of federal facility National Priorities List (NPL) sites; improved the RCRA Facility Investigation (RFI) and Remedy Selection process; and reduced the backlog of brownfield grants' open work packages.

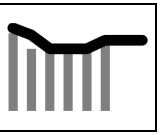
Challenges:

- Complex environmental problems persist at many contaminated properties, such as the presence or perceived presence of hazardous substances in soil, sediment, and groundwater, and can threaten the health of American families and hamper economic redevelopment. There are 188 million people living within three miles of a Superfund, RCRA Corrective Action, or brownfield site – equal to 59% of the U.S. population.
- EPA faces cleanup delays due to emerging contaminants. The Agency has activated a senior-level per- and polyfluoroalkyl substances (PFAS) workgroup to develop an action plan and is evaluating PFAS analytes to understand their toxic effects. Also, EPA has issued updated recommendations to address the effects of human exposures to lead contamination.
- Federal, state, tribal and local environmental land and emergency management programs face reductions in capacity.
- EPA completed 8,128 Leaking Underground Storage Tank (LUST) cleanups, missing the ambitious target of 11,200 cleanups. Many remaining LUST releases have greater challenges such as no responsible party, technically difficult cleanups and lack of available funds. EPA has intensively engaged state partners to identify long-term strategies to meet the long-term performance goal.

Long-Term Performance Goal - By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide[5].

Annual performance goals that support this long-term performance goal:

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

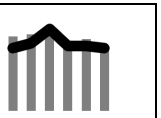
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	60	55	45	45	45	51	51	51	Sites	Increase	
Actual	56	45	45	41	43	51					

Key Takeaways:

- EPA developed a Regional Best Management Practices document based on regional input and Site-Wide Ready for Anticipated Use (SWRAU) Lean event recommendations. Emphasis on early planning and a SWRAU team approach were critical to meeting the FY 2018 target; the team approach will continue to be critical for meeting the targets in FY 2019 and beyond.
- Institutional control implementation and/or the need for a site decision document calling for institutional controls present the greatest site barriers for achieving SWRAU. Headquarters, the SWRAU workgroup and the Office of Site Remediation Enforcement are continuing to work with EPA regions to determine what assistance can be provided and where informational institutional controls can be appropriately applied.
- As the Agency learns more about certain contaminants' human health effects and toxicity values, cleanup standard changes may be necessary for protectiveness; these changes could affect future targets and retractions.
- By the end of FY 2018, 887 Superfund sites had been determined to be SWRAU out of a total 1,836 Superfund sites: there were 1,338 sites on the NPL and 48 non-NPL sites with active Superfund Alternative Approach (SAA) agreements.

Metric Details: The SWRAU measure tracks EPA's progress in cleaning up and preparing Superfund sites for reuse, while ensuring human health and environmental protection. It measures the number of construction complete NPL or SAA sites for which all cleanup goals in the Record(s) of Decision (ROD) or other remedy decision document(s) have been achieved for media that may affect current and reasonably anticipated future land uses of the site, so that there are no unacceptable risks; and that all institutional or other controls required in the ROD or other remedy decision document(s) have been put in place. The SWRAU determination is made directly in Superfund Enterprise Management System (SEMS) once it is determined that the site meets all required criteria and has been approved by appropriate EPA regional personnel. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. Through FY 2017, EPA ensured that a total of 836 sites, including 828 final and deleted sites and 8 non-NPL sites with SAA agreements in place, met the criteria to be determined SWRAU. As of the end of FY 2017, there were 1,342 sites on the NPL and 51 non-NPL sites with active SAA agreements. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM 115) Number of Superfund remedial site assessments completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	650	700	850	675	675	650			Site Assessments	Increase	
Actual	772	794	869	703	747	664					

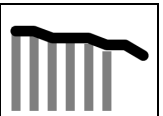
[5] By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.

Key Takeaways:

- Accomplishments under this measure were supported by implementation of Superfund Task Force recommendations development of the Administrator's Emphasis list, and a greater focus on reviewing assessments at federal facility Hazardous Waste Compliance Docket sites.
- States continue to perform a significant portion of the pre-NPL Superfund remedial site assessments: States accounted for 449 of the 664 (68%) assessments completed in FY 2018 with 276 of the 449 (76%) being pre-CERCLA screening assessments at new sites or sites residing in state programs.
- Of these 664 assessments, 386 (58%) resulted in no further federal Superfund interest; 226 (34%) require more complex assessment; and 52 (8%) were determined to need attention using a NPL or non-NPL cleanup approach.
- EPA expects resource constraints, both funding and staff, to reduce assessment production in FY 2019 and beyond.
- An expected FY 2019 decline in assessments may be partially offset by an anticipated increase in assessment reports submitted by other federal agencies. This measure includes EPA review and approval of these reports, a process that can often be completed with relatively fewer Agency resources.

Metric Details: This measure tracks the number of screening-level assessments at sites submitted to the Superfund Program for potential placement on the NPL. The measure includes the number of site assessment reports completed at non-federal sites by EPA and its state and tribal partners, and the number of EPA reviews of site assessment reports completed by other federal agencies at federal facility sites. Assessment data are tracked in SEMS. Assessment results are used to determine whether cleanup may be warranted under a Superfund managed or monitored program. The SEMS active site inventory included approximately 1,750 sites that needed one or more assessments at the beginning of FY 2018, plus around 300 new sites are assessed each year for potential inclusion in this inventory.

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	115	115	105	105	105	95	95	80	Projects	Increase	
Actual	121	115	104	105	97	86					

Key Takeaways:

- The year-to-year performance variability reflects a variety of challenges, including the complexity of the remaining sites; funding and staffing reductions; emerging contaminants; and changing screening/toxicity values.
- More than 68% of remedial action project completions (RAPCs) over the last four years were federal facility and Potentially Responsible Party (PRP)-lead projects; EPA is dependent on remedial action work performed by third parties at these sites. EPA teams performed work on under 32% of RAPCs over the last four years.
- Challenges include limited construction seasons, reduced work force (e.g., attrition), uncertain remedial action funding and unpredictable weather-related events/disasters (e.g., hurricanes, fires).

Metric Details: This measure augments the construction completion measure and documents the completion of a discrete scope of activities supporting a Superfund cleanup. The measure documents incremental progress in reducing risk to human health and the environment at Superfund cleanups. Multiple remedial action projects may be necessary to achieve site-wide construction completion. Regional remedial action project completion (RAPC) data are tracked in SEMS. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. The target decreases in FY 2020 due to lower funding levels.

(PM 141) Number of Superfund sites with remedy construction completed.

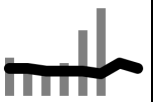
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	19	15	13	13	13	11			Sites	Increase	
Actual	14	8	14	13	10	12					

Key Takeaways:

- At the end of FY 2018, 1,205 NPL and eight SAA sites had reached the construction completion milestone. There are 545 NPL sites where studies are underway, remedies are being selected or designs are being developed. At 324 of these sites, active construction projects are ongoing.
- The performance trend reflects a variety of challenges, including the remaining sites' complexity; funding and staffing reductions; emerging contaminants; and changing screening/toxicity values.
- Challenges include limited construction seasons, reduced work force (e.g., attrition), uncertain remedial action funding and unpredictable weather-related events/disasters (e.g., hurricanes, fires).

Metric Details: This measure tracks site-wide completion of physical construction of all cleanup actions, including actions to address all immediate threats and to bring all long-term threats under control. EPA regional offices document construction completion (CC) in a Preliminary Close Out Report (PCOR) which is reviewed by EPA headquarters. The PCOR signature date is entered in SEMS by the region and EPA headquarters enters the achievement of the CC in SEMS. The universe includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements.

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	10	10	9	9	9	8	12	10	Sites	Increase	
Actual	14	9	10	12	24	32					

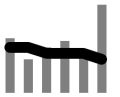
Key Takeaways:

- EPA significantly exceeded the target of eight with a net total accomplishment of 32. This achievement was primarily due to the elevated emphasis placed on sites where human exposure was not under control nationally as mandated in Superfund Task Force Recommendations.
- The Agency implemented several actions to bring additional sites under control: identifying sites where human exposure was not under control and steps to bring these sites under control; launching a public human exposure dashboard; and identifying best management practices to bring additional sites under control.
- Regions identified primary challenges to sites reaching key milestones, including: time required to eliminate remaining human exposure pathways (e.g., fish tissue contamination or lengthy remedy implementation); difficulties reaching consensus with other parties on cleanup implementation; and resources needed for site cleanup.
- Challenges include the health effects of emerging contaminants, the growing understanding of which may lead the Agency to adjust toxicity values and cleanup standards to ensure protectiveness.

Metric Details: This measure documents progress achieved in controlling unacceptable human exposures to contamination at sites and denotes a site-wide accomplishment. Human exposure determinations for sites can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into SEMS. It is important to note that results express as a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The change in status often occurs when a previously unknown exposure pathway (e.g., vapor intrusion) or contaminant is discovered, and a reasonable expectation exists that people could be exposed or there is insufficient data to make such a determination until further investigation takes place. The universe of sites tracked for this measure includes final and deleted NPL sites and since FY 2014, non-NPL sites with SAA agreements. The FY 2019 target

increased from 8 to 12 sites due to higher performance in FY 2017 and FY 2018 because of the Superfund Task Force's emphasis placed on this measure. However, the target decreases in FY 2020 due to lower funding levels.

(PM 152) Number of Superfund sites with contaminated groundwater migration brought under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	15	15	13	13	13	11			Sites	Increase	
Actual	18	11	15	17	14	29					

Key Takeaways:

- EPA significantly exceeded the target of 11, with a net total accomplishment of 29. This was primarily due to work by two regions to define the extent of groundwater contamination at several additional sites based on the installation of additional wells coupled with the completion of other pipeline activities.
- Challenges include the complexity of remaining sites, resource reductions, emerging contaminants, and changing screening/toxicity values.

Metric Details: This measure documents progress achieved in controlling groundwater contamination to protective, risk-based levels or stabilizing the groundwater contamination so there is no unacceptable discharge to surface water. This measure denotes a site-wide accomplishment and reflects a net accomplishment as sites can shift between groundwater migration under control to groundwater migration not under control or to groundwater migration insufficient data determinations. Monitoring is conducted to confirm that affected groundwater remains in the original area of contamination. The change in status often occurs when data from a remedial investigation indicate that contaminated groundwater migration is occurring at a site. Regions enter groundwater migration determinations and supporting data into SEMS. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements.

(PM 137) Number of Superfund removals completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target			275	275	275	175	175	141	Removals	Increase	
Actual			278	226	255	242					

Key Takeaways:

- EPA responds to threats as they arise; predicting how many threats will arise in an individual year is challenging but the targets include assessment of longer-term trends, resource planning, and incorporation of new program approaches. Specifically, the target reflects recent years' shift in the expected allocation of resources toward large time critical removals that cannot be listed on the National Priorities List (NPL).
- The experience and expertise of EPA's On-Scene Coordinators allow EPA to quickly and effectively respond to emergencies as they occur.

Metric Details: This measure is a tabulation of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and PRP-lead. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Data are tracked in SEMS. The target decreases in FY 2020 due to lower funding levels.

(PM FF1) Percentage of Superfund federal facility sites construction complete.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		86	87	88	85	83			Percent	Increase	
Actual		84	84	84	85	82					
Numerator						430			Sites		
Denominator						522					

Key Takeaways:

- FY 2018 represents the lowest result in the past five years. The number of Operable Units (OUs) being addressed has increased recently due to site discovery, the Military Munitions Response Program, and emerging contaminants.
- In FY 2018, EPA used Lean techniques to streamline coordination among the Agency's national and regional offices on five-year reviews of federal facility NPL sites.
- In addition to meeting the national target, EPA selected actions at 51 federal facility NPL Sites through Decision Documents and completed construction or implementation of remedial actions at 24 sites. Tracking activity on 35 OUs were added to the national Superfund Program in FY 2018 through general site discovery and/or emerging contaminants such as PFAS.

Metric Details: This measure represents the percent construction complete covering the 174 federal facility Superfund NPL sites. The measure is calculated in SEMS using data from the 2,114 OUs at federal facilities. Results are calculated as the sum of: (1) the percentage of OUs construction complete for each individual federal facility Superfund NPL site, converted into a range of 1 to 0; (2) the percentage of actions within an OU complete for each individual federal facility Superfund NPL site, considering completed Remedial Investigation/Feasibility Studies (RI/FS), Decision Documents, Action Memos, ROD Amendments, Remedial Designs, Remedial Actions and FF lead Removals, converted into a range of 1 to 0; and (3) the sum of the percentage complete of the planned duration of those actions for each individual Superfund NPL site, converted into a range of 1 to 0; all divided by three times the number of facilities in the Program.

Long-Term Performance Goal - By September 30, 2022, make 3,420 additional brownfields sites RAU[6].

Annual performance goals that support this long-term performance goal:

(PM B30) Number of brownfields sites made ready for anticipated use.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						684	684	684	Sites	Increase	No Trend Data
Actual						861					

Key Takeaways:

- Used Lean techniques to reduce a backlog of open work packages.
- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally RAU before FY 2018 contributed to the FY 2018 count of properties RAU.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.

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

- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.
- From FY 2006 through the end of FY 2018, a cumulative total of 6,854 brownfields properties/sites had been made RAU.

Metric Details: This measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This activity is expected to result in additional sites available for productive reuse, while also helping to quantify the impact of funding from EPA's Brownfields Program. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM B29) Number of brownfields properties assessed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	1,200	1,200	1,300	1,400	1,400	1,300			Properties	Increase	
Actual	1,528	1,659	1,320	1,392	1,419	1,919					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally assessed before FY 2018 contributed to the FY 2018 count of properties assessed.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of properties that have been environmentally assessed for the first time using EPA brownfields funding, as reported by cooperative agreement recipients into the ACRES database. This activity will result in identifying which brownfields are ready to be redeveloped for productive reuse, and which brownfields need to be cleaned up to a regulatory risk-based standard prior to redevelopment.

(PM B32) Number of properties cleaned up using brownfields funding.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	120	120	120	130	130	130			Properties	Increase	
Actual	122	132	150	136	137	143					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally cleaned up before FY 2018 contributed to the FY 2018 count of properties cleaned up.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of properties that have been cleaned up to a regulatory risk-based standard using EPA brownfields funding, as reported by cooperative agreement recipients into the ACRES database. This typically occurs under one of two conditions: (1) a clean or no further action letter (or equivalent) has been issued by the state or tribe under its voluntary response program (or equivalent) for cleanup activities at the property; or (2) the cooperative agreement recipient or property owner, upon

the recommendation of an environmental professional, has determined and documented that on-property work is finished. Ongoing operation and maintenance activities or monitoring may continue after a cleanup completion designation has been made.

(PM B34) Jobs leveraged from brownfields activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	5,000	5,000	5,000	7,000	7,000	7,000			Jobs	Increase	
Actual	10,141	12,376	11,229	9,661	8,472	11,197					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, jobs leveraged from Brownfields activities before FY 2018 contributed to the FY 2018 jobs leveraged from Brownfields activities.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of cleanup and redevelopment jobs leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database. These are actual numbers reported by recipients that are based on jobs resulting from environmental work at the site or the redevelopment of the site.

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	1.2	1.2	1.1	1.1	1.1	1.1	1.3	1.3	Billions of Dollars	Increase	
Actual	1.2	1.54	1.71	1.47	1.7	2.2					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally cleanup and redevelopment funds leveraged before FY 2018 contributed to the FY 2018 cleanup and redevelopment funds leveraged.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of additional dollars leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database. The FY 2019 target increased from $1.1 to $1.3 billion dollars based upon a review of results trends and data cleanup efforts. The data cleanup initiative has resulted in greatly exceeding the FY 2018 target for this measure and is anticipated to have an impact on FY 2019 results, as well. This effort, once completed, will clean up the backlog of data in ACRES to ensure data reported in future fiscal years is as up-to-date as possible.

Long-Term Performance Goal - By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU[7].

Annual performance goals that support this long-term performance goal:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						75	91	107	Facilities	Increase	
Actual						117					

Key Takeaways:

- EPA exceeded the target through improved data processing for previously unlogged sites.
- From FY 2017 through FY 2018, 1,349 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide.

Metric Details: This measure tracks the number of RCRA corrective action facilities made RAU. To be determined RAU, facilities must meet the following criteria: human exposure under control, final cleanup goals achieved for media that would impact the anticipated use, and if needed, controls in place to ensure long-term protectiveness. The universe for this measure is the Agency's list of 3,779 high priority facilities subject to RCRA corrective action. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups.

(PM CA1) Percentage of RCRA corrective action facilities with human exposures to toxins under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	85	87	90	92	94	94			Percent	Increase	
Actual	85	87	90	92	94	95					
Numerator	3,170	3,299	3,392	3,465	3,534	3,571			Facilities		
Denominator	3,779	3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in increased performance FY 2013 through FY 2018.
- By the end of FY 2018, 3,612 RCRA corrective action facilities had human exposures to toxins under control.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities that have met the RCRA environmental indicator for human exposure under control. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks an early step in the progression toward completing facility cleanup.

[7] From FY 1987 through FY 2017, 1,232 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

(PM CA2) Percentage of RCRA corrective action facilities with migration of contaminated groundwater under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	73	77	80	84	88	88			Percent	Increase	
Actual	76	79	82	84	87	89					
Numerator	2,840	2,991	3,097	3,191	3,276	3,347			Facilities		
Denominator	3,779	3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in increased performance FY 2013 through FY 2018.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities that have met the RCRA environmental justice indicator for groundwater migration under control. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks an early step in the progression toward completing facility cleanup.

(PM CA5) Percentage of RCRA corrective action facilities with final remedies constructed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	51	55	60	64	69	70			Percent	Increase	
Actual	51	56	60	64	67	70					
Numerator	1,925	2,114	2,290	2,420	2,547	2,630			Facilities		
Denominator	3,779	3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in increased performance FY 2013 through FY 2018.
- EPA achieved progress in FY 2018 (after slowed progress in FY 2017) by applying Lean improvements to the RFI and Remedy Selection processes; EPA will continue to develop program improvements using Lean tools.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities with final remedies constructed. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

(PM CA6) Percentage of RCRA corrective action facilities with corrective action performance standards attained.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		21	24	30	32	33			Percent	Increase	
Actual		24	28	31	34	36					
Numerator		905	1,067	1,176	1,271	1,341			Facilities		
Denominator		3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in the trend of improved performance through FY 2018; EPA will continue to develop program improvements using Lean tools.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities with have met final corrective action standards. Facilities at this milestone may still require long-term controls to ensure protectiveness. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a late step in the progression towards completing facility cleanup.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							98	98	Facilities	Increase	
Actual											

Metric Details: This measure tracks the number of RCRA corrective action facilities with final remedies constructed. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

(PM HW4) Percentage of hazardous waste units with initial controls in place to prevent release.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						45			Percent	Increase	
Actual					35	55					
Numerator					188	254			Facilities		
Denominator					541	463					

Key Takeaways:

- At the end of FY 2018, 55% of units (254 of 463) in need of controls had initial controls in place. This is an increase over FY 2017, in which 35% of units (188 of 541) in need of controls had initial controls in place.

Metric Details: This measure tracks the facilities that need an initial permit or other initial control. The measure tracks the percentage of those units that have been permitted, clean-closed, or otherwise had initial controls to prevent release (using EPA's RCRAInfo system). Issuance of controls decreases the risk of future releases and enhances protection of human health and the environment. The baseline of facilities in need of controls was assessed in 2014.

(PM HW5) Number of permit renewals issued at hazardous waste facilities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						64	64	64	Facilities	Increase	
Actual	113	110	100	89	125	109					

Key Takeaways:

- At the end of FY 2018, 963 (72%) of a universe of 1,330 permitted facilities had permits not past expiration.

Metric Details: This measure tracks RCRA hazardous waste permit renewals or clean-closures in the universe of permitted facilities using EPA's RCRAInfo system. This does not include all permit maintenance since permit modifications cannot be projected and are not included. Maintaining updated permits ensures that permitted facilities have consistent and protective standards to prevent release; proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated substantial costs. Annual targets for the number of permit renewals or clean-closures are estimated from projections of available workload, such as pending permit applications.

Long-Term Performance Goal - By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration[8].

Annual performance goals that support this long-term performance goal:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	10,100	9,000	8,600	8,600	8,600	11,200	11,200	11,200	Cleanups	Increase	
Actual	11,582	10,393	9,869	8,977	8,775	8,128					

Key Takeaways:

- The states and EPA continue to complete cleanups but the trend in number of cleanups completed continued downward in FY 2018.
- As part of the ELMS process, EPA is working with the states to develop strategies to address issues regarding cleanup progress.
- As the universe of available cleanups decreases, many of the remaining releases are ones with greater challenges such as a lack of responsible party, technically difficult cleanups and lack of available funds.
- By the end of FY 2018, 478,080 LUST cleanups had been completed, out of a cumulative universe of 543,812 confirmed releases.

Metric Details: This measure tracks the number of petroleum-contaminated sites where the states, tribes and EPA have completed cleanup activities. The states and EPA regional offices report the number of cleanups completed within the reporting period (every six months based on the fiscal year). The state totals and EPA regional totals of cleanups completed in Indian country are added together to determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

(PM 113) Number of LUST cleanups completed in Indian country that meet risk-based standards for human exposure and groundwater migration.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	42	37	30	26	26	16			Cleanups	Increase	
Actual	18	26	32	30	21	16					

Key Takeaways:

- EPA met the FY 2018 target of 16 cleanups completed in Indian country.

[8] By the end of FY 2017, 469,898 LUST cleanups had been completed.

- As part of the ELMS process, EPA is working to develop strategies to address cleanup progress. EPA conducted a study of the remaining open releases in Indian country to identify opportunities for additional cleanup completions in the coming years.
- By the end of FY 2018, 1,166 LUST cleanups had been completed in Indian Country.

Metric Details: This measure tracks the number of petroleum-contaminated sites in Indian country where EPA has completed cleanup activities. EPA regional offices report the number of cleanups completed within the reporting period (every six months based on the fiscal year). The EPA regional totals of cleanups completed in Indian country determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed.

(PM 114) Number of confirmed releases at UST facilities in Indian country.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						11			Releases	Decrease	
Actual						11					

Key Takeaways:

- EPA met the target of 11 or fewer confirmed releases in Indian country. The cumulative number of confirmed releases in Indian country is 1,424.
- There is a potential for a higher number of confirmed releases over the next few years due the requirement to investigate additional parts of the tank under EPA's 2015 regulations. Most of these newly discovered releases are likely to be the result of prior contamination, not a new release.

Metric Details: This measure tracks the number of new confirmed releases at Underground Storage Tank (UST) facilities in Indian country. This measure has a direct relation to releases needing to be cleaned up ("backlog" of cleanup sites). EPA regional offices report the number of confirmed releases within the reporting period (every six months based on the fiscal year). EPA uses the LUST4 database to track progress. The universe totals will change over time as releases are found and confirmed.

Other Core Work supporting Objective 1.3

Annual performance goals:

(PM PCB) Number of approvals issued for polychlorinated biphenyl (PCB) cleanup, storage and disposal activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		150	200	200	200	160			Approvals	Increase	
Actual		254	218	182	190	194					

Key Takeaways:

- EPA improved results and met the FY 2018 target due in part to permit process improvements introduced as the result of a Lean event.
- Approval applications are submitted by the regulated community on an as-needed basis, making it very difficult to accurately estimate upcoming targets.

Metric Details: This measure tracks the number of PCB approvals under Section 761 of the Toxic Substances Control Act (TSCA). The approvals are issued by EPA and tracked by EPA regional offices and headquarters. There is no universe for the number of approvals because facilities choose to submit approvals, as needed. PCB permit approval activities are not delegated to the states.

(PM 438) Number of inspections conducted at oil facilities subject to the Spill Prevention, Control and Countermeasure regulation.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						410			Inspections	Increase	
Actual						465					

Key Takeaways:

- Percentage of inspected facilities found to be in compliance at initial inspection is low, at approximately 13%.

Metric Details: This measure tracks the number of EPA inspections occurring at Spill Prevention, Control and Countermeasure (SPCC) facilities. There are approximately 540,000 facilities in the SPCC universe. Data are tracked in EPA's Oil database.

(PM 437) Number of inspections conducted at oil facilities subject to the Facility Response Plan regulation.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						200			Inspections	Increase	
Actual						257					

Key Takeaways:

- Percentage of inspected facilities found to be in compliance at initial inspection is low, at approximately 35%.

Metric Details: This measure tracks the number of EPA inspections occurring at Facility Response Plan (FRP) facilities. There are approximately 4,600 facilities in the FRP universe. Data are tracked in EPA's Oil Database.

(PM CH2) Number of risk management plan inspections conducted.

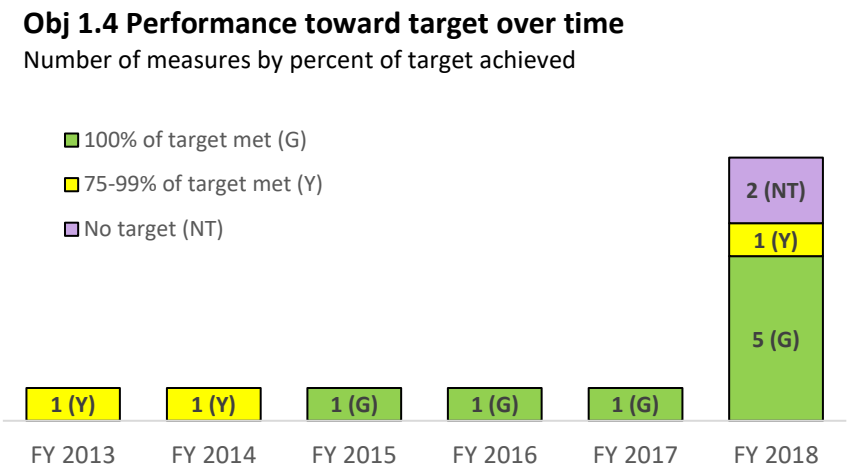
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	500	460	460	460	460	175			Inspections	Increase	
Actual	539	466	376	343	397	316					

Key Takeaways:

- EPA focuses inspection resources on high-risk Risk Management Plan (RMP) facilities (e.g., RMP facilities with a history of accidents or with very large quantities of regulated substances on site).
- Accidents at RMP facilities have declined since the inception of the Program by an average of approximately 3-4% per year.

Metric Details: The RMP Program implements section 112(r) of the 1990 Clean Air Act Amendments. The RMP Program requires facilities (approximately 12,500) that use extremely hazardous substances to develop a RMP. The information required from facilities under the RMP Program helps local fire, police, and emergency response personnel prepare for and respond to chemical emergencies. Data are tracked in EPA's RMP database. EPA aims to conduct inspections at 3% of approximately 11,000 RMP facilities each year.

Objective 1.4 – Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- On track to meet statutory requirements for timely completion of chemical risk evaluations and risk management actions under the Toxic Substances Control Act (TSCA), as amended. Released problem formulation documents for all 10 EPA-initiated risk evaluations released for public comment; and completed peer review for use, hazard, and exposure information for five Persistent, Bioaccumulative and Toxic (PBT) chemicals. Published a white paper explaining how it will identify the next group of chemicals for prioritization. (FY 2018-2019 APG)
- Making progress on all Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Act (PRIA) performance measures. EPA exceeded its percentage of decisions completed on time targets (on or before negotiated due date) on a monthly tracking basis, while beginning to reduce average PRIA registration timeframes through improved processes that will continue to evolve and ensure meeting the long-term performance goals.

Challenges:

- TSCA amendments instituted new requirements and ambitious schedules for reviews of existing chemicals and the requirement for an affirmative safety determination for new chemical reviews. Long-term performance targets for these technically complex review processes are ambitious.
- Completed 58.4% of TSCA pre-manufacture notice final determinations for new chemicals within 90 days, missing 65% target. Reached all final determinations within allowable statutory timeframes. Implementing Lean recommendations to improve performance. (FY 2018-2019 APG)
- EPA has developed a maintenance fee surplus due to FIFRA's "one-to-one" provision that requires every maintenance fee dollar expenditure to be matched with an appropriated dollar. PRIA 4 would eliminate this requirement but its prospects are uncertain.
- A potential lapse of PRIA authority and phase out provisions would impede registration review and result in impacts to personnel.
- Meeting the Endangered Species Act requirements for FIFRA risk assessments continues to be a significant challenge. EPA is working with the Fish and Wildlife Service and the National Marine Fisheries Services on the first three pilot nationwide pesticide endangered species consultations. Once those consultations have been completed, EPA plans to apply the knowledge gained from the first three pilot pesticides to subsequent consultations.

Long-Term Performance Goal - By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines[9].

Annual performance goal that supports this long-term performance goal:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	N/A	10	Evaluations	Increase	
Actual						N/A					

Metric Details: This measure tracks new risk evaluation activity under TSCA, as amended in 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. A risk evaluation is considered complete when the final risk evaluation is published in the Federal Register. The risk evaluation process is the second step, following prioritization and before risk management, in EPA's existing chemical process under TSCA. The purpose of risk evaluation is to determine whether a chemical substance presents an unreasonable risk to health or the environment, under the conditions of use. As part of this process, EPA must evaluate both hazard and exposure, and ensure decisions are based on the weight-of-scientific-evidence. To count toward the target, an evaluation must be completed within three years. While the statute allows for a six-month extension, this measure tracks performance against the initial deadline. Accordingly, the expected completion date for the first 10 risk evaluations, which were commenced on December 19, 2016, is December 19, 2019. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines[10].

Annual performance goal that supports this long-term performance goal:

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	N/A	N/A	Actions	Increase	
Actual						N/A					

Metric Details: This measure tracks the number of risk management actions promulgated within statutory limits under TSCA, as amended by the Lautenberg Act. Statute requires EPA to propose a rule under TSCA Section 6 for certain PBT chemicals by June 21, 2019 (in FY 2019), with a final rule to be issued by December 21, 2020 (in FY 2021). For risk management actions following identification of unreasonable risk to human health or the environment in a risk evaluation, final risk management actions must be completed within two years after publication of the final risk evaluation. While the statute allows for a two-year extension, this measure tracks the performance against the initial deadline only. This measure also encompasses TSCA risk management actions promulgated for other reasons, such as to address risks from exposure to chemicals for which risk assessments were

[9] There is no baseline for this measure, as the program is operating under new statutory authority.
[10] There is no baseline for this measure, as the program is operating under new statutory authority.

completed prior to enactment of the Lautenberg Act. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines[11].

Annual performance goals that support this long-term performance goal:

(PM TSCA3) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the initial 90-day statutory timeframe.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						65	80	80	Percent	Increase	No Trend Data
Actual						58.4					
Numerator						45			Final Deter-minations		
Denominator						77					

Key Takeaways:

- EPA missed the FY 2018 target as TSCA amendments added more complexity to the new chemical review process. Specifically, an affirmative safety determination for all new chemical reviews greatly increased workload making it more difficult to achieve the performance target.
- Performance improved significantly over FY 2018, with 65.2% of final determinations made within 90 days during the 4th quarter. The number of new chemical cases over 90 days pending final determinations at the end of FY 2018 was 315.
- EPA will implement recommendations from a 2018 Lean event to expedite the risk assessment phase of the review process and will initiate a Lean event in FY 2019 to identify efficiencies in the risk management phase.

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. The statute requires a base review period of 90 days and allows EPA to extend this period another 90 days. While EPA has the authority to agree to voluntary suspensions at the request of a submitter to provide additional time to complete the required review pending receipt of additional information that is needed, this measure tracks performance against the initial 90-day deadline only. This measure tracks final determinations for submissions received by EPA in a single fiscal year. Additional information and statistics about the New Chemicals Program are available at: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

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

(PM TSCA3b) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the full timeframes allowable by statute.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target							100	100	Percent	Increase	No Trend Data
Actual											
Numerator									Final Determinations		
Denominator											

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. EPA has the authority to agree to voluntary suspensions at the request of a submitter; these provide additional time to complete the required review pending receipt of additional information that is needed. This measure tracks performance against the full timeframes authorized under the statute. A performance result of 100% indicates that there were no instances in which EPA failed to complete a final determination within the period of review agreed to, including any voluntary suspensions. The baseline is 100% of determinations made within full timeframes allowable by statute in FY 2017.

Long-Term Performance Goal - By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program[12].

Annual performance goals that support this long-term performance goal:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						58	75	75	Decisions	Increase	No Trend Data
Actual						65					

Key Takeaways:

- EPA exceeded its FY 2018 target, now having completed 42% of the known universe of chemical cases at the close of FY 2018.
- The Program continues to look for process efficiencies to meet or exceed future targets.

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first 15-year cycle of registration review by October 1, 2022. The baseline is 239

[12] 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*.)

decisions of a known universe of 725 cases (33%) completed through FY 2017. Universe is finite. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						70	72	75	Risk Assessments	Increase	
Actual						113					

Key Takeaways:

- EPA exceeded its FY 2018 target, now having completed 64% of the known universe of draft risk assessments at the close of FY 2018.
- This result was due in part to several assessments in the queue that were determined to require only minimal administrative actions to be marked final.
- The Program continues to look for process efficiencies to meet, if not continue to exceed, future targets.

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first 15-year cycle of registration review by October 1, 2022. The baseline is 351 draft risk assessments of a known universe of 725 cases (48%) completed through FY 2017.

Long-Term Performance Goal - By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days[13].

Annual performance goals that support this long-term performance goal:

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						643	631	619	Days	Decrease	
Actual						603					

Key Takeaways:

- EPA exceeded the FY 2018 target, demonstrating solid progress toward the long-term performance goal of reducing the PRIA registration timeframe for new active ingredients by an average of 60 days by September 30, 2022.

Metric Details: To expedite the review and licensing of pesticides' new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017. There are 36 different PRIA categories that relate to new active ingredients, with statutory time frames ranging from 7-24 months.

[13] 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.

(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where original PRIA due date was not met.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						303			Days	Decrease	
Actual						117					

Key Takeaways:

- EPA exceeded its target, demonstrating progress toward the long-term performance goal of reducing PRIA registration timeframes by an average of 60 days by September 30, 2022.
- EPA ensured consistent utilization of the preliminary technical screen, resulting in deficient packages being identified earlier in the review process. The applicant either corrected the identified deficiencies so that review could continue, or those applications were rejected under the screen. This allowed Agency resources to be directed to more complete applications.

Metric Details: To expedite the review and licensing of pesticides' new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average of 316 days exceeding the PRIA decision timeframes in the statute (range: 15-1,538 days) for 42 new active ingredients completed in FY 2015-2017.

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	99	97.0	96	96	97	99	99	99	Percent	Increase	
Actual	98.8	85	98.4	99	99	99.7					
Numerator	2,023	1,627	2,078	2,157	2,008	2,193			Decisions		
Denominator	2,048	1,919	2,111	2,174	2,026	2,199					

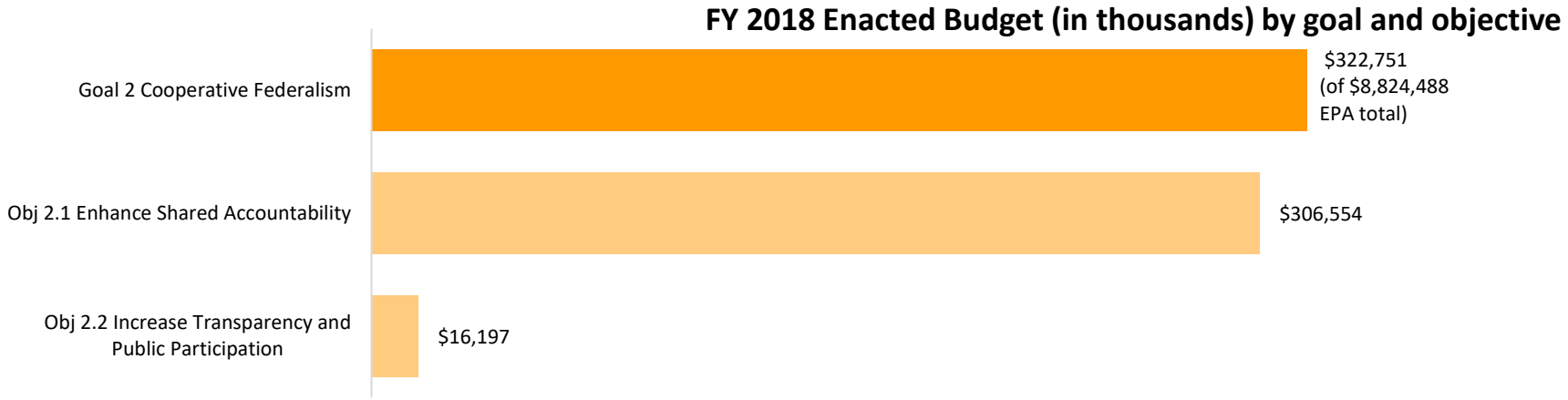
Key Takeaways:

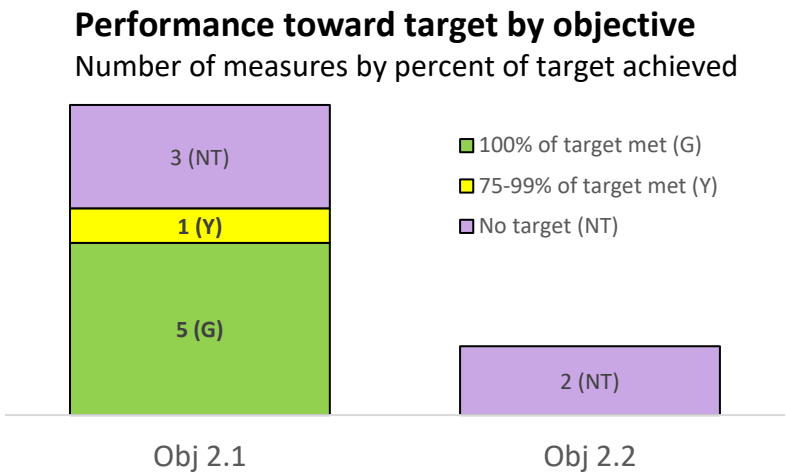
- EPA continues to meet its target of 99% of all PRIA decisions completed on time (on or before PRIA or negotiated due date). EPA exceeded the target for the fourth straight year while achieving the highest rate of on-time PRIA decisions to date: Only six decisions out of 2,199 were not completed on time for a completion rate of 99.7%.
- EPA has streamlined the registration process by using preliminary technical screening under PRIA of 2012 (PRIA 3), allowing the Agency to identify deficiencies early, and applicants to correct these deficiencies at the front end of the process.

Metric Details: Whereas PM PRIA1 and PM PRIA2 track performance for new active ingredient decisions only, this measure relates to all PRIA categories described in the fee tables in FIFRA section 33(b)(3). Additionally, FIFRA section 33(f)(5) allows that EPA and the applicant may mutually agree to extend a decision time review period. Decisions completed on or before the negotiated due date but after the original PRIA due date are still considered "on-time" under this measure. More information on PRIA can be found on https://www.epa.gov/pria-fees/pria-overview-and-history. The baseline is 94% average of decisions completed on-time from FY 2014-2016.

Goal 2 at a Glance

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

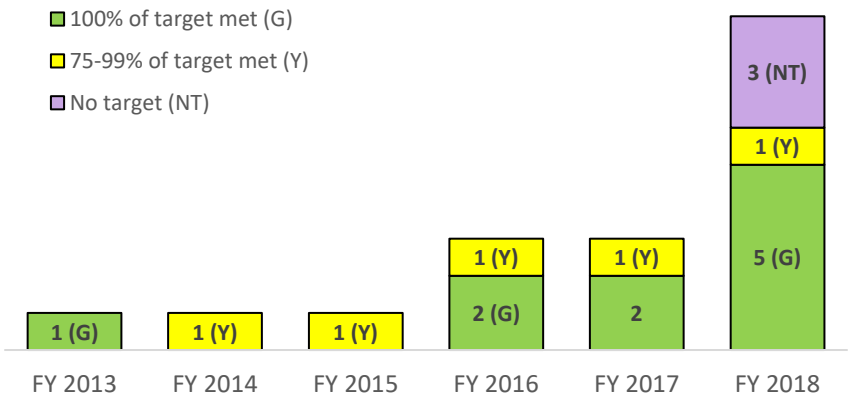



Performance toward target by objective
Number of measures by percent of target achieved
3 (NT)
1 (Y)
5 (G)
2 (NT)
100% of target met (G)
75-99% of target met (Y)
No target (NT)
Obj 2.1
Obj 2.2

Objective 2.1 – Enhance Shared Accountability: Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.

Obj 2.1 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given significant challenges in developing performance goals and baselines for grant commitments, and implementation plans to meet the objective.

Summary of progress toward strategic objective:

- Developed, in coordination with the Environmental Council of the States, a draft memo to guide Agency oversight of delegated federal programs. The memo underscores four principles: deference to states, effective communication, clear standards of review, and elevation of issues.
- After conducting an internal and external survey, EPA took steps to overcome potential barriers to the use of multi-media Performance Partnership Grants (PPGs) by developing an improved method to calculate state and tribal fiscal PPG utilization.
- Developed a model of shared governance with states on enforcement and compliance by issuing guidance to set consistent standards for joint planning, work sharing, and enhanced communication. EPA will become a true partner with states – sharing information, technology, and work.
- Completed an Indian Environmental General Assistance Program (GAP) evaluation procedure to identify opportunities to deliver environmental and health improvements in Indian country. The Agency consulted with hundreds of tribal representatives in developing the procedure.

Challenges:

- EPA and states share the challenge of determining an appropriate balance of federal and state responsibilities, given statutory authorities and available resources.
- EPA needs a broad, agencywide collaboration effort to determine and prioritize a measurable suite of national grant commitments. This work will continue in FY 2019.
- Shared governance between EPA and each of the 573 federally-recognized tribes requires active engagement to identify shared priorities, and coordination across EPA to determine roles and responsibilities.
- EPA retains responsibility for directly implementing federal environmental programs in much of Indian country where eligible tribes do not have delegable authorities.

Long-Term Performance Goal - By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities[14].

Annual performance goal that supports this long-term performance goal:

(PM ST1) Number of grant commitments achieved by states, tribes, and local communities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	TBD	Commit-ments	Increase	
Actual						N/A					

Key Takeaways:

- No results are available for FY 2018.
- In FY 2019, EPA will evaluate commitments associated with state grants to develop a measurable suite of commitments for this measure.
- The Agency is exploring the use of a new reporting tool which will reduce reporting burdens while enhancing transparency in commitment setting across EPA regions.
- Potential challenges include the initial transition to a new reporting tool.

Metric Details: Grant commitments are jointly negotiated by EPA and the state, tribal, or local grant recipient. The objective of this measure is to provide a clear and up-to-date report-out of state-EPA grant commitments. The universe (number of commitments contained in PPGs) and FY 2020 target will be determined in FY 2019. No target is established for FY 2019, but results will be reported.

Long-Term Performance Goal - By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews[15].

Annual performance goal that supports this long-term performance goal:

(PM ST2) Number of alternative shared governance approaches to address state, tribal, and local community reviews.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	3	3	Alternative Approaches	Increase	
Actual						0					

Key Takeaways:

- EPA established a set of key principles to guide Agency oversight of federal programs delegated to states and tribes, and a template to guide co-regulator discussions around oversight activities. The key principles include deference to states, effective communication, clear standards of review, and elevation of issues.

[14] 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*.)

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

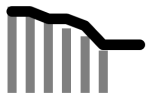
- EPA tested the template with three EPA region-state pairs for Clean Water Act National Pollutant Discharge Elimination System (NPDES) real-time reviews. For the Clean Air Act Title V Operating Permit Program, EPA looked retrospectively at the work done in FY 2018 and aligned the process with the new framework.
- In FY 2019, EPA will solicit feedback from states before launching the new framework in all 10 EPA regions (for NPDES real-time review and Title V), and work with states to select additional programs to target next. Each EPA region will use the template in at least one state, in both programs (for a total of 20 templates) in FY 2019.

Metric Details: This measure tracks the number of program areas where EPA has launched the new oversight framework. EPA will define, develop, pilot, evaluate, and launch a comprehensive system to evaluate state and local implementation of federal environmental programs by 2020. The "comprehensive system" is defined as the overarching principles as laid out in the principles memo, coupled with a template populated with state-and regional specific details on the review activity in question. The purpose of this effort is twofold: to begin to standardize EPA's oversight work across EPA regions, and to maximize state and federal resources by focusing on the most important work. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

Other Core Work supporting Objective 2.1

Annual performance goals:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	17,000	17,000	15,500	15,500	14,000	10,000	10,000	10,000	Inspections & Evaluations	Increase	
Actual	18,000	16,000	15,400	13,500	11,800	10,600					

Key Takeaways:

- Given the reduction in enforcement resources, EPA is using data to target its efforts so that fewer inspections are needed to find noncompliance. EPA also is expanding incentives for self-audit/disclosure.

Metric Details: This measure includes new data elements, such as off-site compliance monitoring activities (e.g., record reviews), not previously tracked or counted, and reflects a recognition that states conduct the vast majority of inspections and an EPA focus on direct implementation programs. The target is the same for FY 2019 and FY 2020 based on available resources.

(PM 426) Number of compliance assurance actions in accordance with EPA's civil enforcement response policies.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established			Actions	Increase	
Actual						N/A					

Key Takeaways:

- EPA used significant resources in FY 2018 to implement other new measures and was not able to finalize definitions such as "informal enforcement actions," a key component of this measure.

Metric Details: This measure includes both EPA's formal civil enforcement action conclusions and informal enforcement actions. Definitions of formal and informal enforcement vary depending on the statute. Formal actions are generally used to address more serious violations while informal actions are for less serious violations. An example of a formal enforcement action is a judicial action. An example of an informal enforcement action is a warning letter.

(PM 427) Number of regulatory sectors served by national web-based compliance assistance centers.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						17			Sectors	Increase	
Actual						16					

Key Takeaways:

- The food processing compliance assistance center has been deactivated because the grant expired, and additional funds were not available to re-compete the grant. EPA will explore opportunities for third-party partners interested in supporting a re-launch of a food processing compliance assistance center.
- EPA funded a cooperative agreement with the National Center for Manufacturing Sciences to develop a new compliance assistance portal to help small and medium-sized oil and natural gas extraction companies that may not have the resources to acquire their own environmental experts, to comply with their environmental regulatory options. This portal will become active in FY 2019.

Metric Details: As of FY 2017, EPA had 17 national web-based compliance assistance centers, providing access to information through web sites, telephone assistance lines, and e-mail discussion groups. This allows businesses; colleges and universities; tribes; local governments and federal facilities to understand and comply with environmental requirements and save money through pollution prevention techniques. These centers serve regulatory sectors, or facilities with similar operations, processes or practices that are subject to a similar set of regulatory requirements.

(PM 428) Number of in-person and live webinar trainings provided to states to expand capacity building.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						100			Trainings	Increase	
Actual						290					

Key Takeaways:

- Offered 150 free online training courses and 38 enforcement and compliance training webinars for state/federal regulators.
- Trained 100 state and federal personnel to identify cleanup parties.
- Held specialized compliance education workshops for federal partners.

Metric Details: This measure includes all in-person and live webinar trainings conducted throughout the fiscal year by EPA's Office of Enforcement and Compliance Assurance to grow infrastructure and leadership necessary for states to implement environmental enforcement programs.

(PM 429) Percentage of projects with early Environmental Impact Statement (EIS) engagement.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						60			Percent	Increase	
Actual						71					
Numerator						100			Projects		
Denominator						141					

Key Takeaways:

- Decisions to engage early are based on available resources and anticipated environmental impacts of the project.

Metric Details: This measure tracks the percentage of projects for which EPA participates with the lead agency on the proposed project prior to publication of the Draft EIS. EPA's policy is to participate early in National Environmental Policy Act (NEPA) compliance efforts of other federal agencies to the fullest extent practicable to identify EPA matters of concern and assist in resolving these concerns at the earliest possible stage of project development. EPA is making a concerted effort to resolve project concerns through early coordination, where possible, rather than rely on submission of critical comments on completed documents. Early engagement activities include, but are not limited to, the following: providing scoping comments; participating in Pre-DEIS project meetings or site-visits to understand project components and context; sharing EPA's pre-DEIS input and expertise through phone calls, emails, or in-person communications with the lead agency; providing feedback to the lead agency on drafts of project descriptions or plans; reviewing technical reports, administrative draft chapters, or drafts of DEIS; and reaching out to the lead agency to discuss significant comments prior to sending them in writing to ensure accuracy and to provide context and an opportunity for questions.

(PM AD4) Cumulative number of state, tribal, and community partners that have integrated data, models, information, and other decision-support tools developed by EPA for climate resiliency into their planning processes.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target				50	120	150			Partners	Increase	
Actual				50	120	395					

Key Takeaways:

- EPA has been particularly successful building the capacity of water utilities to increase their resilience to extreme weather events (e.g., more intense storms) using EPA's Climate Resilience Evaluation and Awareness Tool (CREAT).

Metric Details: A key goal of EPA's work on climate resiliency is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. This measure focuses on providing the tools, training, technical assistance, data, models, and other information they need to build their adaptive capacity. EPA delivers these resources to all communities across the nation through its innovative web-based Climate Adaptation Resource Center (ARC-X).

(PM AD5) Cumulative number of state, tribal, and community partners that have incorporated climate resiliency into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements).

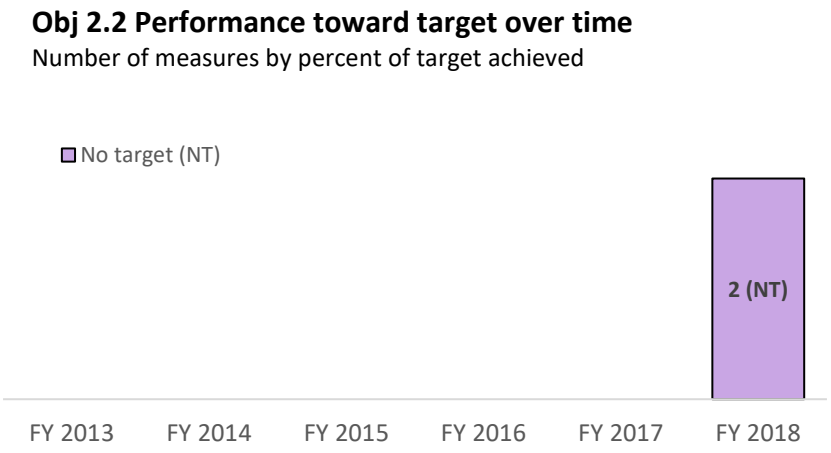
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target				50	100	150			Partners	Increase	
Actual				50	100	256					

Key Takeaways:

- EPA programs are successfully supporting climate-resilient investments by states, tribes, and local communities through existing grant mechanisms. These primarily include Brownfields grants, State Revolving Loan Funds (SRF), and Climate Ready Estuaries Partner Projects.

Metric Details: This measure focuses on supporting climate-resilient investments across the nation.

Objective 2.2 – Increase Transparency and Public Participation: Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given significant challenges responding to FOIA requests, and developing performance goals and strategies to meet the objective.

Summary of progress toward strategic objective:

- Reorganized the Agency's national and regional Freedom of Information Act (FOIA) programs into the General Counsel's and Regional Counsel's offices to improve accountability and transparency. Required all managers with FOIA responsibilities to have performance appraisal language holding them accountable for FOIA response quality, staffing, and training.
- EPA's Office of Community Revitalization used an EPA investment of roughly $500,000 to leverage m
- ore than $1 million in funds from other agencies and deliver contractor-supported community workshops. The action plans that emerge from this work have enabled many communities to attract additional public and private sector funds for project implementation.
- Held two Children's Health Protection Advisory Committee (CHPAC) meetings. The Administrator and EPA's program offices worked to identify relevant and important issues for EPA and children's environmental health.
- Formed the Environmental Justice and Community Revitalization Council (EJCRC) with senior decision-makers to establish regional frameworks to improve internal coordination of EPA community-based activities and more efficiently identify resources to address community needs.

Challenges:

- EPA faced significant challenges in responding to FOIA requests including a significant increase in requests, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests. Data sources are incomplete as the Agency migrates to an updated tracking system.
- While EPA's Office of Community Revitalization held technical assistance workshops in 44 communities over the past year, the Agency was unable to satisfy the more than 300 letters requesting assistance.
- Sustained work is needed to improve coordination among EPA programs to advance environmental justice and meet community demand for public meetings.

Long-Term Performance Goal - By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests[16].

Annual performance goals that support this long-term performance goal:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established	25	50	Percent	Increase (Greater Reduction)	No Trend Data
Actual						-9					
Numerator						-224			Requests		
Denominator						2,537					

Key Takeaways:

- EPA's FOIA backlog increased from 2,537 to 2,761 (the increase is expressed in the result as a negative reduction), due to a significant increase in requests, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests.
- Laid a foundation to improve efficiency and accountability by increasing the centralization of FOIA work into a reorganized National FOIA Office (NFO).
- Developed a tool for implementation in early FY 2019 to provide requesters with immediate responses to initial site-specific FOIA requests.
- Began to enhance hiring, training, and management performance improvement to develop an efficient work force for managing FOIA requests.

Metric Details: For purposes of this measure, overdue requests are defined as those that are not indicated as closed in EPA's FOIAonline tracking system after 20 working days. EPA will focus on reducing the FOIA backlog the Agency has built up over the years, and enhancing the FOIA process which gives the public the right to make requests for federal agency records. The complexity and volume of electronic documents that must be searched, collected, and reviewed has increased over time. The Agency will ensure that it can support the timely searching and collection of electronically-stored information for purposes of responding to FOIA requests and other information needs in a cost-effective and sustainable manner. This should not only help the Agency provide the public with the information requested, but also reduce the fees and lawsuits the Agency incurs from missing FOIA response deadlines. As of April 2018, there were 2,537 overdue FOIA requests in the backlog. In FY 2019, EPA will reduce that number by 25% (635) to 1,902, and by 50% (1,269) to 1,268 in FY 2020.

(PM FO2) Percentage of FOIA requests completed within statutory deadlines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established			Percent	Increase	No Trend Data
Actual						N/A					
Numerator									Requests		
Denominator											

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

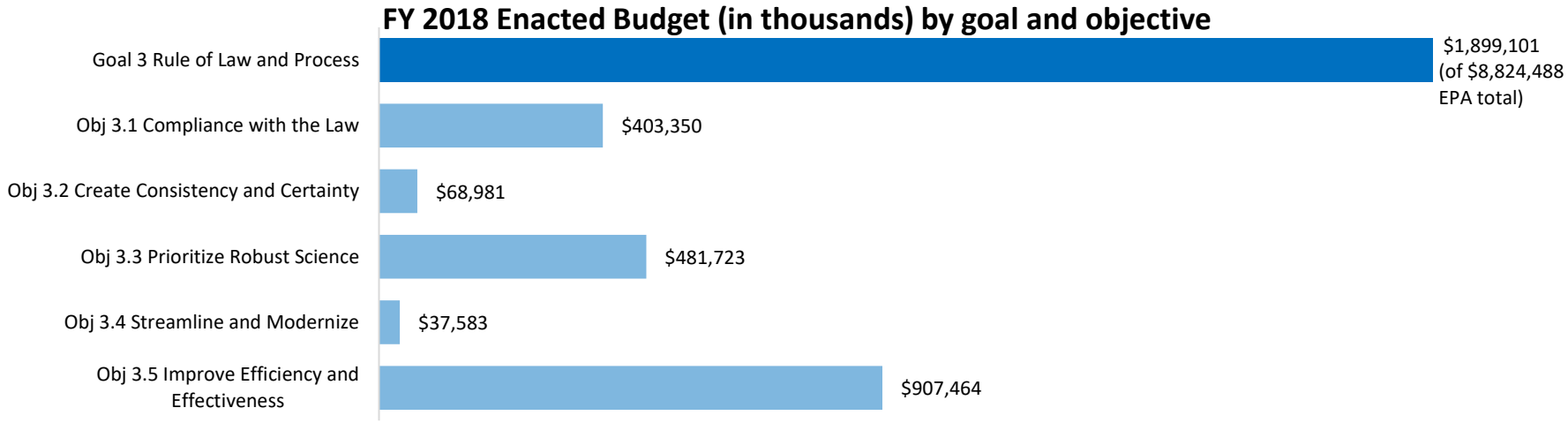
Key Takeaways:

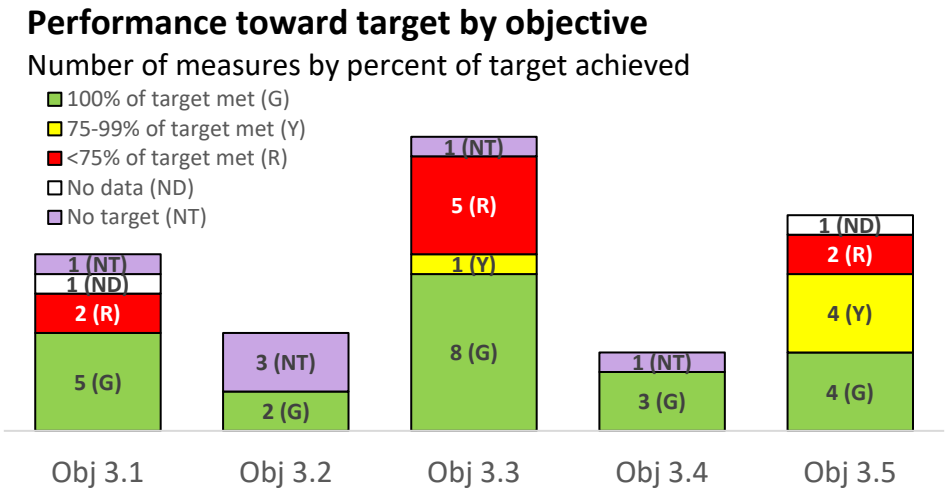
- EPA faced significant challenges in responding to FOIA requests including a significant increase in requests, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests.
- Laid a foundation to improve efficiency and accountability by increasing the centralization of FOIA work into a reorganized National FOIA Office (NFO).
- Developed a tool to be implemented in early FY 2019 to provide requesters with immediate responses to initial site-specific FOIA requests.
- Began to enhance hiring, training, and management performance improvement to develop an efficient work force for managing FOIA requests.

Metric Details: This measure tracks EPA's timeliness in responding to FOIA requests. Currently, data needed to establish a baseline are not available as the Agency upgrades to its updated tracking system, FOIAonline 3.0.

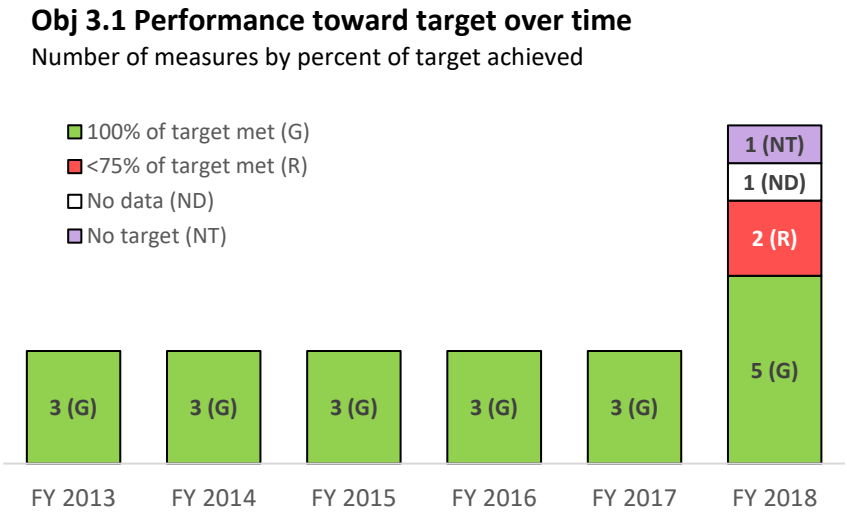
Goal 3 at a Glance

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





Objective 3.1 – Compliance with the Law: Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Transformed National Enforcement Initiatives into National Compliance Initiatives (NCIs) to better align with Agency long-term performance goals, enhance engagement with states, and apply a broader set of compliance assurance tools.
- Issued guidance establishing clear, uniform timeframes for finalizing inspection reports to provide facilities with results, improving certainty and speeding up correction of violations.
- Far exceeded the target on pollutants and waste reduced, due to EPA's focus on high-priority cases with the most significant health and environmental impacts.
- Obtained over $500 million in new private potentially responsible party (PRP) commitments to fund site cleanups at 112 Superfund sites and reached agreements for cleanups at 32 federal facility National Priorities List (NPL) sites.
- Modified agreements with five municipalities to remedy sewer overflows at lower costs with greater environmental benefits: St. Louis, MO; Akron, OH; Evansville, IN; Northeast Ohio; and Lynn, MA.
- Reached $300 million settlement with ExxonMobil that will eliminate thousands of tons of harmful air pollution in TX and LA.
- Obtained 69 years of incarceration for criminal violators of environmental laws.

Challenges:

- Numbers of inspections and enforcement actions continue to decline. EPA and states are focusing on staff development and priority-setting for better results with limited resources.
- EPA did not begin activities under new enforcement pilot measures as planned. Instead, resources were put toward developing new measures for FY 2019.

Long-Term Performance Goal - By September 30, 2022, reduce the average time from violation identification to correction.

Annual performance goals that support this long-term performance goal:

(PM 430) Average time to move EPA civil cases referred to the Department of Justice in FY 2013 or later to settlement or having a complaint filed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established			Years	Decrease	
Actual						2.25					

Key Takeaways:

- The civil judicial timeliness measure has been in place since June 1, 2018. The purpose of the measure is to reduce the time that a facility is in violation of an environmental standard by reducing the amount of time from the referral of an enforcement case to its conclusion.
- When EPA initiated this measure, there were 129 referred cases with no complaint filed (RNCF) more than 2.5 years old. By the end of FY 2018, EPA had reduced the number of RNCF cases to 109 under aggressive case management. Close cooperation between EPA headquarters and regions and with the U.S. Department of Justice (DOJ) ensures that cases move toward resolution at an appropriate speed. EPA is making progress to more quickly return violators to compliance.

Metric Details: This measure is calculated, for the civil judicial referrals settled during a given year, as the average time from the date of referral to the DOJ to settlement or having a complaint filed. Cases included in this measure are those referred in FY 2013 or later. Data for this measure are tracked in EPA's Integrated Compliance Information System. From FY 2010 through FY 2017, the average time to move EPA civil judicial referrals to settlement or having a complaint filed was 3.2 years.

(PM 436) Number of all referred no complaint (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							129	129	Cases	Decrease	
Actual											

Metric Details: This measure represents the number of all open civil judicial cases that are more than 2.5 years old without a complaint filed. 2.5 years is the average time from referral to complaint for a complaint filed between FY 2013 and FY 2017. Excludes Superfund, bankruptcy, collection action, and access order cases. This measure is still early in the implementation and therefore the target remains the same until it is demonstrated that results can be improved.

(PM 431) By FY 2018, identify one or two direct implementation programs that use administrative and informal enforcement tools to pilot for reducing the time between identification of a violation to correction. Also in FY 2018, gather data to establish baselines against which to measure progress.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						Identify Pilot Program(s) and Establish Baselines			N/A	N/A	No Trend Data
Actual						No Pilot Identified					

Key Takeaways:

- EPA did not identify a specific pilot. However, EPA instituted a number of activities to improve the timeliness between violation identification and correction, including: requesting that inspectors flag compliance concerns with a facility at the time of inspection; improving the timeliness of completing inspection reports; and providing the final reports to facilities.

Metric Details: Informal enforcement tools may include Notices of Violation (NOV), Notices of Noncompliance, and violation letters.

Long-Term Performance Goal - By September 30, 2022, increase the environmental law compliance rate[17].

Annual performance goals that support this long-term performance goal:

(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						24	TBD	TBD	Percent	Decrease	No Trend Data
Actual						Data Avail 09/2019					
Numerator									Permittees		
Denominator											

Key Takeaways:

- EPA worked with states to improve compliance data completeness in EPA's Integrated Compliance Information System (ICIS)-NPDES data system.
- EPA identified this goal as a NCI in August 2018. An EPA-state workgroup is developing additional strategies and an implementation plan to reduce noncompliance.
- EPA has identified a problem with the data used to calculate the baseline and targets for this measure and is working to revise these calculations.

[17] 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*.)

Metric Details: This measure tracks the annual SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees. Major and minor permittees that were in SNC/Category 1 noncompliance at any time during the one-year period will be counted in the percentage denominator. SNC/Category 1 noncompliance are a specific type of violation, the severity of which are classified based on duration, severity, and type of violation. For more information, see: https://echo.epa.gov/help/facility-search/npdes-program-search-criteria-help. 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 baseline and targets will be determined in FY 2019. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM 433) By FY 2018, develop a compliance rate pilot in a second program (in addition to NPDES) and implement in FY 2019.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						Identify Pilot			N/A	N/A	
Actual						No Pilot Identified					

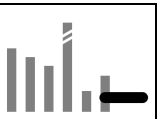
Key Takeaways:

- EPA did not develop a compliance rate pilot in a second program. Instead, resources were put toward developing PM 432 for implementation in FY 2019.

Other Core Work supporting Objective 3.1

Annual performance goals:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						325	325	325	Millions of Pounds	Increase	
Actual	1,425	1,221	1,030	62,223	461	810					

Key Takeaways:

- Results far exceeded target, due to a few larger than expected cases.
- The target for this measure is an estimate based on cases in development and past year results. Results in any given year are dependent on actual case outcomes, which are quite variable and difficult to predict.

Metric Details: This measure combines environmental benefits from pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions. Prior to FY 2018, pounds of pollutants reduced, treated, or eliminated for different media were tracked using separate measures.

(PM 435) Number of potentially responsible party (PRP) and other party commitments to perform or pay for cleanup and/or reuse of contaminated sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						110			Commit-ments	Increase	
Actual						158					

Key Takeaways:

- Superfund enforcement efforts resulted in cleanups and redevelopment at more than 110 sites. EPA obtained over $500M in private PRP commitments to carry out or fund site cleanups.
- Reached agreement on approximately 50 decision documents addressing extensive contamination at 32 federal facility Superfund NPL sites.
- Led efforts to implement 21 Superfund Task Force recommendations to incentivize settlements and engage PRPs.

Metric Details: The focus of this cleanup measure is to encourage Regions to complete orders, settlements and other agreements with responsible parties and third parties that facilitate the cleanup and reuse of contaminated Superfund sites and RCRA Corrective Action facilities. This measure counts the following: completed Superfund private party enforcement agreements for the performance of cleanup and agreements that make cash payments toward future site work (Judicial Consent Decrees, Administrative Orders on Consent, Unilateral Administrative Orders, "Cash out" Agreements, bankruptcy settlements and amendments); completed Superfund Bona Fide Prospective Purchaser Agreements with non-liable parties; assurances to parties interested in cleaning up, purchasing, and developing certain properties (comfort/status letters); RCRA Corrective Action cleanup orders; and Federal Facility Agreements, Records of Decision, and their amendments. PRPs and other parties made an average of 100 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2013 to FY 2016.

(PM 441) Number of enforcement tools completed to address cleanup and/or long-term protection, including reuse, of contaminated sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							170	170	Tools	Increase	
Actual											

Metric Details: For Superfund private sites, this measure includes: completed private party enforcement agreements for the performance of site study and cleanup, agreements that make cash payments toward future site work cost recovery settlements with funds dedicated for future work; completed agreements with third-party prospective purchasers to help remove liability barriers to contaminated properties and facilitate redevelopment; and assurances to parties interested in cleaning up, purchasing and developing certain properties (comfort/status letter). This measure also counts Superfund Federal Facility Agreements (FFAs) and FFA amendments, Records of Decision (RODs) and ROD amendments, Explanation of Significant Differences (ESDs), and RCRA Corrective Action cleanup orders. Potentially Responsible Parties and other parties made an average of 170 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2014 to FY 2018. The target is the same for FY 2019 and FY 2020 based on available resources.

(PM 418) Percentage of criminal cases having the most significant health, environmental, and deterrence impacts.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	43	43	45	45	45	65			Percent	Increase	
Actual	44	48	62	68	72	75					
Numerator						311			Cases		
Denominator						413					

Key Takeaways:

- EPA increased compliance with environmental laws by punishing and remediating harm associated with significant environmental offenses and deterring future violations.
- A defendant was sentenced to serve 63 months of incarceration for fraudulently obtaining fuel credits designed to reduce American dependence on foreign oil.
- A urea manufacturing plant in Oregon was convicted for failing to report ammonia releases that trigged numerous complaints of foul odors, eye irritation, and difficulty breathing from nearby citizens.
- A chicken processing plant in Missouri was sentenced to pay a $2 million criminal fine and pay $500,000 to directly remedy harm caused when it violated the CWA which led to the death of over 100,000 fish.
- As an example of a valuable case that does not fall into the higher tiered criteria, a former Suzuki employee was convicted for submitting false motorcycle emissions standards reports to EPA. The company also paid a separate $2 million civil penalty in FY 2017.

Metric Details: The mission of EPA's Criminal Enforcement Program is to investigate, help prosecute, and thereby deter the most egregious environmental offenders. The Criminal Enforcement Program collects data on a variety of case attributes to evaluate the range, complexity, and quality of our national docket. The Program uses a case selection methodology to ensure the identification, investigation, and prosecution of cases with significant environmental, human health, and deterrence impact. The data elements used in this tiering methodology include information about human health and environmental impacts, the nature of the pollutant and the release, and the profile and compliance history of the subject(s). Since EPA instituted the tiering system in 2010, the percentage of "higher tier" cases has steadily risen. Nevertheless, there are some valuable cases which do not fit into the higher tiered criteria. Tiering parallels U.S. sentencing guidelines for criminal cases.

(PM 419) Percentage of criminal cases with individual defendants.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	75	75	75	75	75	75			Percent	Increase	
Actual	80	87	83	85	90	87					
Numerator						52			Cases		
Denominator						60					

Key Takeaways:

- Through the prosecution of individuals for their illegal acts, EPA holds not only corporations accountable but those who make the conscious decisions to put human health and the environment in jeopardy by violating environmental laws. Often these individuals are placing profits over the safety of the communities where we live.
- Two individuals were convicted for illegally importing products, including pesticides that posed a serious risk to animals and humans.
- A Volkswagen senior manager was sentenced to 84 months in prison for his role in the conspiracy to cheat U.S. vehicle emissions tests.
- A Terminix branch manager pled guilty to illegally applying methyl bromide fumigant which caused permanent injuries to a family vacationing in the U.S. Virgin Islands.

Metric Details: Pursing criminal cases against individual defendants increases the deterrent value of EPA enforcement. EPA's Criminal Enforcement Program emphasizes prosecution of individual defendants as high up the corporate hierarchy as the evidence permits. The reason for this focus on individual liability is simple: corporate managers will think twice about deliberately breaking the law if they understand that they face incarceration and personal criminal fines for criminal conduct, rather than consequences that will be borne solely by the company. During the early years of EPA's Criminal Enforcement Program, organizational defendants made up approximately 70% of the total defendants charged and individual defendants made up the remaining 30%. By FY 2017, these figures had greatly changed: 90% of cases had an individual charged and 10% were cases where only an organizational defendant(s) was charged.

(PM 421) Percentage conviction rate for criminal defendants.

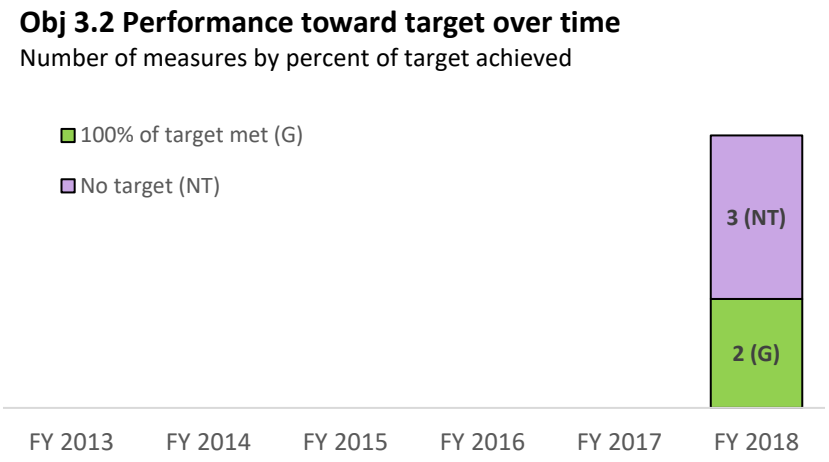
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	85	85	85	85	85	85			Percent	Increase	
Actual	94	95	92	94	91	92					
Numerator						88			Defendants		
Denominator						96					

Key Takeaways:

- EPA works to maintain the historically high conviction rate for defendants charged with environmental crimes, which is a critical ingredient of deterrence. The conviction rate for defendants consistently runs over 90%, a strong affirmation that the government is prosecuting the right cases.

Metric Details: While case outcomes fluctuate based on their specific characteristics, as well as the prosecutorial and sentencing decisions made by DOJ and federal courts, EPA has maintained a historically high conviction rate for defendants charged with environmental crimes.

Objective 3.2 – Create Consistency and Certainty: Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Made progress by defining the scope of the long-term performance goal for legal deadlines to include statutory duties to propose/finalize regulations for which the statute has established date-certain deadlines. EPA will begin tracking and reporting results in FY 2019.
- Per EO 13771: Reducing Regulation and Controlling Regulatory Costs, EPA issued three regulatory actions and 10 deregulatory actions (see PM RG4), exceeding the EO 13771 two-for-one requirement.
- Met the annual target of reducing burden hours by 2,000,000.

Challenges:

- Burden hours change every month given changes to estimates, new rules, etc.
- While the trend in reducing burden hours is positive, high-level leadership involvement will be needed to maintain progress over the course of the FY 2018-2022 EPA Strategic Plan. Most efforts to reduce burden hours will require a regulation. The Agency might be unable to undertake a regulation for the sole purpose of reducing burden hours given other priorities and resources.

Long-Term Performance Goal - By September 30, 2022, meet 100% of legal deadlines imposed on EPA[18].

Annual performance goal that supports this long-term performance goal:

(PM RG1) Percentage of legal deadlines met by EPA.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established	No Target Established	TBD	Percent	Increase	No Trend Data
Actual						N/A					
Numerator									Legal Deadlines		
Denominator											

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

Key Takeaways:

- In FY 2018, EPA evaluated ways to develop an inventory of statutory and regulatory deadlines.
- Determining the scope of the inventory was more complex than anticipated. Consequently, original benchmarks were adjusted to allow for refinement of the measure's scope and accuracy of the baseline inventory.
- Results will be reported for FY 2019; and baseline and FY 2020 target will be determined in FY 2019.
- EPA met all of its court-ordered deadlines in FY 2018.

Metric Details: This measure tracks progress toward EPA meeting its statutory, regulatory, and court-ordered deadlines. EPA is reinvigorating its approach to regulatory development and prioritizing meeting legal deadlines to ensure that expectations for the regulated community and the public are clear and comprehensive and that the Agency can achieve its core mission in a manner that is defensible and consistent with its authorities. This measure will not track critical deadlines and duties reported elsewhere, e.g., legal obligations relating to: Clean Air Act (CAA) State Implementation Plans (SIPs), Title V Petitions, and Prevention of Significant Deterioration (PSD) Permits; Clean Water Act (CWA) Total Maximum Daily Loads (TMDLs); FOIA responses; and legal obligations under Consent Decrees. Baseline and FY 2020 target will be determined in FY 2019. No target is established for FY 2019, but results will be reported.

Long-Term Performance Goal - By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours[19].

Annual performance goal that supports this long-term performance goal:

(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						2,000,000	2,000,000	2,000,000	Hours	Increase (Greater Reduction)	
Actual						2,026,627					

Key Takeaways:

- EPA met the annual target of reducing record keeping and reporting burden by 2,000,000 hours. These reductions came from a variety of actions (consolidating Information Collection Rules, changes in estimates, court cases, etc.), but primarily from the CWA National Pollutant Discharge Elimination System (NPDES) and CAA New Source Review (NSR) Programs.
- To reduce reporting burden a regulation is usually, but not always, required.
- High-level management focus on reducing reporting and record keeping burden will be important if EPA is to continue meeting annual targets.
- EPA is able to use the Regulatory Reform Task Force to prioritize actions to reduce record keeping and reporting burden in ongoing or new regulatory actions

Metric Details: To promote the Agency's goal of efficiency, the measure will not track critical deadlines and duties reported in other Agency measures. These include, for example, legal obligations relating to: CAA SIPs, Title V Petitions, and the PSD permits; CWA TMDLs; FOIA responses; and legal obligations under Consent Decrees. EPA will engage in continuous improvement for managing the paperwork burden on regulated entities associated with EPA's Information Collection Rules and reduce the burden where possible with a goal of eliminating 2,000,000 hours of unnecessary or duplicative reporting per year toward the goal of 10,000,000 hours by the end of FY 2022. Annual

[19] Baseline is estimated at 173,849,665 information collection and reporting hours.

increments represent permanent changes in reporting burden. The data are tracked in OMB's RegInfo.gov database. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

Other Core Work supporting Objective 3.2

Annual performance goals:

(PM RG3) Number of EO 13771 regulatory actions issued.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	No Target Established	Actions	Increase	
Actual						3					

Key Takeaways:

- Per EO 13771, EPA issued three regulatory actions and 10 deregulatory actions (see PM RG4), exceeding the EO 13771 two-for-one requirement.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established, but results are reported.

(PM RG4) Number of EO 13771 deregulatory actions issued.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	No Target Established	Actions	Increase	
Actual						10					

Key Takeaways:

- Per EO 13771, EPA issued 10 deregulatory actions and three regulatory actions (see PM RG3), exceeding the EO 13771 two-for-one requirement.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established, but results are reported.

(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.

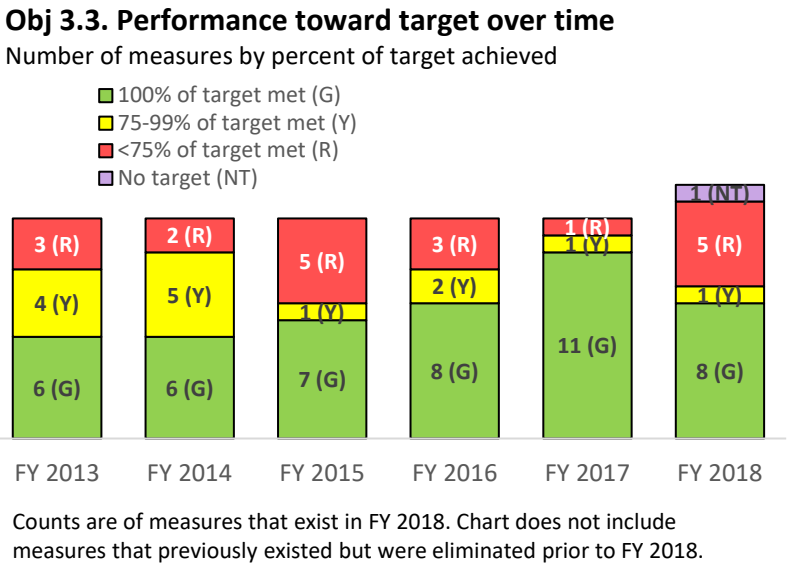
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						-40	-50	No Target Established	Millions of Dollars	Decrease	
Actual						-75					

Key Takeaways:

- EPA is committed to reducing the regulatory burden faced by the American people while still fulfilling its mission of protecting human health and the environment.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23. In FY 2017, the total incremental cost of all EO 13771 regulatory and deregulatory actions was -$21.5 million. The incremental cost values are annualized values in 2016 dollars applying a 7% discount rate, discounted to the year 2016 and assuming a perpetual time horizon. Incremental benefits are not included in this total.

Objective 3.3 – Prioritize Robust Science: Refocus the EPA's robust research and scientific analysis to inform policy making.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- EPA has made significant progress to align its science and research portfolio with the needs of its customers, by engaging extensively within the Agency and with other federal, state, and local stakeholders to re-direct research priorities and improve research translation efforts.
- The Office of Research and Development (ORD) has developed draft FY 2019-2022 Strategic Research Action Plans, which will guide multi-year research efforts and facilitate stronger engagement with customers.

Challenges:

- EPA's research capabilities are at risk due to the challenge of sustaining its workforce and retaining specialized expertise in mission critical positions. EPA is aligning the hiring process with the most critical anticipated gaps in expertise, while considering overarching strategic direction and Administration priorities. Maintaining the Agency's Title 42 hiring authority in FY 2020 will contribute to recruiting and retention of world class environmental scientists and engineers.
- Delays in the award of contracts and other financial vehicles are introducing uncertainty and research delays. EPA is conducting a Lean event focused on targeted contract efficiencies such as the release of unliquidated obligations (ULOs) to provide greater support to the highest priority research projects.

Long-Term Performance Goal - By September 30, 2022, increase the percentage of research products meeting customer needs[20].

Annual performance goals that support this long-term performance goal:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established	77	80	Percent	Increase	No Trend Data
Actual						77					
Numerator						171			Products		
Denominator						222					

[20] 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*.)

Key Takeaways:

- Based on a pilot survey, ORD calculated that 171 products delivered in FY 2018 met customer needs. When statistically applied to the entire suite of products delivered in FY 2018, approximately 77% of products met needs of partners.
- For the purpose of the pilot survey, a research product qualifies as "meeting customer needs" based on a scoring system that takes account of usability, product quality, and timeliness.

Metric Details: Beginning in FY 2018, ORD initiated a survey to measure customer satisfaction of users of its research products. Customer satisfaction is derived through the distribution of over 200 surveys to key users of ORD products, evaluating the scientific rigor of the research products, relevance of the products, and timeliness of the product delivery to support the continuous improvement of research product development. The survey is estimated at a 90% confidence interval of ±10 products. ORD is evaluating modifications to improve its survey methodology and is considering modifications to the measure that will take effect beginning in FY 2020 reporting.

(PM AC1) Percentage of planned research products completed on time by the Air and Energy research program.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	92	87	87	100	100	91					
Numerator					11	10			Products		
Denominator					11	11					

Key Takeaways:

- Included among these products were upgrades to the Smoke Sense mobile application, which makes health risks of wildfire smoke more accessible to the public.
- Also included among these products was a collaboration with EPA's Chesapeake Bay Program Office to estimate air-to-water nutrient deposition to the Chesapeake Bay watershed for historical and future conditions.
- The one product, titled "Performance evaluation of high time-resolution, hyperlocal air quality monitoring platforms using multiple mobile monitoring vehicles," listed as "undelivered," was canceled due to unforeseen staff loss.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

(PM AC2) Percentage of planned research outputs delivered to clients for use in improving air quality.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	83	92	74	85	100	100					
Numerator					6	5			Outputs		
Denominator					6	5					

Key Takeaways:

- Among the research outputs delivered to customers was a report providing emission factors from spray guided, wall guided, and complex guided Gas Direct Injection (GDI) light-duty vehicles. These data will provide improvements to mobile source emissions factors for GDI light-duty vehicles and inform the MOtor Vehicle Emission Simulator (MOVES) model with respect to existing data gaps.
- The Air and Energy Program held a State of the Science webinar for an external audience on emerging technology research findings from the 2014-2018 period; conducted an internal synthesis summarizing current air sensor research; and released several publications. These were among the many efforts ORD initiated to communicate research and technology developments to key partners and stakeholders.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year to best meet EPA's and other partners' needs.

(PM CS1) Percentage of planned research products completed on time by the Chemical Safety for Sustainability research program.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					15	13			Products		
Denominator					15	13					

Key Takeaways:

- Among these products was a Toxic Substances Control Act (TSCA) chemical release database in support of EPA's Office of Chemical Safety and Pollution Prevention (OCSPP) conducting the evaluation phase of systematic source review activities.
- ORD added new tools to improve data mining, visualization and interpretability capabilities to the Agency's ECOTOXicology (ECOTOX) knowledgebase, which is a comprehensive, publicly available online application providing single chemical environmental toxicity data on aquatic life, terrestrial plants and wildlife. The ECOTOX knowledgebase is used by OCSPP to inform implementation of TSCA and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), by the Endocrine Disruptor Screening Program, and by EPA's Office of Land and Emergency Management (OLEM) for the implementation of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). ECOTOX data use includes support to develop and validate models to extrapolate data from in vitro (cell-based) to in vivo (whole organism) effects and across species to evaluate the safety of chemicals.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

(PM CS2) Percentage of planned research outputs delivered to clients and partners to improve their capability to advance the environmentally sustainable development, use, and assessment of chemicals.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	0					
Numerator					3	0			Outputs		
Denominator					3	2					

Key Takeaways:

- The two outputs that were listed as "undelivered" were delayed for FY 2019 delivery due to unplanned work related to TSCA implementation. The output delivery dates were revised to FY 2019 Q1.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

(PM HC1) Percentage of planned research products completed on time by the Sustainable and Healthy Communities research program.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	83	81	100	100	100	100					
Numerator					16	10			Products		
Denominator					16	10					

Key Takeaways:

- Included among these products was the publication of a series of eco-health relationships in the EnviroAtlas interactive online tool. This project supports state-of-the-science reviews and original research on statistical relationships between both urban green space and natural environments, and critical health issues such as physical fitness; cognitive and mental health; and premature mortality.
- The Sustainable and Healthy Communities Research Program also conducted an analysis to identify gaps in decision science and tools to improve community sustainability assessment and inform management decisions.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

(PM HC2) Percentage of planned research outputs delivered to clients, partners, and stakeholders for use in pursuing their sustainability goals.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	68	100	50	92	100	71					
Numerator						5			Outputs		
Denominator						7					

Key Takeaways:

- Among the research outputs delivered to customers was the development of a range of approaches and tools for communities to: (1) identify and prioritize environmental concerns; (2) assess options and inform alternative environmental management decisions related to their priority community concerns; (3) evaluate impacts of sustainable solutions on public health incorporating valuation approaches; and (4) reduce risks and promote public health and well-being.
- The two outputs that were listed as “undelivered” were delayed due to refocusing product development in response to customer engagement through Strategic Research Action Plan development. They are set to be delivered in FY 2019.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA’s and other partners' needs.

(PM HS1) Percentage of planned research products completed on time by the Homeland Security research program.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					4	4			Products		
Denominator					4	4					

Key Takeaways:

- Among these products was a report summarizing the latest in research and development on anthrax decontamination strategies.
- Also included among these products was a technical brief reporting out on the installation of the RTX:LINK tool in Flint, MI. This tool provides real-time modeling of the Flint, MI water system to improve drinking water management in evolving circumstances.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA’s and other partners' needs.

(PM HS2) Percentage of planned research outputs delivered to clients and partners to improve their capabilities to respond to contamination resulting from homeland security events and related disasters.

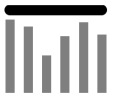
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					8	7			Outputs		
Denominator					8	7					

Key Takeaways:

- Among the research outputs delivered to customers was the development of the Waste Estimation Support Tool (WEST) that uses a Geographic Information System (GIS)-based approach to look at the tradeoffs between decontamination and waste management from a biological incident. WEST looks at the affected infrastructure and composition of biological incidents and helps assess the implications of decontamination.
- Improvements to the Decontamination Support Tool were also released in FY 2018. This tool provides decontamination experts with pros and cons, provides estimates of waste and cost, and compares different options for improved decision-making after chemical incidents.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

(PM RA1) Percentage of planned research products completed on time by the Human Health Risk Assessment research program.

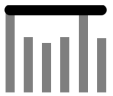
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	88	80	45	68	85	70					
Numerator					11	7			Products		
Denominator					13	10					

Key Takeaways:

- Among these high-priority products was a release of Integrated Risk Information System (IRIS) Assessment Plans; a new version of the Benchmark Dose Software (BMDS) to include additional analysis techniques; and a summary of the significant technical support provided to the Superfund Program.
- The Human Health Risk Assessment Program also integrated new systematic review tools into the Health and Environmental Research Online (HERO) database to improve literature search and screening protocols, including development of new modules, protocols, and capabilities.
- The three products listed as "undelivered" are associated with the IRIS Program. To meet the priorities of EPA programs, ORD instituted a process to reaffirm the needs of EPA programs and regions – outlining exactly what they need and why, plus a timeline. This new process ensures greater accountability from both ORD and program and regional offices and will bring further stability, confidence, and accountability to the IRIS Program in the long term. IRIS scientists provided support to high priority needs of EPA programs including per- and polyfluoroalkyl substances (PFAS) toxicity evaluations and TSCA risk evaluations.
- The outputs listed as not delivered have been off-ramped from the IRIS workflow and will not be developed.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

(PM RA2) Percentage of planned research outputs delivered to clients and partners for use in informing human health decisions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	67	60	67	100	67					
Numerator					2	2			Outputs		
Denominator					2	3					

Key Takeaways:

- Among the research outputs delivered to customers was the release of the final Integrated Science Assessment for sulfur oxides to support the primary National Ambient Air Quality Standards (NAAQS) for SO2 and the final IRIS assessment for Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), to support numerous site-specific remediation efforts.
- The one output listed as "undelivered" is the finalization of provisional peer-reviewed toxicity value (PPRTV) assessments for Superfund. ORD completed its work on this output, but the final output was delayed by contracting issues. During this delay, staff were redirected to competing priorities (including addressing high priority, urgent needs of the Agency related to PFAS). This output will not be delivered as described. It will be recast as part of the new HHRA Strategic Plans.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

(PM RA8) Annual progress score for finalizing IRIS health assessments, Provisional Peer-Reviewed Toxicity Values, and Integrated Science Assessments.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	20	15	15	15	15	5			Score	Increase	
Actual	8	0	5	5	4	2					

Key Takeaways:

- The Agency finalized one assessment, RDX, in FY 2018. IRIS also provided a completed assessment of hexabromocyclododecane (HBCD) to OCSPP for use in the development of a TSCA risk evaluation.
- The missed target is associated with a process instituted by ORD to meet the priorities of EPA programs – outlining exactly what they need and why, plus a timeline. The new process ensures greater accountability from both ORD and program and regional offices and will bring further stability, confidence, and accountability to the IRIS Program in the long term.
- The outputs listed as not delivered have been off-ramped from the IRIS workflow and will not be developed.

Metric Details: This measure was designed to track EPA's progress in releasing (posting) final IRIS assessments. Based on an approach developed over 10 years ago (and prior to the 2011 NAS report), an annual score for final IRIS assessments was based on the relative weighting of each chemical using a 3-tier system (assigning a weight of 1, 2, or 5

points) that considered at that time, client interest, perceived complexity of the science, and level of effort estimated. In FY 2018, IRIS processes were changed to develop more targeted, timely, and responsive products, including assessment products that are not intended to produce finalized IRIS assessments such as interim products provided for support of TSCA or other statutory mandates.

(PM SW1) Percentage of planned research products completed on time by the Safe and Sustainable Water Resources research program.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	70	90	100	100	100	100					
Numerator					7	6			Products		
Denominator					7	6					

Key Takeaways:

- The Safe and Sustainable Water Resources (SSWR) Research Program completed 100% (6/6) of its high-priority research products as planned.
- Key among these products was a series of studies on emerging concerns in surface water chemical and microbial contamination. This work was completed thanks to several cross-agency collaborations and included research advancing the science on PFAS remediation.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

(PM SW2) Percentage of planned research outputs delivered to clients and partners to improve the Agency's capability to ensure clean and adequate supplies of water that support human well-being and resilient aquatic ecosystems.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					1	2			Outputs		
Denominator					1	2					

Key Takeaways:

- The Safe and Sustainable Water Resources (SSWR) Research Program completed 100% (2/2) of its research outputs as planned.
- Key among these outputs was the integration of monitoring methods, modeling, and toxicity indicators to produce assessments that can be used to: (1) identify potential improvements needed in wastewater and drinking water treatment plants, and other water infrastructure; (2) target human disease-causing pathogens, weighing dosing with potential health burden, and integration of exposure/dose characterization with predictive models; and (3) securing and analyzing human health data to estimate a population-based, public health burden of waterborne disease.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's

Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

(PM RD2) Number of peer-reviewed journal articles published.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						336			Articles	Increase	
Actual				654	619	562					

Key Takeaways:

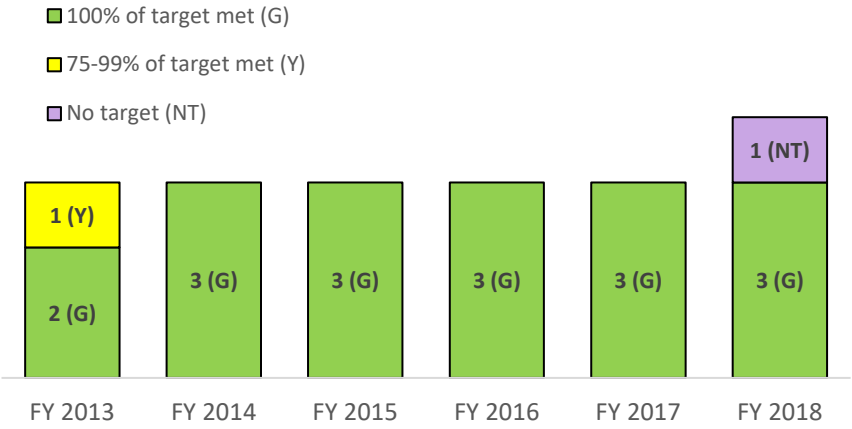
- ORD exceeded the target by publishing 562 peer reviewed journal articles, due to more resources available than were anticipated during target-setting.
- These articles include many that were published in high impact scientific journals, including five high-priority journal articles aimed at adding to the body of scientific knowledge surrounding Integrated Science Assessments (ISAs). ORD also published multiple journal articles focusing on the application of novel immunoassays to evaluate the health impacts of drinking water-related infections and support Agency actions to address contaminated drinking water exposure.

Metric Details: Publishing journal articles is one of the key methods through which EPA disseminates the results of its environmental research. Through the publication of journal articles, EPA can make its research findings available to the scientific community and the general public, and to contribute to the development of many scientific fields.

Objective 3.4 – Streamline and Modernize: Issue permits more quickly and modernize our permitting and reporting systems.

Obj 3.4 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given the backlog in permit approvals, the need to streamline the approval process, and challenges in the development of strategies to the meet the objective.

Summary of progress toward strategic objective:

- Reduced the backlog of new applications by nearly 18% (from 166 to 136 applications) between June and September 2018, through a series of targeted Lean events to improve the efficiency and effectiveness of permitting programs. (FY 2018-2019 APG)
- Developed a centralized system to track pending permit applications and an approach to allow the Agency to deny permits based on incomplete applications, to improve permitting efficiency agencywide.
- EPA's regional offices made significant shifts in resources to address the backlog of new applications.
- Created standard work products for permit writers, established communities of practice, and developed work-sharing agreements to better utilize permit writer expertise.
- Developed an electronic system to receive and collaborate on review of Clean Air Act (CAA) Title V operating permits from state air agencies, replacing a paper-based process. This system will significantly improve the efficiency and timeliness of EPA's reviews.
- Exploring the possibility of automating the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permit application form.
- Planning work with the U.S. Fish & Wildlife Service to elevate Endangered Species Act consultation issues related to permitting.

Challenges:

- FTE and contract resource challenges may prevent EPA from reaching its goal.
- Some permit applications may take more time due to complex issues, public interest, and required consultations.

Long-Term Performance Goal - By September 30, 2022, reach all permitting-related decisions within six months[21].

Annual performance goals that support this long-term performance goal:

(PM PE1) Percentage of permitting-related decisions issued within 6 months.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established			Percent	Increase	No Trend Data
Actual						N/A					
Numerator									Decisions		
Denominator											

Key Takeaways:

- EPA is tracking the number of permit applications that are over six months old rather than the percentage of permitting-related decisions issued within six months. For this measure, the FY 2018 baseline number is 166 (as of June 30, 2018), and the actual is 136 (as of September 30, 2018).
- EPA conducted comprehensive Lean business process improvement events to streamline and optimize the Agency's key permitting programs: Safe Drinking Water Act (SDWA) Underground Injection Control (UIC); CWA NPDES; and CAA Title V operating permits and New Source Review (NSR). The permitting programs are continuing to implement recommendations to improve processes that were identified during those events.
- As part of this effort, the Agency has developed a central system to track pending permit applications. Each month the Agency tracks and reports the status of pending permits (date of application receipt, date of permit decision).
- EPA has identified incomplete information submitted by applicants as a key reason for delays in making permit decisions. EPA has improved internal procedures by developing an approach to allow the Agency to deny applications based on incomplete information. This approach is for applicants who refuse or are unable to provide information necessary for EPA to process a permit application.

Metric Details: The time for a permitting-related decision is calculated from the date a permit application is received to the date of a permit issuance or denial. This does not include renewals or modifications of existing permits.

(PM PE2) Number of permit applications in backlog.

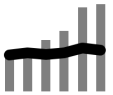
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target							No Target Established	TBD	Permits	Decrease	No Trend Data
Actual											

Metric Details: This measure tracks the sum of new permit applications that are over six months old, and existing permits that have passed their expiration date and are awaiting reissuance. The time for a permitting-related decision is calculated from the date a permit application is received or as soon as an existing permit passes its expiration date, to the date of a permit issuance or denial. No FY 2019 target is established, but results will be reported. The baseline and FY 2020 target will be determined in FY 2019. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

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

Other Core Work supporting Objective 3.4

(PM 052) Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.

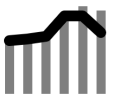
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	75	80	77	80	90	85			Systems	Increase	
Actual	73	89	107	125	174	181					

Key Takeaways:

- Among the new flows introduced were eManifest, the Electronic Permit System (EPS), Burial at Sea, Safe Drinking Water Information System (SDWIS) Virtual Exchange Services, and the Pesticide Submission Portal (PSP) Voluntary Data Submission Module.

Metric Details: The unit of measure "system" is defined as the number of data flows/exchanges that occur through EPA's Central Data Exchange (CDX) by EPA program offices, states and tribes. The CDX Program enables states, tribes and others to send environmental data to EPA through a centralized electronic process, enabling faster receipt, processing, and quality checking of data. The CDX Program estimates its results as the net of new systems using CDX services (increase) and retirement of older systems that are being phased out (decrease). As a result, these results may increase or decrease in subsequent years.

(PM 053) Number of states, tribes and territories able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.

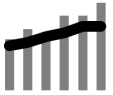
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	95	98	103	140	140	110			States, Tribes & Territories	Increase	
Actual	97	102	104	140	157	149					

Key Takeaways:

- Usage of Virtual Nodes increased by 10 while the number of Physical Nodes in operation remained constant. The number of Physical Nodes in a Test State was reduced by 18 as anticipated. EPA expects to see the shift toward virtual nodes continue in the future.

Metric Details: This measure tracks the total number of physical and virtual nodes in production and test.

(PM 999) Number of active unique users from states, tribes, laboratories, regulated facilities and other entities that electronically report environmental data to EPA through CDX.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	70,000	75,000	84,000	90,000	100,000	100,000			Users	Increase	
Actual	79,818	96,000	85,894	116,636	116,837	137,132					

Key Takeaways:

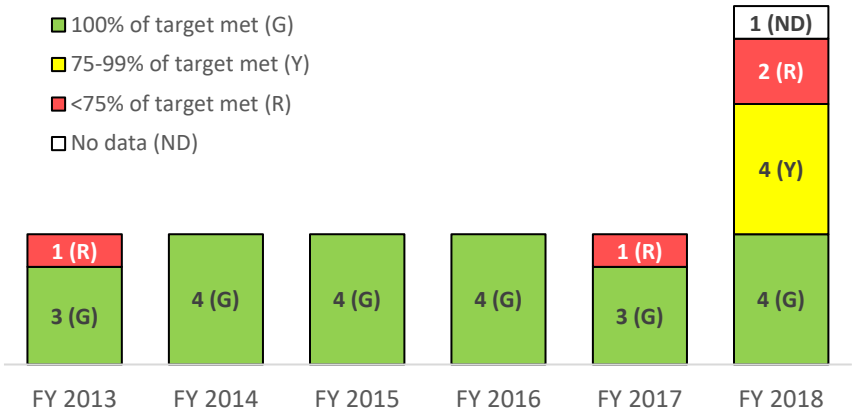
- The number of active users increased significantly as eManifest and NEPDES E-Reporting were brought online.

Metric Details: This measure tracks the number of unique users of the CDX system whose accounts have been active in the last two years and eliminates duplicate registrations under the same email address. Because many EPA regulations require periodic reporting, i.e., once every two, three or five years, a two-year span was utilized to capture the majority of users without overstating their "active" status.

Objective 3.5 – Improve Efficiency and Effectiveness: Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

Obj 3.5 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given significant challenges in meeting the Agency's contracting and procurement needs, and ongoing work to improve these processes.

Summary of progress toward strategic objective:

- Improved the percentage of simplified acquisitions (SA), competitive proposals (CP), and funding and administrative actions (FAA) processed within the Procurement Acquisition Lead Time (PALT).
- Released nearly 150,000 square feet of EPA space, for $5.9M in annual savings.
- Improved 25 Agency processes by deploying EPA Lean Management System (ELMS) principles to improve efficiency and cost effectiveness.
- Began or continued partnerships to implement shared services for Agency grants and security systems, for more efficient processes and more effective programs.
- Demonstrated the Continuous Diagnostic Monitoring (CDM) data exchange model; was the first federal agency to successfully exchange information with the Department of U.S. Homeland Security's federal CDM dashboard.
- Deployed systems and tools to streamline EPA business practices and save Agency resources, including OneDrive computer file storage, a cloud-based Business Automation Platform, EZ Desktop Records to manage electronic records efficiently, and advanced audio conferencing.
- Laid groundwork toward reorganization of the new Office of Mission Support, which was implemented in FY 2019 Q1.

Challenges:

- Deploying enterprise-wide systems and tools that balance business needs across the Agency and improve efficiency while meeting the Agency's goals.
- General Services Administration (GSA) delays in leasing actions and contract processing make it difficult to meet space consolidation goals. EPA is working with GSA to address the backlog of transactions and improve processing time.
- Late appropriations lead to an unbalanced workload during the fiscal year and pose a challenge for meeting PALT standards. EPA is implementing contracting process improvements to reduce delays.
- EPA continues to face delays in completing a plan to manage known high-risk cybersecurity vulnerabilities. However, the Agency has improved its capability to analyze open vulnerabilities and has identified additional steps it will take to improve operational readiness and responses.

Long-Term Performance Goal - By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet[22].

Annual performance goal that supports this long-term performance goal:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						241,000	163,626	146,477	Square Feet	Increase (Greater Reduction)	
Actual						149,278					

Key Takeaways:

- EPA released space at nine facilities for $5.9M estimated annual rent avoidance.
- EPA was unable to meet the target due to GSA delays on leasing actions and processing contracts which are required to support EPA's consolidation efforts. Approximately 128,000 square feet of space originally planned for release in FY 2018 will be released in FY 2019.
- EPA continues to work with GSA to identify obtainable space release goals given their backlog of transactions, as well as opportunities to improve transaction processing time.
- EPA expects planned releases for FY 2019, FY 2020, and FY 2021 to exceed targets and maintain progress toward the FY 2022 long-term performance goal.

Metric Details: This measure tracks usable square feet of office and warehouse space released with data collected from EPA facility manager notifications, and reports generated when there is a modification to an Occupancy Agreement. Space consolidation efforts will result in EPA becoming a more efficient and effective Agency by reducing lease, utility, security and other facility management costs, which will enable the Agency to direct resources to core environmental work.

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

Long-Term Performance Goal - By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT)[23].

Annual performance goals that support this long-term performance goal:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						SA: 75 CP: 65 FAA: 80	85	90	Percent	Increase	No Trend Data
Actual						SA: 70 CP: 88 FAA: 76					
Numerator						SA:704 CP: 21 FAA: 3,038			Actions		
Denominator						SA: 1,007 CP: 24 FAA: 4,002					

Key Takeaways:

- Though it did not meet all FY 2018 PALT targets, EPA made progress in processing more incoming actions within PALT and did not significantly add to the backlog of actions.
- EPA faces challenges meeting the PALT targets for two primary reasons: agencywide budgeting and funding practices that lead to an unbalanced workload during the fiscal year, and a lack of standard funding and administrative modifications that lead to processing inefficiencies and delays.
- EPA plans to complete deployment of the EPA Lean Management System (ELMS) across the Office of Acquisition Services (OAS) by the end of FY 2019 Q2. Use of ELMS is providing additional insights into business processes and is leading to increased knowledge sharing, standard work and timely processing of transactions.
- OAS is engaging Agency senior leadership on the challenges that current enterprise-wide budgeting and funding practices impose on acquisition processing.

Metric Details: For FY 2018, this measure tracked the timeliness of the Agency's processing of contract actions for Simplified Acquisitions (SA), Competitive Proposals (CP), and Funding and Administrative Actions (FAA) with data collected from EPA's Acquisition System (EAS) and information from EPA contract officer representatives (CORs) and contract officers (COs). Timeliness is measured in processing days from the time the procurement request (PR) is released in EAS to the date the contract is awarded. PALT Standards are outlined in Section 7.1.1 of the EPA Acquisition Guide. As a result of these efforts, EPA will become a more efficient and effective agency by reducing processing time and costs. Beginning in FY 2019, EPA will begin reporting results for all acquisition categories in a single percentage, not just SA, CP, and FAA. Baseline as of January 1, 2018 is: 47% SA; 65% CP; and 67% FAA. Baseline as of September 30, 2018 is 77% for all contract actions awarded within PALT.

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

(PM PR2) Acquisition costs avoided through use of strategic sourcing.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						3.0			Millions of Dollars	Increase	
Actual						2.7					

Key Takeaways:

- Acquisition costs avoided through the use of strategic sourcing came within 10% of meeting the FY 2018 target.
- The Agency did not launch any new strategic sourcing initiatives. The $2.7 million in avoided costs is a result of maintenance of prior-year strategic sourcing initiatives that continue to save the Agency money.
- Annual costs avoided through the use of strategic sourcing depend on EPA's contracting needs in a given year.
- EPA expects to see greater cost avoidance in the next few fiscal years as strategic sourcing is used in an increasing number of Agency acquisitions and as the Agency launches new strategic sourcing initiatives.

Metric Details: This measure tracks the Agency's avoided acquisition costs through use of the Strategic Sourcing Program (SSP) with data collected from EPA's spend-save tool. Avoided costs achieved by SSP contract vehicles result in EPA becoming a more efficient and effective agency by reducing expenditures, processing time and labor. This will enable the Agency to direct resources to core environmental work. In FY 2018, EPA obligated $1.521 billion in contracts.

Long-Term Performance Goal - By September 30, 2022, improve 250 operational processes.

Annual performance goal that supports this long-term performance goal:

(PM OP1) Number of operational processes improved.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						25	50	50	Operational Processes	Increase	
Actual						Data Avail 04/2019					

Key Takeaways:

- EPA made progress by improving processes across the Agency in mission and mission-support areas, including faster processing of permits, improved acquisitions, reduction in non-attainment areas, and increased numbers of formerly contaminated sites Ready for Anticipated Use (RAU).
- EPA experienced some challenges determining the methodology used for certifying that a process has improved. EPA has refined the criterion and now have multiple ways for determining if a process has improved, which includes monitoring the status of metrics in the "ELMS bowling charts" and counting those targets that have moved from severely behind (red) for several months to current (on-time/green) status.

Metric Details: EPA is applying Lean principles to improve the efficiency and cost effectiveness of its operations. An operational process is a sequence of activities that results in the delivery of a service. Initially, EPA counted an operational process as improved following a completed Lean/Kaizen event that meets a three-part test: (1) the work of the process has been standardized; (2) visual management has been put in place and used; and (3) performance has improved. EPA completed 11 of these events in FY 2018. EPA is currently refining the definition to include other key tools of ELMS, in addition to Lean/Kaizen events, to achieve process improvements that meet a more stringent requirement for improvement.

Long-Term Performance Goal - By September 30, 2022, increase enterprise adoption of shared services by four[24].

Annual performance goals that support this long-term performance goal:

(PM CF1) Number of administrative shared services.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						6	7	8	Shared Services	Increase	
Actual						5					

Key Takeaways:

- While EPA did not complete the adoption of any shared services in FY 2018, the Agency successfully migrated two existing operations to federal shared service providers in the first quarter of FY 2019: the U.S. Department of the Interior's FedTalent System (employee training); and the General Services Administration's USAccess Program (employee credentials).

Metric Details: EPA will use additional federal and/or internal shared services when supported by business case analysis. Enterprise adoption of shared services will ensure consistency and scalability in tools and services, enabling the Agency to standardize internal operational processes, control costs, and improve data quality. The five administrative shared services in place as of the end of FY 2017 were: Interior Business Center (HR/payroll), Concur (travel), Compass (core financial management), human resources shared service centers, and finance centers.

(PM CF2) Number of Agency administrative subsystems.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						24	22	20	Subsystems	Decrease	
Actual						26					

Key Takeaways:

- EPA did not complete the consolidation of the Agency's Document Collection System (DCS) and Assistance Information Management System (AIMS) into Grant Payment Allocation System (GPAS Consolidation Project), or consolidation of Interagency Agreements (IAs) into the new Payment Tracking System (PTS)-Interagency Document Online Tracking System (IDOTS) application in FY 2018 as planned. This work will be completed in FY 2019.

Metric Details: Reducing the number of administrative system interfaces allows EPA users to more easily input and access data and standardizes reporting as payment processing is moved to a federal shared service provider. This has a positive impact on streamlining operational processes and drives the integration of financial transactions across multiple administrative systems, reducing manual entry, and improving data quality. The focus is currently on establishing an integrated end-to-end delivery of financial transactions for contracts, grants, and Interagency Agreements into Compass. In FY 2017, the Agency had 26 administrative subsystems.

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

(PM CF3) Average cost per payment transaction.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						34.99			Dollars	Decrease	
Actual						33.48					

Key Takeaways:

- EPA met the target through an emphasis on staff training and a strategic focus on cross-functional support during invoice payment peak weeks. Key staff met regularly to discuss and implement strategies to create efficiencies in the invoice payment process.

Metric Details: EPA is working to reduce the cost of contract and Simplified Acquisition Purchasing (SAP) transactions to the estimated cost level of an agencywide shared service solution by FY 2020. Data are tracked in the Agency's Compass system. In FY 2017, the cost per payment transaction was $38.28, which includes personnel and Information Technology (IT) costs for processing payments. The significant target reduction in FY 2020 is based on expected automation of the invoicing process, and additional IT modernization efforts underway.

Other Core Work supporting Objective 3.5

Annual performance goals:

(PM 35A) Environmental and business actions taken for improved performance or risk reduction.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	307	248	268	274	274	196			Actions	Increase	
Actual	215	324	296	285	204	103					

Key Takeaways:

- The decrease in results and missed target are related to the increase in mandatory work combined with a decrease in resources. The mandatory work is often focused on compliance and not long-term environmental benefits, so the Office of the Inspector General (OIG) does not typically find significant issues that require recommendations to the Agency.

Metric Details: This measure captures implemented corrective actions taken by the Agency based on OIG recommendations to improve EPA programs and/or processes. Results are typically from prior years' recommendations and may fluctuate depending on the Agency's ability to complete agreed-upon corrective actions. The target is developed by taking the actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities.

(PM 35B) Environmental and business recommendations or risks identified for corrective action.

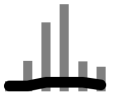
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	786	687	967	1,094	1,094	460			Risks	Increase	
Actual	1,003	944	1,110	1,127	1,150	759					

Key Takeaways:

- OIG identified 235 recommendations for improvement, including: preventing deaths and serious injuries from residential fumigations; improving oversight of purchase cards avoiding inappropriate purchases; reducing risk of information security breaches by conducting required background investigations for information systems contractor personnel; and periodic verification that air monitoring agencies are implementing EPA's recommended criteria for ambient air quality.
- OIG identified seven unimplemented recommendations to include properly reconciling tens of millions of dollars accounts receivable and properly recording millions in interest.
- OIG identified 462 findings in 119 external reports involving EPA for effective administration of millions of dollars in grants and assistance agreements throughout the U.S.

Metric Details: This measure captures the number of OIG outputs (recommendations for improvement; outreach activities to plan and promote OIG work; congressional testimonies delivered; best practices identified; and risks identified). One key activity during an OIG audit/evaluation is identifying risks to EPA operations and programs. Risk identification is based on federal standards for internal control. Internal control is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency; reliable reporting; and compliance with laws, regulations and policies. Ultimately effective internal controls assure that operations run efficiently and effectively. The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities.

(PM 35C) Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	125	132	220	220	220	160			Percent	Increase	
Actual	248	734	1,656	2,098	722	588					
Numerator	122.00M	380.00M	852.00M	1,070.00M	849.17M	473.07M			Dollars		
Denominator	49.19M	51.77M	51.45M	51.00M	117.58M	80.43M					

Key Takeaways:

- OIG questioned nearly $3.2 million on 11 grants and assistance agreements including $2.4M of unaccounted EPA funds.
- OIG identified more than $375 million in potential benefits, such as improved acquisition planning that will help EPA reduce hundreds of millions of dollars in high-risk contracts.
- OIG identified nearly $91 million of monetary actions were taken or resolved by the Agency prior to report issuance; this figure represents corrections during the EPA financial statement audit.
- EPA saved more than $935,000 in annual costs in response to OIG reports, including about $900,000 that the Administrator decided to stop providing for fitness centers in EPA space.
- OIG achieved cost savings totaling nearly $1.3 million due to investigative work.

Metric Details: Results under this measure identify the potential return on investment and do not include actual recoveries. The OIG's role is to question costs and identify cost efficiencies and funds put to better use (recommended efficiencies). The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities and removing reports from the average calculation with recommended efficiencies in excess of $200M. The reports excluded from the average are: FY 2014-$230 million; FY 2015-$571 million; FY 2016-$886 million; FY 2017-$774 million; and FY 2018-$375 million.

(PM 35D) Criminal, civil, administrative, and fraud prevention actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	90	125	175	145	145	87			Actions	Increase	
Actual	256	213	304	181	298	330					

Key Takeaways:

- OIG recovered over $527,000 in administrative costs resulting from 87 administrative actions and 19 suspensions/debarments.
- OIG recovered over $1 million in fines related to 10 criminal actions, including 85 months total in prison time, 96 months total in probationary time and six months of home detention.
- OIG recovered nearly $362,000 resulting from one civil action.
- OIG conducted 128 fraud awareness briefings to internal and external stakeholders.

Metric Details: This measure captures criminal, civil, and administrative actions resulting from OIG investigations on fraud, waste, and abuse. To a large extent, results are influenced by factors outside the control of OIG (e.g., judges, juries).

Table of Contents – Appendix

Coordination with Other Federal Agencies

Environmental Programs

Air and Radiation Programs

National Ambient Air Quality Standards (NAAQS) Implementation

EPA cooperates with other federal, state, tribal and local agencies to achieve goals related to ground level ozone and particulate matter (PM), and to ensure the actions of other agencies are compatible with state plans for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). EPA works closely with the Department of Agriculture (USDA), the Department of the Interior (DOI), and the Department of Defense (DOD) on issues such as prescribed burning at silviculture and agricultural operations. EPA, the Department of Transportation (DOT) and the U.S. Army Corps of Engineers (USACE) also work with state and lcal agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities.

Air Quality in the Agricultural Sector

To improve EPA's understanding of environmental issues related to the agricultural sector, EPA works closely with the USDA and others to improve air quality while supporting a sustainable agricultural sector.

Regional Haze

EPA works with the DOI, National Park Service (NPS), and U.S. Forest Service (USFS) in implementing its regional haze program and operating the Interagency Monitoring of Protected Visual Environments (IMPROVE) visibility monitoring network. The operation and analysis of data produced by this air monitoring system is an example of the close coordination of efforts between EPA and state and tribal governments. EPA also consults with the DOI's Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) on potential endangered species issues.

Air Quality Assessment, Modeling, and Forecasting

For pollution assessments and transport, EPA works with the National Aeronautics and Space Administration (NASA) on technology transfer using satellite imagery. EPA further distributes NASA satellite products and NOAA air quality forecast products to states, local agencies and tribes to provide a better understanding of daily air quality and to assist with air quality forecasting. EPA works with NASA to develop a better understanding of PM formation using satellite data. EPA also has worked with the Department of the Army on advancing emission measurement technology and with NOAA for meteorological support for our modeling and monitoring efforts. EPA collects real-time ozone and PM measurements from state and local agencies, which are used by both NOAA and EPA to improve and verify Air Quality Forecast models.

EPA's *AIRNow* Program (the national real-time Air Quality Index reporting and forecasting system) works with the National Weather Service (NWS) to coordinate NOAA air quality forecast guidance with state and local agencies for air quality forecasting efforts and to render the NOAA model output in EPA Air Quality Index (AQI), which helps people determine appropriate air quality protective behaviors. In wildfire situations, EPA and the USFS work closely with states to deploy monitors and report monitoring information and other conditions on *AIRNow*. EPA also has worked with USFS by providing new science on the impacts of smoke on health to inform smoke management practices and intervention strategies to reduce health impacts. The *AIRNow* Program also collaborates with the NPS and the USFS in collecting air quality monitoring observations, in addition to observations from over 130 state, local, and tribal air agencies. *AIRNow* also collaborates with NASA in a project to incorporate satellite data with air quality observations.

EPA, the USDA, and the DOI established a collaborative framework to address issues pertaining to wildland fire and air quality. The agreement recognizes the key roles of each agency, as well as opportunities for collaboration. For example, the partnership explains that the agencies seek to reduce the impact of emissions from wildfires, especially catastrophic wildfires, and the impact of those emissions on air quality. In addition, the partnership highlights opportunities for enhancing coordination among the agencies through information sharing and consultation, collaboration on tools and information resources, and working together to collaborate with state and other partners, among other goals.

Mobile Sources

EPA works with the DOT's National Highway Traffic Safety Administration (NHTSA) on the coordinated national program establishing standards to improve fuel efficiency and reduce GHG emissions for light-duty vehicles. Specifically, EPA, in coordination with the DOT's fuel economy and fuel consumption standards programs, implements vehicle and commercial truck greenhouse gas standards with a focus on industry compliance to ensure the standards are realized.

To address criteria pollutant emissions (such as nitrogen oxide) from marine and aircraft sources, EPA works collaboratively with the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO), as well as with other federal agencies, such as the U.S. Coast Guard (USCG) and the Federal Aviation Administration (FAA). EPA also collaborates with the USCG in the implementation of Emission Control Area (ECA) around the United States, and with Mexico and Canada in the North American Commission for Environmental Cooperation (CEC) to evaluate the benefits of establishing a Mexican ECA.

To better understand the sources and causes of mobile source pollution, EPA works with the DOE and DOT to fund applied research projects including transportation modeling projects. EPA also has worked closely with the DOE on refinery cost modeling analyses to support clean fuel programs. EPA also coordinates with the DOE's Energy Information Administration (EIA) regarding fuel supply during emergency situations. For mobile sources program outreach, the Agency has participated in a collaborative effort with DOT's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to educate the public about the impacts of transportation choices on traffic congestion, air quality, and human health. This community-based

public education initiative also includes the Centers for Disease Control and Prevention (CDC). EPA also has worked with FHWA to develop and deliver training on modeling emissions from cars and trucks and with other federal agencies, such as the USCG, on air emission issues. Other programs targeted to reduce air toxics from mobile sources are coordinated with the DOT. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. EPA works with the DOE, DOT and other agencies, as needed, on the requirements of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, such as the Renewable Fuel Standard. EPA also has worked with other agencies on biofuel topics through the Biomass Research and Development Institute.

To develop air pollutant emission factors and emission estimation algorithms for military aircraft, ground equipment, and vehicles, EPA partners with the DOD. This partnership provides for the joint undertaking of air-monitoring/emission factor research and regulatory implementation.

Air Toxics

EPA works closely with other health agencies such as the CDC, the National Institute of Environmental Health Sciences (NIEHS), and the National Institute for Occupational Safety and Health (NIOSH) on health risk characterization for both toxic and criteria air pollutants. EPA also contributes air quality data to the CDC's Environmental Public Health Tracking Program, which is made publicly available and used by state and local public health agencies.

Addressing Transboundary Air Pollution

In developing regional and international air quality programs and projects, and in working on regional agreements, EPA works with the Department of State (DOS), NOAA, NASA, DOE, USDA, U.S. Agency for International Development (USAID), and the Office of Management and Budget (OMB), as well as with regional organizations. In addition, EPA has partnered with other organizations and countries worldwide, including the United Nations Environment Programme (UNEP), the European Union (EU), the Organization for Economic Cooperation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), the CEC, Canada, Mexico, China, and Japan.

EPA partners with environment and public health officials and provides technical assistance through UNEP to facilitate the development of air quality management strategies to other major emitters and/or to key regional or sub-regional groupings of countries.

Stratospheric Ozone

EPA works closely with the Department of State (DOS) and other federal agencies in international negotiations among Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer and in developing the implementing regulations. The environmental goal of the Montreal Protocol is to protect the ozone layer and, the ozone depleting substances (ODS) it controls also are significant greenhouse gases. EPA has worked on several multinational environmental agreements working closely with the DOS and other federal agencies, including OMB, Office of Science

Technology and Policy (OSTP), Council on Environmental Quality (CEQ), USDA, Food and Drug Administration (FDA), Department of Commerce, NOAA and NASA.

EPA works with other agencies, including the Office of the United States Trade Representative (USTR) and the Department of Commerce (DOC), to analyze potential trade implications in stratospheric protection regulations that affect imports and exports. EPA has coordinated efforts with the Department of Justice (DOJ), Department of Homeland Security (DHS), Department of Treasury (U.S. Treasury) and other agencies to curb the illegal importation of ODS.

In addition, there have been further efforts on a number of other issues. For example, EPA has had discussions with the DOD, U.S. General Services Administration (GSA), and NASA to assist in the effective transition from ODS. EPA has worked with USDA and the DOS to facilitate research, development and adoption of alternatives to methyl bromide. EPA also has consulted with USDA on domestic methyl bromide needs. EPA has coordinated with NASA and NOAA to monitor the state of the stratospheric ozone layer and to collect, analyze, and disseminate Ultraviolet (UV) data. EPA has coordinated with the Small Business Administration (SBA) to ensure that proposed rules are developed in accordance with the Small Business Regulatory Flexibility Act (SBREFA).

Radiation and Radiation Preparedness and Response

EPA works primarily with the Nuclear Regulatory Commission (NRC), DOE, and the DHS on multiple radiation-related issues. EPA has ongoing planning and guidance discussions with DHS on general emergency response activities, including exercises responding to nuclear related incidents. As the regulator of DOE's Waste Isolation Pilot Plant (WIPP) facility, EPA is charged with coordinating oversight activities with DOE to ensure the facility is operating in compliance with EPA regulations. EPA is a member of the Interagency Radiation Source Protection and Security Task Force, established in the Energy Policy Act, to improve the security of domestic radioactive sources. EPA also is a working member of the interagency Nuclear Government Coordinating Council (NGCC), which coordinates across government and the private sector on issues related to security, communications and emergency management within the nuclear sector.

For emergency preparedness purposes, EPA coordinates closely with other federal agencies through the Federal Radiological Preparedness Coordinating Committee and the Advisory Team for Environment, Food and Health which provides federal scientific advice and recommendations to state and local decision makers such as governors and mayors during a radiological emergency. EPA has participated in planning and implementing table-top and field exercises including radiological anti-terrorism activities, with the NRC, DOE, DOD, Department of Health and Human Services (DHHS) and DHS.

EPA is a charter member and co-chairs the Interagency Steering Committee on Radiation Standards (ISCORS), which was created at the direction of Congress. Through quarterly meetings and the activities of its six subcommittees, member agencies are kept informed of cross-cutting issues related to radiation protection, radioactive waste management, and emergency preparedness and response. ISCORS also helps coordinate U.S. responses to radiation-related issues internationally.

During radiological emergencies EPA works with expert members of the International Atomic Energy Agency's (IAEA). Additionally, EPA works with OECD's Nuclear Energy Agency (NEA) on two committees: the NEA Radioactive Waste Management Committee (RWMC) and the Committee on Radiation Protection and Public Health (CRPPH) as necessary during the response and remediation including those incidents involving significant waste issues. Through participation on the CRPPH and its working groups, EPA has been successful in bringing a U.S. perspective to international radiation protection policy, and benefits from having other countries' perspectives.

Research Supporting the Air and Radiation Program

EPA continues to strengthen interactions with other agencies, including NOAA, DOE, USDA, National Institutes of Health (NIH) and FHWA to improve understanding and develop sustainable approaches to manage risks from air pollution. For example, EPA worked with NOAA and NASA to relate satellite-based air quality data to ambient monitoring, which resulted in several publications[1] from this collaboration.

Water Programs

Collaboration with Public and Private Partners on Water Infrastructure Preparedness, Response and Recovery

EPA coordinates with other federal agencies, primarily DHS, CDC, FDA, and DOD, on biological, chemical, and radiological contaminants of high concern, and how to detect and respond to their presence in drinking water and wastewater systems. EPA maintains a close linkage with the Federal Bureau of Investigation, and the Intelligence Analysis Directorate in DHS, particularly with respect to ensuring the timely dissemination of threat information through existing communication networks.

EPA works with USACE and the Federal Emergency Management Agency (FEMA) to refine coordination processes among federal partners engaged in providing emergency response support to the water sector. EPA works with USACE and FEMA to maintain clear roles and responsibilities under the National Disaster Recovery Framework. In addition, EPA continues to work with FEMA and USACE, as well as other agencies, on the Federal Interagency Floodplain Management Task Force regarding water resources and floodplain management.

Drinking Water Programs

EPA and the U.S. Geological Survey (USGS) established an Interagency Agreement to coordinate activities and information exchange in the areas of unregulated contaminants occurrence, the environmental relationships affecting contaminant occurrence, protection area delineation methodology, and analytical methods. This collaborative effort improves the quality of information to support risk management decision-making at all levels of government, generates valuable new data, and eliminates potential redundancies.

[1] For more information, please see: https://discover-aq.larc.nasa.gov/.

EPA also collaborates with the Department of Housing and Urban Development (HUD) to develop strategies to decrease drinking water lead exposure in homes. The partnership shares information, leverages funding and reviews processes to facilitate better-informed decisions and coordinate investments.

Sustainable Rural Drinking and Wastewater Systems

EPA and USDA work together to increase the sustainability of rural drinking water and wastewater systems to ensure the protection of public health, water quality, and sustainable communities. The two agencies facilitate coordinated funding for infrastructure projects that aid in the compliance of national drinking water and clean water regulations.

National Water Sector Workforce Development: Department of Veterans Affairs

EPA and the Department of Veterans Affairs (VA) Vocational Rehabilitation and Employment Service (VR&E) jointly promote activities that will help advance and improve employment opportunities for veterans with disabilities while supporting the development of a trained and competent workforce for the water sector.

Tribal Access Coordination

EPA, and USDA, HUD, DHHS, Indian Health Service (IHS), and DOI work together to maintain and improve coordination in delivering water and wastewater infrastructure services and financial assistance to American Indian communities. The agencies work together to increase the number of American Indian homes provided access to safe drinking water. In implementation of the Indian set-aside grant program under Title VI of the CWA, EPA works closely with IHS to administer grant funds to the various Indian tribes, including determination of the priority ranking system for the various wastewater needs in Indian Country. EPA and the USDA Office of Rural Development partner to provide coordinated financial and technical assistance to tribes.

Source Water Protection and Harmful Algal Blooms

To combat harmful algal blooms and hypoxia, the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 (HABHRCA 2014, P.L. 113-124) emphasizes the mandate to advance the scientific understanding and ability to detect, predict, control, mitigate, and respond to harmful algal blooms and hypoxia. This legislation established the Interagency Working Group on HABHRCA (IWG-HABHRCA). It tasked the group with coordinating and convening Federal agencies to discuss Harmful Algal Bloom (HAB) and hypoxia events in the United States, and to develop action plans, reports, and assessments of these situations. The Working Group is co-chaired by EPA and NOAA and includes the: FDA, National Institute of Food and Agriculture, CDC, USACE, Bureau of Ocean Energy Management, U.S. Navy, National Science Foundation (NSF), NASA, National Park Service, USDA, USGS and NIEHS.

Water Technology and Innovation

EPA works with federal departments to lead or support work to catalyze Technology and Innovation in work for Clean and Safe Water. Examples of EPA collaborations include working with:

- DOS to advise on efficient and innovative water infrastructure design at U.S. Embassies;
- DOE in researching opportunities to address the Food-Water-Energy Nexus, as well as research focused on optimally targeting resources to water/wastewater utilities with the greatest needs;
- Bureau of Reclamation to support Technology Challenges to catalyze the development of low-cost, high-performance water sensors;
- NOAA in the development of the National Water Data Center and the National Water Model;
- The interagency National Drought Resilience Partnership, to fast-track solutions to long-term drought;
- NSF, DOE, as well as non-federal entities in the development of the National Testbed Network ("FAST Network"), to test water technologies and provide crucial information to local decision-makers;
- FEMA to research innovative stormwater control approaches to mitigate urban flooding;
- NASA in assessing emerging water treatment technologies;
- Multi-agency efforts related to water data interoperability through the Open Water Data Initiative and the Internet of Water; and
- Department of the Army in assessing emerging water service technologies.

Watersheds Restoration and Nonpoint Source Pollution

Protecting and restoring watersheds depends largely on the direct involvement of many federal agencies as well as state, tribal, and local governments who manage the multitude of programs necessary to address water quality on a watershed basis. Federal agency involvement includes the USDA (including the National Resource Conservation Service [NRCS], US Forest Service [USFS], and the Agriculture Research Service [ARS]) in agricultural areas as well as USDA, USACE, NOAA, and DOI in coastal waters. EPA and USDA are co-implementing the National Water Quality Initiative in about 200 watersheds nationwide. Other EPA partners might include DOI (including the Bureau of Land Management [BLM], Office of Surface Mining, USGS, FWS, NPS, and Bureau of Indian Affairs), NOAA, DOT, DOD (including USACE), and FEMA. EPA co-implements with NOAA the coastal nonpoint source pollution program under CZARA. EPA also co-chairs, with NOAA, the U.S. Coral Reef Task Force's Watershed Working Group to reduce land-based source pollutants to coral reef watersheds.

National Pollutant Discharge Elimination System (NPDES) Program

Since inception of the NPDES Program under Section 402 of the Clean Water Act (CWA), EPA and the authorized states maintain relationships with various federal agencies to implement pollution controls for point sources under NPDES. EPA works with the FWS and NMFS on consultation for protection of endangered species. EPA works with the Advisory Council on

Historic Preservation on National Historic Preservation Act implementation. EPA and the states rely on monitoring data from the USGS to help inform pollution control decisions. The Agency also works closely with SBA and OMB to ensure that regulatory programs are fair and reasonable. The Agency coordinates with NOAA on efforts to ensure that NPDES programs support coastal and national estuary efforts and with the DOI on mining issues. The Agency also coordinates with the FHWA to reduce the impacts of stormwater from roads.

Clean Water and Drinking Water State Revolving Funds

EPA's State Revolving Fund programs work with HUD and USDA to foster collaboration on jointly funded infrastructure projects. In many states, coordination committees have been established with representatives from the three programs.

Monitoring and Assessment of Nation's Waters

EPA is co-chair, along with the USGS, of the National Water Quality Monitoring Council, a national forum for scientific discussion of strategies and technologies to improve water quality monitoring and data sharing. The council membership includes other federal agencies, state and tribal agencies, non-governmental organizations, academic institutions, and the private sector. Under an MOU, EPA and the USGS developed and are now operating the national Water Data Portal, a web portal serving data from the USGS and EPA ambient water quality data warehouses in a common format through the internet. EPA has an Interagency Agreement with the USGS for the development of *NHDPlus* version 2, which is complete for the lower 48 states. EPA also collaborates with the USGS and NOAA, National Park Service (NPS), USDA, FWS, BLM, and the USFS on implementation, analysis and/or interpretation of the results of the National Aquatic Resource Surveys - an EPA, state and tribal partnership to assess and report on the condition of the nation's waters and changes over time using nationally consistent and regionally relevant methods.

Wetlands

EPA, and FWS, USACE, NOAA, USGS, USDA's NRCS, USFS, FEMA, and Federal Highway Administration (FHWA) coordinate on a range of wetlands activities. These activities include: studying and reporting on wetlands trends in the United States, diagnosing causes of coastal wetland loss and identifying opportunities to stem the losses, statistically surveying the condition of the nation's wetlands, and developing methods for better protecting wetland function. Additionally, EPA and USACE work very closely together in implementing the regulatory program under the CWA Section 404 and CWA jurisdiction. EPA also works with the FWS and NOAA on regulatory matters involving permits.

Natural Resources Damage Assessment and the Restore Council

EPA works in partnership with fellow federal and state trustees and their representatives to support the ongoing Natural Resources Damage Assessment and the Restore Council (Gulf Coast Ecosystem Restoration Council). Partners include NOAA, DOI, and USDA.

Research to Support Water Programs

While EPA is the federal agency mandated to ensure safe drinking water, other federal and non-federal entities conduct research that complements EPA's research on priority contaminants in drinking water. Much of this research has been conducted in collaboration with EPA scientists. Cooperative research efforts have been ongoing with the American Water Works Association, Water Research Foundation, and other stakeholders to coordinate drinking water research where the private sector, particularly the water treatment industry, is conducting research in such areas as analytical methods, treatment technologies, and the development and maintenance of water resources. EPA also has worked with the USGS to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

Interagency coordination in research also is occurring in developing sediment criteria. Here, EPA has developed joint research initiatives with the NOAA and USGS for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

Land and Emergency Management Programs

Brownfields

EPA's Brownfields and Land Revitalization Programs partner with the Department of Labor (DOL) and NIEHS to support environmental workforce development and fund job training and placement programs in brownfield communities. The programs work with the USDA, DHHS, and the Agency for Toxic Substances and Disease Registry (ATSDR) to identify ways communities can work with federal programs to increase food access in all communities and improve access to quality health care, in response to community requests. Improved access to healthy food and health care services can catalyze redevelopment and employment that contributes to healthier and more sustainable communities. The Brownfields and Land Revitalization programs also partner with the NPS's River, Trails and Conservation Assistance Program to support Groundwork USA and individual Groundwork Trust organizations in their efforts to engage youth in brownfields redevelopment and community revitalization. The Program participates with DOC's Economic Development Administration's (EDA's) Economic Development Integration (EDI) team to identify opportunities for greater interagency collaboration for coordinated and effective investment of federal economic development resources. EPA leads the Brownfields Federal Partnership, which includes more than 20 federal agencies dedicated to the cleanup and redevelopment of brownfields properties. Partner agencies work together to prevent, assess, safely clean up, and redevelop brownfields.

Economically Distressed Communities

EPA has expertise on the importance of downtown revitalization, the use of green infrastructure strategies, green demolition, and sustainable development strategies for the federal government to help economically distressed communities. EPA's efforts positively impact the work of HUD, DOT, DOC, DHHS, DHS, DOJ, SBA, DOL, and many other agencies and departments.

Superfund Remedial Program

The Superfund Remedial Program maintains ongoing coordination with the Agency for Toxic Substances and Disease Registry (ATSDR) and National Institute of Environmental Health Sciences (NIEHS) to promote information sharing and greater efficiencies. ATSDR provides valued advice to EPA through the preparation of public health assessments, site specific consultations, and preparation of toxicological profiles. There are several areas where collaboration and sharing resources are of mutual benefit. For example, ATSDR has a statutory mandate to complete health assessments on sites listed on EPA's National Priorities List (NPL), while EPA conducts site characterization and performs site work. Moreover, EPA site managers strive to work with their ATSDR and state counterparts to coordinate messages for the public.

The NIEHS is a valuable partner in collaborating with universities and conducting research related to the toxicity of contaminants, site characterization, and site remediation. NIEHS has a research translation component that focuses on the explanation of site risk information for communities and other parties. In addition, multiple grant recipients have supported communities in understanding the hazards posed by waste materials.

USACE substantially contributes to Superfund site cleanups by providing a wide range of technical, management, and acquisition support functions to implement or oversee responsible party Superfund project implementation for the remedial and removal programs. Most notably, the USACE has the technical design and construction expertise and contracting capability needed to assist EPA regional Superfund programs in implementing complex Superfund remedial action projects. USACE also provides technical on-site support to regional offices in the enforcement oversight of numerous construction projects performed by private Potentially Responsible Parties.

Superfund Federal Facilities Restoration and Reuse Program

The Superfund Federal Facilities Restoration and Reuse Program coordinates closely with federal agencies, states, tribes, state associations, and others to implement its statutory responsibilities to ensure protective and efficient cleanup and reuse of federally contaminated land on the NPL. In addition, EPA continues to work to streamline and improve the Superfund process through the Superfund Task Force recommendations. Successful implementation of these recommendations requires strengthening partnerships and increasing engagement with other federal agencies.

EPA participates in a dialogue with the Environmental Council of the States (ECOS) and DOE for the purpose of improving/enhancing ongoing working relationships among senior leaders involved in the cleanup of DOE Environmental Management sites. The Dialogue is an example of how each agency can advance the cleanup at DOE sites and foster an understanding of challenges and successes at the national level.

EPA participates with other federal agencies on the Federal Mining Dialogue (FMD) which provides a national level forum for federal agencies to identify and discuss lessons learned and technical mining impact issues associated with the cleanup and reuse of abandoned and inactive hard rock and abandoned uranium mines across the country. EPA's Abandoned Mine Lands Program has coordinated through the Agency's National Mining Team (NMT) which has

representatives on each of the FMD workgroups: Data Standards, Best Practices, Cost Recovery and Watershed Strategy. EPA also participates with other federal agencies on the Munitions Response Dialogue (MRD), partners with DOD research and development programs (SERDP and ESTCP) on the munitions management track and participates on the Intergovernmental Data Quality Task Force (IDQTF) which works to address data quality concerns.

Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) Polychlorinated Biphenyl (PCB) Programs

The RCRA Corrective Action Program coordinates closely with other federal agencies, primarily DOD and DOE, which have many sites in the corrective action universe. An Agency top priority is to assist federal facilities meet the RCRA Corrective Action Program's goals of investigating and cleaning up hazardous releases. EPA also coordinates with other agencies, primarily DOD, on cleanup and disposal issues posed by polychlorinated biphenyls (PCBs) under the authority of the Toxic Substances Control Act (TSCA).

Emergency Preparedness and Response

EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. EPA's leadership in federal preparedness begins with its co-chairing the National Response Team (NRT) and the 13 Regional Response Teams with the U.S. Coast Guard. These teams, which have member participation from other key federal agencies, deliver federal assistance to state, local, and tribal governments to plan for and respond to natural disasters and other major environmental incidents. This requires coordination with many federal, state, and local agencies. The Agency participates with other federal agencies to develop national planning and implementation policies at the operational level.

The National Response Framework (NRF), under the direction of the DHS, provides for the delivery of federal assistance to states to help them deal with the consequences of terrorist events, acts of malfeasance, as well as natural and other significant disasters. EPA maintains the lead responsibility for the NRF's Emergency Support Function #10 (covering inland hazardous materials and petroleum releases) and participates in the Federal Emergency Support Function Leaders Group which addresses NRF planning and implementation at the operational level. As an example of the NRF functionality, EPA closely collaborated with FEMA, and other federal agencies in responding to the FY 2017/2018 hurricane season and the wildfires in California.

Oil Spills

Under the Oil Spill Program, EPA provides assistance to agencies such as FWS and the USCG and works in coordination to address oil spills nationwide. EPA also assists agencies with judicial referrals when enforcement of violations becomes necessary. In addition, EPA and the USCG work in coordination to address oil spills nationwide.

Strengthen Human Health and Environmental Protection in Indian Country

EPA has a long history of working with other federal agencies to address shared environmental and human health concerns. EPA, DOI, DHHS, USDA, and HUD, have worked through several MOUs as partners to improve infrastructure on tribal lands.

All five federal partners have committed to continue federal coordination in delivering services to tribal communities. The Infrastructure Task Force has built on prior partner successes, including improved access to funding and reduced administrative burden for tribal communities through the review and streamlining of Agency policies, regulations, and directives as well as improved coordination of technical assistance to water service providers and solid waste managers through regular coordination meetings and web-based tools.

Homeland Security

EPA's Homeland Security, Preparedness and Response Program continues to develop and maintain Agency assets and capabilities to respond to and support nationally significant incidents with emphasis on those involving chemical warfare agents. The Program implements a broad range of activities for a variety of internal and multi-agency efforts that are consistent with the Department of Homeland Security's NRF and the various Homeland Security Presidential Directives EPA is lead on and or supports. This includes being the lead analytical agency for environmental sampling during a CWA incident.

EPA coordinates its preparedness activities with DHS, FEMA, the Federal Bureau of Investigation (FBI), and other federal agencies, states and local governments. EPA will continue to clarify its roles and responsibilities to ensure that Agency Homeland Security activities are consistent with the national homeland security strategy.

Research to Support Homeland Security

EPA collaborates with numerous agencies on Homeland Security research in order to leverage funding across multiple programs to produce synergistic results. EPA's Homeland Security Research Program has worked closely with the DHS to assure that EPA has the science to back decisions made in its role as a lead agency responsible for cleanup during a Stafford Act declaration under ESF-10 and as the lead agency for water infrastructure. In its research work related to biological and chemical warfare agents, EPA has worked closely with the DOD and its sub-organizations. To identify and support such collaborations, EPA has participated in a tri-agency research partnership (Technical Coordination Working Group – TCWG) with the DOD and DHS that focuses on chemical and biological defense needs and gaps as they relate to homeland security. TCWG activities include: information sharing, joint science and technology research projects and complementing policies. In conducting biological agent research, EPA also collaborates with the CDC.

EPA also works with these entities and others to address areas of mutual interest and concern related to both cleanup and water infrastructure protection. The Program also has conducted joint research with USDA and DOI focusing on addressing homeland security threats at the intersection

of the environment/public health and agriculture/natural resources. EPA also has worked with DOE to access and conduct research at the DOE's National Laboratories specialized research facilities, such as to establish the Water Security Test Bed and develop analytical capabilities for biological and chemical agents in environmental matrices.

Research to Support Land and Emergency Management Programs

Consistent with the broad scope of EPA's ecosystem research efforts, EPA has complementary and joint programs with the USFS, USGS, USDA, NOAA, BLM, non-government organizations (NGOs), and many others specifically to minimize duplication, maximize scope, and maintain a real-time information flow. For example, these organizations have worked together to produce the National Land Cover Data used by all landscape ecologists nationally. Each contributed funding, services, and research to this uniquely successful effort.

EPA has expended substantial effort coordinating its research to support a range of environmental priorities at other federal agencies, including work with DOD in its SERDP and the Environmental Security Technology Certification Program, DOE, and its Office of Health and Environmental Research. EPA also has conducted collaborative laboratory research with DOD, DOE, DOI (particularly the USGS), and NASA to improve characterization and risk management options for dealing with subsurface contamination.

EPA, USACE, and the U.S. Navy signed an MOU to increase collaboration and coordination in contaminated sediments research. Additionally, EPA works through the Interstate Technology Regulatory Council (ITRC) in defining continuing research needs through its teams on topics including permeable reactive barriers, radionuclides, and Brownfields. EPA has developed a MOU[2] with several other agencies (such as the DOE, DOD, NRC, USGS, NOAA, and USDA) for multi-media modeling research and development.

EPA has collaborated with many the Institutes within the NIH and CDC on research on variability and susceptibility in risks from exposure to environmental contaminants. EPA has collaborated with NIEHS in supporting the Centers for Children's Environmental Health and Disease Prevention, which study whether and how environmental factors play a role in children's health and with the National Institute on Child Health and Human Development (NICHD) on the development and implementation of the National Children's Study. Additionally, EPA, the National Institute on Minority Health and Health Disparities (NIMHD), NIEHS, and NICHD co-fund the Centers of Excellence for Research on Environmental Health Disparities. This funding has broadened research on disadvantaged communities and the impacts of greater exposures of ambient hazards.

[2] For more information, please see: Interagency Steering Committee on Multimedia Environmental Models MOU, at: http://www.iscmem.org/Memorandum.htm.

Chemical Safety and Pollution Prevention Programs

General Coordination for Chemical Safety

Following enactment of the Toxic Substances Control Act (TSCA) amendments in June 2016, EPA established an Interagency Policy Group comprised of other federal agencies with interest and expertise in chemical issues to hold periodic meetings to obtain input on significant actions such as the TSCA Framework rules and potential existing chemical candidates for Prioritization under TSCA. The agencies on the Interagency Policy Group include: The Department of Defense (DOD), Office of Management and Budget (OMB), National Aeronautics and Space Administration (NASA), Department of Labor (DOL), Small Business Administration (SBA), National Institutes of Health (NIH), Consumer Product Safety Commission (CPSC), Food and Drug Administration (FDA) and Centers for Disease Control (CDC). In FY 2020, EPA intends to use this group to review TSCA materials including, but not limited to: risk evaluations for the first chemicals undergoing risk evaluation, and documents related to prioritization of existing chemicals for risk evaluation.

The Agency also engages in biannual meetings with the OMNE[3] Committee, which includes the Occupational Safety and Health Administration (OSHA), Mining Safety and Health Administration (MSHA), National Institute for Occupational Safety and Health (NIOSH) and the National Institute of Environmental Health Sciences (NIEHS). The OMNE Committee exists to provide a venue for federal agencies to share information and coordinate activities regarding proposed rules, risk assessments, and risk management strategies for controlling exposure to chemicals. In FY 2020, this Committee will hold their regular biannual meetings for mid-level technical staff. These meetings comprise discussions on topics not solely pertaining to TSCA, but on technical subjects of interest across member agencies.

Participation in International Agreements addressing Chemical Safety

To participate more effectively in international agreements addressing chemical safety (e.g., persistent organic pollutants [POPs] and mercury), EPA continues to coordinate with other federal agencies, including the Department of State (DOS), Department of Commerce (DOC), and the Department of Health and Human Services (DHHS). EPA also coordinates with federal agencies such as the Agency for Toxic Substances and Disease Registry (ATSDR), NIH and the Consumer Product Safety Commission (CPSC), on matters relating to the work of the (Organisation for Economic Co-Operation and Development (OECD) on test guideline harmonization and other chemical safety program work. EPA also engages in bilateral cooperation and information exchange with the European Chemicals Agency (ECHA), Canada, China, Australia, and others. EPA works closely with the DOS in leading the technical and policy engagement for the United States in the Minamata Convention on Mercury, as well as with the Department of Energy (DOE), FDA and U.S. Geological Survey (USGS).

[3] The OMNE Committee is named for the first letter in each participating agency's name.

Certification and Training, Worker Protection, IPM, and Environmental Stewardship

EPA's Pesticide Program will continue to coordinate with USDA, DOD, Department of the Interior (DOI), and state lead agencies for pesticides, in order to implement the Certification and Training Program for pesticide applicators who use the riskiest pesticides. EPA's Regional Offices also have provided technical guidance and assistance to the states and tribes in the implementation of all pesticide program activities, such as protecting workers, promoting Integrated Pest Management and environmental stewardship. EPA also provides grants to states, tribes and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, environmental groups, and other entities, as necessary, to assist in strengthening and implementing EPA's pesticide activities, such as worker protection, promoting environmental stewardship and Integrated Pest Management.

Assessing Potential Pesticide Risks with Supplemental Data

EPA has relied on data from DHHS and USDA to supplement data from the pesticide industry in order to assist the Agency to assess the potential risks of pesticides in the diets of adults and children. Specifically, EPA relies on food consumption data developed by the DHHS as part of their NHANES (National Health and Nutrition Survey) survey, and is a part of EPA's dietary risk assessment for pesticides and pesticide residue (concentration) data in food commodities, which is generated by the USDA in its Pesticide Data Program (PDP).

Endangered Species & Pollinator Protection

EPA's Pesticides Program will continue collaborating with the USDA, FWS, and NMFS on developing methods for assessing potential risks and effects of pesticides to endangered and threatened species. EPA, in cooperation with USDA, other federal agencies, state agencies, and other entities, will continue to address pesticide risks to bees and other pollinators which are critical to our environment and the production of food crops.

Homeland Security – Protecting Food & Agriculture Sectors

EPA has collaborated with the DOD, DHS, USDA, FDA, FEMA and other federal, tribal and state organizations on a variety of technical and policy homeland security issues. These issues focus on protecting the public and food and agriculture sectors from threats associated with use of chemical and biological agents or from natural disasters. EPA has collaborated with these organizations on research pertaining to effective disinfectants for high threat microorganisms, planning for response to various potential incidents, training and development of policies and guidelines. EPA continues to partner with the OSHA, NIOSH, and CPSC on risk assessment and risk mitigation activities.

Pesticide Program Dialogue Committee (PPDC)

One of the Agency's methods for receiving stakeholder input on pesticide issues has been the Pesticide Program Dialogue Committee (PPDC), a Federal Advisory Committee, that brings together a broad cross-section of knowledgeable individuals from organizations that represent divergent views in order to discuss pesticide regulatory, policy, and implementation issues. The

PPDC consists of members from federal and state government agencies, industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups, and others. The PPDC has provided a structured environment for meaningful information exchanges and discussions, and keeping the public involved in decisions that affect them. Dialogue with outside groups is essential if the Agency is to remain responsive to the needs of the affected public, growers, and industry organizations.

General Research to Support Chemical Safety

EPA's Toxicity Forecaster (ToxCast™) is part of an ongoing multi-agency effort under the Tox21 collaboration MOU. Tox21 has pooled chemical research, data and screening tools from multiple federal agencies including EPA, the NIH and FDA. ToxCast™ has utilized existing resources to develop faster, more thorough predictions of how chemicals may affect human and environmental health. Tox21 and ToxCast™ are currently screening nearly 10,000 environmental chemicals for potential toxicity in high-throughput screening assays at the NIH National Center for Advancing Translational Sciences (NCATS). EPA also has an agreement to provide NCATS funding to support the effort.

Research to Support the Amended Toxic Substances Control Act

EPA is actively collaborating with international groups on research to accelerate the pace of chemical risk assessment and provide greater regulatory certainty for the public and industry. EPA's Chemical Safety for Sustainability (CSS) research program is working with Health Canada and the European Joint Research Center on the development and testing of new non-animal approach methodologies to quickly and cost-effectively evaluate chemicals for safety. The use of these new approach methods will be a critical part of implementing the TSCA strategic plan to reduce, refine and replace the use of vertebrates in toxicity testing and evaluation. EPA also has commenced work with Health Canada and ECHA to promote sharing of non-confidential chemical safety information with the intent of advancing application of chemical evaluations and evaluations across regulatory jurisdictions. This collaborative approach will help the Agency screen, prioritize and evaluate existing chemicals under TSCA Section 6, potentially improve and expedite the evaluation of new chemicals under TSCA Section 5, and promote implementation of alternative methods to replace vertebrate animal testing under TSCA Section 4. Finally, EPA is actively engaged in multiple OECA chemical safety groups. The various groups share information, expertise, and research results related to chemical safety. Ultimately, these international efforts will work towards creating transparent data requirements for industry and reducing the regulatory uncertainty of multiple regulatory environments internationally.

Research to Support Agencywide Risk Assessment Activities

EPA consults and collaborates routinely with other federal agencies about the science of individual Integrated Risk Information System (IRIS) assessments, as well as efforts to prioritize and coordinate chemical evaluations. IRIS maintains an interagency working group that consists of public health agencies (e.g., CDC, ATSDR, NIOSH, and NIEHS), many other agencies (e.g., DOD, NASA, SBA, DOT, DOE, DOI, etc.), and White House offices (e.g., OMB, OSTP, and CEQ). EPA also has coordinated with ATSDR through an MOU on the development of

toxicological reviews and toxicology profiles, respectively. In addition, EPA has contracted with the National Academy of Sciences' National Research Council (NRC) on very difficult and complex human health risk assessments through consultation or review. Most recently, EPA convened an interagency working group, co-chaired by EPA and the Office of Information and Regulatory Affairs (OIRA) in OMB, to review the IRIS Program's progress and enhancements following the 2014 NAS report recommendations. In FY 2018, the NRC convened a public meeting and independently reviewed the progress of the IRIS Program's implementations of the latest NRC recommendations. The NAS concluded that: "overall, EPA has been responsive and has made substantial progress in implementing National Academies recommendations." EPA also participates in the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) to work towards increasing the efficiency and effectiveness of U.S. federal agency test method review, eliminating unnecessary duplication of effort, sharing experience among U.S. federal regulatory agencies, and reducing, refining, and replacing the use of animals in testing where feasible.

Enforcement and Compliance Assurance Programs

General Enforcement Coordination

The Enforcement and Compliance Assurance Program has coordinated closely with:

- DOJ on all civil and criminal environmental enforcement matters. In addition, the Program has coordinated with other agencies on specific environmental issues as described herein;
- The Chemical Safety and Hazard Investigation Board, OSHA, and ATSDR in preventing and responding to accidental releases and endangerment situations;
- DOI's Bureau of Indian Affairs (BIA), and DHHS's IHS on issues relative to compliance with environmental laws in Indian country;
- The DOC and SBA on the implementation of the Small Business Regulatory Enforcement Fairness Act (SBREFA). In addition, it has collaborated with the SBA to maintain current environmental compliance information at Business.gov, a website initiated as an e-government initiative in 2004, to help small businesses comply with government regulations. The IRS on cases that require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws;
- USACE on wetlands issues; and,
- USDA on the regulation of animal feeding operations and on food safety issues arising from the misuse of pesticides and shares joint jurisdiction with the Federal Trade Commission (FTC) on pesticide labeling and advertising.

International Trade

EPA has worked with U.S. Customs and Border Protection (CBP) on implementing the secure International Trade Data System across all federal agencies and on pesticide imports and on hazardous waste and Cathode Ray Tube exports, as well as on a variety of other import/export issues under the various statutes (e.g., imports of vehicles and engines).

Coordination on Issues Involving Shared Jurisdiction

EPA and the FDA share jurisdiction over general-purpose disinfectants used on non-critical surfaces and some dental and medical equipment surfaces. EPA and FDA also have collaborated and shared information on Good Laboratory Program inspections to avoid duplication of inspections and maximize efficient use of limited resources. The Agency has entered into an agreement with the HUD concerning enforcement of the TSCA lead-based paint notification requirements. The Agency has coordinated with the USCG under the Act to Prevent Pollution from Ships, and on discharges of pollutant from ships and oil spills under the CWA. The Enforcement and Compliance Assurance Program also works with the DOI on CWA permit enforcement on the Outer Continental Shelf, as well as both the Interior and Transportation Departments on enforcement of CWA requirements for offshore facilities.

Criminal Enforcement

EPA's Criminal Enforcement Program coordinates with the FBI, CBP, DOL, U.S. Treasury, USCG, DOI and DOJ and with international, state, tribal, and local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also has actively worked with DOJ to establish task forces that bring together federal, state, tribal, and local law enforcement organizations to address environmental crimes. EPA has an Interagency Agreement with DOJ's Environment and Natural Resources Division, to develop the first federal Environmental Crime Victim Assistance Program. This allows both Agencies to meet their statutory obligations under the Crime Victims' Rights Act (CVRA) and the Victims' Rights and Restitution Act (VRRA), to make sure that environmental crime victims are notified of and accorded their rights under the CVRA and VRRA. In addition, the Program has an Interagency Agreement with the DHS to provide specialized criminal environmental training to federal, state, local, and tribal law enforcement personnel at the Federal Law Enforcement Center (FLETC) in Glynco, Georgia.

Monitoring the Environmental Compliance of Federal Agencies

Executive Order 12088 on *Federal Compliance with Pollution Control Standards* directs EPA to monitor compliance by federal agencies with all environmental laws. The Federal Facility Enforcement Program has coordinated with other federal agencies, states, tribes, and local governments to ensure compliance by federal agencies with all environmental laws. EPA works through the Federal Facilities Environmental Stewardship and Compliance Assistance Center (www.fedcenter.gov), which is now governed by a board of more than a dozen contributing federal agencies. EPA also partners with other federal agencies to identify ways to expedite cleanup of Superfund sites and prevent and address regulatory compliance issues. For example, EPA meets quarterly with the DOD on general compliance matters and participates in a periodic dialogue with the DOE on cleanup matters.

The Enforcement and Compliance Assurance programs, together with EPA's International Program, has provided training and capacity building to foreign governments to improve their compliance and enforcement programs. This support has helped create a level playing field for U.S. businesses engaged in global competition, helped other countries improve their environmental conditions, and ensured U.S. compliance with obligations for environmental

cooperation as outlined in various free trade agreements. In support of these activities, EPA has worked closely with DOS, USAID, USTR, DOJ, USFS, DOI and the International Law Enforcement Academies. EPA also has participated in the OECD Mutual Acceptance of Data program, designed to garner international recognition of testing data in support of pesticides and chemical registrations.

Superfund Enforcement

The Enforcement and Compliance Assurance program coordinates with other federal agencies in their use of CERCLA enforcement authority. This includes the coordinated use of CERCLA enforcement authority at individual hazardous waste sites that are located on both nonfederal land (EPA jurisdiction) and federal lands (other agency jurisdiction). As required by Executive Order 13016 amending Executive Order 12580, EPA also reviews and concurs on the use of CERCLA Section 106 authority by other departments and agencies. In addition, EPA coordinates closely with Federal Land Management Agencies (FLMAs), such as BLM and USFS at mixed ownership sites (*i.e.*, those sites located partially on privately-owned land and partially on federally-owned land) pursuant to Executive Order 12580. EPA frequently enters into Memoranda of Understanding with FLMAs designed to provide a framework for agencies to coordinate response actions (e.g., EPA to be the lead agency [as defined in the NCP 300.5] for response actions involving a parcel, project, or operable unit located on the privately-owned portion of a site, and the FLMA to be the lead agency for response actions involving a parcel, project, or operable unit located on federally-owned lands). Most recently, as part of the Superfund Task Force Recommendations, EPA has been working on a memorandum with FLMAs to improve to improve the efficient and effective use of federal resources to cleanup at mixed ownership mining sites. EPA also meets quarterly with DOI and USDA, as part of the Federal Mining Dialogue (an interagency working group), to discuss developments arising out of the CERCLA work at mixed ownership sites.

EPA also coordinates with Natural Resource Trustees (DOI, USDA, DOC, DOE and DOD) to ensure that appropriate and timely notices, required under CERCLA, are sent to the Natural Resource Trustees notifying them of potential damages to natural resources. EPA also coordinates with Natural Resource Trustees on natural resource damage assessments, investigations, and planning of response activities under Section 104 of CERCLA. When an enforcement action is initiated at a site where hazardous substances are found to have caused damages to natural resources, EPA coordinates with the Natural Resource Trustees by including them, where appropriate, in negotiations with potentially responsible parties concerning the releases that have caused those damages.

EPA has an interagency agreement with DOJ for ongoing legal representation, litigation, and associated costs related for the Superfund Enforcement Program. DOJ also provides assistance to EPA with judicial referrals seeking recovery of response costs incurred by the U.S., injunctive relief to implement response actions, or enforcement of other CERCLA requirements.

Under Executive Order 12580, EPA's Superfund Federal Facilities Enforcement Program assists federal agencies in complying with CERCLA, and ensured that: (1) all federal facility sites on the National Priorities List have interagency agreements, also known as Federal Facility Agreements

(FFAs) with enforceable cleanup schedules; (2) FFAs are monitored for compliance; (3) federal sites are transferred to new owners in an environmentally responsible manner; and (4) compliance assistance is available to the extent possible. This program also ensures that federal agencies comply with Superfund cleanup obligations "in the same manner and to the same extent" as private entities. To enable the cleanup and reuse of such sites, the Federal Facilities Enforcement Program also has coordinated creative solutions that help restore facilities, so they can once again serve an important role in the economy and welfare of local communities, and the country.

International and Tribal Affairs Programs

Supporting Global Policy Reducing Persistent, Bioaccumulative and Toxic Chemicals

EPA has developed a strong network of government, private sector and non-governmental partners working to achieve reductions in global mercury use and emissions, particularly when adverse U.S. impacts would be likely. EPA works closely with the DOS in leading the technical and policy engagement for the United States in the Minamata Convention on Mercury and the multi-stakeholder Global Mercury Partnership. In addition to the DOS, EPA collaborates closely with several federal agencies including USGS and USAID to advance robust implementation of the Minamata Convention by other countries. EPA also continues to share information through the Arctic Council on reducing releases of mercury which disproportionally impact indigenous arctic communities. Similarly, EPA is engaged in a multi-pronged effort to address the growing global problem of marine litter. In this effort we work closely with the DOS, NOAA, Peace Corps, and USAID to advance policy and technical solutions in global fora including the G7, the G20 and the United Nations Environment Assembly.

Supporting Environmental Priorities in Global Trade Policy and Implementation of Environmental Cooperation Agreements

EPA has played a key role in ensuring that trade-related activities sustain environmental protection since the 1972 Trade Act mandated interagency consultation by USTR on trade policy issues. EPA is a member of the Trade Policy Staff Committee (TPSC) and the Trade Policy Review Group (TPRG), interagency mechanisms that are organized and coordinated by USTR to provide advice, guidance, and clearance to the USTR in the development of U.S. international trade and investment policy.

EPA either leads or cooperates with DOS and other USG agencies to support implementation of environmental, ecosystems and human health protections in environmental cooperation agreements, or their equivalent, associated with U.S Free Trade Agreements. In North America, EPA represents the USG on the Commission for Environmental Cooperation and collaborates with the U.S. interagency (NOAA, CDC, DOI, FWS, DOS, USTR, DOC, and others) to develop and implement environmental, ecosystem, human health and sustainable growth cooperation with Canada and Mexico. EPA also works with the DOC to promote the export of U.S. environmental technologies, and with the U.S. Treasury to ensure adherence to environmental safeguards in the context of multilateral development bank project lending.

Addressing Transboundary Pollution

EPA collaborates with countries around the world to address foreign sources of pollution. This includes collaboration with China, West Africa, and U.S. neighbors Canada and Mexico and is done coordinated with DOS, USAID, DOJ, Treasury, and other USG agencies.

The World Health Organization recognizes air pollution as a major global health threat.[4] EPA works closely with the DHHS to advance recognition of environmental risk factors of non-communicable diseases (NCDs) and how to mitigate the risks, including from lead and mercury. In addition, EPA will continue to strengthen our activities in the Arctic by working with Alaska, tribes, federal agencies, and the private sector to build international support for U.S. environmental policy objectives through the Arctic Council. These objectives cover a range of topics, including reducing emissions and exposure to mercury and short-lived climate pollutants - black carbon,[5] in particular.

Working in Indian Country

To better coordinate the federal government's efforts in providing access to safe drinking water and basic wastewater facilities for tribal communities, EPA works under a five-federal agency MOU. EPA, DOI, DHHS, USDA, and HUD work as the Federal Tribal Infrastructure Task Force (TITF) to use their combined authorities to maintain a framework to enhance interagency efficiency and coordination, and to cultivate greater cooperation in carrying out their tribal infrastructure responsibilities.

Specifically, since 2007, the TITF has: maintained procedures necessary for a common understanding of the programs pertaining to funding infrastructure construction, solid waste management efforts, and technical assistance to tribes; worked together to improve the capacity of tribal communities to operate and maintain sustainable infrastructure; enhanced the efficient leveraging of funds; worked directly with tribes to promote an understanding of federal programs; identified ways to improve construction, operation, and maintenance of sustainable infrastructure; and worked to allow and facilitate the exchange of data and information amongst the partners.[6]

[4] Political Declaration adopted at the 3rd High Level Meeting on Prevention and Control of Non-Communicable Diseases and by the U.N General Assembly (UNGA) on 10 October 2018 (http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/73/2); World Health Organization, "Air Pollution Exposure and Noncommunicable Diseases" background document, October 2018, https://www.who.int/airpollution/events/conference/AP_exposure_and_NCDs_background.pdf?ua=1.

[5] For more information, please see: https://oaarchive.arctic-council.org/handle/11374/1936.

[6] For more information, please see https://www.epa.gov/tribal/federal-infrastructure-task-force-improve-access-safe-drinking-water-and-basic-sanitation.

Internal Operations Programs

Central Planning, Budgeting and Finance Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA participates and makes active contributions to standing interagency management committees, including:

- the Chief Financial Officers Council focuses on improving resources management and accountability throughout the federal government;
- the Performance Improvement Council coordinates and develops strategic plans, performance plans, and performance reports as required by law;
- numerous OMB-led E-Government initiatives such as the Financial Management and Budget Formulation and Execution Lines of Business;
- the Bureau of Census maintains the Federal Assistance Awards Data System; and
- the President's Management Council oversees developing and implementing Cross-Agency Priority (CAP) goals. CAP goals are designed to overcome barriers and achieve better performance than one agency can achieve on its own.

Provide Government-to-Government Employee Relocation Services

EPA provides government-to-government employee relocation services via interagency agreements through EPA's Federal Employee Relocation Center (FERC) as a Working Capital Fund (WCF) activity. EPA-FERC provides "one-stop shop" domestic and international relocation services to other federal agencies to increase operational efficiency and save the government money. EPA-FERC currently provides relocation services internally to all EPA regions and program offices, and externally to the Transportation Security Administration (TSA), Department of Labor (DOL), Office of Personnel Management (OPM), United States Patent and Trademark Office (USPTO), DHHS and the USDA. EPA also coordinates appropriately with Congress and other federal agencies, such as the U.S. Treasury, the Government Accountability Office (GAO), and GSA.

Administration and Resources Management Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA provides leadership and expertise to government–wide activities in various areas of human resources, grants management, contracts management, suspension and debarment, and homeland security. These activities include specific collaboration efforts with federal agencies and departments through:

- The Chief Human Capital Officers Council, a group of senior leaders that discuss human capital initiatives across the federal government.

- The Legislative and Policy Committee, a committee comprised of other federal agency representatives who assist the OPM in developing plans and policies for training and development across the government.

- The Chief Acquisition Officers Council, the principal interagency forum for monitoring and improving the federal acquisition system. The Council also is focused on promoting the President's specific initiatives and policies in all aspects of the acquisition system.

- The Award Committee for E-Government (E-Gov) provides strategic vision for the portfolio of systems/federal wide supporting both federal acquisition and financial assistance. Support also is provided to the associated functional community groups, including the Procurement Committee for E-Gov, the Financial Assistance Committee for E-Gov, and the Intergovernmental Transaction Working Group.

- The Interagency Suspension and Debarment Committee (ISDC), a representative committee of federal agency leaders in suspension and debarment. The Committee facilitates lead agency coordination, serves as a forum to discuss current suspension and debarment related issues, and assists in developing unified federal policy. Besides actively participating in the ISDC, EPA: 1) provides instructors for the National Suspension and Debarment Training Program offered through the Federal Law Enforcement Training Center, and 2) supports the development of coursework and training on the suspension and debarment process for the Inspector General Academy and the Council of the Inspectors General on Integrity and Efficiency.

- The Financial Management Line of Business (FMLoB) has been expanded to also encompass the Grants Management Line of Business. The combined FMLoB, with the Department of Treasury as the managing partner, will more closely align the financial assistance and financial management communities around effective and efficient management of funds. EPA also participates in the Grants.gov Users' Group, as well as the Federal Demonstration Partnership which is designed to reduce the administrative burdens associated with research grants.

- The Partnership for Sustainable Communities initiative, a collaborative effort with HUD and DOT, improves the alignment and delivery of grant resources to communities designated under certain environmental programs. It also helps identify cases in the program that may warrant consideration of suspension and debarment.

- The Interagency Committee on Federal Advisory Committee Management (Committee Management Officer Council) provides leadership and coordination on federal advisory committee issues and promotes effective and efficient committee operations government-wide. In addition to serving on the Council, EPA works with the GSA Committee Management Secretariat to establish and renew advisory committees, conduct annual reviews of advisory committee activities and accomplishments, maintain committee information in a publicly accessible online database, and develop committee management regulations, guidance, and training. Further, the Office of Mission Support (OMS)

participates on the GSA Federal Advisory Committee Act (FACA) Attorney Council Interagency Workgroup to keep abreast of developments in the statutory language, case law, interpretation and implementation of the FACA.

- The Interagency Security Committee (ISC) is the leading organization for nonmilitary federal departments and agencies in establishing policies for the security and protection of federal facilities, developing security standards and ensuring compliance with those standards. EPA participates in the ISC as a primary member and in sub-committees and workgroups to facilitate EPA's compliance with ISC standards for facilities nationwide.

- The Office of Personnel Management Background Investigations Stakeholder Group (BISG) is a collaborative organization that is derived from the Intelligence Reform and Terrorism Prevention Act of 2004. The BISG is comprised of senior security officials across the federal government who are responsible for the submission, adjudication and/or oversight of personnel security programs. EPA works with this group regularly to discuss topics regarding back ground investigations, focusing on standardizing and improving the Agency's personnel security program.

- EPA manages the Senior Environmental Employment (SEE) Program's interagency agreements with other federal agencies. The interagency agreements are with the White House Council on Environmental Quality, the Federal Highway Administration, the National Oceanic and Atmospheric Administration, and the Gulf Coast Ecosystem Restoration Council. SEE participants provide administrative, technical, and professional support to these agencies for projects relating to pollution prevention, abatement, and control.

- EPA's Office of Administrative Law Judges (OALJ) partners with the Patent & Trademark Office, the National Oceanographic and Atmospheric Administration, the Alcohol and Tobacco Tax and Trade Bureau, the Merit Systems Protection Board, and the Equal Employment Opportunity Commission to serve as Presiding Officers for proceedings to adjudicate complaints brought before the partner organizations. This collaboration allows partner organizations the ability to provide constitutionally guaranteed legal due process and review without staffing and supporting their own office of Administrative Law Judges, while EPA's judges expand their experience and knowledge in the area of Administrative Law. The services OALJ provides to other agencies are reimbursed by the borrowing organization.

Collaboration in Implementing GrantSolutions *Software*

Starting in FY 2018, EPA began working with the DHHS in implementing *GrantSolutions,* an OMB-selected grants business leader for end-to-end grants management services. EPA will join ten other Cabinet Level and Independent Partner Agencies in adopting *GrantSolutions* software, which supports the full 14 stages of the Grants Management Lifecycle and interfaces with EPA's financial system for award processing and close out actions.

Work with the Department of Interior's Interior Business Center

In addition, throughout FY 2019 and FY 2020, OMS will continue working with DOI's Interior Business Center (IBC), an OPM and OMB approved Human Resources Line of Business shared service center. IBC offers HR transactional processing, compensation management and payroll processing, benefits administration, time and attendance, HR reporting, talent acquisition systems, and talent management systems. EPA also continues its charter membership on the OPM HR Line of Business Multi Agency Executive Strategy Committee (MAESC), providing advice and recommendations to the Director of OPM as well as additional government-wide executive leadership, for the implementation of the HR Line of Business vision, goals, and objectives.

Partnering with GSA on the USAccess *Program*

EPA also is partnering with GSA on: the *USAccess* Program for Personal Identity Verification cards and identity credential solutions, which provides an efficient, economical and secure infrastructure to support agencies' credentialing needs, and migrations to the Enterprise Physical Access Control System, which allows the Agency to control access in EPA space, including restricted and secure space.

Environmental Information Programs

To support EPA's overall mission, EPA collaborates with a number of other federal agencies, states, and tribal governments on a variety of initiatives, including making government more efficient and transparent, protecting human health and the environment, and assisting in homeland security. OEI is primarily involved in the information technology (IT), information management (IM), and information security aspects of the projects on which it collaborates.

The Chief Information Officer (CIO) Council

The CIO Council is the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of federal information resources. The Council develops recommendations for IT/IM policies, procedures, and standards; identifies opportunities to share information resources; and assesses and addresses the needs of the federal IT workforce.

eRulemaking

The eRulemaking Program's mission encompasses two areas: (1) to improve public access, participation in, and understanding of the rulemaking process; and (2) to improve the efficiency and effectiveness of Agency partners' notice and comment process when promulgating regulations. The eRulemaking Program maintains a public website, http://www.regulations.gov/, which enables the public to access and submit comments on various documents that are published in the Federal Register, including proposed regulations and Agency-specific notices. The Federal Docket Management System (FDMS) is the agency side of Regulations.gov. FDMS enables agencies to administer public submissions regarding regulatory and other documents posted by the agencies on the Regulations.gov website. The increased public access to the agencies' regulatory process enables a more informed public to provide supporting technical/legal/economic analyses to strengthen the agencies' rulemaking vehicles. The PMO, located at EPA, coordinates the

operations of the eRulemaking Program through its 40 partner departments and independent agencies (comprising more than 178 agencies, boards, commissions, and offices). The administrative committee structure works with the PMO on day-to-day operations, ongoing enhancements and long-range planning for program development. The Executive Steering Committee and the Advisory Board have representative members from each partner agency and deal with contracts, budget, website improvements, improved public access, records management, and a host of other regulatory concerns that were formally only agency-specific in nature. Coordination and leadership from the OMB, Office of Information and Regulatory Affairs, and partner agencies allows for a more uniform and consistent presentation of rulemaking dockets across government. This coordination is further demonstrated by the fact that more than 90 percent of all federal rules promulgated annually are managed through the eRulemaking Program. In FY 2020, EPA will work with the OMB and the General Services Administration (GSA) towards transferring management services to GSA.

Freedom of Information Act (FOIA)

EPA serves as the lead for the *FOIAonline*, a multi-agency solution that enables EPA and partner agencies to meet their responsibilities under FOIA while creating a repository of publicly released FOIA records for reuse. Partner agencies include, but are not limited to, DOC, CBP, DOD, SBA, and DOJ. Through *FOIAonline*, the public has the ability to submit and track requests, search and download requests and responsive records, correspond with processing staff, and file appeals. Agency users are provided with a secure, login-access website to receive and store requests, assign and process requests (and refer to other agencies), post responses online, produce the annual FOIA report to DOJ, and manage records electronically.

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed OMB and DOJ to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of the National FOIA Portal. EPA and other federal agencies will be expected to contribute to this effort.

The National Environmental Information Exchange Network (EN)

EPA's EN Program and CBP are coordinating on using the Automated Commercial Environment (ACE) system. This coordination will lead to automated processing of over 2.8 million EPA-related electronic filings needed to clear legitimate imports and exports at the ports. With the move from paper filings to electronic filings combined with automated processing through ACE, filing time can be reduced from weeks/days to minutes/days. This significant processing improvement directly impacts the movement of goods into commerce and the economy while helping to ensure compliance with environmental and CBP laws and regulations. It also helps the U.S. Government keep pace with the speed of business.

The EN also is coordinating with multiple agencies via the Broadband Interagency Working Group chaired by the National Transportation and Information Agency to increase broadband access. Access to broadband is critical to fully participating in the EN and is of particular concern for tribes who often lack this access. EPA will participle on current and future workgroups to

implement Presidential actions to promote the use of broadband in rural America. This includes tribal lands. EPA is currently represented on the workgroup, Leveraging Federal Assets (co-chaired by DOI and GSA).

Automated Commercial Environment/International Trade Data System (ACE/ITDS)

ITDS is the electronic information exchange capability, or "single window," through which businesses will transmit data required by participating agencies for the import or export of cargo. ACE is the system built by CBP to ensure that its customs officers and other federal agencies have the information they need to decide how to handle goods and merchandise being shipped into or out of the United States. It also will be the way those agencies provide CBP with information about potential imports/exports. ITDS eliminates the need, burden and cost of paper reporting. It also allows importers and exporters to report the same information to multiple federal agencies with a single submission, and facilitates movement of cargo by automating processing of the import and exports. ITDS provides the capability for industry to consolidate reporting for commodities regulated by multiple agencies. For these consolidated reports, the industry filers will receive the appropriate status response when their filings meet each agency's reporting requirements. Once all agency reporting requirements have been met, filers can receive a coordinated single U.S. government response to proceed into the commerce of the United States.

EPA has the responsibility and legal authority to make sure pesticides, toxic chemicals, vehicles and engines, ODS, and other commodities entering and hazardous waste exiting the country meet its human health and environmental standards. EPA's ongoing collaboration with CBP on the ACE/ITDS effort will improve the efficiency of processing these shipments through information exchange between EPA and CBP and automated processing of electronic filings. As resources permit, EPA will continue to work with CBP towards the goal to automate the current manual paper review process for admissibility so that importers and brokers (referred to collectively as Trade) can know before these commodities are loaded onto an airplane, truck, train, or ship if their shipment meets EPA's reporting requirements. Because of this automated review, trade can greatly lower its cost of doing business and customs officers at our nation's ports will have the information on whether shipments comply with our environmental regulations.

Geospatial Information

EPA works with DOI, NOAA, USGS, NASA, USDA, and DHS on developing and implementing geospatial approaches to support various business areas. It also works with 25 additional federal agencies through the activities of the federal Geographic Data Committee (FGDC) and the OMB Geospatial Line of Business (Geo LoB), for which EPA leads several key initiatives. EPA also participates in the FGDC Steering Committee and Executive Committee and is part of the Geospatial Data Act Implementation Tiger Team. A key component of EPA's work with FGDC is developing and implementing the National Spatial Data Infrastructure (NSDI) and the National *GeoPlatform*. The key objective of the NSDI is to make a comprehensive array of national spatial data – data that portrays features associated with a location or tagged with geographic information and can be attached to and portrayed on maps – easily accessible to both governmental and public stakeholders. Use of this data, in tandem with analytical applications, supports several key EPA and government-wide business areas. These include ensuring that human health and environmental

conditions are represented in the appropriate contexts for targeting and decision making; enabling the assessment, protection and remediation of environmental conditions; and aiding emergency first responders and other homeland security activities. EPA supports geospatial initiatives through efforts such as EPA's Geospatial Platform, EPA's Environmental Dataset Gateway, the EN, National Environmental Policy Act (NEPA) Assist, EPA Metadata Editor, Facilities Registry System (FRS) Web Services, and *My Environment*. EPA also works closely with its state, tribal, and international partners in a collaboration that enables consistent implementation of data acquisition and development, standards, and technologies supporting the efficient and cost-effective sharing and use of geographically-based data and services.

The Administrator's Office

Overall Operations

EPA's Office of the Administrator (AO) supports the leadership of the Agency's programs and activities. Several program responsibilities include congressional and intergovernmental relations, regulatory management and economic analysis, program evaluation, intelligence coordination, the Science Advisory Board, children's health, the small business program, environmental training, and outreach.

Regulatory Management

EPA's Office of Policy (OP) interacts with many federal agencies during its rulemaking activities. Per governing statutes and agency priorities, OP submits "significant" regulatory actions to OMB for interagency review prior to signature and publication in the *Federal Register*. In addition, OP coordinates EPA's review of other agency's regulatory actions submitted to OMB for review. Under the Congressional Review Act, rules are submitted to each House of Congress and to the Comptroller General of the United States. OP reviews, edits, tracks, and submits regulatory actions and other documents that are published by the Office of the Federal Register. For regulations that may have a significant economic impact on a substantial number of small entities, OP collaborates extensively with the Small Business Administration and OMB. Finally, OP also leads EPA's review of draft Executive Orders and Presidential Memoranda.

Economic Analysis

From time to time, OP collaborates with other federal regulatory and natural resource agencies (e.g., the USDA, the DOE, DOI, and NOAA) to collect economic data used in the conduct of economic cost-benefit analyses of environmental regulations and policies and to foster improved interdisciplinary research and reporting of economic information. This is achieved in several ways, such as representing EPA on interagency workgroups or committees tasked with measuring the economic costs and benefits of federal policies and programs.

Children's Health

The Administrator of EPA and the Secretary of DHHS co-chair the President's Task Force on Environmental Health Risks and Safety Risks to Children. The Task Force comprises 17 federal

departments, agencies and White House offices. A senior staff steering committee, co-chaired by the Director of EPA's Office of Children's Health Protection **(**OCHP), coordinates interagency cooperation on Task Force priority areas. As part of this effort, this program may coordinate with other related agencies to improve federal government-wide support in implementing children's health legislative mandates and children's health outreach. This may include providing children's environmental health expertise on interagency activities and coordinating expertise from program offices.

The Inspector General

Work with the Council of Inspectors General on Integrity and Efficiency (CIGIE)

EPA's Inspector General is a member of the Council of Inspectors General on Integrity and Efficiency (CIGIE), an organization comprised of federal Inspectors General (IGs), GAO, and the FBI. The CIGIE coordinates and improves the way IGs conduct audits, investigations, and internal operations. The CIGIE also promotes joint projects of government-wide interest and reports annually to the President on the collective performance of the IG community.

Activity Coordination, Information Exchange and Training

EPA's OIG coordinates criminal investigative activities with other law enforcement organizations such as the FBI, Secret Service, and DOJ. In addition, the OIG participates with various inter-governmental audit forums and professional associations to exchange information, share best practices, and obtain or provide training. The OIG also promotes collaboration among EPA's partners and stakeholders in its participation of disaster response and its outreach activities.

Collaborative Work with Inspectors General and Other Partners

EPA's OIG initiates and participates in collaborative audits, program evaluations, and investigations with OIGs of agencies with an environmental mission such as the DOI, USDA, as well as other federal, state, and local law enforcement agencies as prescribed by the IG Act, as amended.

Statutory Duties

As required by the IG Act, EPA's OIG coordinates and shares information with the GAO. EPA's OIG currently serves as the Inspector General of the U.S. Chemical Safety and Hazard Investigations Board (CSB). EPA's OIG will continue to perform its duties with respect to the CSB until otherwise directed.

Major Management Challenges

Introduction

Consistent with requirements in the Reports Consolidation Act of 2000, the Office of Inspector General (OIG) identifies what they consider the most serious management challenges facing the Agency and assesses the Agency's progress in addressing those challenges. The Environmental Protection Agency has established procedures for addressing its major management challenges. The Agency uses audits, reviews, and program evaluations conducted internally and by the OIG, the Government Accountability Office, and the Office of Management and Budget to assess program effectiveness and identify potential management issues. The Agency recognizes that management challenges, if not addressed adequately, may prevent the Agency from effectively meeting its mission. EPA remains committed to addressing all management issues in a timely manner and to the fullest extent of its authority.

The following discussion summarizes each of the FY 2018 management challenges identified by the OIG and presents the Agency's responses.

1. EPA Needs to Improve Oversight of States, Territories and Tribes Authorized to Accomplish Environmental Goals

***Summary of Challenge**: The OIG believes that EPA's oversight of states, territories and tribes authorized to implement environmental programs under several statutes remains a key management challenge. The OIG notes that while progress has been made, challenges remain throughout Agency programs and many recommendations have not been fully implemented.*

Agency Response: EPA recognizes states have the primary role in implementing many federal programs, while EPA maintains responsibility and accountability for upholding the rule of law, advancing national environmental goals and ensuring that federal statutes are consistently implemented and enforced. As part of the Agency's reform plan on tailoring oversight of delegated federal programs, EPA will define, develop, pilot, evaluate and launch a comprehensive system to evaluate implementation of federal environmental programs by 2020. In FY 2018, EPA established an Oversight Workgroup comprised of headquarters and regional representatives, charged with baselining the current state of the Agency's oversight activities, analyzing the variations of oversight activities between regions and states and working to standardize work flows. With input from the Environmental Council of States (ECOS), EPA will streamline, reduce and tailor its oversight activities to focus on national program integrity and technical assistance as needed.

EPA is working to design a comprehensive and consistent shared governance approach to evaluate the implementation of delegated federal programs. Shared governance is the concept where management of federal environmental programs is shared with state, tribal, or local governments. In collaboration with the Environmental Council of the States, EPA is developing a new oversight framework that tests this concept across the regions for the NPDES and Title V programs. This framework is comprised of two documents: 1) Principles to guide oversight of the delegated federal programs, including recognition of primacy, standards of review, effective communication, and elevation of issues, and 2) Template to guide region-state/tribal discussion around oversight

activities including standard work, timelines, and the process for dispute resolution. Together, these will document the shared governance approach.

Efforts the Agency has taken to address this management challenge include the following:

- Baselined statutorily-required and discretionary oversight activities.
- Establishing a principles document to guide oversight of federal environmental programs delegated to states, territories and tribes.
- Piloted a template to establish clear expectations on oversight activities for an air permitting program (Title V) and a water permitting program.

In consultation with ECOS, EPA will make changes to the templates, before rolling out the new oversight processes in FY 2019 for the air and water permitting programs. As a goal for 2020, EPA also will work with ECOS to decide on the next set of program areas to target. With ECOS, EPA will use these identified program areas to gradually implement additional programs to utilize the template and apply the oversight principles captured in the principles memo.

EPA has a long-term performance goal supporting Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 – 2022 EPA Strategic Plan:* "By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews" and a supporting FY 2020 annual performance goal "Number of alternative shared governance approaches to address state, tribal, and local community reviews."

Responsible Agency Official: Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations

2. EPA Needs to Improve Its Workload Analysis to Accomplish Its Mission Efficiently and Effectively

Summary of Challenge: *The OIG believes that EPA has not fully implemented controls and a methodology to determine workforce levels based upon analysis of the Agency's workload. EPA's program and regional offices have not conducted a systematic workload analysis or identified workforce needs for budget justification purposes. EPA's ability to assess its workload and estimate workforce levels necessary to carry out that workload is critically important to mission accomplishment.*

Agency Response: EPA believes it has effectively used workload analyses to examine several critical processes, including grants and IT security. EPA Lean Management System efforts, and multi-year planning initiatives will offer additional options for addressing priority work. Current *kaizen* efforts include state oversight, EPA's field presence, flexibility in state and tribal assistance, community and infrastructure investments, FOIA responses, reporting requirements, EPA laboratories, environmental permitting, and acquisitions

The Agency agrees with prior OIG recommendations about the importance of grants management,[7] since grants are the largest type of Agency spending with the most direct effect on

[7] For more information see: https://www.epa.gov/office-inspector-general/report-improved-oversight-epas-grant-monitoring-program-will-decrease-risk.

our state and tribal partners. In the last few years, the Agency conducted workload analyses related to the Agency's management of grants to examine workload by Project Officer, Grants Specialists and other metrics and used results to update policies, processes and procedures.

The Superfund program will develop a multi-year FTE plan, review Army Corps of Engineers and Naval Facilities Engineering Command workload management and FTE distribution practices, and implement a national risk-based prioritization of all sites. The Agency will explore how to coordinate certain enforcement functions where specialists in one region provide expertise to several other regions.

In addition to these efforts, in the last few years, EPA conducted workload analysis for:

- IT security officers - Information Security Task Force analyses of Information Security Officer duties
- Funds Control Officers – FCO workload including contracts, payroll, travel, etc.
- Fee-related duties within the OCFO – Existing and new fees workload

Targeted analyses will also contribute to the Agency's multi-year approach to resource and workforce planning by helping identify potential investment opportunities and informing workforce decisions. The multi-year effort will advance the Agency's planning capabilities and identify strategic priorities and opportunities and help inform decisions of how best to align resources and FTE with the Agency's priorities.

Additionally, the budget process incorporates FTE reviews and allocations. In 2018, FTE were re-allocated to better align with the Agency's new strategic goals and objectives.

As the OIG acknowledges, EPA's highly variable, multi-year, and non-linear functions and activities limit the utility of detailed FTE-based workload analyses to determine precise FTE levels. The Agency deliberately discontinued using comprehensive workload analyses because they require substantial work to develop, maintain and refine, and quickly become out of date, particularly when the Agency is in the midst of numerous efforts to improve processes. The Agency believes these difficulties are why it has been unable to find examples of agencies similar to EPA using comprehensive workload models in their budget formulation FTE decision-making processes. However, EPA believes there is value in using trend and macro-level workload reviews to estimate program needs and using workload analyses of task-driven functions.

Responsible Agency Official: Maria Williams, Acting Director, Office of Budget

3. Enhancing Information Technology Security to Combat Cyber Threats

Summary of Challenge: *The OIG acknowledges that the Agency continues to initiate actions to further strengthen or improve its information security program. However, the Agency lacks a holistic approach to managing accountability over its contractors, and lacks follow-up on corrective actions taken.*

Agency Response: The Agency is committed to protecting its information and technology assets. EPA understands the prevalence and complexity of the ever-growing cyber security attacks and is

aware of the potential impact to the Agency's mission if information assets are compromised. The Agency has established and implemented adequate processes for tracking audit recommendations and the status of corrective actions that will help address concerns associated with this management challenge.

The Agency is working internally to develop a process to train Contract Officer Representatives on their responsibilities for monitoring the contractors to ensure they meet specified information security responsibilities. This includes:

- Monitoring contractors that operate information systems on behalf of EPA to ensure they perform the mandated information security assessments.
- Ensuring that contractors with significant information security responsibilities complete role-based training.

EPA's Office of Mission Support (OMS), in coordination with the Office of General Counsel, developed standard security language to help ensure contractors implement and follow EPA and federal information security directives. The language is incorporated in the Agency's Environmental Protection Agency Acquisition Guide (EPAAG). During Federal Information Technology Acquisition Reform Act review, staff in the Office of Information Security and Privacy check for the inclusion of the EPAAG Subsection 39.1.2 Cybersecurity Tasks[8] in the appropriate documents.

Additional efforts the Agency has taken to address this management challenge include the following:

- Requires Senior Information Officials to annually submit a written certification of the status of security training for all contractors with significant security responsibility in the SIOs areas of responsibility. The certifications are tracked and maintained by staff that report to the Chief Information Security Officer.
- Developed and is following an Information Security Strategic Plan to improve the Agency's security posture. To facilitate plan implementation, EPA is working closely with the Department of Homeland Security and the General Services Administration to leverage to the greatest extent possible all Continuous Diagnostics and Mitigation phases.
- Chartered an information security task force to identify how best to implement CISO improvement recommendations. The Agency implemented ISTF implementation recommendations for centralizing and consolidating cyber security functions.
- Developed and published procedures covering all agency information and information systems to include information and information systems used, managed, or operated by contractors, other agencies, or other organizations on behalf of EPA.

Responsible Agency Official: Robert McKinney, Director, Office of Information Security and Privacy

[8] For more information see: https://oamintra.epa.gov/?q=EPAAG.

4. EPA Needs to Improve on Fulfilling Mandated Reporting Requirements

Summary of Challenge: *OIG believes the Agency faces challenges in tracking and submitting reports mandated by law that contain key program information for Congress, the Administrator and the public. The Agency needs to make a comprehensive effort to address this issue. Specifically, EPA leadership needs to develop and implement a process for tracking and submitting required reports, including devoting the people and resources required to reduce risks, and establishing processes for reporting and accountability.*

Agency Response: The OIG identified instances across five programs where EPA has failed to meet legal reporting requirements to Congress between 2010 and 2018. EPA leadership is committed to making a comprehensive effort to address this issue across the Agency by reducing the missing reports, identifying the causes of not issuing reports, with targeted plans to address the causes, and implementing corrective actions to address these issues.

EPA recognizes the importance of tracking and submitting Congressionally-mandated reports to ensure legislative requirements are achieved. Working internally, the Agency has determined that the ADP Tracker is a viable system to capture and store the comprehensive reporting as provided in environmental statutes. Currently, the Agency is exploring how the system can be expanded to include the universe of reports that are identified in EPA's annual appropriations process. To date, the Agency has:

- Met with stakeholders to identify the Agency systems with functionality to capture and report on the required tracking
- Reminded all agency decision makers that all new legislative reporting requirements need to be included in the ADP Tracker.
- Working with internal stakeholders to determine and better define the universe of information that needs to be included in the system.

Responsible Agency Official: Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations

5. EPA Needs to Improved Data Quality for Program Performance and Decision-Making

Summary of Challenge: *According to recent OIG reports poor data quality negatively impacts EPA's effectiveness in overseeing programs that directly impact public health. These reports point to a systemic problem with data quality, making data analysis more difficult and less reliable.*

Agency Response: Under the Clinger Cohen Act (1996), EPA Chief Information Officer in the Office of Mission Support (OMS) has delegated authority for information quality including oversight responsibility for EPA's mandatory Quality Program. OMS issues the Agency's Quality Policy and Procedure for Environmental Programs that mandate implementation of a Quality Management System for all EPA programs involved with environmental data operations and organizations funded by EPA submitting data and information for EPA's use in programmatic decisions. The Agency's Quality Program is decentralized and implemented by the National Program Offices and regions with specific responsibilities for assuring the quality of data produced and used are appropriate for their programmatic decisions.

OMS routinely assesses implementation for conformance to the Agency's Quality Policy and effectiveness of the QA practices and management controls implemented by the individual organization. These Quality System Assessments identify best practices, opportunities for improvement and vulnerabilities that may potentially impact the agencywide Quality Program. OMS develops tools and processes to guide consistent implementation of quality across the Agency. One such tool is the Quality Assurance Project Plan that defines a systematic approach for planning, collecting, assessing and documenting quality assurance requirements at the project level. The organization determines the quality and utility of the results of the data and information based on program needs. Organizations report annually to OMS on their QA accomplishments. Cross-cutting issues on agencywide vulnerabilities, risks, success, areas for continuous improvement or resources needs are reported to the CIO.

OMS does not view the data quality issue raised by the OIG as a management challenge. It is critical that the data supporting enforcement, regulatory and other program decisions be based on sound, defensible data. OMS plans to revise the Agency's Quality policy to clarify that it is the responsibility of program and regional offices senior management to ensure that these data are of the appropriate quality for those uses.

Responsible Agency Official: Vincia Holloman, Director, Enterprise Quality Management Division

EPA User Fee Programs

In FY 2020, EPA will have several user fee programs in operation. These user fee programs and proposals are as follows below.

Current Fees: Pesticides

Fee collection authority under the Federal Insecticide, Fungicide, and Rodenticide Act of 1988, as amended by Public Law 112-177 Pesticide Registration Improvement Renewal Act (PRIA-3), expired on February 15, 2019. The Pesticide Registration Improvement Extension Act of 2018 (PRIA-4) reauthorizing these fee authorities through fiscal year 2023 and adjusting fee amounts for certain registration activities was signed into law by the President on March 8, 2019.

- **Pesticides Maintenance Fee (7 U.S.C. §136a-1(i))**

The Maintenance Fee provides funding for the Registration Review programs, and a certain percentage supports the processing of applications involving inert ingredients and expedited processing of some applications, such as fast track amendments. PRIA-4 reauthorized collection of this fee through 2023 and raised the collection target by $3.2 million to $31 million.

- **Enhanced Registration Services (7 U.S.C. §136w-8(b))**

Entities seeking to register pesticides for use in the United States pay a fee at the time the registration action request is submitted to EPA, setting specific timeframes for the registration decision service. This process has introduced new pesticides to the market more quickly. PRIA-4 reauthorized collection of these fees through 2023 and adjusted fee amounts for certain types of registrations. In FY 2020, EPA expects to collect approximately $18 million from this fee program.

Current Fees: Other

Clean Air Part 71 Operating Permits Program

Title 40 CFR Part 71 § 71.9 authorizes and establishes requirements for the Clean Air Part 71 program - a comprehensive federal air quality operating permit program for air pollution control agencies that do not have a delegated Title V program - on charging and collecting user fees, as required by Section 502(b)(3) of the Clean Air Act. All sources subject to the operating permit requirements of Title V shall have a permit to operate that assures compliance with all applicable requirements. The owners or operators shall pay annual fees that are sufficient to cover the permit program costs, in accordance with the procedures described in this section.

Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of TSCA, including providing authority for the establishment of a new, broader TSCA User Fee program that replaces the former Section 5 Pre-Manufacturing Notification Fee. The law authorizes the Agency to collect fee revenues

amounting to an estimated 25 percent of the Agency's costs for administering Sections 4, 5, 6 and 14 of TSCA, as amended, and enables the revenues to be deposited in the TSCA Service Fee Fund for direct use by EPA. Fees are charged for: issuance of Test Orders, Test Rules and Enforceable Consent Agreements under TSCA Section 4; submission of Pre-Manufacturing Notices, Significant New Use Notices and Microbial Commercial Activity Notices and certain submissions for exemptions under TSCA Section 5; and development of Risk Evaluations (EPA-Initiated and Manufacturer-Requested) under TSCA Section 6.

EPA finalized a rule implementing these fee collection authorities on September 27, 2018 and began to charge fees on October 1, 2018. In FY 2020, fee revenues are expected to exceed $30 million due to collections from the planned commencement of 20 EPA-Initiated Risk Evaluations in December 2019. Fee revenues are estimated to return to $7 million to $10 million in FY 2021, since no new EPA-initiated risk evaluations are planned to begin that year. Despite the fluctuations in annual fee receipts, the fees are structured to collect 25 percent of associated program total costs (including agency indirect costs), averaging $15 million to $20 million per year. These fee estimates do not include fees for manufacturer-requested risk evaluations, which can recover 50 percent to 100 percent of the costs of these evaluations.

- **Lead Accreditation and Certification Fee**

Title IV, Section 402(a)(3), mandates the development of a schedule of fees to cover the costs of administering and enforcing the standards and regulations for persons operating lead training programs accredited under the Section 402/404 rule and for lead-based paint contractors certified under this rule. The training programs ensure that lead paint abatement and renovation professionals are properly trained and certified. Fees collected for this activity are deposited in the U.S. Treasury. EPA estimates that $4.6 million will be deposited in FY 2020.

- **Motor Vehicle and Engine Compliance Program Fee**

This fee is authorized by the Clean Air Act of 1990 and is administered by the Office of Transportation and Air Quality. Fee collections for manufactures of light-duty vehicles, light- and heavy-duty trucks, and motorcycles began in August 1992. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly-regulated vehicles and engines. The fees established for new compliance programs also are paid by manufacturers of heavy-duty and non-road vehicles and engines, including large diesel and gas equipment (earthmovers, tractors, forklifts, compressors, etc.), handheld and non-handheld utility engines (chainsaws, weed-whackers, leaf-blowers, lawnmowers, tillers, etc.), marine (boat motors, watercraft, jet-skis), locomotive, aircraft and recreational vehicles (off-road motorcycles, all-terrain vehicles, snowmobiles) for in-use testing and certification. In 2009, EPA added fees for evaporative emissions requirements for non-road engines. EPA intends to apply certification fees to additional industry sectors as new programs are developed. In FY 2020, EPA expects to collect approximately $23.1 million from this fee program based upon a projection of the original rulemaking cost study adjusted for inflation. EPA is not authorized to expend these collected funds.

- **Hazardous Waste Electronic Manifest**

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In accordance with the Act, EPA established the e-Manifest program. EPA finalized the user fee rule, *Hazardous Waste Management System: User Fees for the Electronic Hazardous Waste Manifest System and Amendments to Manifest Regulations*, in December 2017, and the e-Manifest system launched in June 2018.

In FY 2020, EPA will continue to operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $24 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will fully support the e-Manifest program, including the operation of the system, necessary program expenses, and future development costs.

- **WIFIA Program Fees**

As was previously authorized, the FY 2020 Budget requests authorization for the Administrator to collect and obligate fees established in accordance with title V, subtitle C, sections 5029 and 5030, of Public Law 113-121, the Water Resources Reform and Development Act of 2014. These funds shall be deposited in the Water Infrastructure Finance and Innovation Program Account and remain available until expended. WIFIA fee regulations were promulgated in FY 2017. Fee revenue is for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms. The requested WIFIA program fee expenditure authority would be in addition to the $5 million request for administrative and operations expenses. Fee revenue does not take the place of the request for WIFIA administration. The appropriated administrative level and the anticipated fee revenue are both needed to successfully implement the WIFIA Pprogram. In FY 2020, EPA estimates that upward of $5 million in WIFIA fees could be collected.

Fee Proposals: Other

- **ENERGY STAR**

By administering the ENERGY STAR program through the collection of user fees, EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that save them money and help protect the environment. Product manufacturers who seek to label their products under the program would pay a fee that would support EPA's work to set voluntary energy efficiency standards and to process applications. The fee collections provide funding to cover an upfront appropriation of $46 million, and continued expenses to develop, operate, and maintain the ENERGY STAR program.

- **FIFRA and PRIA Fee Spending Restrictions**

Current statutory language in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Act (PRIA) restricts what activities EPA can fund from collections deposited in the Reregistration and Expedited Processing Revolving Fund and Pesticide Registration Fund. The FY 2020 request carries forward the proposed statutory language from the FY 2019 President's Budget to expand the range of activities that may be funded with these fees. Language for pesticide registration service fees is included in the proposed Administrative Provisions; since pesticide maintenance fees are mandatory, separate language has been prepared for those fees that will be transmitted at a later date.

- **Oil Spill: Prevention, Preparedness, and Response**

The FY 2020 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for owners or operators of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act. There are approximately 3,800 FRP facilities and over 540,000 SPCC facilities. Allowing these facilities to voluntarily request and pay for a service will help expand awareness and understanding of accident prevention processes, improve the safety of industrial operations, and reduce inadvertent regulatory compliance violations. These fees will be deposited in the Inland Oil Spill Programs account and remain available until expended for the expenses of providing compliance assistance services. These fees are discretionary, and the proposed language is included in the Administrative Provisions section. When the Agency receives Congressional authorization, the Administrator will establish procedures for making and accepting a facility's request for voluntary assistance.

- **State and Local Prevention and Preparedness**

The FY 2020 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for owners or operators of a stationary source required to prepare and submit a Risk Management Plan under Section 112(r)(7) of the Clean Air Act. There are close to 12,300 RMP facilities. Allowing these facilities to voluntarily request and pay for a service will help expand awareness and understanding of accident prevention processes, improve the safety of industrial operations, and reduce inadvertent regulatory compliance violations. These fees will be deposited in the Environmental Programs and Management account and remain available until September 30, 2021 for the expenses of providing compliance assistance services. These fees are discretionary, and the proposed language is included in the Administrative Provisions section. When the Agency receives Congressional authorization, the Administrator will establish procedures for making and accepting a facility's request for voluntary assistance.

Working Capital Fund

In FY 2020, the Agency will be in its 24th year of operation of the Working Capital Fund (WCF). The WCF is a revolving fund authorized by law to finance a cycle of operations in which the costs for goods or services provided are charged to the users. The WCF operates like a commercial business within EPA where customers pay for services received, thus generating revenue. Customers include EPA program and regional offices and other federal agencies. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and the Omnibus Consolidated Appropriations Act of 1997. EPA received permanent WCF authority in the Department of Interior and Related Agencies Appropriations Act of 1998.

EPAs Chief Financial Officer (CFO) initiated the WCF in FY 1997 as part of an effort to: (1) be accountable to Agency offices, the Office of Management and Budget, and Congress; (2) increase the efficiency of the administrative services provided to program offices; and (3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by the Associate Chief Financial Officer, is comprised of twenty-three voting members from program and regional offices.

In FY 2020, there will be nine agency activities provided under the WCF. These are the Agency's information technology, telecommunications operations and data services; agency postage costs, Cincinnati voice services, and background investigations managed by the Office of Mission Support; financial and administrative systems, employee relocations, and a budget formulation system managed by the Chief Financial Officer; the Agency's continuity of operations site, managed by the Land and Emergency Management program; and regional information technology service and support managed by Region 8.

The Agency's FY 2020 budget request includes resources for these nine activities in each National Program Manager's submission, totaling approximately $270 million. These estimated resources may be adjusted during the year to incorporate any program office's additional service needs during the operating year. To the extent that these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2020, the Agency will continue to perform relocation services for other federal agencies in an effort to deliver high quality services external to EPA, which will result in lower costs to EPA customers.

It is anticipated that budget constraints will continue to impact operations in FY 2020 with minor increases and decreases due to several IT improvements, including increased cloud computing, cyber security requirements, continuous diagnostic and mitigation program implementation, and bandwidth enhancements. Other funding shifts have been included in the FY 2020 WCF plan that relate to the necessary telecommunications and computer support needed by every employee. As part of an overall review and rebalancing of these costs, funds have been shifted across programs to reflect FTE changes as well.

Environmental Protection Agency

Acronyms for Statutory Authority

The following is not an exhaustive list of [U.S.] statutory authorities, but includes those commonly referred to by acronym in this document.

ADA: Americans with Disabilities Act

ADEA: Age Discrimination in Employment Act

AEA: Atomic Energy Act, as amended, and Reorganization Plan #3

AHERA: Asbestos Hazard Emergency Response Act

AHPA: Archaeological and Historic Preservation Act

APA: Administrative Procedures Act

ARRA: American Recovery and Reinvestment Act

ASHAA: Asbestos in Schools Hazard Abatement Act

ASTCA: Antarctic Science, Tourism, and Conservation Act

AWIA: America's Water Infrastructure Act of 2018

BEACH Act of 2000: Beaches Environmental Assessment and Coastal Health Act

BRERA: Brownfields Revitalization and Environmental Restoration Act

BUILD Act: Brownfields Utilization, Investment, and Local Development Act

CAA: Clean Air Act

CAAA: Clean Air Act Amendments (1970 and 1990)

CCA: Clinger Cohen Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act (1980)

CFOA: Chief Financial Officers Act

CICA: Competition in Contracting Act

CRA: Civil Rights Act

CSA: Computer Security Act

CWA: Clean Water Act (1972)

CWPPR: Coastal Wetlands Planning, Protection, and Restoration Act of 1990

CZARA: Coastal Zone Act Reauthorization Amendments

CZMA: Coastal Zone Management Act

DPA: Deepwater Ports Act

DREAA: Disaster Relief and Emergency Assistance Act

ECRA: Economic Cleanup Responsibility Act

EFOIA: Electronic Freedom of Information Act

EISA: Energy Independence and Security Act of 200**7**

EPAct: Energy Policy Act of 2005

EPAA: Environmental Programs Assistance Act

EPCA: Energy Policy and Conservation Act

EPCRA: Emergency Planning and Community Right to Know Act (1986)

ERD&DAA: Environmental Research, Development and Demonstration Authorization Act

ESA: Endangered Species Act

ESECA: Energy Supply and Environmental Coordination Act

FACA: Federal Advisory Committee Act

FAIR: Federal Activities Inventory Reform Act

FASA: Federal Acquisition Streamlining Act (1994)

FCMA: Fishery Conservation and Management Act

FEPCA: Federal Environmental Pesticide Control Act of 1972, enacted as amendments to FIFRA

FFDCA: Federal Food, Drug, and Cosmetic Act

FGCAA: Federal Grant and Cooperative Agreement Act

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act (1972)

FLPMA: Federal Land Policy and Management Act

FMFIA: Federal Managers' Financial Integrity Act (1982)

FOIA: Freedom of Information Act

FPA: Federal Pesticide Act

FPAS: Federal Property and Administration Services Act

FQPA: Food Quality Protection Act (1996)

FRA: Federal Register Act

FSA: Food Security Act

FSMA: Food Safety Modernization Act

FTTA: Federal Technology Transfer Act

FUA: Fuel Use Act

FWCA: Fish and Wildlife Coordination Act

FWPCA: Federal Water Pollution and Control Act (also known as the Clean Water Act [CWA])

GISRA: Government Information Security Reform Act

GMRA: Government Management Reform Act

GPRA: Government Performance and Results Act (1993)

GPRAMA: Government Performance and Results Modernization Act of 2010

HMTA: Hazardous Materials Transportation Act

HSWA: Hazardous and Solid Waste Amendments of 1984, enacted as amendments to RCRA

IGA: Inspector General Act

IPA: Intergovernmental Personnel Act

IPIA: Improper Payments Information Act

ISTEA: Intermodal Surface Transportation Efficiency Act

ITMRA: Information Technology Management Reform Act of 1996-aka Clinger/Cohen Act

MPPRCA: Marine Plastic Pollution, Research and Control Act of 1987

MPRSA: Marine Protection Research and Sanctuaries Act

NAWCA: North American Wetlands Conservation Act

NEPA: National Environmental Policy Act

NHPA: National Historic Preservation Act

NISA: National Invasive Species Act of 1996

ODA: Ocean Dumping Act

OPA: Oil Pollution Act of 1990

OWBPA: Older Workers Benefit Protection Act

PBA: Public Building Act

PFCRA: Program Fraud Civil Remedies Act

PHSA: Public Health Service Act

PLIRRA: Pollution Liability Insurance and Risk Retention Act

PPA: Pollution Prevention Act

PR: Privacy Act of 1974

PRA: Paperwork Reduction Act

PRIA: Pesticide Registration Improvement Act of 2003

PREA: Pesticide Registration Extension Act of 2012 (also known as PRIA 3)

PRIRA: Pesticide Registration Improvement Renewal Act

QCA: Quiet Communities Act

RCRA: Resource Conservation and Recovery Act of 1976, enacted as amendments to SWDA

RFA: Regulatory Flexibility Act

RICO: Racketeer Influenced and Corrupt Organizations Act

RLBPHRA: Residential Lead-Based Paint Hazard Reduction Act

SARA: Superfund Amendments and Reauthorization Act of 1986

SBLRBRERA: Small Business Liability Relief and Brownfields Revitalization and Environmental Restoration Act

SBREFA: Small Business Regulatory Enforcement Fairness Act of 1996

SDWA: Safe Drinking Water Act

SICEA: Steel Industry Compliance Extension Act

SMCRA: Surface Mining Control and Reclamation Act

SPA: Shore Protection Act of 1988

SWDA: Solid Waste Disposal Act

TSCA: Toxic Substances Control Act

UMRA: Unfunded Mandates Reform Act

UMTRLWA: Uranium Mill Tailings Radiation Land Withdrawal Act

USTCA: Underground Storage Tank Compliance Act

WIFIA: Water Infrastructure Finance and Innovation Act

WIIN: Water Infrastructure Improvements for the Nation Act

WQA: Water Quality Act of 1987

WRDA: Water Resources Development Act

WSRA: Wild and Scenic Rivers Act

WWWQA: Wet Weather Water Quality Act of 2000

FY 2020 STAG Categorical Program Grants
Statutory Authority and Eligible Uses
(Dollars in Thousands)

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
State and Local Air Quality Management	CAA, Section 103.	Air pollution control agencies as defined in section 302(b) of the CAA	S/L monitoring and data collection activities in support of the $PM_{2.5}$ monitoring network and associated costs.	Goal 1, Obj. 1.1	$43,254.9	$41,968.0	$41,968.0	$29,313.0
State and Local Air Quality Management	CAA, Section 103.	Air pollution control agencies as defined in section 302(b) of the CAA	S/L monitoring and data collection activities in support of air toxics monitoring.	Goal 1, Obj. 1.1	$6,806.0	$4,959.0	$4,959.0	$6,271.0
State and Local Air Quality Management	CAA, Section 103.	Air pollution control agencies as defined in section 302(b) of the CAA	S/L monitoring procurement activities in support of the NAAQS.	Goal 1, Obj. 1.1	$4,798.0	$4,772.0	$4,772.0	$2,780.0

[9] Does not reflect STAG rescissions.

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
State and Local Air Quality Management	CAA, Sections 103, 105, 106.	Air pollution control agencies as defined in section 302(b) of the CAA; Multi-jurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA section 302(b) agency officers and whose mission is to support the continuing environmental programs of the States); Interstate air quality control region designated pursuant to section 107 of the CAA or of implementing section 176A, or section 184 NOTE: only the Ozone Transport Commission is eligible.	Carrying out the traditional prevention and control programs required by the CAA and associated program support costs, including all monitoring activities, including PM 2.5 monitoring and associated program costs (Section 103 and/or 105); Coordinating or facilitating a multi-jurisdictional approach to carrying out the traditional prevention and control programs required by the CAA (Sections 103 and 106); Supporting training for CAA Section 302(b) air pollution control agency staff (Sections 103 and 105); Supporting research, investigative, and demonstration projects (Section 103).	Goal 1, Obj. 1.1	$173,532.5 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$229,030.4**	$175,881.0 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$228,219.0**	$175,881.0 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$228,219.0**	$113,177.0 Section 105 grants _____ $420.0 Section 106 grants **Total:** **$151,961.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Tribal Air Quality Management	CAA, Sections 103 and 105; Tribal Cooperative Agreements (TCA) in annual Appropriations Acts.	Tribes; Intertribal Consortia; State/Tribal College or University	Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting CAA training for federally-recognized Tribes.	Goal 1, Obj. 1.1	$8,767.9 Section 103 grants _____ $4,000.0 Section 105 grants **Total: $12,767.9**	$8,829.0 Section 103 grants _____ $4,000.0 Section 105 grants **Total: $12,829.0**	$8,829.0 Section 103 grants _____ $4,000.0 Section 105 grants **Total: $12,829.0**	$6,163.0 Section 103 grants _____ $2,800.0 Section 105 grants **Total: $8,963.0**
Radon	TSCA, Sections 10 and 306.	State Agencies, Tribes, Intertribal Consortia	Assist in the development and implementation of programs for the assessment and mitigation of radon.	Goal 1, Obj. 1.1	$8,198.0	$8,051.0	$8,051.0	$0.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Multipurpose Grants	Appropriation Act: FY 2018 (Public Law 115-141) and all other major environmental legislation including but not limited to CAA, CWA, SDWA and CERCLA	State Agencies, Tribes	Implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws.	Goal 1 Obj.: *Multiple*	$56.1	$10,000.0	$10,000.0	$10,000.0
Water Pollution Control (Section 106)	FWPCA, as amended, Section 106; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Interstate Agencies	Develop and carry out surface and ground water pollution control programs, including NPDES permits, TMDLs, WQ standards, monitoring, and NPS control activities.	Goal 1, Obj. 1.2	$229,034.4	$230,806.0	$230,806.0	$153,683.0
Nonpoint Source (NPS – Section 319)	FWPCA, as amended, Section 319(h); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement EPA-approved State and Tribal nonpoint source management programs and fund projects as selected by the state.	Goal 1, Obj. 1.2	$167,592.8	$170,915.0	$170,915.0	$0.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Wetlands Program Development	FWPCA, as amended, Section 104 (b)(3); TCA in annual Appropriations Acts.	States, Local Governments, Tribes, Interstate Organizations, Intertribal Consortia, Non-Profit Organizations	To develop new wetland programs or enhance existing programs for the protection, management, and restoration of wetland resources.	Goal 1, Obj. 1.2	$15,111.2	$14,661.0	$14,661.0	$9,762.0
Public Water System Supervision (PWSS)	SDWA, Section 1443(a); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health.	Goal 1, Obj. 1.2	$98,978.8	$101,963.0	$101,963.0	$67,892.0
Underground Injection Control (UIC)	SDWA, Section 1443(b); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement and enforce regulations that protect underground sources of drinking water by controlling Class I-V underground injection wells.	Goal 1, Obj. 1.2	$10,130.3	$10,506.0	$10,506.0	$6,995.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Beaches Protection	BEACH Act of 2000; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Local Governments	Develop and implement programs for monitoring and notification of conditions for coastal recreation waters adjacent to beaches or similar points of access that are used by the public.	Goal, Obj. 1.2	$9,552.0	$9,549.0	$9,549.0	$0.0
Hazardous Waste Financial Assistance	Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Appropriation Act: FY 2018 (Public Law 115-141).	States, Tribes, Intertribal Consortia	Development & Implementation of Hazardous Waste Programs	Goal 1, Obj. 1.3	$97,994.5	$99,693.0	$99,693.0	$66,381.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Brownfields	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128(a).	States, Tribes, Intertribal Consortia	Establish and enhance state and tribal response programs which will survey and inventory brownfields sites; develop oversight and enforcement authorities to ensure response actions are protective of human health and the environment; develop ways for communities to provide meaningful opportunities for public participation; and develop mechanisms for approval of a cleanup plan and verification and certification that cleanup is complete.	Goal 1, Obj. 1.3	$46,941.8	$47,745.0	$47,745.0	$31,791.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Underground Storage Tanks (UST)	Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.	States	Provide funding for States' underground storage tanks and to support direct UST implementation programs.	Goal 1, Obj. 1.3	$1,320.0	$1,498.0	$1,498.0	$0.0
Pesticides Program Implementation	FIFRA, Sections 23(a)(1); Federal Food, drug and Cosmetic Act (FDCA); Food quality Protection Act (FQPA); Endangered Species Act (ESA).	States, Tribes, Intertribal Consortia	Implement the following programs through grants to States, Tribes, partners, and supporters for implementation of pesticide programs, including: Certification and Training (C&T); Worker Protection; Endangered Species Protection Program (ESPP) Field Activities; Pesticides in Water; and tribal Programs.	Goal 1, Obj. 1.4	$12,364.7 – States formula _____ $363.4 HQ Programs: - Tribal - PREP - School IPM _____ **Total: $12,728.1**	$11,423.0 – States formula _____ $1,278.0 HQ Programs: - Tribal - PREP - School IPM _____ **Total: $12,701.0**	$11,423.0 – States formula _____ $1,278.0 HQ Programs: - Tribal - PREP - Pollinator Protection _____ **Total: $12,701.0**	$7,350.0 – States formula _____ $1,107.0 HQ Programs: - Tribal - PREP - Pollinator Protection _____ **Total: $8,457.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Lead	TSCA, Sections 401-412.	States, Tribes, Intertribal Consortia	Aid states, territories, the District of Columbia, and tribes to develop and implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs. EPA directly implements these programs in all areas of the country that are not authorized to do so, and will continue to operate the Federal Lead-based Paint Program Database (FLPP) of trained and certified lead-based paint professionals.	Goal 1, Obj. 1.4	$11,917.6 404(g) State/ Tribal Certification _____ $1,098.6 404(g) Direct Implementation **Total:** **$13,016.2**	$12,384.0 404(g) State/ Tribal Certification _____ $1,665.0 404(g) Direct Implementation **Total:** **$14,049.0**	$12,384.0 404(g) State/ Tribal Certification _____ $1,665.0 404(g) Direct Implementation **Total:** **$14,049.0**	$0.0 404(g) State/ Tribal Certification _____ $0.0 404(g) Direct Implementation **Total:** **$0.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Toxic Substances Compliance	Toxic Substances Control Act; TCA in annual Appropriations Acts.	States, federally recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S.	Assist in developing, maintaining, and implementing compliance monitoring programs for PCBs, asbestos, and Lead Based Paint. In addition, enforcement actions by: 1) the Lead Based Paint program and 2) States that obtained a "waiver" under the Asbestos program.	Goal 2, Obj. 2.1	$4,685.5	$4,919.0	$4,919.0	$3,276.0
Pesticide Enforcement	FIFRA § 23(a)(1); FY2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, federally-recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S.	Assist with implementation of cooperative pesticide enforcement programs.	Goal 2, Obj. 2.1	$17,924.6	$18,050.0	$18,050.0	$10,531.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
Pollution Prevention	Pollution Prevention Act of 1990, Section 6605; TSCA Section 10; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Provides assistance to States and State entities (*i.e.*, colleges and universities) and federally-recognized Tribes and intertribal consortia to deliver pollution prevention technical assistance to small and medium-sized businesses. A goal of the program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source.	Goal 2, Obj. 2.1	$4,115.9	$4,765.0	$4,765.0	$0.0
Tribal General Assistance Program	Indian Environmental General Assistance Program Act (42 U.S.C. § 4368b); TCA in annual Appropriations Acts.	Tribal Governments, Intertribal Consortia	Plan and develop Tribal environmental protection programs.	Goal 2, Obj. 2.1	$65,266.10	$65,476.0	$65,476.0	$44,233.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2018 Actual Dollars (X1000)	FY 2018 Enacted Dollars[9] (X1000)	FY 2019 Annualized Continuing Resolution (X1000)	FY 2020 President's Budget (X1000)
National Environmental Information Exchange Network (NEIEN, aka "the Exchange Network")	Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute) Appropriation Act: FY 2018 (Public Law 115-141)	States, U.S. Territories, Federally Recognized Tribes and Native Villages, Interstate Agencies, Tribal Consortia, Other Agencies with Related Environmental Information Activities.	Helps States, U.S. Territories, Tribes, and intertribal consortia develop the information management and technology (IM/IT) capabilities they need to participate in the Exchange Network, to continue and expand data-sharing programs, and to improve access to environmental information.	Goal 3, Obj. 3.4	$9,550.3	$9,646.0	$9,646.0	$6,422.0

Program Projects by Program Area

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology				
Clean Air				
Clean Air Allowance Trading Programs	$7,543.1	$7,569.0	$5,739.0	-$1,830.0
Atmospheric Protection Program	$8,572.7	$8,018.0	$0.0	-$8,018.0
Federal Support for Air Quality Management	$5,722.3	$6,714.0	$3,776.0	-$2,938.0
Federal Vehicle and Fuels Standards and Certification	$90,650.1	$94,240.0	$77,826.0	-$16,414.0
Subtotal, Clean Air	**$112,488.2**	**$116,541.0**	**$87,341.0**	**-$29,200.0**
Indoor Air and Radiation				
Indoor Air: Radon Program	$133.5	$159.0	$0.0	-$159.0
Radiation: Protection	$2,407.4	$2,246.0	$990.0	-$1,256.0
Radiation: Response Preparedness	$3,259.5	$3,266.0	$3,793.0	$527.0
Reduce Risks from Indoor Air	$40.0	$326.0	$0.0	-$326.0
Subtotal, Indoor Air and Radiation	**$5,840.4**	**$5,997.0**	**$4,783.0**	**-$1,214.0**
Enforcement				
Forensics Support	$12,016.5	$13,669.0	$10,883.0	-$2,786.0
Homeland Security				
Homeland Security: Critical Infrastructure Protection	$9,504.5	$9,788.0	$7,457.0	-$2,331.0
Homeland Security: Preparedness, Response, and Recovery	$22,767.3	$22,918.0	$24,847.0	$1,929.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$415.0	$416.0	$500.0	$84.0
Subtotal, Homeland Security	**$32,686.8**	**$33,122.0**	**$32,804.0**	**-$318.0**
IT / Data Management / Security				
IT / Data Management	$2,296.0	$3,089.0	$2,747.0	-$342.0
Operations and Administration				
Facilities Infrastructure and Operations	$70,101.6	$68,339.0	$67,274.0	-$1,065.0
Workforce Reshaping	$0.0	$0.0	$5,994.0	$5,994.0
Subtotal, Operations and Administration	**$70,101.6**	**$68,339.0**	**$73,268.0**	**$4,929.0**
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$2,888.3	$2,531.0	$2,401.0	-$130.0
Pesticides: Protect the Environment from Pesticide Risk	$2,309.7	$3,072.0	$2,257.0	-$815.0
Pesticides: Realize the Value of Pesticide Availability	$362.0	$424.0	$615.0	$191.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Subtotal, Pesticides Licensing	**$5,560.0**	**$6,027.0**	**$5,273.0**	**-$754.0**
Research: Air and Energy				
Research: Air and Energy	$87,503.9	$91,906.0	$31,707.0	-$60,199.0
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	$104,163.5	$106,257.0	$69,963.0	-$36,294.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$131,757.3	$134,327.0	$53,631.0	-$80,696.0
Research: Chemical Safety and Sustainability				
Human Health Risk Assessment	$33,568.7	$36,523.0	$22,689.0	-$13,834.0
Research: Chemical Safety and Sustainability				
Endocrine Disruptors	$12,501.0	$16,253.0	$10,346.0	-$5,907.0
Computational Toxicology	$21,153.1	$21,409.0	$17,630.0	-$3,779.0
Research: Chemical Safety and Sustainability (other activities)	$45,933.8	$52,745.0	$35,901.0	-$16,844.0
Subtotal, Research: Chemical Safety and Sustainability	$79,587.9	$90,407.0	$63,877.0	-$26,530.0
Subtotal, Research: Chemical Safety and Sustainability	**$113,156.6**	**$126,930.0**	**$86,566.0**	**-$40,364.0**
Water: Human Health Protection				
Drinking Water Programs	$3,458.2	$3,519.0	$4,094.0	$575.0
Congressional Priorities				
Water Quality Research and Support Grants	$4,094.0	$4,100.0	$0.0	-$4,100.0
Total, Science & Technology	**$685,123.0**	**$713,823.0**	**$463,060.0**	**-$250,763.0**
Environmental Program & Management				
Clean Air				
Clean Air Allowance Trading Programs	$14,720.4	$15,270.0	$13,292.0	-$1,978.0
Atmospheric Protection Program	$92,753.7	$95,436.0	$13,965.0	-$81,471.0
Federal Stationary Source Regulations	$19,618.3	$21,028.0	$17,311.0	-$3,717.0
Federal Support for Air Quality Management	$128,588.0	$128,001.0	$107,298.0	-$20,703.0
Stratospheric Ozone: Domestic Programs	$4,601.1	$4,637.0	$3,948.0	-$689.0
Stratospheric Ozone: Multilateral Fund	$8,326.0	$8,736.0	$0.0	-$8,736.0
Subtotal, Clean Air	**$268,607.5**	**$273,108.0**	**$155,814.0**	**-$117,294.0**
Indoor Air and Radiation				
Indoor Air: Radon Program	$2,575.1	$3,136.0	$0.0	-$3,136.0
Radiation: Protection	$9,286.8	$9,180.0	$2,307.0	-$6,873.0
Radiation: Response Preparedness	$1,774.5	$1,952.0	$2,219.0	$267.0
Reduce Risks from Indoor Air	$13,489.6	$13,369.0	$0.0	-$13,369.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Subtotal, Indoor Air and Radiation	**$27,126.0**	**$27,637.0**	**$4,526.0**	**-$23,111.0**
Brownfields				
Brownfields	$24,175.6	$25,593.0	$16,728.0	-$8,865.0
Compliance				
Compliance Monitoring	$101,299.2	$101,665.0	$89,644.0	-$12,021.0
Enforcement				
Civil Enforcement	$164,266.9	$171,283.0	$147,647.0	-$23,636.0
Criminal Enforcement	$44,334.2	$44,995.0	$44,582.0	-$413.0
Environmental Justice	$6,436.5	$6,737.0	$2,739.0	-$3,998.0
NEPA Implementation	$15,751.2	$17,622.0	$16,598.0	-$1,024.0
Subtotal, Enforcement	**$230,788.8**	**$240,637.0**	**$211,566.0**	**-$29,071.0**
Geographic Programs				
Geographic Program: Chesapeake Bay	$67,542.4	$73,000.0	$7,300.0	-$65,700.0
Geographic Program: Gulf of Mexico	$9,122.9	$12,542.0	$0.0	-$12,542.0
Geographic Program: Lake Champlain	$8,395.0	$8,399.0	$0.0	-$8,399.0
Geographic Program: Long Island Sound	$11,753.9	$12,000.0	$0.0	-$12,000.0
Geographic Program: Other				
Lake Pontchartrain	$947.0	$948.0	$0.0	-$948.0
S.New England Estuary (SNEE)	$4,934.5	$5,000.0	$0.0	-$5,000.0
Geographic Program: Other (other activities)	$1,507.4	$1,445.0	$0.0	-$1,445.0
Subtotal, Geographic Program: Other	$7,388.9	$7,393.0	$0.0	-$7,393.0
Great Lakes Restoration	$307,739.4	$300,000.0	$30,000.0	-$270,000.0
Geographic Program: South Florida	$1,674.5	$1,704.0	$0.0	-$1,704.0
Geographic Program: San Francisco Bay	$1,763.7	$4,819.0	$0.0	-$4,819.0
Geographic Program: Puget Sound	$27,961.9	$28,000.0	$0.0	-$28,000.0
Subtotal, Geographic Programs	**$443,342.6**	**$447,857.0**	**$37,300.0**	**-$410,557.0**
Homeland Security				
Homeland Security: Communication and Information	$4,471.8	$3,910.0	$3,514.0	-$396.0
Homeland Security: Critical Infrastructure Protection	$908.7	$880.0	$1,188.0	$308.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$5,400.2	$5,405.0	$4,986.0	-$419.0
Subtotal, Homeland Security	**$10,780.7**	**$10,195.0**	**$9,688.0**	**-$507.0**
Information Exchange / Outreach				
State and Local Prevention and Preparedness	$14,799.1	$14,760.0	$10,524.0	-$4,236.0
TRI / Right to Know	$13,796.8	$12,783.0	$7,811.0	-$4,972.0
Tribal - Capacity Building	$13,979.6	$14,547.0	$13,201.0	-$1,346.0
Executive Management and Operations	$49,458.4	$49,842.0	$41,771.0	-$8,071.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Environmental Education	$10,223.4	$8,702.0	$0.0	-$8,702.0
Exchange Network	$17,432.4	$15,956.0	$12,127.0	-$3,829.0
Small Minority Business Assistance	$1,598.1	$1,574.0	$0.0	-$1,574.0
Small Business Ombudsman	$1,799.8	$1,826.0	$1,918.0	$92.0
Children and Other Sensitive Populations: Agency Coordination	$6,496.0	$6,548.0	$2,545.0	-$4,003.0
Subtotal, Information Exchange / Outreach	**$129,583.6**	**$126,538.0**	**$89,897.0**	**-$36,641.0**
International Programs				
US Mexico Border	$2,645.5	$3,033.0	$0.0	-$3,033.0
International Sources of Pollution	$6,619.8	$6,904.0	$5,339.0	-$1,565.0
Trade and Governance	$5,290.1	$5,463.0	$0.0	-$5,463.0
Subtotal, International Programs	**$14,555.4**	**$15,400.0**	**$5,339.0**	**-$10,061.0**
IT / Data Management / Security				
Information Security	$7,016.5	$7,280.0	$13,773.0	$6,493.0
IT / Data Management	$84,464.5	$83,256.0	$71,117.0	-$12,139.0
Subtotal, IT / Data Management / Security	**$91,481.0**	**$90,536.0**	**$84,890.0**	**-$5,646.0**
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$9,529.8	$10,653.0	$8,828.0	-$1,825.0
Administrative Law	$4,706.5	$4,753.0	$4,812.0	$59.0
Alternative Dispute Resolution	$1,155.7	$1,150.0	$0.0	-$1,150.0
Civil Rights Program	$8,848.2	$9,335.0	$9,003.0	-$332.0
Legal Advice: Environmental Program	$51,344.3	$50,886.0	$48,123.0	-$2,763.0
Legal Advice: Support Program	$14,616.0	$15,455.0	$17,151.0	$1,696.0
Regional Science and Technology	$1,094.6	$1,205.0	$0.0	-$1,205.0
Science Advisory Board	$3,531.8	$3,787.0	$3,763.0	-$24.0
Regulatory/Economic-Management and Analysis	$14,270.7	$14,190.0	$16,162.0	$1,972.0
Subtotal, Legal / Science / Regulatory / Economic Review	**$109,097.6**	**$111,414.0**	**$107,842.0**	**-$3,572.0**
Operations and Administration				
Central Planning, Budgeting, and Finance	$70,053.3	$72,884.0	$71,100.0	-$1,784.0
Facilities Infrastructure and Operations	$292,535.1	$308,701.0	$308,335.0	-$366.0
Acquisition Management	$27,441.3	$30,210.0	$28,032.0	-$2,178.0
Human Resources Management	$43,220.4	$44,227.0	$41,635.0	-$2,592.0
Financial Assistance Grants / IAG Management	$24,462.0	$24,729.0	$20,202.0	-$4,527.0
Workforce Reshaping	$0.0	$0.0	$25,003.0	$25,003.0
Subtotal, Operations and Administration	**$457,712.1**	**$480,751.0**	**$494,307.0**	**$13,556.0**
Pesticides Licensing				
Science Policy and Biotechnology	$1,604.1	$2,040.0	$0.0	-$2,040.0
Pesticides: Protect Human Health from Pesticide Risk	$56,288.2	$58,016.0	$49,440.0	-$8,576.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Pesticides: Protect the Environment from Pesticide Risk	$38,380.7	$41,081.0	$30,668.0	-$10,413.0
Pesticides: Realize the Value of Pesticide Availability	$7,004.6	$8,226.0	$5,571.0	-$2,655.0
Subtotal, Pesticides Licensing	**$103,277.6**	**$109,363.0**	**$85,679.0**	**-$23,684.0**
Research: Chemical Safety and Sustainability				
Research: Chemical Safety and Sustainability	$328.4	$0.0	$0.0	$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$37,118.1	$39,052.0	$33,202.0	-$5,850.0
RCRA: Waste Management	$58,434.1	$60,791.0	$46,813.0	-$13,978.0
RCRA: Waste Minimization & Recycling	$6,782.4	$9,534.0	$0.0	-$9,534.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	**$102,334.6**	**$109,377.0**	**$80,015.0**	**-$29,362.0**
Toxics Risk Review and Prevention				
Endocrine Disruptors	$4,583.1	$7,553.0	$0.0	-$7,553.0
Pollution Prevention Program	$10,353.0	$11,236.0	$0.0	-$11,236.0
Toxic Substances: Chemical Risk Review and Reduction	$65,947.8	$61,105.0	$66,418.0	$5,313.0
Toxic Substances: Lead Risk Reduction Program	$12,523.5	$12,627.0	$0.0	-$12,627.0
Subtotal, Toxics Risk Review and Prevention	**$93,407.4**	**$92,521.0**	**$66,418.0**	**-$26,103.0**
Underground Storage Tanks (LUST / UST)				
LUST / UST	$10,812.6	$11,295.0	$5,996.0	-$5,299.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	$25,187.6	$26,723.0	$0.0	-$26,723.0
Wetlands	$18,528.7	$21,065.0	$21,578.0	$513.0
Subtotal, Water: Ecosystems	**$43,716.3**	**$47,788.0**	**$21,578.0**	**-$26,210.0**
Water: Human Health Protection				
Beach / Fish Programs	$1,777.0	$2,014.0	$0.0	-$2,014.0
Drinking Water Programs	$91,494.4	$96,493.0	$89,808.0	-$6,685.0
Subtotal, Water: Human Health Protection	**$93,271.4**	**$98,507.0**	**$89,808.0**	**-$8,699.0**
Water Quality Protection				
Marine Pollution	$10,242.6	$11,065.0	$0.0	-$11,065.0
Surface Water Protection	$192,705.9	$199,352.0	$188,233.0	-$11,119.0
Subtotal, Water Quality Protection	**$202,948.5**	**$210,417.0**	**$188,233.0**	**-$22,184.0**
Congressional Priorities				
Water Quality Research and Support Grants	$25,400.0	$12,700.0	$0.0	-$12,700.0
Total, Environmental Program & Management	**$2,584,046.9**	**$2,643,299.0**	**$1,845,268.0**	**-$798,031.0**

Inspector General

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$40,328.4	$41,489.0	$38,893.0	-$2,596.0
Total, Inspector General	**$40,328.4**	**$41,489.0**	**$38,893.0**	**-$2,596.0**
Building and Facilities				
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	$5,921.7	$6,676.0	$6,176.0	-$500.0
Operations and Administration				
Facilities Infrastructure and Operations	$34,605.1	$27,791.0	$33,377.0	$5,586.0
Total, Building and Facilities	**$40,526.8**	**$34,467.0**	**$39,553.0**	**$5,086.0**
Hazardous Substance Superfund				
Indoor Air and Radiation				
Radiation: Protection	$2,176.9	$1,985.0	$1,933.0	-$52.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$9,159.7	$8,778.0	$9,586.0	$808.0
Compliance				
Compliance Monitoring	$943.0	$995.0	$991.0	-$4.0
Enforcement				
Criminal Enforcement	$7,336.3	$7,502.0	$8,198.0	$696.0
Environmental Justice	$617.0	$758.0	$0.0	-$758.0
Forensics Support	$1,999.6	$1,824.0	$1,144.0	-$680.0
Superfund: Enforcement	$151,915.5	$150,048.0	$155,059.0	$5,011.0
Superfund: Federal Facilities Enforcement	$5,810.9	$6,243.0	$6,956.0	$713.0
Subtotal, Enforcement	**$167,679.3**	**$166,375.0**	**$171,357.0**	**$4,982.0**
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$31,102.4	$31,648.0	$31,054.0	-$594.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$1,325.5	$968.0	$915.0	-$53.0
Subtotal, Homeland Security	**$32,427.9**	**$32,616.0**	**$31,969.0**	**-$647.0**
Information Exchange / Outreach				
Exchange Network	$1,328.6	$1,328.0	$1,293.0	-$35.0
IT / Data Management / Security				

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Information Security	$745.8	$661.0	$5,082.0	$4,421.0
IT / Data Management	$14,126.0	$13,824.0	$13,443.0	-$381.0
Subtotal, IT / Data Management / Security	**$14,871.8**	**$14,485.0**	**$18,525.0**	**$4,040.0**
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$744.3	$748.0	$0.0	-$748.0
Legal Advice: Environmental Program	$914.1	$505.0	$579.0	$74.0
Civil Rights Program	$60.0	$0.0	$0.0	$0.0
Subtotal, Legal / Science / Regulatory / Economic Review	**$1,718.4**	**$1,253.0**	**$579.0**	**-$674.0**
Operations and Administration				
Central Planning, Budgeting, and Finance	$20,503.7	$22,018.0	$21,340.0	-$678.0
Facilities Infrastructure and Operations	$76,061.2	$75,253.0	$73,540.0	-$1,713.0
Acquisition Management	$20,477.3	$21,183.0	$21,541.0	$358.0
Human Resources Management	$6,279.4	$7,044.0	$5,444.0	-$1,600.0
Financial Assistance Grants / IAG Management	$2,498.6	$2,607.0	$2,655.0	$48.0
Subtotal, Operations and Administration	**$125,820.2**	**$128,105.0**	**$124,520.0**	**-$3,585.0**
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$11,023.3	$11,463.0	$10,977.0	-$486.0
Research: Chemical Safety and Sustainability				
Human Health Risk Assessment	$2,822.9	$2,824.0	$5,338.0	$2,514.0
Superfund Cleanup				
Superfund: Emergency Response and Removal	$200,491.4	$189,917.0	$168,370.0	-$21,547.0
Superfund: EPA Emergency Preparedness	$7,744.0	$7,636.0	$7,396.0	-$240.0
Superfund: Federal Facilities	$21,300.3	$21,125.0	$20,465.0	-$660.0
Superfund: Remedial	$607,626.1	$566,062.0	$472,052.0	-$94,010.0
Subtotal, Superfund Cleanup	**$837,161.8**	**$784,740.0**	**$668,283.0**	**-$116,457.0**
Total, Hazardous Substance Superfund	**$1,207,133.8**	**$1,154,947.0**	**$1,045,351.0**	**-$109,596.0**
Leaking Underground Storage Tanks				
Enforcement				
Civil Enforcement	$619.8	$620.0	$470.0	-$150.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$390.3	$387.0	$434.0	$47.0
Facilities Infrastructure and Operations	$1,056.6	$813.0	$773.0	-$40.0
Acquisition Management	$6.5	$152.0	$138.0	-$14.0
Subtotal, Operations and Administration	**$1,453.4**	**$1,352.0**	**$1,345.0**	**-$7.0**
Underground Storage Tanks (LUST / UST)				

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
LUST / UST	$9,731.5	$9,240.0	$6,722.0	-$2,518.0
LUST Cooperative Agreements	$58,088.1	$55,040.0	$38,840.0	-$16,200.0
LUST Prevention	$24,233.5	$25,369.0	$0.0	-$25,369.0
Subtotal, Underground Storage Tanks (LUST / UST)	**$92,053.1**	**$89,649.0**	**$45,562.0**	**-$44,087.0**
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$311.3	$320.0	$424.0	$104.0
Total, Leaking Underground Storage Tanks	**$94,437.6**	**$91,941.0**	**$47,801.0**	**-$44,140.0**
Inland Oil Spill Programs				
Compliance				
Compliance Monitoring	$122.5	$139.0	$0.0	-$139.0
Enforcement				
Civil Enforcement	$2,464.8	$2,413.0	$2,373.0	-$40.0
Oil				
Oil Spill: Prevention, Preparedness and Response	$14,690.3	$14,409.0	$12,413.0	-$1,996.0
Operations and Administration				
Facilities Infrastructure and Operations	$753.8	$584.0	$665.0	$81.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$695.6	$664.0	$511.0	-$153.0
Total, Inland Oil Spill Programs	**$18,727.0**	**$18,209.0**	**$15,962.0**	**-$2,247.0**
State and Tribal Assistance Grants				
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	$19,543.0	$20,000.0	$3,000.0	-$17,000.0
Brownfields Projects	$84,310.3	$80,000.0	$62,000.0	-$18,000.0
Infrastructure Assistance: Clean Water SRF	$1,657,428.2	$1,693,887.0	$1,119,772.0	-$574,115.0
Infrastructure Assistance: Drinking Water SRF	$1,128,161.0	$1,163,233.0	$863,233.0	-$300,000.0
Infrastructure Assistance: Mexico Border	$11,524.6	$10,000.0	$0.0	-$10,000.0
Diesel Emissions Reduction Grant Program	$72,668.1	$75,000.0	$10,000.0	-$65,000.0
Targeted Airshed Grants	$29,479.0	$40,000.0	$0.0	-$40,000.0
GKM Water Monitoring	$3,092.6	$4,000.0	$0.0	-$4,000.0
Safe Water for Small & Disadvantaged Communities	$0.0	$20,000.0	$0.0	-$20,000.0
Reducing Lead in Drinking Water	$0.0	$10,000.0	$0.0	-$10,000.0
Lead Testing in Schools	$0.0	$20,000.0	$10,000.0	-$10,000.0
Healthy Schools	$0.0	$0.0	$50,000.0	$50,000.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Drinking Water Infrastructure Resilience and Sustainability	$0.0	$0.0	$2,000.0	$2,000.0
Drinking Fountain Lead Testing	$0.0	$0.0	$5,000.0	$5,000.0
Technical Assistance for Treatment Works	$0.0	$0.0	$7,500.0	$7,500.0
Sewer Overflow Control Grants	$0.0	$0.0	$61,450.0	$61,450.0
Water Infrastructure and Workforce Investment	$0.0	$0.0	$300.0	$300.0
Subtotal, State and Tribal Assistance Grants (STAG)	**$3,006,206.8**	**$3,136,120.0**	**$2,194,255.0**	**-$941,865.0**
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	$167,592.8	$170,915.0	$0.0	-$170,915.0
Categorical Grant: Public Water System Supervision (PWSS)	$98,978.8	$101,963.0	$67,892.0	-$34,071.0
Categorical Grant: State and Local Air Quality Management	$229,030.4	$228,219.0	$151,961.0	-$76,258.0
Categorical Grant: Radon	$8,198.0	$8,051.0	$0.0	-$8,051.0
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	$17,766.8	$17,848.0	$11,884.0	-$5,964.0
Categorical Grant: Pollution Control (Sec. 106) (other activities)	$211,267.6	$212,958.0	$141,799.0	-$71,159.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	$229,034.4	$230,806.0	$153,683.0	-$77,123.0
Categorical Grant: Wetlands Program Development	$15,111.2	$14,661.0	$9,762.0	-$4,899.0
Categorical Grant: Underground Injection Control (UIC)	$10,130.3	$10,506.0	$6,995.0	-$3,511.0
Categorical Grant: Pesticides Program Implementation	$12,728.1	$12,701.0	$8,457.0	-$4,244.0
Categorical Grant: Lead	$13,016.2	$14,049.0	$0.0	-$14,049.0
Categorical Grant: Hazardous Waste Financial Assistance	$97,994.5	$99,693.0	$66,381.0	-$33,312.0
Categorical Grant: Pesticides Enforcement	$17,924.6	$18,050.0	$10,531.0	-$7,519.0
Categorical Grant: Pollution Prevention	$4,115.9	$4,765.0	$0.0	-$4,765.0
Categorical Grant: Toxics Substances Compliance	$4,685.5	$4,919.0	$3,276.0	-$1,643.0
Categorical Grant: Tribal General Assistance Program	$65,266.1	$65,476.0	$44,233.0	-$21,243.0
Categorical Grant: Underground Storage Tanks	$1,320.0	$1,498.0	$0.0	-$1,498.0
Categorical Grant: Tribal Air Quality Management	$12,767.9	$12,829.0	$8,963.0	-$3,866.0
Categorical Grant: Environmental Information	$9,550.3	$9,646.0	$6,422.0	-$3,224.0
Categorical Grant: Beaches Protection	$9,552.0	$9,549.0	$0.0	-$9,549.0
Categorical Grant: Brownfields	$46,941.8	$47,745.0	$31,791.0	-$15,954.0
Categorical Grant: Multipurpose Grants	$56.1	$10,000.0	$10,000.0	$0.0
Categorical Grant: Sector Program	$103.4	$0.0	$0.0	$0.0
Subtotal, Categorical Grants	**$1,054,098.3**	**$1,076,041.0**	**$580,347.0**	**-$495,694.0**
Congressional Priorities				
Congressionally Mandated Projects	$6,788.8	$0.0	$0.0	$0.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Total, State and Tribal Assistance Grants	**$4,067,093.9**	**$4,212,161.0**	**$2,774,602.0**	**-$1,437,559.0**
Hazardous Waste Electronic Manifest System Fund				
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	$2,146.2	$0.0	$0.0	$0.0
Total, Hazardous Waste Electronic Manifest System Fund	**$2,146.2**	**$0.0**	**$0.0**	**$0.0**
Water Infrastructure Finance and Innovation Fund				
Water Quality Protection				
Water Infrastructure Finance and Innovation	$12,235.8	$63,000.0	$25,000.0	-$38,000.0
Total, Water Infrastructure Finance and Innovation Fund	**$12,235.8**	**$63,000.0**	**$25,000.0**	**-$38,000.0**
Subtotal, EPA	**$8,751,799.4**	**$8,973,336.0**	**$6,295,490.0**	**-$2,677,846.0**
Cancellation of Funds	$0.0	-$148,848.0	-$227,000.0	-$78,152.0
TOTAL, EPA	**$8,751,799.4**	**$8,824,488.0**	**$6,068,490.0**	**-$2,755,998.0**

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

Eliminated Programs

Eliminated Program Projects

Alternative Dispute Resolution (FY 2019 Annualized CR: $1.898 M, 8.4 FTE)
This program provides alternative dispute resolution (ADR) services to EPA Headquarters, EPA Regional Offices, and external stakeholders. This elimination of funding reflects the centralization of conflict prevention and the ADR program. Programs across the Agency may pursue ADR support services and training individually.

Beach / Fish Programs (FY 2019 Annualized CR: $2.014 M, 4.1 FTE)
This program provides science, guidance, technical assistance and nationwide information to state, Tribal, and federal agencies on the human health risks associated with eating locally caught fish/shellfish or wildlife with excessive levels of contaminants, as well as beach monitoring and notification programs. The Agency will encourage states to continue this work within ongoing core programs.

Categorical Grant: Beaches Protection (FY 2019 Annualized CR: $9.549 M, 0.0 FTE)
Grants authorized under the BEACH Act support continued development and implementation of coastal recreational water monitoring and public notification programs. After over 17 years of technical guidance and financial support, state and local governments now have the technical expertise and procedures to continue beach monitoring without federal support.

Categorical Grant: Lead (FY 2019 Annualized CR: $14.049 M, 0.0 FTE)
The program provides support to authorized state and tribal programs that administer training and certification programs for lead paint professionals and contractors. Lead paint certification will continue under the Chemical Risk Review Reduction program.

Categorical Grant: Nonpoint Source (Sec. 319) (FY 2019 Annualized CR: $170.915 M, 0.0 FTE)
This program provides grants to assist states and tribes in implementing approved elements of Nonpoint Source Programs including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects. The Agency will continue to coordinate with the United States Department of Agriculture to target funding where appropriate to address nonpoint sources.

Categorical Grant: Pollution Prevention (FY 2019 Annualized CR: $4.765 M, 0.0 FTE)
The Pollution Prevention (P2) program is a tool for advancing environmental stewardship by federal, state and Tribal governments, businesses, communities and individuals. In FY 2020, EPA will focus its resources on core statutory environmental work.

Categorical Grant: Radon (FY 2019 Annualized CR: $8.051 M, 0.0 FTE)
The program provides funding for the development of state radon programs and disseminates public information and educational materials. The program also provides information on equipment training, data storage and management, and toll-free hotlines. For over 30 years EPA's radon program has provided important guidance and funding to help states establish their own

programs. States could elect to maintain core program work by using state resources rather than using federal resources.

Categorical Grant: Underground Storage Tanks (FY 2019 Annualized CR: $1.498 M, 0.0 FTE)
The program provides funding for petroleum and hazardous substance release prevention and detection activities including: compliance assistance, state program approvals, and technical equipment reviews and approvals. States could elect to maintain core program work with state resources rather than federal.

Endocrine Disruptors (FY 2019 Annualized CR: $7.553 M, 7.7 FTE)
The program develops and validates scientific test methods for the routine, ongoing evaluation of pesticides and other chemicals to determine their potential interference with normal endocrine system function. The program recently developed and validated some tier 1 and tier 2 testing approaches for endocrine disruption. The ongoing functions of the program will be absorbed into the pesticides program using the currently available tiered testing.

Environmental Education (EE) (FY 2019 Annualized CR: $8.702 M, 10.3 FTE)
This program promotes delivery of environmental education through science-based methodologies that promote public engagement. In recognition of the significant guidance and financial support the EE program has provided to non-profit organizations, local education agencies, universities, community colleges, and state and local environmental agencies, funding for some of the environmental stewardship activities could be leveraged at the state or local level.

Geographic Program: Gulf of Mexico (FY 2019 Annualized CR: $12.542 M, 13.1 FTE**)**
The program is a partnership of the five Gulf states, Gulf coastal communities, citizens, nongovernmental organizations, and federal agencies working together to initiate cooperative actions by public and private organizations to achieve specific environmental results. EPA will encourage the five Gulf of Mexico states to continue to make progress in restoring the Gulf of Mexico from within core water programs.

Geographic Program: Lake Champlain (FY 2019 Annualized CR: $8.399 M, 0.0 FTE)
The program creates a pollution prevention, control, and restoration plan for protecting the Lake Champlain Basin. EPA will encourage New York and Vermont to continue to make progress in restoring Lake Champlain from within core water programs.

Geographic Program: Long Island Sound (FY 2019 Annualized CR: $12.000 M, 0.0 FTE)
The program supports the implementation of the Comprehensive Conservation and Management Plan for the Long Island Sound National Estuary Program. EPA will encourage Long Island Sound states and local entities to continue to make progress in restoring the Sound from within core water programs.

Geographic Program: Other (FY 2019 Annualized CR: $7.393 M, 4.6 FTE)
The program provides funding to develop and implement community-based approaches to mitigate diffuse sources of pollution and cumulative risk for geographic areas including: Lake Pontchartrain, Southern New England Estuary (SNEE), and the Northwest Forest Program. EPA will encourage states and local entities to continue to make progress in restoring these aquatic ecosystems from within core water programs.

Geographic Program: Puget Sound (FY 2019 Annualized CR: $28.000 M, 6.5 FTE)
The program works to protect and restore the Puget Sound, focusing on environmental activities consistent with the State of Washington's 2020 Puget Sound Action Agenda. EPA will encourage state, tribal, and local entities to continue to make progress in restoring the Puget Sound from within core water programs.

Geographic Program: San Francisco Bay (FY 2019 Annualized CR: $4.819 M, 2.3 FTE)
The program is aimed at protecting and restoring water quality and ecological health of the San Francisco Bay estuary through partnerships, interagency coordination, and project grants. EPA will encourage the state of California and local entities to continue to make progress in restoring the San Francisco Bay from within core water programs.

Geographic Program: South Florida (FY 2019 Annualized CR: $1.704 M, 1.8 FTE)
The program leads special initiatives and planning activities in the South Florida region, which includes the Everglades and Florida Keys coral reef ecosystem. EPA will encourage state, tribal, and local entities to continue to make progress in protecting and restoring sensitive aquatic ecosystems in South Florida from within core water programs.

Gold King Mine Water Monitoring (FY 2019 Annualized CR: $4.000 M, 0.6 FTE)
This non-recurring program provided grants that supported the development and implementation of a program for monitoring of rivers contaminated by the Gold King Mine Spill. The Agency will continue coordinating with the involved states and tribes from within core water programs.

Indoor Air: Radon Program (FY 2019 Annualized CR: $3.295 M, 9.0 FTE)
Within this program, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance, and advises the public of steps they can take to reduce exposure to radon. For over 30 years EPA's radon program has provided important guidance and funding to help states establish their own programs.

Infrastructure Assistance: Mexico Border (FY 2019 Annualized CR: $10.000 M, 0.0 FTE)
The program provides for the planning, design, and construction of water and wastewater treatment facilities along the U.S. Mexico border. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border.

LUST Prevention (FY 2019 Annualized CR: $25.369 M, 0.0 FTE)
The program provides resources to states, tribes, territories, and intertribal consortia for their Underground Storage Tank (UST) programs, with a focus on inspections, enforcement, development of leak prevention regulations, and other program infrastructure. States could elect to maintain core program work with state resources rather than federal.

Marine Pollution (FY 2019 Annualized CR: $11.065 M, 42.5 FTE)
The program funds the implementation of regulatory and support activities relating to ocean discharges and related marine ecosystem protection activities. EPA will continue to meet statutory mandates through the core national water program.

National Estuary Program / Coastal Waterways (FY 2019 Annualized CR: $26.723 M, 36.9 FTE)
The program works to restore the physical, chemical, and biological integrity of estuaries and coastal watersheds. EPA will encourage states to continue this work and continue to implement conservation management plans.

Pollution Prevention Program (FY 2019 Annualized CR: $11.236 M, 46.2 FTE)
The program promotes environmentally sound business practices and the development of safer (green) chemicals, technologies, and processes. Partners can continue the best practices that have been shared through this program and continue efforts aimed at reducing pollution.

RCRA: Waste Minimization & Recycling (FY 2019 Annualized CR: $9.534 M, 47.6 FTE)
The program establishes a framework for redirecting materials away from disposal and towards beneficial uses, such as composting food waste, increasing the recycling of electronics, and reducing waste from federal facilities. EPA will focus its resources on core environmental work.

Reduce Lead in Drinking Water (FY 2019 Annualized CR: $10.000 M, 0.4 FTE)
The Reducing Lead in Drinking Water program provides grants to eligible entities for lead reduction projects. EPA will continue to work on awarding the funds appropriated by Congress in FY 2018 and FY 2019. In FY 2020 lead reduction efforts may continue through the State Revolving Fund (SRF) mechanisms, WIFIA, and the newly proposed America's Water Infrastructure Act of 2018 (AWIA) programs.

Reduce Risks from Indoor Air (FY 2019 Annualized CR: $13.695 M, 46.0 FTE)
This program addresses indoor environmental asthma triggers, such as secondhand smoke, dust mites, mold, cockroaches and other pests, household pets, and combustion byproducts through a variety of outreach, education, training and guidance activities.

Regional Science and Technology (FY 2019 Annualized CR: $1.205 M, 2.0 FTE)
The program supplies laboratory analysis, field monitoring and sampling, and builds Tribal capacity for environmental monitoring and assessment. Central approach will be replaced with ad hoc efforts.

Safe Water for Small and Disadvantaged Communities (FY 2019 Annualized CR: $20.000 M, 0.4 FTE)
The Safe Water for Small and Disadvantaged Communities Program provides grants to eligible entities for use in carrying out projects and activities to assist public water systems. EPA will continue to work on awarding the funds appropriated by Congress in FY 2018 and FY 2019. In FY 2020, EPA will continue to request flexible subsidization funding to target small and disadvantaged communities through the State Revolving Fund (SRF) mechanism.

Science Policy and Biotechnology (FY 2019 Annualized CR: $2.040 M, 7.2 FTE)
The Scientific Advisory Panel (SAP) organizes and conducts reviews (typically six to ten each year) by independent, outside scientific experts of science documents, science policies, and/or science programs that relate to EPA's pesticide and toxic program activities. Statutory requirements will be absorbed by the pesticides and toxics programs.

Small Minority Business Assistance (FY 2019 Annualized CR: $1.574 M, 8.9 FTE)
This program provides technical assistance to small businesses, headquarters, and regional office employees to ensure that small minority businesses and minority academic institutions receive a fair share of EPA's procurement dollars and grants, where applicable. The Agency will integrate its resources for Small and Disadvantaged Business activities under the Small Business Ombudsman program.

Stratospheric Ozone: Multilateral Fund (FY 2019 Annualized CR: $8.736 M, 0.0 FTE)
This program promotes international compliance with the Montreal Protocol by financing the incremental cost of converting existing industries in developing countries to cost-effective ozone friendly technology. EPA will continue domestic ozone-depleting substances reduction work.

Targeted Airshed Grants (FY 2019 Annualized CR: $40.000 M, 0.0 FTE)
This program offers competitive grants to reduce air pollution in the top five most polluted nonattainment areas relative to annual ozone or PM2.5. This program is regional in nature, and affected states can continue to fund work through EPA's core air grant programs and statutes.

Toxic Substances: Lead Risk Reduction Program (FY 2019 Annualized CR: $12.627 M, 66.0 FTE)
The program addresses exposure to lead from lead-based paint through regulations, certification, and training programs and public outreach efforts. Lead paint certifications will continue under Chemical Risk Review Reduction program. Other forms of lead exposure are addressed through other targeted programs such as the State Revolving Funds to replace lead pipes.

Trade and Governance (FY 2019 Annualized CR: $5.463 M, 15.9 FTE)
This program promotes trade related activities focused on sustaining environmental protection. In FY 2020 EPA will focus its resources on core statutory work.

U.S. Mexico Border (FY 2019 Annualized CR: $3.033 M, 13.9 FTE)
The program addresses environmental protection of the U.S Mexico border in partnership with the ten (10) Border States, U.S. Tribal government, and the Government of Mexico. In FY 2020, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. The State Revolving Funds also may continue to fund water system improvements in U.S. communities along the border.

Water Quality Research and Support Grants (FY 2019 Annualized CR: $16.800 M, 0.0 FTE)
The program focuses on the development and application of water quality criteria, the implementation of watershed management approaches, and the application of technological options to restore and protect water bodies. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF).

Eliminated Sub-Program Projects

Atmospheric Protection Program (FY 2019 Annualized Continuing Resolution:
Estimated $66.000 M)
The following voluntary climate-related partnership programs are proposed for elimination: AgSTAR, Center for Corporate Climate Leadership, Coalbed Methane Outreach Program,

Combined Heat & Power Partnership, Global Methane Initiative, GreenChill Partnership, Green Power Partnership, Landfill Methane Outreach Program, Natural Gas STAR, Responsible Appliance Disposal Program, SF6 Reduction Partnership for Electric Power Systems, SmartWay, State and Local Climate Energy Program, and Voluntary Aluminum Industrial Partnership. (Note: The FY 2020 President's Budget includes a proposal to authorize EPA to administer the ENERGY STAR program through the collection of user fees.)

Global Change Research (Research: AE) (FY 2019 Annualized CR: $19.014 M, 47.3 FTE)
The program develops scientific information that supports policy makers, stakeholders, and society-at-large as they respond to climate change. This elimination prioritizes activities that support decision-making related to core environmental statutory requirements.

STAR Research Grants (Research: AE, CSS, SSWR, SHC) (FY 2019 Annualized CR: $28.536 M, 0.0 FTE)
The Science to Achieve Results, or STAR, funds research grants and graduate fellowships in environmental science and engineering disciplines through a competitive solicitation process and independent peer review. EPA will prioritize activities that support decision-making related to core environmental statutory requirements, as opposed to extramural activities.

WaterSense (Surface Water Protection) (FY 2019 Annualized CR: $3.100 M, 8.0 FTE)
WaterSense is a voluntary partnership program to label water-efficient products as a resource for helping to reduce water use.

Expected Benefits of E-Government Initiatives

eRulemaking

The eRulemaking Line of Business is designed to: enhance public access and participation in the regulatory process through electronic systems; reduce the burden on citizens and businesses in finding relevant regulations and commenting on proposed rulemaking actions; consolidate redundant docket systems; and improve agency regulatory processes and the timeliness of regulatory decisions. EPA is currently the managing partner for this Line of Business; however, in FY 2019, EPA will work with the Office of Management and Budget (OMB) and the General Services Administration (GSA) towards transferring management services to GSA by the beginning of FY 2020.

The eRulemaking Program's Federal Docket Management System (FDMS) currently supports more than 178 federal entities including all Cabinet-level Departments and independent rulemaking agencies, which collectively promulgate approximately 90 percent of all federal regulations each year. FDMS has simplified the public's participation in the rulemaking process and made EPA's rulemaking business processes more accessible as well as transparent. FDMS provides EPA's approximately 501 active users with a secure, centralized electronic repository for managing agency rulemaking development via distributed management of data and robust role-based user access. EPA posts regulatory and non-regulatory documents in *Regulations.gov* for public viewing, downloading, bookmarking, email notification and commenting. Overall, EPA currently provides public access to 1,220,433 documents in *Regulations.gov*.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2018	020-99-99-99-99-0060-24	$1,000.0
2019	020-99-99-99-99-0060-24	$1,000.0
2020	020-99-99-99-99-0060-24	$1,000.0

Geospatial Line of Business

The Geospatial Line of Business is an intergovernmental project to improve the ability of the public and government to use geospatial information to support the business of government and facilitate decision-making. This initiative will reduce costs and improve agency operations in several areas.

With the implementation of the National Spatial Data Infrastructure Strategic Plan, the geospatial data sets known as National Geospatial Data Assets (NDGA) and associated analytical services have become available on the National Geospatial Platform. These additional datasets and services are easily accessible by federal agencies, their partners, and stakeholders. EPA uses the National Geospatial Platform to obtain data and services for internal analytical purposes as well as to publish outward-facing geospatial capabilities to the public.

While the Department of the Interior is the managing partner, EPA is a leader in developing the vision and operational plans for the implementation of the Geospatial Data Act as well as OMB

guidance on Coordination of Geographic Information and Related Spatial Data Activities and the National Geospatial Platform which incorporates many national geospatial data and analytical services for federal agencies, their partners, and stakeholders. EPA is expected to contribute to the operation of the National Geospatial Platform in FY 2020. The intent is to reduce base costs by providing an opportunity for EPA and other agencies to share approaches on procurement consolidation and include shared services for hosting geospatial data, services and applications.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-99-99-99-99-3100-24	$225.0
2019	020-99-99-99-99-3100-24	$225.0
2020	020-99-99-99-99-3100-24	$225.0

USA Jobs

U.S. Office of Personnel Management (OPM) USA Jobs simplifies the process of locating and applying for federal jobs. USA Jobs is a standard job announcement and resume builder website. It is the one-stop for federal job seekers to search for and apply to positions on-line. This integrated process benefits citizens by providing a more efficient process to locate and apply for jobs, and assists federal agencies in hiring top talent in a competitive marketplace. The OPM USA Jobs initiative has increased job seeker satisfaction with the federal job application process and is helping the Agency to locate highly-qualified candidates and improve response times to applicants.

The Agency is required to integrate with USA Jobs, to eliminate the need for applicants to maintain multiple user IDs to apply for federal jobs across agencies. The vacancy announcement format is improved for easier readability. The system can maintain up to five resumes per applicant, which allows them to create and store resumes tailored to specific skills. In addition, USA Jobs has a notification feature that keeps applicants updated on the status of the application and provides a link to the Agency's website for detailed information. This self-help USA Jobs feature allows applicants to obtain up-to-date information on the status of their application upon request.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2018	020-00-01-16-04-1218-24	$125.0
2019	020-00-01-16-04-1218-24	$105.0
2020	020-00-01-16-04-1218-24	$130.0

Financial Management Line of Business

The Financial Management Line of Business (FM LoB) is a multi-agency effort whose goals include: achieving process improvements and cost savings in the acquisition, development, implementation, and operation of financial management systems. By incorporating the same FM LoB-standard processes as those used by central agency systems, interfaces among financial systems are streamlined and the quality of information available for decision-making is improved.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-00-01-01-04-1100-24	$96.0
2019	020-00-01-01-04-1100-24	$96.0
2020	020-00-01-01-04-1100-24	$96.0

Grants.gov

The Grants.gov initiative benefits EPA and its grant programs by providing a single location to publish grant opportunities and application packages, and by providing a single site for the grants community to apply for grants using common forms, processes and systems. EPA believes that the central site raises the visibility of its grants opportunities to a wider diversity of applicants.

The grants community benefits from savings in postal costs, paper and envelopes. Applicants save time in searching for agency grant opportunities and in learning the application systems of various agencies. In order to streamline the application process, EPA offers Grants.gov application packages for mandatory state grants (*i.e.*, Continuing Environmental Program Grants).

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-00-04-00-04-0160-24	$307.0
2019	020-00-04-00-04-0160-24	$276.0
2020	020-00-04-00-04-0160-24	$331.0

Budget Formulation and Execution Line of Business

The Budget Formulation and Execution Line of Business (BFELoB) allows EPA and other agencies to access budget-related benefits and services. The Agency has the option to implement LoB-sponsored tools, training and services.

EPA has benefited from the BFELoB by sharing valuable information on how systems and software being developed by the LoB have enhanced work processes. This effort has created a government-only capability for electronic collaboration (*Wiki*) in which the Budget Community website allows EPA to share budget information internally, with OMB, and with other federal agencies. The Agency also made contributions to the Human Capital Workgroup, participating in development of on-line training modules for budget activities – a valuable resource to all agency budget staff. The LoB has developed the capability to have secure, virtual on-line meetings where participants can view budget-related presentations from their workspace and participate in the discussion through a conference line. The LoB provides regularly scheduled symposia as an additional forum for EPA budget employees.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-99-99-99-99-3200-24	$110.0
2019	020-99-99-99-99-3200-24	$110.0
2020	020-99-99-99-99-3200-24	$110.0

Federal Human Resources Line of Business

OPM's Human Resources Line of Business (HR LoB) provides the federal government the infrastructure to support pay-for-performance systems, modernized HR systems, and the core functionality necessary for the strategic management of human capital.

The OPM HR LoB offers common solutions that will enable federal departments and agencies to work more effectively, and to provide managers and executives across the federal government an improved means to meet strategic objectives. EPA will benefit by supporting an effective program management activity which evaluates provider performance, customer satisfaction, and compliance with program goals, on an ongoing basis.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-00-01-16-04-1200-24	$68.0
2019	020-00-01-16-04-1200-24	$68.0
2020	020-00-01-16-04-1200-24	$69.0

Integrated Acquisition Environment

The Integrated Acquisition Environment (IAE) is currently comprised of nine government-wide automated applications and/or databases that have contributed to streamlining the acquisition business process across the government. In FY 2012, GSA began the process of consolidating the systems into one central repository called the System for Award Management (SAM). Until the consolidation is complete, EPA continues to leverage these systems via electronic linkages between EPA's Acquisition System (EAS) and the IAE shared systems. Other IAE systems are not linked directly to EAS but benefit the Agency's contracting staff and vendor community as stand-alone resources.

EAS uses data provided by SAM to replace internally maintained vendor data. Contracting officers can download vendor-provided representation and certification information electronically via SAM as well, which allows vendors to submit this information once rather than separately for every contract proposal. Contracting officers are able to access the Excluded Parties List (EPLS) via SAM to identify vendors that are debarred from receiving contract awards.

Contracting officers also can link to the Wage Determination Online to obtain information required under the Service Contract Act and the Davis-Bacon Act. EAS links to the Federal Procurement Data System (FPDS) for submission of contract actions at the time of award. FPDS provides public access to government-wide contract information. The Electronic Subcontracting Reporting System supports vendor submission of subcontracting data for contracts identified as requiring this information. EPA submits synopses of procurement opportunities over $25,000 to the Federal Business Opportunities website, where the information is accessible to the public. Vendors use this website to identify business opportunities in federal contracting.

Further, the Federal Funding Accountability and Transparency Act (FFATA) requires agencies to unambiguously identify contract, grant, and loan recipients and determine parent/child relationship

and address information. The FFATA taskforce determined that using both the Dun and Bradstreet DUNS Number (standard identifier for all business lines) and Central Contractor Registration (CCR, the single point of entry for data collection and dissemination) are the most appropriate ways to accomplish this. This fee will pay for EPA's use of this service while reporting grants and/or loans. Funds also may be used to consolidate disparate contract and grant systems into the new SAM.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2018	020-00-01-16-04-0230-24	$874.0
2019	020-00-01-16-04-0230-24	$944.0
2020	020-00-01-16-04-0230-24	$720.0

Federal PKI Bridge

Federal Public Key Infrastructure (FPKI) provides the government with a common infrastructure to administer digital certificates and public-private key pairs, including the ability to issue, maintain, and revoke public key certificates. FPKI leverages a security technique called Public Key Cryptography to authenticate users and data, protect the integrity of transmitted data, and ensure non-repudiation and confidentiality.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-99-99-99-99-0090-24	$32.0
2019	020-99-99-99-99-0090-24	$93.0
2020	020-99-99-99-99-0090-24	$41.0

Freedom of Information Act Portal

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the OMB and the Department of Justice (DOJ) to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of this National FOIA Portal. EPA and other federal agencies were asked to contribute to this effort.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2018	020-99-99-99-99-0090-24	$0.0
2019	020-99-99-99-99-0090-24	$34.0
2020	020-99-99-99-99-0090-24	$43.0

FY 2020 Administrator's Priorities

Funding for the Administrator's priorities are allocated by program project in the FY 2020 President's Budget with a total of $2.375 million in the Environmental and Program Management Account and $125 thousand in the Science and Technology Account.

These funds, which are set aside for the Administrator's priorities, are used to address unforeseen issues that may arise during the year. These funds are used by the Administrator to support critical unplanned issues and the amounts shown in the below table will be reallocated as needed, in accordance with reprogramming limits.

FY 2020 President's Budget Funding for Administrator's Priorities

Appropriation	Program Project	Dollars in Thousands
EPM	Acquisition Management	$150
EPM	Brownfields	$25
EPM	Civil Enforcement	$150
EPM	Civil Rights / Title VI Compliance	$75
EPM	Compliance Monitoring	$100
EPM	Criminal Enforcement	$145
EPM	Drinking Water Programs	$100
EPM	Exchange Network	$75
EPM	Federal Stationary Source Regulations	$100
EPM	Federal Support for Air Quality Management	$130
EPM	Human Resources Management	$25
EPM	International Sources of Pollution	$50
EPM	IT / Data Management	$175
EPM	Legal Advice: Environmental Program	$100
EPM	Legal Advice: Support Program	$75
EPM	NEPA Implementation	$100
EPM	Pesticides: Protect Human Health from Pesticide Risk	$150
EPM	Pesticides: Protect the Environment from Pesticide Risk	$150
EPM	Pesticides: Realize the Value of Pesticide Availability	$100
EPM	RCRA: Waste Management	$25
EPM	Science Advisory Board	$100
EPM	State and Local Prevention and Preparedness	$100
EPM	Surface Water Protection	$50
EPM	TRI / Right to Know	$75
EPM	Tribal - Capacity Building	$50
S&T	Federal Support for Air Quality Management	$25
S&T	Research: Air and Energy	$50
S&T	Research: Chemical Safety and Sustainability	$50
Total		**$2,500**

Proposed FY 2020 Administrative Provisions

To further clarify proposed Administrative Provisions that involve more than a simple annual extension or propose a modification to an existing provision, the following information is provided.

Establishment of Authority for Energy Star Fee Collection and Use

The FY 2020 Budget includes a proposal to authorize EPA to administer the ENERGY STAR Program through the collection of user fees. Fee collections would begin after EPA undertakes a rulemaking process to determine which products would be covered by fees and the level of fees, and to ensure that a fee system would not discourage manufacturers from participating in the program or result in a loss of environmental benefits. The fee collections would provide funding to cover an upfront appropriation, and continued expenses to develop, operate, and maintain the ENERGY STAR Program. The legislative proposal to authorize collection and spending of the fees is as follows:

Section 131 of The Energy Policy and Conservation Act, as amended, 42 U.S.C. §6294A, is amended by inserting after paragraph (d):

"(e) ***User Fees***

(1) In General

In accordance with paragraph (a), the Administrator may prescribe by regulation, for application in fiscal year 2020 and in subsequent fiscal years, reasonable fees as the Administrator determines to be necessary to defray costs incurred for entities that participate in the ENERGY STAR program. The regulation will ensure that the fee imposed on each entity is sufficient and not more than reasonably necessary to cover a proportional share of ENERGY STAR program costs incurred in operating and maintaining the Energy Star program, including collection and processing fees. The Administrator shall amend this regulation periodically so as to ensure that the schedule of fees covers such program costs.

(2) Collection of Fees. *The Administrator shall prescribe procedures to collect the fees.*

(3) Availability of Fees.

(A) *Such fees shall be collected and available for ENERGY STAR program administration functions performed by the Agency in an amount and to the extent provided in advance in appropriations acts."*

FIFRA and PRIA Fee Spending Restrictions

Statutory language in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Extension Act of 2018 (PRIA-4), signed into law by the President on March 8, 2019, restricts what activities EPA can fund from collections deposited in the Reregistration and Expedited Processing Revolving Fund and Pesticide Registration Fund. The FY 2020 Budget carries forward the proposed statutory language from the FY 2019 President's Budget to clarify the Agency's authority to utilize resources in the funds, to review existing pesticide registrations for their compliance within current FIFRA standards, and to ensure market

access for pesticide registrants. Specifically, fees collected would be available for the following activities as they relate to pesticide licensing: processing and review of data submitted in association with a registration; information submitted pursuant to Section 6(a)(2) of FIFRA; supplemental distributor labels, transfers of registrations and data compensation rights, additional uses registered by states under Section 24(c) of FIFRA; data compensation petitions, review of minor amendments and notifications; laboratory support and audits; administrative support; development of policy and guidance; rulemaking support; information collection activities; and the portions of salaries related to work in these areas.

Statutory language would ease spending restrictions related to both the FIFRA pesticide maintenance fees and the PRIA registration fees. Since the FIFRA fees are mandatory, separate language has been prepared that will be transmitted at a later date.

Notwithstanding any other provision of law, in addition to the activities specified in section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136w-8), fees collected in this and prior fiscal years under such section shall be available for the following activities as they relate to pesticide licensing: processing and review of data submitted in association with a registration;, information submitted pursuant to section 6(a)(2) of FIFRA; supplemental distributor labels, transfers of registrations and data compensation rights; additional uses registered by States under section 24(c) of FIFRA; data compensation petitions, review of minor amendments, and notifications; laboratory support and audits; administrative support; development of policy and guidance; rulemaking support; information collection activities; and the portions of salaries related to work in these areas.

Note: PRIA-4, signed into law by the President on March 8, 2019 subsequent to formulation of the Budget, addresses a portion of this proposal by allowing the use of maintenance fees deposited in the Reregistration and Expedited Processing Fund for Endangered Species Act reviews, tracking and implementation of registration review decisions, laboratory inspections and data audits, and information systems enhancements. This proposal would further expand these allowable uses of pesticide maintenance and registration service fees.

Hazardous Waste Electronic Manifest

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In FY 2020, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $24 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will be utilized for the operation of the system and necessary program expenses. Fees will fully support the e-Manifest Program, including future development costs. The legislative proposal to authorize collection and spending of the fees is as follows:

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2020.

Issuing grants for PM 2.5 monitoring network under Clean Air Act Sections 103 and 105

Per the Consolidated Appropriations Act, 2018 (P.L. 115-141), EPA is directed to use Section 103 of the Clean Air Act to provide grants to states for the PM 2.5 monitoring network. Accordingly, EPA continues to issue grants to states for the network exclusively under Section 103. EPA requests the flexibility to use both Sections 103 and 105 authorities under the Clean Air Act to issue grants to states for the PM 2.5 monitoring network.

$151,961,000 shall be for grants, including associated program support costs, to states, federally recognized tribes, interstate agencies, Tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104-134, and for making grants under Sections 103 and 105 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator.

Current statutory language directs EPA to issue grants in support of the PM 2.5 monitoring under Section 103 of the Clean Air Act. However, given the maturity of the PM 2.5 monitoring network, it is appropriate for EPA to provide grants to states to fund the network under Section 105 of the Clean Air Act. The PM 2.5 monitoring network is a continuing activity in support of air quality management, which aligns with authorized activities under Section 105, whereas Section 103 is intended to fund research, demonstration, and other similar activities. The proposed language gives the Agency more flexibility to award grants under Section 103 and 105 authorities. The Clean Air Act Section 105 authority provides for cost-sharing between EPA and the states with up to 60 percent of costs provided by EPA.

Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of the Toxic Substances Control Act (TSCA). The amendments provide authority to the Agency to establish fees for certain activities under Sections 4, 5 and 6 of TSCA, as amended, to defray 25 percent of the costs of administering these Sections and requirements under Section 14. The amendments removed the previous cap that the Agency may charge for pre-manufacturing notification reviews. Fees collected under the TSCA Fees Rule will be deposited in the TSCA Service Fee Fund for use by EPA. Fees under this structure began to be incurred through EPA rulemaking on October 1, 2018 and replaces the former Pre-Manufacturing Notification Fees. The legislative proposal to authorize collection and spending of the fees is as follows:

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 26(b) of the Toxic Substances Control Act (15 U.S.C. 2625(b)) for fiscal year 2020.

Oil and Chemical Facility Compliance Assistance

The FY 2020 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for facilities who are required to prepare and submit Spill

Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act and for facilities who are required to prepare and submit a Risk Management Plan under Section 112(r)(7) of the Clean Air Act. These fees are discretionary and would start in FY 2020 after the Agency establishes procedures for making and accepting a facility's request for voluntary assistance. The fees are offsetting collections and would provide for necessary expenses, including the development, operation, and maintenance of this voluntary compliance assistance service.

The legislative proposals to authorize collection and spending of the fees are as follows:

- *Oil Spill: Prevention, Preparedness, and Response*

The Administrator of the Environmental Protection Agency may collect fees to provide compliance assistance services for owners and operators of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j)): Provided, That fees collected for compliance assistance services pursuant to the authority provided in this paragraph by the Administrator in fiscal year 2020 shall be deposited in the Inland Oil Spill Programs account and shall remain available until expended for the expenses of providing compliance assistance services: Provided further, That the amount of such fees shall be based on the amount of compliance assistance services provided by the agency: Provided further, That the owner or operator of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit a Spill Prevention Control and Countermeasure Plan or a Facility Response Plan under section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j))may request that the Administrator conduct an on-site walk-through of the facility to assist the owner or operator in complying with such section: Provided further, That the walk-through shall be conducted within one year of an accepted request: Provided further, That the Administrator may establish procedures for making and accepting such a request: Provided further, That observations, findings, conclusions, and recommendations made by the Administrator when conducting an on-site walk-through, including any report after an on-site walk-through, shall not in any private action or suit for damages or bodily injury, or in any action under section 505 of the Federal Water Pollution Control Act (33 U.S.C. 1365), be used or admitted as evidence: Provided further, That the Administrator may, by guidance, establish policies for the use of such evidence in actions under the Act.

- *State and Local Prevention and Preparedness*

The Administrator of the Environmental Protection Agency may collect fees to provide compliance assistance services for owners or operators of a stationary source required to prepare and submit a Risk Management Plan under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)): Provided, That fees collected for compliance assistance services pursuant to the authority provided in this paragraph by the Administrator in fiscal year 2020 shall be deposited in the Environmental Programs and Management account and shall remain available until September 30, 2021 for the expenses of providing compliance assistance services: Provided further, That the amount of such fees shall be based on the amount of compliance assistance services provided by the agency: Provided further, That the owner or operator of a stationary source required to prepare and submit, or that has prepared and submitted, a Risk Management Plan under section

112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)) may request that the Administrator conduct an on-site walk-through of the stationary source to assist the owner or operator in complying with such section: Provided further, That the walk-through shall be conducted within one year of an accepted request: Provided further, That the Administrator may establish procedures for making and accepting such a request: Provided further, That the observations, findings, conclusions, and recommendations made by the Administrator when conducting an on-site walk-through, including any report after an on-site walk-through, shall not in any private action or suit for damages or bodily injury, or in any action under section 304 of the Clean Air Act (42 U.S.C. 7604), be used or admitted as evidence: Provided further, That the Administrator may, by guidance, establish policies for the use of such evidence in actions under the Act.

Title 42 Authority

EPA currently has authority to appoint up to 50 persons under 42 U.S.C. section 209 (f) – (h), which is separate and apart from the Title 5 General Schedule and Senior Executive Service system. The Title 42 hiring authority allows EPA's Office of Research and Development to meet the Agency's current, critical research needs by competing for the best and the brightest environmental researchers in academia, private industry, and other government agencies. Title 42 provides EPA with the ability to direct hire world-renowned scientists and engineers and offer them competitive, market-based salaries.

For the sole purposes of extending the authority, the current proposal is:

Proposed Language to Add to FY 2020:
The fourth paragraph under the heading "Administrative Provisions" in title II of Public Law 113-235 is amended by striking "2020" and inserting "2025."

Authority language would read:
For fiscal years 2020 through 2025, the Administrator may, after consultation with the Office of Personnel Management, employ up to fifty persons at any one time in the Office of Research and Development under the authority provided in 42 U.S.C. 209.

Attorney Fee and Cost Payments Obligated in FY 2018 Under Equal Access for Justice

Date of Final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Case Disposition	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case	Hourly Rate of Attorney	Hourly Rate of Expert Witness
5/10/2018	Waterkeeper Alliance, Sierra Club, The Humane Society of the United States, Environmental Integrity Project, and the Center for Food Safety	District of Columbia Circuit Court	09-1017	Stephen Williams	Court Ordered	$243,699.67	EPA Appropriations	Court Ordered after litigation of fees	Earthjustice	Petitioners successfully challenged a final rule which provided a full CERCLA § 103 reporting exemption and partial EPCRA § 304 reporting exemption for releases of hazardous substances into the air from animal waste at farms.	Attorney Range: $174.77 - $200.20 Paralegal/Clerk Range: $152 - $195	No expert witnesses
6/26/2018	Center for Food Safety, International Center for Technology Assessment vs. EPA	9th Circuit	15-72312	Judges Melloy, Clifton, Watford	Court vacated EPA's registration decision; DOJ/EPA negotiated fee settlement	$45,000.00	EPA Appropriations	Negotiated	Center for Food Safety	Petitioners challenged EPA's conditional registration of a new nanosilver active ingredient.in a pesticide product intended for use in textile and plastics.	We did not agree on an hourly rate to reach the $45,000 settlement. But the highest hourly rate given was for the senior attorney, George Kimbrell at $550/hour, and the lowest junior attorney at $235/hour	No expert witnesses.
9/20/2018	A Community Voice-Louisiana vs. EPA	Northern District of California	3:17-cv-06293	Judge Jeffrey S. White	Court vacated the challenged portion of EPA's action; DOJ/EPA negotiated fee settlement	$75,000.00	EPA Appropriations	Negotiated	Earthjustice (on behalf of A Community Voice-Louisiana)	Petitioners successfully challenged a final rule's one-year extension of a compliance date for the TSCA formaldehyde rule on composite wood products.	We did not agree on an hourly rate to reach the $75,000 settlement.	No expert witnesses.

Physicians' Comparability Allowance (PCA) Plan

Department and component:

Environmental Protection Agency

Purpose: The purpose of this document is to describe the Agency's plan for implementing the Physicians' Comparability Allowance (PCA) program. Per 5 CFR 595.107, the Office of Management and Budget (OMB) must approve this plan prior to the Agency entering into any PCA service agreement. Changes to this plan must be reviewed and approved by OMB in accordance with 5 CFR 595.107.

Reporting: In addition to the plan, each year, components utilizing PCA will include their PCA worksheet in the OMB Justification (OMBJ), typically in September. OMB and OPM will use this data for Budget development and congressional reporting.

Plan for Implementing the PCA program:

1a) Identify the categories of physician positions the Agency has established are covered by PCA under § 595.103. Please include the basis for each category. If applicable, list and explain the necessity of any additional physician categories designated by your agency (for categories other than I through IV-B). List Any Additional Physician Categories Designated by Your Agency: Pursuant to 5 CFR 595.107, any additional category of physician receiving a PCA, not covered by categories I through IV-B, should be listed and accompanied by an explanation as to why these categories are necessary.

	Category of Physician Position	**Covered by Agency** (mark "x" if covered)	**Basis for Category**
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position		
	Category II Research Position	X	The small population of EPA Research Physicians experiences modest turnover. The value of the physicians' comparability allowance to EPA is as a retention tool. We are told regularly that absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.
	Category III Occupational Health		
	Category IV-A Disability Evaluation		
	Category IV-B Health and Medical Admin.		

Physicians' Comparability Allowance (PCA) Plan (continued)

2) Explain the recruitment and retention problem(s) for each category of physician in your agency (this should demonstrate that a current need continues to persist). § 595 of 5CFR Ch. 1 requires that an agency may determine that a significant recruitment and retention problem exists only if all of the following conditions apply:
- Evidence indicates that the Agency is unable to recruit and retain physicians for the category;
- The qualification requirements being sought do not exceed the qualifications necessary for successful performance of the work;
- The Agency has made efforts to recruit and retain candidates in the category; and
- There are not a sufficient number of qualified candidates available if no comparability allowance is paid.

	Category of Physician Position	**Recruitment and retention problem**
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position	
	Category II Research Position	The small population of EPA Research Physicians experiences modest turnover. The value of the physicians' comparability allowance to EPA is as a retention tool. We are told regularly that absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.
	Category III Occupational Health	
	Category IV-A Disability Evaluation	
	Category IV-B Health and Medical Admin.	

3) Explain how the Agency determines the amounts to be used for each category of physicians.

	Category of Physician Position	**Basis of comparability allowance amount**
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position	
	Category II Research Position	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, we try to be within a range that allows us to retain the employees.
	Category III Occupational Health	
	Category IV-A Disability Evaluation	
	Category IV-B Health and Medical Admin.	

4) Does the Agency affirm that the PCA plan is consistent with the provisions of 5 U.S.C. 5948 and the requirements of § 595 of 5 CFR Ch. 1?

Yes

Physicians' Comparability Allowance (PCA) Worksheet

1) Department and component:

Environmental Protection Agency

2) Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*
Historically, the number of EPA Research Physicians is between three and seven positions. This small population experiences modest turnover. The value of the physicians' comparability allowance to EPA is as a retention tool.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2018 (Actual)	**CY 2019 (Estimates)**	**BY* 2020 (Estimates)**
3a) Number of Physicians Receiving PCAs	3	4	4
3b) Number of Physicians with One-Year PCA Agreements			
3c) Number of Physicians with Multi-Year PCA Agreements	3	4	4
4a) Average Annual PCA Physician Pay (without PCA payment)	$141,457	$144,759	$147,509
4b) Average Annual PCA Payment	$26,667	$26,667	$26,667

*BY data will be approved during the BY Budget cycle. Please ensure each column is completed.

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*

We are told regularly that absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

An agency with a very small number of physician positions and a low turn-over rate among them still needs the allowance authority to maintain the stability of the small population. Those who opt for federal employment in opposition to private sector employment still want the maximum pay available in the federal sector. Were it not for the PCA, EPA would regularly lose some of its physicians to other federal agencies that offer the allowance, requiring EPA to refill vacant positions. Turn-over statistics should be viewed in this light.

IT Resource Statements

IT Resource Statements
Environmental Protection Agency
IT Resource Statements for FY 2020 PB Budget Submission

OMB Guidance	EPA Statement	Signature/Date
A statement that the CIO collaborated with all component CIOs and the Office of the Chief Financial Officer (OCFO) on the IT Budget Submissions, and that IT includes appropriate estimates of all IT resources included in the budget request/President's budget.	The CIO collaborates regularly with Senior IT Leaders on IT service and resource priorities. For the BY20 President's Budget planning cycle, the OCIO reviewed all investments in the Agency IT Portfolio Summary (AITPS) with the Office of the Chief Financial Officer (OCFO) and provided feedback to all Program offices' regarding their Major IT Investments. The CIO also conducted IT portfolio reviews, with OCFO participation, that covered all CPIC investments and their projected FY20 Presidential budget figures. The FY20 CPIC major estimates in this budget submission are consistent with data presented in the IT Portfolio Reviews.	3-13-19 Holly Greaves Date Chief Financial Officer 3-12-2019 Vaughn Noga Date Chief Information Officer
A statement from the CIO indicating the extent to which the CIO has reviewed and had significant input in approving IT investments included in this budget request. For example, if the CIO reviewed and approved all investments from Bureau/Component/Operating Division/Mode A, B, and C, but not D, then the statement must identify that the CIO reviewed and approved Investments from Bureau/Component/Operating Division/Mode A, B, and C.	The CIO has significant input in approving IT investments operated by the Office of Mission Support (OMS). As noted above, the CIO also reviewed all CPIC investments annually as part of the President's Budget process. Additionally, the CIO annually reviews the topline budget numbers for the Agency's IT Investment Portfolio with a focus on toplines by RPIOs, by CPIC Investment Category level, by Part 1, 2, and 3 of IT Portfolio, by appropriation, by IT spend type, by IT Tower, and by program. CIO also reviews all new, consolidated, eliminated and retired investments.	3-12-2019 Vaughn Noga Date Chief Information Officer

OMB Guidance	EPA Statement	Signature/Date
A joint statement from the OCFO and OCIO identifying the extent to which the CIO played a significant role in reviewing planned IT resources for major programs and significant increase and decreases in IT resources in this budget.	The OCIO and OCFO meet regularly to discuss top issues in IT funding. The OCFO met with the OCIO prior to the BY20 President's Budget submission to review the IT budget submission for planned IT resources for major programs and significant increases and decreases in the overall IT budget.	3-13-19 Holly Greaves Date Chief Financial Officer 3-12-2019 Vaughn Noga Date Chief Information Officer
An update of the CIO's common baseline rating for Element D (CIO reviews and approves major IT portion of budget request) to show whether the desired outcome is: 1. Incomplete – Agency has not started development of a plan describing changes it will make to ensure that all baseline FITARA responsibilities are in place. 2. Partially addressed – Agency is working to develop a plan describing the changes it will make to ensure that all baseline FITARA responsibilities are in place. 3. Fully implemented – Agency has developed and	Fully implemented – EPA has developed and implemented its plan to ensure that for Common Baseline Element D ("CIO reviews and approves major IT investment portion of budget request"), all FITARA responsibilities are in place.	3-12-2019 Vaughn Noga Date Chief Information Officer

OMB Guidance	EPA Statement	Signature/Date
implemented its plan to ensure that all common baseline FITARA responsibilities are in place.		
The extent to which the CIO can certify the use of incremental development. For example, if the CIO can certify that all investments from bureau/component A, B, C, but not D are using incremental development practices, then the statement must identify that the CIO certifies that Investments from bureaus A, B, and C are using incremental development practices.	EPA has one major investment that has been CIO-certified as employing incremental development, and the five additional major investments have self-certified as employing incremental development. EPA will create and document a CIO certification process for the use of incremental development. During FITARA acquisition reviews and IT Portfolio Reviews OMS has identified several systems that use mature Agile development practices. EPA activities to promote Agile practices include an IT Fellowship program and standing up a Developer's Guild. In addition, EPA recently awarded an Agile coaching and training contract to help programs adopt Agile methodologies.	3-12-2019 Vaughn Noga Date Chief Information Officer

Notes:

IG's Comments on the FY2020 President's Budget

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB – 8 2019

OFFICE OF
INSPECTOR GENERAL

The Honorable Mick Mulvaney
Director
Office of Management and Budget
Executive Office of the President
725 17th Street, NW
Washington, D.C. 20503

Dear Mr. Mulvaney:

Pursuant to Section 6(g)(3) of the Inspector General Act of 1978, as amended, I am submitting comments concerning the President's proposed fiscal year (FY) 2020 budget for the U.S. Environmental Protection Agency's (EPA's) Office of Inspector General (OIG). Section 6(g)(3) of the Inspector General Act of 1978 provides that:

> The President shall include in each budget of the United States Government submitted to Congress- (E) any comments of the affected Inspector General with respect to the proposal if the Inspector General concludes that the budget submitted by the President would substantially inhibit the Inspector General from performing the duties of the office.

The President's proposed FY 2020 budget would create a significant challenge for the EPA OIG's ability to accomplish its mission. The President's FY 2020 budget proposes a $48.5 million funding level for the EPA OIG, which is $1.8 million less than our $50.3 million FY 2018 enacted appropriations.

The proposed FY 2020 funding level would have a negative impact on our production capacity and our ability to respond to ever-demanding and increased workload requirements. As such, I do not agree with the President's budget request, because such a proposal would substantially inhibit the OIG from fully performing its duties. These duties are to conduct audits and investigations of EPA programs and operations; promote economy, efficiency and effectiveness in the administration of those programs; and detect and prevent waste, fraud and abuse.

The EPA OIG's primary products are audits, evaluations and investigations of EPA programs and operations. Such activity is labor intensive and most of our budget goes to pay for the salaries of our employees. The EPA OIG also is obligated to carry out many audits mandated by statute, which necessarily reduces our resources to conduct discretionary audits.

While the EPA OIG tries to balance its workload with a tight FY 2018 enacted appropriation of $50.3 million, the proposed budget of $48.5 million would further hinder our ability to perform discretionary audits and evaluations. The discretionary work that we do fulfills our obligation under the IG Act in keeping EPA

leadership and Congress apprised of problems and deficiencies relating to the agency' s programs and operations, provides valuable management tools to EPA leadership, and produces a positive return on investment to taxpayers. The impact of a $48.5 million budget would create great risk for the agency and reduce taxpayers' return on investment.

The EPA OIG receives multiple and varied inquiries to review EPA actions or inaction. During the past fiscal year, requests for our services far exceeded our ability to handle them. For example, we had to inform congressional requesters and others that we could either not undertake their requested review, only do a portion of the requested work or try to do the requested work eventually. These requests include projects that we believe have significant value. However, we were forced to forego them because our lack of resources resulted in a diminished capacity to adequately respond.

I respectfully request that the President's budget recognize the important work that the EPA OIG continues to perform and the increased risk to the EPA and its mission if our funding levels are reduced to $48.5 million. I request that the EPA OIG's initial budget request of $58 million be recognized. If our budget request is not going to be recognized, pursuant to Section 6(g)(3)(E) of the JG Act, these comments should then be included when the President's budget is transmitted to Congress.

If you or your staff have any questions or would like to meet to discuss this matter, please feel free to contact me at (202) 566-0847 or at Sheehan.Charles@epa.gov.

Sincerely,

Charles J. Sheehan

Charles Sheehan
Acting Inspector General

cc: Michael Horowitz, Chair, Council of the Inspectors General on Integrity and Efficiency
Matthew Z. Leopold, General Counsel, EPA
Holly W. Greaves, Chief Financial Officer, EPA

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

		FY 2019 Annualized Continuing Resolution				FY 2020 President's Budget			
NPM	Major Office	Pay ($K)	Non-Pay ($K)	Total ($K)	FTE	Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
OA	Immediate Office	$6,305	$687	$6,992	36.4	$3,798	$536	$4,334	22.1
	Office of Congressional and Intergovernmental Relations	$7,029	$481	$7,510	45.9	$6,848	$206	$7,054	40.3
	Office of Public Affairs	$6,297	$410	$6,707	37.0	$5,142	$147	$5,289	30.5
	Office of Public Engagement	$1,158	$76	$1,234	6.8	$2,024	$53	$2,077	12.0
	Office of Policy	$23,084	$4,456	$27,541	125.1	$26,511	$5,844	$32,355	136.2
	Children's Health Protection	$2,503	$2,889	$5,392	14.4	$1,416	$50,610	$52,026	7.9
	Environmental Education	$849	$7,330	$8,179	6.5	$0	$0	$0	0.0
	Office of Civil Rights	$3,218	$699	$3,918	19.8	$3,318	$346	$3,664	18.5
	Executive Secretariat	$1,740	$119	$1,859	12.4	$1,854	$42	$1,896	11.0
	Executive Services	$3,263	$507	$3,770	20.7	$2,511	$161	$2,672	14.9
	Homeland Security	$1,930	$480	$2,410	9.2	$1,986	$305	$2,291	9.3
	Science Advisory Board	$3,334	$542	$3,876	17.5	$3,649	$104	$3,753	18.7
	Small and Disadvantaged Business Utilization	$1,599	$1,090	$2,689	11.3	$440	$651	$1,090	2.4
	Regional Resources	$27,515	$2,319	$29,834	172.5	$35,425	$2,584	$38,009	212.3
	TOTAL	**$89,824**	**$22,087**	**$111,911**	**535.5**	**$94,922**	**$61,590**	**$156,512**	**536.1**
OAR	Immediate Office	$9,300	$74,871	$84,171	54.1	$8,704	$53,046	$61,750	47.7
	Office of Air Quality Planning and Standards	$51,970	$42,835	$94,805	343.9	$39,965	$43,207	$83,171	240.7
	Office of Atmospheric Programs	$35,702	$71,080	$106,782	213.8	$21,306	$13,646	$34,952	117.4
	Office of Transportation and Air Quality	$54,323	$121,247	$175,570	341.8	$50,863	$35,485	$86,348	296.7
	Office of Radiation and Indoor Air	$24,108	$13,457	$37,565	148.9	$11,880	$5,253	$17,133	72.0
	Regional Resources	$83,927	$210,848	$294,775	567.8	$69,925	$82,837	$152,763	435.3
	TOTAL	**$259,330**	**$534,337**	**$793,667**	**1,670.3**	**$202,643**	**$233,474**	**$436,117**	**1,209.8**
OCFO	Immediate Office	$1,603	$1,406	$3,009	10.0	$1,583	$539	$2,123	10.0
	Center for Environmental Finance	$0	$0	$0	0.0	$0	$0	$0	0.0
	Office of Budget	$6,411	$2,537	$8,948	40.0	$6,017	$2,005	$8,022	38.0
	Office of Planning, Analysis and Accountability	$3,526	$284	$3,810	22.0	$3,484	$347	$3,831	22.0
	Office of Financial Management	$0	$0	$0	0.0	$0	$0	$0	0.0
	Office of Technology Solutions	$7,998	$24,577	$32,575	49.9	$7,300	$27,371	$34,671	46.1
	Office of Financial Services	$0	$0	$0	0.0	$0	$0	$0	0.0
	Office of Resource and Information Management	$2,084	$1,651	$3,734	13.0	$1,742	$836	$2,577	11.0
	Office of the Controller	$21,782	$2,216	$23,998	135.9	$21,123	$2,930	$24,053	133.4
	OCFO eEnterprise	$1,045	$300	$1,345	5.0	$731	$300	$1,031	4.0
	Regional Resources	$28,661	$1,692	$30,353	202.1	$29,321	$1,199	$30,521	196.0
	TOTAL	**$73,109**	**$34,664**	**$107,773**	**477.9**	**$71,301**	**$35,528**	**$106,829**	**458.5**
OCSPP	Immediate Office	$5,864	$2,127	$7,992	32.7	$5,795	$771	$6,566	30.5
	Office of Pesticide Programs	$72,800	$24,084	$96,884	445.1	$72,365	$3,420	$75,785	410.9
	Office of Pollution Prevention and Toxics	$51,195	$27,630	$78,826	313.6	$36,549	$32,602	$69,151	212.7
	Office of Science Coordination and Policy	$3,516	$6,486	$10,002	20.3	$918	$13	$931	4.9
	Regional Resources	$21,399	$31,320	$52,719	147.6	$11,522	$8,230	$19,751	75.7
	TOTAL	**$154,774**	**$91,648**	**$246,422**	**959.3**	**$127,148**	**$45,036**	**$172,184**	**734.7**
OECA	Immediate Office	$7,267	$1,740	$9,006	40.5	$7,455	$1,372	$8,827	40.0
	Office of Civil Enforcement	$22,669	$11,260	$33,929	121.4	$19,590	$4,373	$23,963	98.9
	Office of Criminal Enforcement, Forensics, and Training	$56,040	$10,488	$66,528	296.0	$52,043	$10,318	$62,361	256.3

		FY 2019 Annualized Continuing Resolution				FY 2020 President's Budget			
NPM	**Major Office**	**Pay ($K)**	**Non-Pay ($K)**	**Total ($K)**	**FTE**	**Pay ($K)**	**Non-Pay ($K)**	**Total ($K)**	**FTE**
	Office of Compliance	$19,617	$17,146	$36,763	112.6	$19,158	$27,579	$46,737	104.5
	Office of Environmental Justice	$3,570	$1,647	$5,216	22.0	$0	$0	$0	0.0
	Office of Federal Activities	$2,877	$1,476	$4,353	16.8	$0	$0	$0	0.0
	Federal Facilities Enforcement Office	$2,344	$586	$2,930	13.3	$2,424	$398	$2,822	12.7
	Office of Site Remediation Enforcement	$11,510	$24,443	$35,953	65.1	$12,347	$25,736	$38,083	65.4
	Regional Resources	$306,104	$44,511	$350,616	1,995.8	$280,564	$14,447	$295,011	1,708.3
	TOTAL	**$431,998**	**$113,298**	**$545,296**	**2,683.5**	**$393,580**	**$84,223**	**$477,803**	**2,286.1**
OGC	Immediate Office	$2,822	$28	$2,850	15.7	$2,296	$46	$2,342	11.8
	Air and Radiation Law Office	$8,484	$5	$8,489	44.0	$6,778	$17	$6,795	33.8
	Pesticides and Toxic Substances Law Office	$4,157	$4	$4,161	18.9	$3,496	$16	$3,512	17.7
	Solid Waste and Emergency Response Law Office	$2,807	$17	$2,824	16.0	$2,270	$25	$2,295	11.5
	Water Law Office	$3,715	$118	$3,834	19.6	$3,437	$10	$3,447	17.4
	Civil Rights - Title VI	$2,031	$161	$2,193	12.0	$1,631	$300	$1,931	9.0
	Other Legal Support	$18,389	$976	$19,365	108.8	$18,966	$2,524	$21,490	98.6
	Regional Resources	$26,993	$557	$27,551	149.6	$26,617	$991	$27,608	137.4
	TOTAL	**$69,400**	**$1,866**	**$71,266**	**384.6**	**$65,491**	**$3,929**	**$69,420**	**337.2**
OIG	Immediate Office	$666	$69	$735	3.0	$633	$75	$708	3.0
	Office of Audit	$24,951	$828	$25,779	153.0	$23,708	$684	$24,392	138.0
	Office of Congressional, Public Affairs and Management	$3,204	$79	$3,283	19.0	$3,044	$362	$3,406	17.0
	Office of Chief of Staff	$6,042	$2,585	$8,627	38.0	$5,741	$2,821	$8,562	35.0
	Office of Investigations	$10,732	$1,112	$11,844	53.0	$10,198	$1,213	$11,411	49.0
	TOTAL	**$45,595**	**$4,672**	**$50,267**	**266.0**	**$43,324**	**$5,155**	**$48,479**	**242.0**
OITA	Immediate Office	$1,016	$89	$1,105	6.0	$421	$55	$476	2.0
	Office of Regional and Bilateral Affairs	$3,501	$2,721	$6,222	20.7	$962	$1,101	$2,063	5.0
	Office of Global Affairs and Policy	$3,400	$227	$3,627	20.1	$962	$1,089	$2,051	5.0
	Office of Management and International Services	$1,962	$594	$2,556	11.6	$782	$719	$1,501	4.0
	American Indian Environmental Office	$2,621	$647	$3,269	15.5	$2,662	$1,001	$3,663	14.3
	Regional Resources	$11,823	$66,820	$78,644	79.2	$9,183	$44,604	$53,787	55.9
	TOTAL	**$24,324**	**$71,099**	**$95,423**	**153.1**	**$14,973**	**$48,568**	**$63,541**	**86.2**
OLEM	Immediate Office	$7,876	$5,142	$13,018	43.7	$5,803	$4,901	$10,705	30.4
	Federal Facilities Restoration and Reuse Office	$2,258	$825	$3,084	13.4	$2,357	$626	$2,983	13.2
	Office of Communication, Partnership, and Analysis	$2,341	$1,656	$3,998	12.9	$2,073	$1,313	$3,387	11.1
	Office of Superfund Remediation and Technology Innovation	$23,739	$69,948	$93,687	139.8	$26,725	$69,224	$95,950	146.3
	Office of Resource Conservation and Recovery	$24,809	$13,483	$38,292	147.9	$19,128	$7,795	$26,924	109.5
	Office of Underground Storage Tanks	$4,406	$2,541	$6,947	24.3	$3,137	$261	$3,398	16.3
	Office of Brownfields and Land Revitalization	$2,420	$12,738	$15,159	14.9	$2,206	$11,211	$13,417	12.1
	Office of Emergency Management	$12,043	$29,380	$41,423	68.0	$11,150	$24,696	$35,846	59.6
	Regional Resources	$262,500	$829,451	$1,091,951	1,739.4	$252,464	$587,094	$839,558	1,575.0
	TOTAL	**$342,394**	**$965,164**	**$1,307,558**	**2,204.3**	**$325,043**	**$707,123**	**$1,032,166**	**1,973.5**
OMS*	Immediate Office	$13,442	$46,914	$60,356	79.3	$14,180	$27,096	$41,277	81.6
	Environmental Appeals Board	$2,916	$128	$3,045	14.0	$2,261	$27	$2,288	11.3
	Administrative Law Judges	$1,547	$171	$1,717	9.2	$2,547	$35	$2,582	12.5
	Office of Human Resources	$18,148	$313,128	$331,276	81.0	$18,623	$327,177	$345,801	85.6
	Office of Administration	$20,369	$5,869	$26,238	81.0	$19,569	$7,440	$27,009	88.6
	OARM - Research Triangle Park	$10,892	$30,879	$41,770	89.9	$10,591	$32,921	$43,512	78.9

NPM	Major Office	FY 2019 Annualized Continuing Resolution				FY 2020 President's Budget			
		Pay ($K)	Non-Pay ($K)	Total ($K)	FTE	Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
	Office of Grants and Debarment	$10,210	$4,423	$14,633	62.0	$9,545	$4,184	$13,729	53.5
	OARM - Cincinnati	$10,636	$19,378	$30,014	77.7	$10,259	$17,601	$27,860	70.5
	Office of Acquisition Solutions	$29,152	$9,992	$39,144	191.8	$29,599	$8,668	$38,266	181.9
	Office of Enterprise Information Programs	$5,841	$8,546	$14,388	33.5	$6,212	$5,632	$11,844	33.4
	Office of Information Management	$9,746	$31,430	$41,176	54.9	$10,654	$21,284	$31,937	56.5
	Office of Digital Services & Technical Architecture	$3,332	$2,569	$5,901	18.5	$4,154	$1,707	$5,862	22.1
	Office of Customer Advocacy, Policy & Portfolio Management	$5,514	$3,044	$8,558	32.3	$5,435	$2,146	$7,581	30.5
	Office of Information Security & Privacy	$3,105	$6,339	$9,444	19.2	$2,404	$17,040	$19,444	13.9
	Office of Information Technology Operations	$1,928	$3,630	$5,559	10.7	$1,868	$2,483	$4,351	10.0
	Regional Resources	$76,472	$57,514	$133,987	485.6	$70,773	$52,834	$123,607	430.5
	TOTAL	**$223,250**	**$543,954**	**$767,204**	**1,340.6**	**$218,674**	**$528,274**	**$746,948**	**1,261.3**
ORD	ORD Headquarters	$48,382	$60,181	$108,564	300.9	$37,149	$21,784	$58,933	221.5
	National Center for Environmental Research	$6,747	$43,216	$49,963	40.9	$646	$2,363	$3,009	3.8
	National Exposure Research Laboratory	$47,446	$31,337	$78,782	294.3	$37,217	$14,242	$51,459	217.7
	National Health and Environmental Effects Research Laboratory	$65,550	$46,118	$111,668	434.9	$54,383	$23,575	$77,958	319.2
	National Homeland Security Research Center	$7,638	$10,618	$18,256	44.1	$5,065	$7,348	$12,413	29.6
	National Risk Management Research Laboratory	$41,148	$26,284	$67,431	268.0	$34,490	$12,672	$47,162	200.3
	Office of the Science Advisor	$2,752	$2,339	$5,092	14.2	$1,836	$824	$2,660	10.8
	National Center for Computational Toxicology	$5,334	$16,121	$21,455	31.0	$4,044	$6,906	$10,950	21.7
	National Center for Environmental Assessment	$25,387	$11,424	$36,811	147.0	$15,336	$4,906	$20,242	84.2
	TOTAL	**$250,384**	**$247,638**	**$498,022**	**1,575.3**	**$190,166**	**$94,620**	**$284,786**	**1,108.8**
OW	Immediate Office	$10,458	$6,359	$16,817	60.3	$10,874	$3,688	$14,562	59.1
	Office of Ground Water and Drinking Water	$25,725	$41,538	$67,263	157.7	$28,093	$41,931	$70,024	163.5
	Office of Science and Technology	$19,003	$16,793	$35,796	110.6	$18,846	$9,593	$28,438	103.5
	Office of Wastewater Management	$19,013	$77,837	$96,850	115.4	$21,445	$102,109	$123,554	120.5
	Office of Wetlands, Oceans and Watersheds	$18,837	$24,617	$43,454	109.9	$14,453	$19,666	$34,118	78.8
	Regional Resources	$185,669	$3,932,678	$4,118,346	1,259.7	$168,114	$2,261,893	$2,430,008	1,064.7
	TOTAL	**$278,706**	**$4,099,821**	**$4,378,527**	**1,813.6**	**$261,824**	**$2,438,881**	**$2,700,705**	**1,590.1**
	Subtotal Agency Resources	**$2,243,088**	**$6,730,248**	**$8,973,336**	**14,064.0**	**$2,009,089**	**$4,286,401**	**$6,295,490**	**11,824.3**
	Less Rescission of Prior Year Funds			($148,848)				($227,000)	
	Reimbursable FTE				312.1				590.3
	Total Agency Resources	**$2,243,088**	**$6,730,248**	**$8,824,488**	**14,376.1**	**$2,009,089**	**$4,286,401**	**$6,068,490**	**12,414.6**

* The Office of Mission Support (OMS) reflects a merger of the Office of Environmental Information (OEI) and the Office of Administration & Resource Management (OARM)

Fiscal Year 2020: Consolidations, Realignments, or Other Transfers of Resources

There are no consolidations, realignments or other transfers of resources from one program-project to another associated with the FY 2020 budget submission.

U.S. Environmental Protection Agency

S. 2276 – Good Accounting Obligation in Government Act

Public Law No: 115-414, January 3, 2019

In accordance with the reporting requirements of the act, Agencies are to submit reports on outstanding recommendations in the annual budget submitted to Congress.

For the FY 2020 budget justification, two reports have been developed using available information sources:

- A report listing each open public recommendation of the Government Accountability Office

- A report listing each open public recommendation for corrective action from the Office of the Inspector General

The Government Accountability Office Open Recommendations Report is from data collected from the GAO's website, www.GAO.gov, on March 5, 2019.

The Office of the Inspector General Open Recommendations Report is from data collected from the EPA's Management Audit Tracking System (MATS) on March 5, 2019.

Due to the only recent enactment of the GAO-IG Act, EPA is in the process of standing up procedures for reporting GAO and IG recommendation in the budget justification. The Agency plans to provide updated information in the FY 2021 budget justification.

GAO Open Recommendations

GAO Publication Name	Publication Number	Date Publication Issued	Recommendations	Comments	Close Date (TBD)
Superfund: EPA Should Improve the Reliability of Data on National Priorities List Sites Affecting Indian Tribes	GAO-19-123	2019-01-23	The Director of EPA's Office of Superfund Remediation and Technology Innovation should develop a regular review process to ensure the quality of Superfund Enterprise Management System (SEMS) data identifying NPL sites on tribal property and revise automated reports used to check the accuracy of SEMS data to include on tribal property data. (Recommendation 1)	Comments for FY19 GAO Reports will be provided after completion of GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	
Superfund: EPA Should Improve the Reliability of Data on National Priorities List Sites Affecting Indian Tribes	GAO-19-123	2019-01-23	The Assistant Administrator of EPA's Office of Land and Emergency Management should clarify guidance to regional offices on how to determine whether sites have Native American Interest (NAI), including by adding criteria for when a site should be designated as having NAI in the SEMS database and how, if at all, to adjust SEMS data if a tribe is no longer interested in a site.	Comments for FY19 GAO Reports will be provided after completion of GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	

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			(Recommendation 2)		
Superfund: EPA Should Improve the Reliability of Data on National Priorities List Sites Affecting Indian Tribes	GAO-19-123	2019-01-23	The Director of EPA's Office of Superfund Remediation and Technology Innovation should clarify agency guidance regarding tribal consultation for the Superfund program to clearly identify the circumstances under which the agency should consider consulting with tribes. (Recommendation 3)	Comments for FY19 GAO Reports will be provided after completion of GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	
Superfund: EPA Should Improve the Reliability of Data on National Priorities List Sites Affecting Indian Tribes	GAO-19-123	2019-01-23	The Assistant Administrator of EPA's Office of International and Tribal Affairs should develop or revise existing guidance to clearly direct regional officials to document all invitations to consult with tribes in the Tribal Consultation Opportunity Tracking System database and provide the guidance to those officials. (Recommendation 4)	Comments for FY19 GAO Reports will be provided after completion of GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	
Drinking Water: Approaches For Identifying Lead Service Lines Should Be Shared With All States	GAO-18-620	2018-09-21	The Assistant Administrator for Water of EPA's Office of Water should share information with all states about the approaches that some states and	Comments for this GAO Report will be provided after completion of GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	

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			water systems are using to successfully identify and publicize information on lead service lines, including responses to potential challenges. (Recommendation 1)		
Columbia River Basin: Additional Federal Actions Would Benefit Restoration Efforts	GAO-18-561	2018-08-24	The Administrator of the EPA should develop a program management plan that includes a schedule of the actions EPA will take and the resources and funding it needs to establish and implement the Columbia River Basin Restoration Program, including formation of the associated Columbia River Basin Restoration Working Group, and submit this plan to the appropriate congressional authorizing committees as part of the fiscal year 2020 budget process. (Recommendation 1).	As of December 2018, EPA had reconvened the Columbia River Toxics Reduction Working Group to begin implementing its responsibilities and actions outlined in the Columbia River Basin Restoration Act. Some of their actions include developing a program management plan, developing a "report card" on the implementation of actions identified in the 2010 Columbia River Basin Toxics Reduction Action Plan, and re-examining a list of contaminants developed for a prior USGS State of the River Report.	
Federal Chief Information Officers: Critical Actions Needed to Address Shortcomings and Challenges in Implementing Responsibilities	GAO-18-93	2018-08-02	The Administrator of the Environmental Protection Agency should ensure that the agency's IT management policies address the role of the CIO for key responsibilities	When we confirm what actions the agency has taken in response to this recommendation, we will provide updated information.	

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			in the six areas we identified. (Recommendation 19)		
Puget Sound Restoration: Additional Actions Could Improve Assessments of Progress	GAO-18-453	2018-07-19	The EPA Region 10 Administrator should work with the management conference on future updates to the CCMP to help prioritize among the indicators that currently lack measurable targets and ensure that such targets are developed for the highest priority indicators where possible. (Recommendation 1)	EPA agreed with this recommendation and stated that it has begun working with partners from the management conference to determine how to address it. We will provide updated information once EPA informs us of the status of these efforts and any specific actions taken in response to this recommendation.	
Puget Sound Restoration: Additional Actions Could Improve Assessments of Progress	GAO-18-453	2018-07-19	The EPA Region 10 Administrator should work with the appropriate members of the federal task force regional implementation team to clearly link, such as through the tracking tool, the Federal Action Plan's priority federal actions to the CCMP's framework for assessing progress toward Puget Sound restoration. (Recommendation 2)	EPA agreed with this recommendation and identified steps it plans to take to implement it beginning in 2019. We will provide updated information once EPA informs us of the status of these efforts and any specific actions taken in response to this recommendation.	
Long Island Sound Restoration: Improved Reporting and Cost Estimates Could Help Guide Future Efforts	GAO-18-410	2018-07-12	The Director, working with the Study, should ensure that as the Study finalizes its reporting format, it fully incorporates leading practices of	GAO and EPA are still in discussion on comments provided, updates will be provided after GAO’s Biannual Open Recommendations Update process	

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			performance reporting. (Recommendation 1)	scheduled, April 1, 2019	
Long Island Sound Restoration: Improved Reporting and Cost Estimates Could Help Guide Future Efforts	GAO-18-410	2018-07-12	The Director, working with the Study, should develop cost estimates that include analyses of uncertainties for each of the targets in the 2015 plan. (Recommendation 2)	GAO and EPA are still in discussion on comments provided, updates will be provided after GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	
Long Island Sound Restoration: Improved Reporting and Cost Estimates Could Help Guide Future Efforts	GAO-18-410	2018-07-12	The Director, working with the Study, should estimate the range of potential costs for all implementation actions and include the estimates in future supplements to the 2015 plan. (Recommendation 3)	GAO and EPA are still in discussion on comments provided, updates will be provided after GAO's Biannual Open Recommendations Update process scheduled, April 1, 2019	
K-12 Education: Lead Testing of School Drinking Water Would Benefit from Improved Federal Guidance	GAO-18-382	2018-07-05	The Assistant Administrator for Water of EPA's Office of Water should promote further efforts to communicate the importance of testing for lead in school drinking water to address what has been a varied approach by regional offices. For example, the Assistant Administrator could direct those offices with limited involvement to build on the recent efforts of several regional offices to provide technical assistance and	EPA agreed with this recommendation. The agency reported that its Office of Ground Water and Drinking Water is holding regular meetings with regional offices on drinking water in schools and will continue this collaboration. EPA also plans to use implementation of the new congressional appropriation for lead testing in schools as a means to improve consistency in the agency's approach.	

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			guidance, and other forms of support. (Recommendation 1)		
K-12 Education: Lead Testing of School Drinking Water Would Benefit from Improved Federal Guidance	GAO-18-382	2018-07-05	The Assistant Administrator for Water of EPA's Office of Water should provide interim or updated guidance to help schools choose an action level for lead remediation and more clearly explain that the action level currently described in the 3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance is not a health-based standard. (Recommendation 2)	EPA agreed with this recommendation. The Office of Ground Water and Drinking Water is holding regular meetings with regional offices, the Office of Research and Development and the Office of Children's Health Protection to obtain input to improve the 3Ts guidance. Potential revisions include updates to implementation practices, the sampling protocol, and clarifying descriptions of different action levels and standards.	
K-12 Education: Lead Testing of School Drinking Water Would Benefit from Improved Federal Guidance	GAO-18-382	2018-07-05	The Assistant Administrator for Water of EPA's Office of Water should, following the agency's revisions to the Lead and Copper Rule (LCR), consider whether to develop a health-based level, to include in its guidance for school districts, that incorporates available scientific modeling regarding vulnerable population exposures and is consistent with the LCR. (Recommendation 3)	EPA generally agreed with this recommendation. While it has not yet determined the role of a health-based benchmark for lead in drinking water in the revised LCR, it sees value in providing states, drinking water systems, and the public with a greater understanding of the potential health implications for vulnerable populations of specific levels of lead in drinking water. The EPA notes that states and local districts may set lower trigger levels as a part of their efforts to further protect children from lead	

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				exposure. Their objective in reviewing the 3Ts guidance is to provide an updated, informative toolkit to better help schools and childcare facilities with their efforts to reduce exposure to lead in drinking water.	
K-12 Education: Lead Testing of School Drinking Water Would Benefit from Improved Federal Guidance	GAO-18-382	2018-07-05	The Assistant Administrator for Water of EPA's Office of Water should provide information to states and school districts concerning schedules for testing school drinking water for lead, actions to take if lead is found in the drinking water, and costs of testing and remediation. (Recommendation 4)	EPA agreed with this recommendation. The agency stated that it would continue to reach out to states and schools to provide information, technical assistance, and training and will continue to make the 3Ts guidance available. In addition, EPA reported that its Office of Water and Office of Children's Health Protection are currently collaborating to develop additional resources for schools including a website to support the 3Ts guidance and case studies of school districts that have tested for lead. The agency plans to work with the Department of Education to ensure that school districts and other stakeholders are aware of this resource and continue to provide training and updated information to help schools and childcare facilities reduce lead in drinking water, including schedules for testing and actions to take if lead is found.	
K-12 Education: Lead Testing of School Drinking Water Would	GAO-18-382	2018-07-05	The Assistant Administrator for Water of EPA's Office of Water	EPA agreed with this recommendation. The agency noted that increased collaboration	

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Benefit from Improved Federal Guidance			and the Director of the Office of Children's Health Protection should collaborate with Education to encourage testing for lead in school drinking water. This effort could include further dissemination of EPA guidance related to lead testing and remediation in schools or sending letters to states to encourage testing in all school districts that have not yet done so. (Recommendation 6)	between its Office of Water and Office of Children's Health Protection, and between EPA and the Department of Education, could improve school districts' awareness of resources on lead in drinking water. The agency will continue to provide training and updated information to better assist schools and childcare facilities in their efforts to reduce lead in drinking water, including schedules for testing and actions to take if lead is found.	
Drinking Water and Wastewater Infrastructure: Opportunities Exist to Enhance Federal Agency Needs Assessment and Coordination on Tribal Projects	GAO-18-309	2018-05-15	The Administrator of EPA, in cooperation with other members of the tribal infrastructure task force, should review the 2011 task force report and identify and implement additional actions to help increase the task force's collaboration at the national level. (Recommendation 8)	As of October 2018, EPA had begun discussing the 2011 task force report with the other member agencies to identify and implement additional actions to increase collaboration at the national level. We will evaluate EPA's actions once they are complete.	
Drinking Water and Wastewater Infrastructure: Opportunities Exist to Enhance Federal Agency Needs Assessment and Coordination on Tribal Projects	GAO-18-309	2018-05-15	The Administrator of EPA, in cooperation with other members of the tribal infrastructure task force, should direct EPA regional offices to identify and pursue additional	As of October 2018, EPA was exploring options and opportunities with its regional offices to improve regional interagency collaboration. We will evaluate EPA's actions once they are complete.	

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			mechanisms to increase their collaboration. (Recommendation 14)		
Critical Infrastructure Protection: Additional Actions Are Essential for Assessing Cybersecurity Framework Adoption	GAO-18-211	2018-02-15	The Administrator of the Environmental Protection Agency should take steps to consult with respective sector partner(s), such as the SCC, DHS and NIST, as appropriate, to develop methods for determining the level and type of framework adoption by entities across their respective sector. (Recommendation 4)	When we confirm what actions the agency has taken in response to this recommendation, we will provide updated information.	
Water and Wastewater Workforce: Recruiting Approaches Helped Industry Hire Operators, but Additional EPA Guidance Could Help Identify Future Needs	GAO-18-102	2018-01-26	The Assistant Administrator for Water should direct EPA's Office of Water to amend its Safe Drinking Water Act and Clean Water Act inspection guidance documents to add questions on strategic workforce planning topics--such as the number of positions needed in the future, skills needed in the future, and any potential gaps in water operator positions. (Recommendation 1)	In commenting on the report, EPA stated that it agrees with GAO's recommendation as it applies to sanitary surveys for drinking water utilities. It is in the process of updating the survey guidance manual and it plans to add questions related to workforce needs. As the recommendation applies to wastewater utilities, EPA did not agree or disagree. It said that inspectors may be limited in the information related to workforce planning that they can assess because there is no utility management section of the permit compliance inspection guidance for wastewater utility inspections. EPA stated that where it identifies	

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				studies or documents on adequate staffing of wastewater facilities, it will incorporate that information into its existing guidance documents.	
Information Technology Reform: Agencies Need to Improve Certification of Incremental Development	GAO-18-148	2017-11-07	The Administrator of the Environmental Protection Agency (EPA) should ensure that the CIO of EPA establishes an agency-wide policy and process for the CIO's certification of major IT investments' adequate use of incremental development, in accordance with OMB's guidance on the implementation of FITARA, and confirm that it includes: a description of the CIO's role in the certification process; a description of how CIO certification will be documented; and a definition of incremental development and time frames for delivering functionality, consistent with OMB guidance. (Recommendation 11)	The Environmental Protection Agency (EPA) concurred with our recommendation and stated that it planned to develop a policy to implement this recommendation and other FITARA issues. Specifically, EPA officials reported in August 2018 that policy and process documents were being developed and would be finalized in 2019. We will continue to monitor EPA's progress on these efforts.	
Stormwater Management: EPA Pilot Project to Increase Use of Green Infrastructure Could	GAO-17-750	2017-09-28	The Director of EPA's Office of Wastewater Management should, when	EPA generally agreed with the recommendation and said it will utilize the collaborative practices	

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Benefit from Documenting Collaborative Agreements			working with municipalities and other stakeholders to develop long-term stormwater plans, document agreements on how they will collaborate, such as in a memorandum of understanding, aligned with our key considerations for implementing interagency collaborative mechanisms. (Recommendation 1)	recommended by GAO in the pilot projects which are projected to take place over the next 12-18 months. When we confirm what actions EPA has taken in response to this recommendation, we will provide updated information.	
Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule	GAO-17-424	2017-09-01	The Assistant Administrator for Water of EPA's Office of Water should require states to report available information about lead pipes to EPA's Safe Drinking Water Information System (SDWIS)/Fed (or a future redesign such as SDWIS Prime) database, in its upcoming revision of the LCR. (Recommendation 1)	In August 2017, EPA said that it would consider GAO's recommendation to require states to report available information about lead pipes along with those of other stakeholders as part of the development of the revisions to the Lead and Copper Rule. EPA officials estimate that these revisions will be final in 2020.	
Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule	GAO-17-424	2017-09-01	The Assistant Administrator for Water of EPA's Office of Water should require states to report all 90th percentile sample results for small water systems to EPA's SDWIS/Fed (or a future redesign such as SDWIS	In August 2017, EPA said that it would consider GAO's recommendation to require states to report all 90th percentile sample results for small systems along with those of other stakeholders as part of the development of the revisions to the Lead and Copper Rule. EPA	

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			Prime) database, in its upcoming revision of the LCR. (Recommendation 2)	officials estimate that these revisions will be final in 2020.	
Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule	GAO-17-424	2017-09-01	The Assistant Administrator for Water of EPA's Office of Water and the Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a statistical analysis that incorporates multiple factors--including those currently in SDWIS/Fed and others such as the presence of lead pipes and the use of corrosion control--to identify water systems that might pose a higher likelihood for violating the LCR once complete violations data are obtained, such as through SDWIS Prime. (Recommendation 3)	In August 2017, EPA stated that GAO's recommendation to develop a national statistical analysis that could identify water systems with a higher likelihood of violating the Lead and Copper Rule (LCR) would be a challenge to develop, but highly beneficial to both the agency and states. EPA also indicated that the agency is seeking opportunities to build tools and resources to enhance oversight of the LCR. GAO will leave this recommendation open until information about such actions are made available.	
Small Business Contracting: Actions Needed to Demonstrate and Better Review Compliance with Select Requirements for Small Business Advocates	GAO-17-675	2017-08-25	To address demonstrated noncompliance with section 15(k) of the Small Business Act, as amended, the Administrator of Environmental Protection Agency should comply with section 15(k)(15) or report to Congress on	For section 15(k)(15), related to collateral duties, on September 10, 2018, an agency official stated that the agency is in the process of transferring responsibility of the Disadvantaged Business Enterprise Program from the OSDBU to the Office of Grants and Debarment. The official	

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			why the agency has not complied, including seeking any statutory flexibilities or exceptions believed appropriate.	stated that the estimated completion date for the transfer is October 1, 2018. We will continue to monitor EPA's efforts to address this recommendation.	
Data Center Optimization: Agencies Need to Address Challenges and Improve Progress to Achieve Cost Savings Goal	GAO-17-448	2017-08-15	The Secretaries of Agriculture, Commerce, Defense, Homeland Security, Energy, HHS, Interior, Labor, State, Transportation, Treasury, and VA; the Attorney General of the United States; the Administrators of EPA, GSA, and SBA; the Director of OPM; and the Chairman of NRC should take action to, within existing OMB reporting mechanisms, complete plans describing how the agency will achieve OMB's requirement to implement automated monitoring tools at all agency-owned data centers by the end of fiscal year 2018.	The Environmental Protection Agency (EPA) described planned actions to address our recommendation. Specifically, the agency detailed plans to address OMB's requirements, such as leveraging EPA's current investment in a network monitoring tool and the intent to procure and deploy a data center infrastructure management tool by the end of fiscal year 2018. However, in December 2018, EPA determined it will leverage its current network monitoring tool for server utilization monitoring. The agency expects to have most data center servers monitored by the end of CY 2019. Once servers are monitored, the agency said that it will follow the most current OMB guidance to report required metrics. We will continue to monitor the agency's progress in taking these actions.	
Small Business Research Programs: Most Agencies Met Spending Requirements, but DOD and EPA Need to	GAO-17-453	2017-05-31	To ensure full compliance with SBIR and STTR spending and reporting requirements, the Secretary of	In its comments on the draft report, EPA concurred with the recommendation and stated that EPA will work with SBA to develop an alternative	

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Improve Data Reporting			Defense and the EPA Administrator should establish procedures to collect and submit obligations data or--through SBA, independently, or through a working group of agencies participating in the SBIR and STTR programs--propose to Congress an alternative methodology for calculating spending requirements for their agencies.	methodology for calculating spending requirements. As of June 2018, EPA officials said they have initiated discussions with SBA on this topic, including holding a meeting with SBA officials in January 2018.	
Data Center Optimization: Agencies Need to Complete Plans to Address Inconsistencies in Reported Savings	GAO-17-388	2017-05-18	The following 17 agencies (the Secretaries of the Departments of Commerce, Defense, Energy, Health and Human Services, Interior, Labor, State, Transportation, Treasury, and Veterans Affairs; the Attorney General; and the Administrators of the Environmental Protection Agency, National Aeronautics and Space Administration, Small Business Administration, and U.S. Agency for International Development; the Chairman of the Nuclear Regulatory Commission; and the Commissioner of the Social Security Administration)	The Environmental Protection Agency (EPA) has not yet taken steps to implement our recommendation. As of June 2018, EPA has not updated its Data Center Optimization Strategic Plan to include achieved closures or cost savings and avoidances for fiscal years 2016 through 2018. We will continue to monitor and evaluate the agency's progress in implementing this recommendation.	

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			should each take action to complete the missing elements in their respective DCOI strategic plan, including addressing any identified challenges, and submit their completed strategic plan to OMB.		
Data Center Optimization: Agencies Need to Complete Plans to Address Inconsistencies in Reported Savings	GAO-17-388	2017-05-18	Finally, the following 11 agencies (the Secretaries of the Departments of Commerce, Education, Health and Human Services, Interior, Labor, State, Transportation, and Treasury; the Administrators of the Environmental Protection Agency, General Services Administration, and the U.S. Agency for International Development) should also each take action to ensure that the amounts of achieved data center cost savings and avoidances are consistent across all reporting mechanisms, including the quarterly data submissions and DCOI strategic plans.	The Environmental Protection Agency (EPA) has not yet taken any action to implement our recommendation. As of June 2018, EPA has not updated its Data Center Optimization Initiative Strategic Plan or quarterly data reports to include achieved cost savings and avoidances for fiscal years 2016 through 2018. In addition, while the quarterly data reports have listed historical cost savings for fiscal years 2012-2015, these savings are not listed in the Data Center Optimization Initiative Strategic Plan. We will continue to monitor and evaluate the agency's progress in implementing this recommendation.	
Grants Management: EPA Has Taken Steps to Improve Competition for Discretionary	GAO-17-161	2017-01-23	To improve the quality of EPA's internal records and the information	In written comments on this report, EPA stated that there are opportunities to explore	

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Grants but Could Make Information More Readily Available			EPA can communicate to internal and external decision makers, the EPA Administrator should direct the Assistant Administrator for the Office of Administration and Resources Management to direct the Director of the Office of Grants and Debarment (OGD) to provide clear guidance to EPA staff to help ensure that staff correctly identify all EPA discretionary grant programs in the agency's internal grants management system.	how to better develop guidance for tracking grants and determine how to make more complete information on discretionary grants publicly available. In June 2017, EPA reported that it intends to be involved in efforts in 2017 to improve the Catalog of Federal Domestic Assistance (CFDA) descriptions, which may include changes to the CFDA template language to improve clarity of discretionary grant designations. EPA stated that also in 2017 the agency will assess whether other actions are necessary to help staff better identify discretionary grant programs in the agency's internal grants management systems, including training and reconciling any inconsistencies in defining discretionary grants. In January 2018, EPA reported that the agency is working to ensure that its internal grants management systems use a consistent definition of discretionary grant programs. In June 2018, EPA reported that the agency has taken the following steps to address this recommendation: updating its list of active discretionary grants programs to be posted on both internal and external agency websites, indicating in	

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				CFDA descriptions by September 2018 whether discretionary funds are expended, and including definitions of discretionary grants in training materials to ensure a consistent interpretation in the agency.	
Grants Management: EPA Has Taken Steps to Improve Competition for Discretionary Grants but Could Make Information More Readily Available	GAO-17-161	2017-01-23	To better enable Congress and other decision makers to monitor EPA's management of discretionary grants, the EPA Administrator should direct the Assistant Administrator for the Office of Administration and Resources Management to direct the Director of OGD to determine how to make more complete information on EPA's discretionary grants publicly available, such as by posting timely and complete reports on its website.	In June 2017, EPA reported that in 2017 the agency will begin to examine whether and how it can use its new internal Next Generation Grants System to generate more timely and complete reports related to discretionary grants and make them publicly available. EPA also stated that it plans to explore the ability to use the system to (1) generate more timely and complete information that can be publicly posted on the number of applications received and types of entities submitting applications for open competitive opportunities, and (2) produce an annual report on the amount of funds per discretionary grant program and whether such funds were for new awards or amendments. In January 2018, EPA reported that the agency is working to identify and update its discretionary grant programs so that it can produce reports on discretionary funds expended per program. In June 2018, EPA	

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				reported that the agency is using its grants system to generate more timely and more frequent publicly available information on grants competition. EPA also reported that it has updated its list of active discretionary grant programs and that this should facilitate its ability to report on discretionary funds expended per program. EPA reported that the agency hopes to complete this effort by September 2018, but this may be subject to change.	
Grants Management: EPA Partially Follows Leading Practices of Strategic Workforce Planning and Could Take Additional Steps	GAO-17-144	2017-01-09	To help ensure that EPA has people with the right skills to meet the goals of its 2016-2020 Grants Management Plan, the Administrator should direct the Assistant Administrator for the Office of Administration and Resources Management and regional and national program offices, as appropriate, to review project officer critical skills and competencies and determine training needs to address any gaps.	EPA officials told us that they surveyed project officers in fiscal years 2017 and 2018 to identify areas where additional or new training was required. They also told us that they have conducted in-person and webinar-based trainings in response to the survey results and continue to develop annual training agendas to meet the evolving needs of the project officer workforce. They agreed to provide examples of training materials they have used to address skill and competency gaps among project officers.	
Grants Management: EPA Partially Follows Leading Practices of Strategic Workforce Planning and Could Take Additional Steps	GAO-17-144	2017-01-09	To enhance EPA's ability to identify performance shortfalls and appropriate corrective actions,	In 2018, EPA provided documentation showing that it is collecting data related to the recruitment and retention of grant	

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			the Administrator should direct the Assistant Administrator for the Office of Administration and Resources Management to develop performance measures to track the effectiveness of the recruitment and retention efforts for grant specialists and collect performance data for these measures.	specialists. However, this documentation does not clearly illustrate which performance measures, if any, the agency is using to track the effectiveness of these recruitment and retention efforts. EPA officials told us that it would be possible to establish a performance measure that, for example, tracks the percent of grant specialists with less than 2 years of experience managing grants.	
Information Technology: Agencies Need to Improve Their Application Inventories to Achieve Additional Savings	GAO-16-511	2016-09-29	To improve federal agencies' efforts to rationalize their portfolio of applications, the heads of the Departments of Agriculture, Commerce, Education, Energy, Health and Human Services, Housing and Urban Development, the Interior, Labor, State, Transportation, the Treasury, and Veterans Affairs; and heads of the Environmental Protection Agency; National Aeronautics and Space Administration; National Science Foundation; Nuclear Regulatory Commission; Office of Personnel Management; Small Business	We reported that the Environmental Protection Agency had fully met three of the four practices to establish a complete application inventory, and partially met one. Specifically, the agency partially met the practice for including application attributes in the inventory, as although EPA did not identify the business function for every application. In March 2018, Environmental Protection Agency officials stated that while they have made progress in addressing the key practice, their efforts are not yet completed. We will continue to monitor the agency's efforts.	

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			Administration; Social Security Administration; and U.S. Agency for International Development should direct their Chief Information Officers (CIOs) and other responsible officials to improve their inventories by taking steps to fully address the practices we identified as being partially met or not met.		
Federal Chief Information Security Officers: Opportunities Exist to Improve Roles and Address Challenges to Authority	GAO-16-686	2016-08-26	To ensure that the role of the SAISO is defined in agency policy in accordance with FISMA 2014, the Administrator of the Environment Protection Agency should define the SAISO's role in agency policy for ensuring that plans and procedures are in place to ensure recovery and continued operations of the department's information systems in the event of a disruption.	The Environmental Protection Agency (EPA) concurred with our recommendation. However, as of February 2019, the department has not yet provided sufficient evidence that it has implemented the recommendation.	
Grants Management: EPA Could Improve Certain Monitoring Practices	GAO-16-530	2016-07-14	The EPA Administrator should direct the Office of Grants and Debarment (OGD) and program and regional offices, as appropriate, as part of EPA's ongoing streamlining	In correspondence to GAO, EPA reiterated its agreement with this recommendation. EPA also stated that its vision for grants management includes having grant recipients submit performance reports and other information to the	

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			initiatives and the development of a grantee portal, to incorporate expanded search capability features, such as keyword searches, into its proposed web-based portal for collecting and accessing performance reports to improve their accessibility.	agency through a web-based portal. The portal would incorporate capabilities such as key word searches to allow for easier access to performance report information. EPA expects this recommendation to be addressed by its new grants management system (GrantsSolutions). As of December 2018, EPA expects to deploy Grants Solutions in fiscal year 2019.	
Grants Management: EPA Could Improve Certain Monitoring Practices	GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to identify grant programs where existing program-specific data reporting can meet EPA's performance reporting requirements for grants management purposes to reduce duplicative reporting by grantees.	In correspondence to GAO, EPA reiterated its general agreement with this recommendation and stated it will work with recipient partners to identify where duplicative reporting can be reduced. However, EPA also noted that program-specific data cannot be relied upon to meet all grants management requirements, and performance reports often contain other information that allows project officers to monitor a recipient's progress. Further, EPA mentioned it will need to consider the feasibility of expanding project officer access to certain program databases to enhance grant performance monitoring. In December 2018, EPA stated that its EPA-State Grant Subgroup did not identify any areas where they	

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				thought there was overlap between performance reporting and program-specific data reporting. Additionally, EPA's new emphasis on increasing the number of state grant commitments met by focusing state grant commitments on a core set of outcome-oriented measures, reduces the likelihood of duplicative reporting going forward, according to EPA.	
Grants Management: EPA Could Improve Certain Monitoring Practices	GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, once EPA's new performance system is in place, to ensure that the Office of Water adopts software tools, as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA's national performance system.	In correspondence to GAO, EPA reiterated its general agreement with this recommendation and stated that it will apply it, where appropriate and cost effective, to program-specific databases, not only the Office of Water databases. EPA noted that not all data from program-specific databases may be appropriate for direct electronic transfer to the national performance system; some individual grant data may need to be analyzed before being rolled up into national data. As of December 2018, EPA officials said that continued work on this recommendation is dependent upon EPA's Office of the Chief Financial Officer's deployment of a new performance tracking system and individual program funds for	

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				developing systems that interact with it.	
Grants Management: EPA Could Improve Certain Monitoring Practices	GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to clarify the factors project officers should consider when determining whether performance reports are consistent with EPA's environmental results directive.	In correspondence to GAO, EPA reiterated its agreement with this recommendation and stated that it will make conforming changes to the implementation guidance for the Environmental Results Order (directive). In December 2018, EPA stated that its existing environmental results directive may be superseded or incorporated into a different policy as part of the agency's migration to a new grants management system (GrantsSolutions). However, EPA stated that it will incorporate the recommendation into its new policy. EPA expects to implement GrantsSolutions in fiscal year 2019.	
Grants Management: EPA Could Improve Certain Monitoring Practices	GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to expand aspects of EPA's policy for certain categorical grants, specifically, the call for an explicit reference to the planned results in grantees' work plans and their projected time	In correspondence to GAO, EPA reiterated its agreement with this recommendation and stated that it will make conforming changes to existing policy. In December 2018, EPA stated that its existing policies may be superseded or incorporated into different policies as part of the agency's migration to a new grants management system (GrantsSolutions). However, EPA stated that it will incorporate the recommendation	

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			frames for completion, to all grants.	into its new policy. EPA expects to implement GrantsSolutions in fiscal year 2019.	
Grants Management: EPA Could Improve Certain Monitoring Practices	GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to incorporate built-in data quality controls for performance reports into the planned web-based portal based on EPA's environmental results directive.	In correspondence to GAO, EPA reiterated its general agreement with this recommendation. However, EPA emphasized that identifying and deploying appropriate data quality controls is a long-term effort subject to budgetary considerations, completion of its new grants management system, and extensive collaboration with internal and external stakeholders. EPA officials said that the agency expects this recommendation to be addressed by its new grants management system (GrantsSolutions). As of December 2018, EPA expects to implement GrantsSolutions in fiscal year 2019.	
IT Dashboard: Agencies Need to Fully Consider Risks When Rating Their Major Investments	GAO-16-494	2016-06-02	To better ensure that the Dashboard ratings more accurately reflect risk, the Secretaries of the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, State, Transportation, the Treasury, Veterans Affairs; the	The agency disagreed with the recommendation and, as of January 2019, has not provided an update on its actions to address the recommendation. We will continue to monitor the implementation of this recommendation.	

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			Administrator of the Environmental Protection Agency; and the Commissioner of the Social Security Administration should direct their CIOs to ensure that their CIO ratings reflect the level of risk facing an investment relative to that investment's ability to accomplish its goals.		
Government Purchase Cards: Opportunities Exist to Leverage Buying Power	GAO-16-526	2016-05-19	To ensure that good practices are shared within agencies, the Secretaries of Defense, Veterans Affairs, the Interior, Homeland Security, and Energy, and the Environmental Protection Agency should develop guidance that encourages local officials to examine purchase card spend patterns to identify opportunities to obtain savings and to share information on such efforts. Where applicable, we further recommend that these agencies determine the feasibility for broader application of these efforts across the agency or organization.	The agency provided comments indicating its concurrence with this recommendation, noting that it looks forward to opportunities to benchmark with other agencies and share information on approaches taken to identify opportunities which led to positive strategic sourcing outcomes. In August 2018, the EPA reported that it has established savings and spending dashboards as well as an electronic contract depository to provide contracting officials and other staff with insight into agency spending patterns and active contracts to help ensure savings when using purchase cards. Further, according to officials, the EPA is developing an additional system for its contracting officers that will provide further information and tools for analyzing agency purchases to include	

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				purchase card spending. According to officials, guidance for this new system will encourage officials to review purchase card spending to identify sources for potential savings.	
High-Containment Laboratories: Comprehensive and Up-to-Date Policies and Stronger Oversight Mechanisms Needed to Improve Safety	GAO-16-305	2016-03-21	To ensure that federal departments and agencies have comprehensive and up-to-date policies and stronger oversight mechanisms in place for managing hazardous biological agents in high-containment laboratories and are fully addressing weaknesses identified after laboratory safety lapses, the Administrator of the Environmental Protection Agency (EPA) should revise existing EPA policies for managing hazardous biological agents in high-containment laboratories to contain specific requirements for inventory control, or direct the Director of the Office of Pesticide Programs to incorporate this requirement into its policy.	EPA agreed with this recommendation in its February 2016 comments on the draft report, but maintains that agency, or senior-level policies, exist that include this requirement. EPA officials cited a Microbiology Laboratory Branch standard operating procedure (SOP) as containing inventory control requirements for the agency's one high-containment laboratory. However, in July 2016, EPA officials told us that it disagreed with our assessment that the SOP, as a laboratory-level document, was insufficient to meet our expectations for senior-level policies. In November 2016, EPA officials reiterated its position stating that the SOP had been approved by senior agency management and, as the requirements in it are universally applied by all laboratory staff, appropriately represents an agency-level policy. EPA further noted that the Office of Pesticide Policy, in which the Microbiology Laboratory Branch is located, is a sub-office within EPA's Office of	

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				Chemical Safety and Pollution Prevention (OCSPP), an Assistant Administrator-level office. We continue to believe that senior-level policies--in this case, either those policies issued at the EPA level or at the OCSPP/OPP level--that include all of the policy elements we analyzed reflect critical management commitment to and support for a culture of laboratory safety throughout the organization, regardless of the number of agency laboratories. According to EPA officials, in 2017 EPA initiated activities to create an agency-wide Biosafety & Biosecurity Advisory Board (BBAB) as part of the Homeland Security Collaborative Network (HSCN). These activities are being led by EPA's Office of Research and Development and Office of Homeland Security. This program, described as comprehensive and robust, was expected to provide oversight and ensure a culture of responsibility for life sciences research at EPA. As of May 2018, OCSPP reported that it had no updates on the activities of the BBAB.	
High-Containment Laboratories: Comprehensive and Up-to-Date Policies and Stronger Oversight	GAO-16-305	2016-03-21	To ensure that federal departments and agencies have comprehensive and up-to-date policies	In July 2016, EPA reported that the policies and procedures for both the facility that houses its microbiology	

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Mechanisms Needed to Improve Safety			and stronger oversight mechanisms in place for managing hazardous biological agents in high-containment laboratories and are fully addressing weaknesses identified after laboratory safety lapses, the Administrator of EPA should review and update EPA's outdated policies for managing hazardous biological agents in high-containment laboratories and establish a regular schedule for reviewing and updating EPA and Office of Pesticide Programs policies.	laboratory and the laboratory itself are reviewed and updated on a bi-yearly or yearly basis consistent with the EPA schedules for biosafety and laboratory plans set in policy. However, EPA did not provide us with the policy that sets the EPA schedules. In addition, our analysis focused on policy documents issued by EPA or its senior-level offices, such as EPA's Safety, Health, and Environmental Management Program manual, dated November 2012. When we analyzed that policy for the report, we were unable to determine whether it was up-to-date because it did not include a review and update schedule or a specific recertification date. As of November 2016, EPA maintained that this recommendation has been completed, because the office revised the standard operating procedure that provides guidance for establishing the receipt, expiration dates, and disposal of biological inventory used in the laboratory. As of April 2017, GAO had reached out to EPA for documentation of the agency's actions. Further, according to EPA officials, in 2017 EPA initiated activities to create an agency-wide Biosafety &	

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				Biosecurity Advisory Board (BBAB) as part of the Homeland Security Collaborative Network (HSCN). These activities are being led by EPA's Office of Research and Development and Office of Homeland Security. This program, described as comprehensive and robust, was expected to provide oversight and ensure a culture of responsibility for life sciences research at EPA. As of May 2018, OCSPP reported that it had no updates on the activities of the BBAB.	
Data Center Consolidation: Agencies Making Progress, but Planned Savings Goals Need to Be Established [Reissued on March 4, 2016]	GAO-16-323	2016-03-03	The Secretaries of the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Labor, State, Transportation, the Treasury, and Veterans Affairs; the Attorney General of the United States; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and U.S. Agency for International	The Environmental Protection Agency agreed with our recommendation and has taken initial steps to implement it. In May 2016, the agency stated in correspondence to GAO that it had directed data center stakeholders to place an emphasis on virtualizing physical servers and moving server-based applications to the cloud or a core data center. The agency added that the estimated increase for each optimization metric would be determined after data consolidation plans were finalized. However, in August 2016, the Office of Management and Budget (OMB) announced changes to the optimization metrics that we analyzed in our	

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			Development; the Director of the Office of Personnel Management; the Chairman of the Nuclear Regulatory Commission; and the Commissioner of the Social Security Administration should take action to improve progress in the data center optimization areas that we reported as not meeting OMB's established targets, including addressing any identified challenges.	report. Specifically, OMB dropped seven of the metrics we originally reviewed, added three new metrics, and retained two (facility utilization and power usage effectiveness). OMB further clarified that the two retained metrics applied only to agency-owned tiered data centers. We are no longer tracking agency progress against the seven metrics that were dropped, and only monitoring progress against the two metrics that were retained. Subsequently, as of June 2018, the agency reports on OMB's IT that while it does meet the power usage efficiency metric, it does not yet meet the target for facility utilization. We will continue to monitor and evaluate the department's progress in implementing this recommendation.	
Drinking Water: EPA Needs to Collect Information and Consistently Conduct Activities to Protect Underground Sources of Drinking Water	GAO-16-281	2016-02-26	To help ensure protection of underground drinking water from the injection of wastewater associated with domestic oil and gas production, the Administrator of the Environmental Protection Agency should require and collect well-specific data on inspections from state and EPA-managed programs,	In February 2018, EPA said that it is working toward establishing a complete, regularly updated data set. It will work toward expanding the agency's access to well-specific data and will expand the data it has in its national Underground Injection Control database. In addition, the agency said that it will continue to work with DOE and the Groundwater Protection Council to develop a national oil	

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			including when the wells were inspected, the types of inspections conducted, and the results of the inspections in order to track progress toward state and EPA-managed annual inspection goals.	and gas gateway for well-specific data. Until such data are made available, we will leave this recommendation as open.	
Drinking Water: EPA Needs to Collect Information and Consistently Conduct Activities to Protect Underground Sources of Drinking Water	GAO-16-281	2016-02-26	To help ensure protection of underground drinking water from the injection of wastewater associated with domestic oil and gas production, the Administrator of the Environmental Protection Agency should complete the aquifer exemption database and establish a way to update it to provide EPA headquarters and regions with sufficient information on aquifer exemptions to oversee state and EPA-managed programs.	In December 2016, EPA published a map of aquifer exemptions online, with the exception of region 9 data. The public dataset shows the data in two dimensions and includes information such as depth of injection, surrounding geology and injectate characteristics. EPA plans to update the database annually. We will continue to keep this recommendation open until EPA completes work on region 9.	
Drinking Water: EPA Needs to Collect Information and Consistently Conduct Activities to Protect Underground Sources of Drinking Water	GAO-16-281	2016-02-26	To help ensure protection of underground drinking water from the injection of wastewater associated with domestic oil and gas production, the Administrator of the Environmental Protection Agency should clarify guidance on what data should be	In February 2018, EPA said that it had developed a web-based 7520 database that can be used to report, aggregate and summarize 7520 data. According to EPA officials, EPA is in the process of updating its guidance for reporting data on the 7520-4 and hope to standardize and incorporate 7520-4 data into the 7520 database.	

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			reported on the 7520-4 form to help ensure that the data collected are complete and consistent across state and EPA-managed programs and to provide the information EPA needs to assess whether it must take enforcement actions.	Until the revised guidance is finalized and shared with state programs, and 7520-4 data have been incorporated into the 7520-4 database, we will keep this recommendation open.	
Drinking Water: EPA Needs to Collect Information and Consistently Conduct Activities to Protect Underground Sources of Drinking Water	GAO-16-281	2016-02-26	To help ensure protection of underground drinking water from the injection of wastewater associated with domestic oil and gas production, the Administrator of the Environmental Protection Agency should conduct a workforce analysis to identify the human capital and other resources EPA needs to carry out its oversight of state and EPA-managed programs.	In February 2018, EPA disagreed and said that the best approach is to expand its evaluation of agency oversight to include elements of inspection and enforcement. Once the evaluation is complete, EPA will consider its oversight of state programs. We will keep this recommendation open until EPA completes its review and determines what it will do with its oversight.	
Bee Health: USDA and EPA Should Take Additional Actions to Address Threats to Bee Populations	GAO-16-220	2016-02-10	To better ensure that EPA is reducing the risk of unreasonable harm to important pollinators, the Administrator of EPA should direct the Office of Pesticide Programs to develop a plan for obtaining data from pesticide registrants on the effects of pesticides on nonhoney bee species, including	In September 2018, EPA said that its plan for obtaining data on the effects of pesticides on nonhoney bees is to adhere to the existing process that it follows for other taxonomic groups. More specifically, in its response to GAO, EPA emphasized that it routinely uses surrogate species to evaluate risks from pesticides and that it has used honey bees as a surrogate for nonhoney bee species.	

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			other managed or wild, native bees.	EPA acknowledged that, ideally, risk evaluations would be made using as many species as would likely be exposed. However, EPA stated that doing so would be impractical on a routine basis. EPA also maintained that existing data indicate that honey bees continue to represent a reasonable surrogate for nonhoney bee species. Additionally, EPA said that when acceptable data on nonhoney bees are available, the agency uses the information to characterize the relative sensitivity of honey bees and nonhoney bees and to determine whether additional data are needed on nonhoney bees to inform risk management decisions and ensure that the use of a pesticide does not represent an unreasonable risk to the environment. Finally, EPA said that if data support that honey bees are not serving as suitable surrogates for nonhoney bees for a particular compound, then the agency would consider whether the risk management decision warrants calling in additional data. In April and September 2018, EPA said that it has continued to work toward the development of suitable protocols for assessing exposure and	

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				effects of pesticide on nonhoney bees. We note that those efforts may contribute to EPA's ability to obtain data from pesticide registrants on the effects of pesticides on nonhoney bee species when necessary. GAO acknowledges that EPA may require registrants to provide data on the effects of pesticides on nonhoney bee species on a case-by-case basis. However, EPA has not met the intent of our recommendation that it developed a plan to routinely obtain such data from pesticide registrants.	
Bee Health: USDA and EPA Should Take Additional Actions to Address Threats to Bee Populations	GAO-16-220	2016-02-10	To help comply with the directive in the White House Pollinator Health Task Force's strategy, the Administrator of EPA should direct the Office of Pesticide Programs to identify the pesticide tank mixtures that farmers and pesticide applicators most commonly use on agricultural crops to help determine whether those mixtures pose greater risks than the sum of the risks posed by the individual pesticides.	EPA has taken steps to partially implement this recommendation. In September 2018, EPA officials said that in response to our recommendation, the agency had conducted a pilot study to evaluate pesticide tank mixes used on almonds in California during bloom. EPA selected almonds because almond growers contract for the services of roughly 67 percent of the nation's managed honey bee colonies and because almonds are grown primarily in California where growers are required to report pesticide use under state law. As part of the pilot study, EPA worked in collaboration with the California Department of Pesticide Regulation and the	

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				California Almond Board, and used data contained in the California Pesticide Use Report. EPA said that although it was able to identify pesticide tank mixes applied during almond bloom, the number and variability in those combinations led the agency to conclude that is it not feasible to do so at a national level given the number of factors that influence such combinations even within a relatively localized area. EPA said it was unaware of similar data on tank mixes for states other than California. With respect to evaluating the potential for some combinations of pesticide active ingredients to result in synergistic effects, EPA said that it has been taking a closer look at pesticides for which registrants are making patent assertions of synergistic effects. EPA believes data supporting these patents likely represent the most compelling evidence of synergistic effects. When warranted based on these patent assertions and the supporting evidence, EPA may require additional data or incorporate the patent evidence into its risk assessments on a case-by-case basis. While we appreciate EPA's efforts to gather data on tank	

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				mixtures in California almond orchards and note EPA's statement that the agency does not believe a national analysis of mixtures is feasible, we cannot conclude that the agency has fully implemented the recommendation.	
Water Infrastructure: EPA and USDA Are Helping Small Water Utilities with Asset Management; Opportunities Exist to Better Track Results	GAO-16-237	2016-01-27	As EPA and USDA continue to consider ways to track and promote water utilities' implementation of asset management, the Administrator of EPA should direct the Office of Groundwater and Drinking Water and Office of Wastewater Management to continue to include questions on water utilities' use of asset management in the clean water needs assessment and consider including questions about water utilities' use of asset management in future drinking water infrastructure needs assessment surveys.	As of February 2018, EPA is planning the next Drinking Water Infrastructure Needs Survey and Assessment that will begin in 2019. EPA officials said that they would work with industry and states to consider questions related to water utilities' use of asset management in the survey. At this time, EPA does not plan to do another Clean Water Needs Survey. GAO will continue to review this recommendation.	
Critical Infrastructure Protection: Sector-Specific Agencies Need to Better Measure Cybersecurity Progress	GAO-16-79	2015-11-19	To better monitor and provide a basis for improving the effectiveness of cybersecurity risk mitigation activities, informed by the sectors' updated plans and in collaboration with sector stakeholders, the	The 2015 water and wastewater sector-specific plan includes a segment on measuring the effectiveness of sector activities that describes the overall principles for collecting data and using the National Annual Report data calls as a tool for assessing performance	

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			Administrator of the Environmental Protection Agency should direct responsible officials to develop performance metrics to provide data and determine how to overcome challenges to monitoring the water and wastewater systems sector's cybersecurity progress.	and reporting on progress within the sector. However, the plan does not state specific measures and the agency acknowledged in its response to our report that it does not collect performance metrics on the effectiveness of its cybersecurity programs for the sector. In 2017, the Environmental Protection Agency worked through the sector and government coordinating councils to develop a sector security and resilience roadmap which includes sector cybersecurity concerns and strategies but no metrics. According to agency officials, the development of performance metrics in collaboration with sector partners is underway. We will continue to follow up to identify any specific metrics developed and implemented and resulting outcome-based reports.	
Information Technology Reform: Billions of Dollars in Savings Have Been Realized but Agencies Need to Complete Reinvestment Plans	GAO-15-617	2015-09-15	To improve the agency's IT savings reinvestment plans, the Administrator of the Environmental Protection Agency should direct the CIO to ensure that the agency's integrated data collection submission to OMB includes, for all reported initiatives,	The Environmental Protection Agency agreed with our recommendation but has not yet taken steps to implement it. Specifically, as of May 2018, the agency's quarterly integrated data collection submission to the Office of Management and Budget did not include reinvestment plans for 2 of the 3 reported cost savings	

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			complete plans to reinvest any resulting cost savings and avoidances from OMB-directed IT reform-related efforts.	and avoidance initiatives. For example, the agency reported about $3.9 million in cost savings and avoidances related to two shared services initiatives but did not provide information regarding how it plans to reinvest these savings and avoidances. We will continue to evaluate the agency's progress in implementing this recommendation.	
Grants Management: EPA Has Opportunities to Improve Planning and Compliance Monitoring	GAO-15-618	2015-08-17	The EPA Administrator should direct OGD to develop a timetable with milestones and identify and allocate resources for adopting electronic records management for all 10 regional offices.	According to EPA officials, the Office of Grants and Debarment (OGD) established an agency-wide electronic grants record workgroup in fiscal year 2016. The workgroup identified the contents of the electronic grant file, technical options, and evaluation criteria. OGD completed its alternatives analysis for scope, general approach, and requirements in fiscal year 2017 and EPA expects this recommendation to be addressed by its new grants management system (GrantsSolutions). As of December 2018, EPA expects to deploy GrantsSolutions in fiscal year 2019.	
Grants Management: EPA Has Opportunities to Improve Planning and Compliance Monitoring	GAO-15-618	2015-08-17	The EPA Administrator should direct OGD to implement plans for adopting an up-to-date and comprehensive IT	Implementation efforts are ongoing. According to EPA officials, OGD is conducting a multi-modular project to upgrade the agency's grants management IT	

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			system by 2017 that will provide accurate and timely data on agencywide compliance with grants management directives.	system. EPA expects this recommendation to be addressed by its new grants management system (GrantsSolutions). As of December 2018, EPA expects to deploy GrantsSolutions in fiscal year 2019.	
Grants Management: EPA Has Opportunities to Improve Planning and Compliance Monitoring	GAO-15-618	2015-08-17	Until the new IT system is implemented, the EPA Administrator should direct OGD to develop ways to more effectively use existing web-based tools to better monitor agencywide compliance with grants management directives.	Implementation efforts are ongoing. As of July 2018, EPA stated that it had implemented a new web-based system (Grants Reporting and Information Portal) to provide grants managers with cumulative annual baseline monitoring data. However, full implementation of the recommendation will depend on EPA's deployment of its new grants management system (GrantsSolutions). As of December 2018, EPA expects to deploy GrantsSolutions in fiscal year 2019.	
State Revolving Funds: Improved Financial Indicators Could Strengthen EPA Oversight	GAO-15-567	2015-08-05	To improve EPA's review and oversight of the SRF program, the Administrator of EPA should direct the Office of Water to use information on SRF funds' past performance to develop projections of SRF programs by forecasting future lending capacity during regional office reviews of states' SRF programs using factors such as future interest	As of February 2018, EPA officials said that they recently enhanced the agency's Financial Planning Model to align future loan projections with target cash balances. Officials also said that they plan to update their annual guidance to states to promote the importance of SRF financial modeling. They also plan to ask regional staff to discuss with states their efforts to do financial planning for SRF funds. EPA also plans to hold webinars	

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			earnings and inflation rates.	in the next year to help show how the Financial Planning Model can be used. GAO will review EPA's progress by reviewing regional annual SRF reviews and webinars, as appropriate, and determine if this recommendation can be closed.	
EPA's Science Advisory Board: Improved Procedures Needed to Process Congressional Requests for Scientific Advice	GAO-15-500	2015-06-04	To better ensure compliance with ERDDAA when handling congressional requests for scientific advice from EPA's SAB, the EPA Administrator should clarify in the charter when it is renewed which offices should receive and process congressional requests.	In September 2016, EPA finalized procedures for reviewing congressional committee requests for advice from the Science Advisory Board (SAB). According to EPA officials, the agency will also make modifications to the SAB charter to be consistent with the process. EPA renewed the SAB's charter in September 2017, but the renewed charter does not specify which EPA office should receive and process congressional requests for scientific advice from the SAB.	
EPA's Science Advisory Board: Improved Procedures Needed to Process Congressional Requests for Scientific Advice	GAO-15-500	2015-06-04	To better ensure compliance with ERDDAA when handling congressional requests for scientific advice from EPA's SAB, the EPA Administrator should document procedures for reviewing congressional committee requests to determine which questions should be	In September 2016, EPA finalized procedures for reviewing congressional committee requests for advice from the Science Advisory Board (SAB) to determine which questions should be taken up by the SAB. These procedures, however, do not ensure compliance with the Environmental Research, Development, and	

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			taken up by the SAB and criteria for evaluating such requests.	Demonstration Authorization Act (ERDDAA) because they fail to recognize that under ERDDAA, the SAB is required to provide requested scientific advice to select committees. The procedures lay out a process and criteria for reviewing congressional requests for SAB advice which include: (1) the scope of EPA's legal authorities; (2) whether the requested advice is related to the science and technical aspect of the environmental issue, rather than a question of public policy; and (3) EPA priorities and strategic plan. The relevant criterion for determining whether the SAB should take up a question, however, is whether it is scientific in nature. The other criteria may be relevant to EPA's prioritization of requests to the SAB in light of the SAB's limited resources.	
Telecommunications: Agencies Need Better Controls to Achieve Significant Savings on Mobile Devices and Services	GAO-15-431	2015-05-21	To help the agency effectively manage spending on mobile devices and services, the Administrator of the Environmental Protection Agency should ensure procedures to monitor and control spending are established agency-wide. Specifically, ensure that (1) procedures	As of November 2018, the Environmental Protection Agency had not implemented this recommendation. In July 2016, the agency stated that program offices received quarterly mobile device usage reports to review. However, as of November 2018, the agency had not provided documented procedures that address	

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			include assessing devices for zero, under, and over usage; (2) personnel with authority and responsibility for performing the procedures are identified; and (3) the specific steps to be taken to perform the process are documented.	the elements of our recommendation.	
Hazardous Waste: Agencies Should Take Steps to Improve Information on USDA's and Interior's Potentially Contaminated Sites	GAO-15-35	2015-01-16	To help resolve disagreements between EPA and USDA and Interior regarding which remaining docket sites require preliminary assessments, the Administrator of EPA should direct the Office of Federal Facilities Restoration and Reuse to review available information on USDA and Interior sites where EPA's Superfund Enterprise Management System indicates that a preliminary assessment has not occurred to determine the accuracy of this information, and update the information, as needed.	In response to this recommendation, EPA Federal Facilities Restoration and Reuse Office (FFRRO) generated a spreadsheet with information from EPA's Superfund Enterprise Management System showing the status of USDA and Interior sites on the docket. In January 2016 FFRRO sent letters to USDA and Interior which included information from the spreadsheet showing the status of each department's sites and requested that the departments work with EPA to determine the accuracy of the data. In addition, the departments were to--for those sites where EPA believed that a preliminary assessment was needed--provide a schedule for completion of the sites. In a June 2016 letter to EPA, USDA responded that with help from EPA regions they were able to substantially reconcile the list, complete preliminary	

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				assessments or their equivalent, and provide a status to EPA on its 251 sites. In an October 2016 letter to EPA, Interior responded that 79 sites have one or more areas of uncertainty regarding their status within the Federal Facilities Docket system. Interior stated that it had developed a work plan for obtaining additional information on the sites, which is scheduled for completion in March 2018. We will continue to monitor EPA's and Interior's progress to address this recommendation.	
Hazardous Waste: Agencies Should Take Steps to Improve Information on USDA's and Interior's Potentially Contaminated Sites	GAO-15-35	2015-01-16	To help resolve disagreements between EPA and USDA and Interior regarding which remaining docket sites require preliminary assessments, the Administrator of EPA should direct the Office of Federal Facilities Restoration and Reuse to work with the relevant USDA and Interior offices to obtain any additional information needed to assist EPA in determining the accuracy of the agency's data on the status of preliminary assessments for these sites.	According to EPA officials and documents, in response to this recommendation, EPA's Federal Facilities Restoration and Reuse Office (FFRRO) has been meeting quarterly with USDA and Interior to discuss, among other issues, any additional information needed to assist EPA in determining the accuracy of the agency's data on the status of preliminary assessments for these sites. According to a June 2016 letter USDA sent to EPA, preliminary assessments or their equivalent have been completed for its 251 sites. Interior informed EPA in an October 2016 letter that it has	

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				developed a plan--scheduled for completion in March 2018--for obtaining additional information on the sites. After the updated list of sites is developed, Interior plans to work with EPA to determine the final steps necessary to complete a preliminary assessment for each site. We will continue to monitor EPA's and Interior's progress to address this recommendation.	
Hazardous Waste: Agencies Should Take Steps to Improve Information on USDA's and Interior's Potentially Contaminated Sites	GAO-15-35	2015-01-16	To help resolve disagreements between EPA and USDA and Interior regarding which remaining docket sites require preliminary assessments, the Administrator of EPA should direct the Office of Federal Facilities Restoration and Reuse to, after completing this review, inform USDA and Interior whether the requirement to conduct a preliminary assessment at the identified sites has been met or if additional work is needed to meet this requirement	According to EPA officials and documents, in response to this recommendation, EPA's Federal Facilities Restoration and Reuse Office (FFRRO) has been meeting quarterly with USDA and Interior to discuss, among other issues, whether the requirement to conduct a preliminary assessment at the identified sites has been met or if additional work is needed to meet this requirement. According to a June 2016 letter USDA sent to EPA, preliminary assessments or their equivalent have been completed for its 251 sites. Interior informed EPA in an October 2016 letter that it has developed a plan--scheduled for completion in March 2018--for obtaining additional information on the sites. After the updated list of sites is	

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				developed, Interior plans to work with EPA to determine the final steps necessary to complete a preliminary assessment for each site. We will continue to monitor EPA's and Interior's progress to address this recommendation.	
Environmental Regulation: EPA Should Improve Adherence to Guidance for Selected Elements of Regulatory Impact Analyses	GAO-14-519	2014-07-18	To improve future adherence to OMB guidance for conducting RIAs, the EPA Administrator should enhance the agency's review process for RIAs to ensure the transparency and clarity of information presented for selected elements in and across RIAs.	In May 2017, EPA reported that it is committing to have its National Center for Environmental Economics in the Office of Policy review regulatory impact analyses (RIAs) for economically significant rules and provide a written review prior to their submission to OMB, indicating progress toward implementing this recommendation. As of January 2019, GAO is keeping this recommendation open until seeing how EPA implements this commitment, including any written documentation or guidance to support this process and the type of criteria the agency plans to use for these reviews to ensure the transparency and clarity of information presented for selected elements in and across EPA's RIAs.	
Environmental Regulation: EPA Should Improve Adherence to Guidance for Selected Elements of Regulatory Impact Analyses	GAO-14-519	2014-07-18	In addition, to enhance the usefulness of EPA's RIAs, the EPA Administrator should identify and prioritize for	As of May 2017, EPA said that it continues to make progress in the spirit of this recommendation, including its consideration of the	

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			research key categories of benefits and costs that the agency cannot currently monetize that, once monetized, would most enhance the agency's ability to consider economic trade-offs associated with different regulatory alternatives.	Science Advisory Board's (SAB) April 2017 draft report and research recommendations regarding the use of economy-wide modeling in benefit-cost analysis for environmental regulations. As of January 2019, GAO is keeping this recommendation open until it is clearer how EPA is using the SAB's work to develop its regulatory impact analyses.	
Drinking Water: EPA Program to Protect Underground Sources from Injection of Fluids Associated with Oil and Gas Production Needs Improvement	GAO-14-555	2014-06-27	To ensure that EPA's oversight of the class II program is effective at protecting drinking water sources from the underground injection of large amounts of wastewater that will be produced with increasing domestic oil and gas production, and to ensure that EPA maintains enforcement authority of state program requirements, the Administrator of the Environmental Protection Agency should (1) conduct a rulemaking to incorporate state program requirements, and changes to state program requirements, into federal regulations, and (2) at the same	EPA agrees with GAO's analysis that state program requirements and changes should be approved and codified in federal regulations. However, EPA does not agree with GAO's recommendation to conduct one comprehensive rulemaking to achieve this. In February 2018, EPA officials said that the agency explored alternative methods for maintaining federal enforceability under the current statutory provisions and determined that there were no viable alternatives to approving and codifying changes to state program requirements into federal regulations. Officials also told us that EPA has not determined which states have regulations or changes to regulations that have not been	

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			time, evaluate and consider alternative processes to more efficiently incorporate future changes to state program requirements into federal regulations without a rulemaking.	codified and has no plans to conduct a rulemaking at this time.	
Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should develop an agency-wide comprehensive policy for the management of software licenses that addresses the weaknesses we identified.	In April 2018, the Environment Protection Agency reported that it is currently taking steps to develop a comprehensive policy that will address a centralized management program of licenses, an analysis to inform decision making, education and training goals and overall management throughout the lifecycle. In addition, The Agency stated that it is still leveraging the efforts of the Continuous Diagnostics and Mitigation project as well as its Office of Acquisition Management's consolidation of its Microsoft suite. We will follow up with the agency to obtain supporting documents and continue to monitor its progress in implementing this recommendation.	
Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should employ a	In April 2018, the Environment Protection Agency reported that it is currently taking steps to develop a comprehensive policy that will address a centralized management program	

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			centralized software license management approach that is coordinated and integrated with key personnel for the majority of agency software license spending and/or enterprise-wide licenses.	of licenses. In addition, the agency stated that it is still leveraging the efforts of the Continuous Diagnostics and Mitigation project as well as leveraging its Office of Acquisition Management's consolidation of enterprise licenses. We will follow up with the agency to obtain supporting documents and continue to monitor its progress in implementing this recommendation.	
Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should establish a comprehensive inventory of software licenses using automated tools for the majority of agency software license spending and/or enterprise-wide licenses.	In April 2018, The Environmental Protection Agency reported that it is currently leveraging its Continuous Diagnostics and Mitigation program for a comprehensive software license inventory. The Agency also reported that this comprehensive inventory will be provided via an automated dashboard. We will follow up with the agency to obtain supporting documents and continue to monitor its progress in implementing this recommendation.	
Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should regularly track and maintain a comprehensive inventory of software licenses	In April 2018, the Environment Protection Agency reported that it is currently leveraging its Continuous Diagnostics and Mitigation program for an automated tool that will establish a comprehensive software license inventory. We will follow up with the	

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			using automated tools and metrics.	agency to obtain supporting documents and continue to monitor its progress in implementing this recommendation.	
Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should analyze agency-wide software license data, such as costs, benefits, usage, and trending data, to identify opportunities to reduce costs and better inform investment decision making.	In April 2018, the Environment Protection Agency reported that it is currently leveraging its Continuous Diagnostics and Mitigation program for a comprehensive software license inventory by the second quarter of fiscal year 2018. However, no supporting documentation was provided. The agency also stated that it is currently conducting an analysis of licenses and maintenance with regards to category management to determine the current spend environment and visibility within the agency to develop strategies for addressing each platform. We will follow up with the agency to obtain supporting documentation and continue to monitor its progress in implementing this recommendation.	
Federal Software Licenses: Better Management Needed to Achieve Significant Savings Government-Wide	GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should provide software license management training to	In April 2018, the Environment Protection Agency reported that it is working to develop a robust training curriculum that addresses all software license requirements including but not limited to negotiations, laws and regulations, and contract terms and	

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			appropriate agency personnel addressing contract terms and conditions, negotiations, laws and regulations, acquisition, security planning, and configuration management.	conditions department wide. We will follow up with the agency to obtain supporting documents and continue to monitor its progress in implementing this recommendation.	
Chemical Safety: Actions Needed to Improve Federal Oversight of Facilities with Ammonium Nitrate	GAO-14-274	2014-05-19	To strengthen federal oversight of facilities with ammonium nitrate, the Secretary of Labor and the Administrator of EPA should direct OSHA and EPA, respectively, to consider revising their related regulations to cover ammonium nitrate and jointly develop a plan to require high risk facilities with ammonium nitrate to assess the risks and implement safeguards to prevent accidents involving this chemical.	In January 2017, EPA issued a final rule to modify its Risk Management Program (RMP) regulations. The agency decided not to propose any revisions to the list of regulated substances and therefore, did not address ammonium nitrate in the revised regulations.	
Clean Water Act: Changes Needed If Key EPA Program Is to Help Fulfill the Nation's Water Quality Goals	GAO-14-80	2013-12-05	To enhance the likelihood that TMDLs support the nation's waters' attainment of water quality standards and to strengthen water quality management, the Administrator of EPA should develop and issue new regulations requiring that TMDLs include additional elements--and	In February 2018, EPA officials stated that it has taken several actions that change the focus of the total maximum daily loads (TMDL) program to focus efforts on implementing TMDLs. First, EPA developed a TMDL Vision document to focus on integrating and implementing different efforts to restore and protect the nation's aquatic resources.	

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			consider requiring the elements that are now optional--specifically, elements reflecting key features identified by NRC as necessary for attaining water quality standards, such as comprehensive identification of impairment and plans to monitor water bodies to verify that water quality is improving.	Second, EPA has held regional meetings to discuss different TMDL topics such as monitoring, implementation, and reasonable assurance. Included in these discussions were good practices and examples. EPA officials stated that these actions have changed the focus of the program in the place of regulations. We agree that these actions are helpful and can take the agency and states in the direction of improving the TMDL program. However, the actions do not carry the force of regulations and we believe that the problems of nonpoint source pollution require stronger action such as regulations to be resolved.	
Information Technology: Additional OMB and Agency Actions Are Needed to Achieve Portfolio Savings	GAO-14-65	2013-11-06	To improve the agency's implementation of PortfolioStat, the Administrator of the Environmental Protection Agency should direct the CIO to develop a complete commodity IT baseline.	In September 2016, we reported that the Environmental Protection Agency's (EPA) Registry of Environmental Protection Agency Applications, Models and Databases (READ) system had a complete inventory of enterprise IT and business systems-two of three categories of IT assets that make up a commodity IT baseline-and that the agency had processes in place to regularly update this inventory to ensure its completeness (see GAO-16-511). We are following up with EPA to obtain its inventory	

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				of IT infrastructure systems-the third commodity IT category--and determine the agency's process to ensure the completeness of this inventory.	
Information Technology: Additional OMB and Agency Actions Are Needed to Achieve Portfolio Savings	GAO-14-65	2013-11-06	To improve the agency's implementation of PortfolioStat, in future reporting to OMB, the Administrator of the Environmental Protection Agency should direct the CIO to fully describe the following PortfolioStat action plan elements: (1) consolidate commodity IT spending under the agency CIO; (2) establish targets for commodity IT spending reductions and deadlines for meeting those targets; and (3) establish criteria for identifying wasteful, low-value, or duplicative investments.	In November 2016, the Environmental Protection Agency (EPA) reported making progress in addressing the three action plan elements through implementation of the Federal Information Technology Acquisition Reform Act (FITARA) and efforts to assess applications in its inventory. However, EPA did not provide documentation describing the action plan items. We are following up with the agency to obtain this documentation.	
Information Technology: Additional OMB and Agency Actions Are Needed to Achieve Portfolio Savings	GAO-14-65	2013-11-06	To improve the agency's implementation of PortfolioStat, the Administrator of the Environmental Protection Agency should direct the CIO to report on the agency's progress in consolidating the managed print	Between July and December 2016, the Environmental Protection Agency (EPA) reported that it had implemented a managed print service contract for headquarters in 2014 and was preparing to award a new contract to also cover its regions. The agency also	

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			services and strategic sourcing of end user computing to shared services as part of the OMB integrated data collection quarterly reporting until completed.	reported that it plans to use one of the government-wide contracts identified in OMB's policy on improving the acquisition and management of common IT for its end user computing needs. EPA, however, did not provide documentation supporting these efforts. We are following up with the agency to obtain this documentation.	
Great Lakes Restoration Initiative: Further Actions Would Result in More Useful Assessments and Help Address Factors That Limit Progress	GAO-13-797	2013-09-27	To address challenges the Task Force faces in producing comprehensive and useful assessments of progress and addressing factors that may limit GLRI progress, the EPA Administrator, in coordination with the Task Force, as appropriate, should establish an adaptive management plan that includes all of the key elements of adaptive management and provides details on how these elements will be implemented.	In March 2018, EPA provided to GAO a draft of the final report from the Great Lakes Restoration Initiative Adaptive Management Pilot Project. The report did not recommend changing the adaptive management plan from what was in use when GAO issued this recommendation. GAO will review the final report when it is issued.	
Pesticides: EPA Should Take Steps to Improve Its Oversight of Conditional Registrations	GAO-13-145	2013-08-08	To improve EPA's management of the conditional registration process, the Administrator of EPA should direct the Director of the Office of Pesticide Programs to	In fiscal year 2017, EPA reported that until upgrades to the Office of Pesticide Programs' (OPP) database architecture are complete in fiscal year 2018, the agency cannot complete plans to automate data related to	

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			complete plans to automate data related to conditional registrations to more readily track the status of these registrations and related registrant and agency actions and identify potential problems requiring management attention.	conditional registrations. The agency informed us that plans are currently underway to improve the functionality and accuracy of OPP databases, including the tracking of information on conditional registration. As of May 2018, we are continuing to review EPA's efforts to respond to this recommendation.	
Chemical Assessments: An Agencywide Strategy May Help EPA Address Unmet Needs for Integrated Risk Information System Assessments	GAO-13-369	2013-05-10	To ensure that EPA maximizes its limited resources and addresses the statutory, regulatory, and programmatic needs of EPA program offices and regions when IRIS toxicity assessments are not available, and once demand for the IRIS Program is determined, the EPA Administrator should direct the Deputy Administrator, in coordination with EPA's Science Advisor, to develop an agencywide strategy to address the unmet needs of EPA program offices and regions that includes, at a minimum: (1) coordination across EPA offices and with other federal research agencies to help identify and fill data gaps that preclude the agency from	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program officials told GAO that they are working with EPA program and regional offices to build capacity for applying systematic review in toxicity and risk assessments. To date, EPA has not provided GAO with documentation of an agencywide strategy for identifying data gaps or coordinating systematic review procedures; rather, the efforts led by the IRIS Program are ad hoc. EPA has also not produced agencywide guidance on alternative sources of toxicity information when IRIS values are not available, applicable, or current. According to interviews with program and regional offices, some offices have developed their own hierarchies and criteria for alternative sources of toxicity information; while these hierarchies may be similar, they are	

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			conducting IRIS toxicity assessments, and (2) guidance that describes alternative sources of toxicity information and when it would be appropriate to use them when IRIS values are not available, applicable, or current.	not agencywide guidance. Until EPA produces documentation that shows (1) coordination across EPA offices and with other federal research agencies to help identify and fill data gaps that preclude the agency from conducting IRIS toxicity assessments, and (2) guidance on alternative sources of toxicity information and when it would be appropriate to use them when IRIS values are not available, applicable, or current, GAO will keep this recommendation open.	
Toxic Substances: EPA Has Increased Efforts to Assess and Control Chemicals but Could Strengthen Its Approach	GAO-13-249	2013-03-22	To better position EPA to collect chemical toxicity and exposure-related data and ensure chemical safety under existing TSCA authority, while balancing its workload, and to better position EPA to ensure chemical safety under existing TSCA authority, the Administrator of EPA should direct the appropriate offices to develop strategies for addressing challenges that impede the agency's ability to meet its goal of ensuring chemical safety. At a minimum, the strategies should	As of December 2018, while there have been fundamental changes in EPA's approach to chemicals management, this recommendation remains open. Specifically, Congress amended the Toxic Substances Control Act TSCA (TSCA) of 1976 by passing the Frank R. Lautenberg Chemical Safety for the 21st Century Act in 2016 in ways that fundamentally changed and expanded EPA's approach to domestic chemicals management, including authorizing EPA to review existing and new chemicals. According to EPA, in carrying out the statutory requirements for conducting risk evaluations for chemicals, the Office of Chemical Safety and	

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			address challenges associated with: (1) obtaining toxicity and exposure data needed to conduct ongoing and future TSCA Work Plan risk assessments, (2) gaining access to toxicity and exposure data provided to the European Chemicals Agency, (3) working with processors and processor associations to obtain exposure-related data, (4) banning or limiting the use of chemicals under section 6 of TSCA and planned actions for overcoming these challenges--including a description of other actions the agency plans to pursue in lieu of banning or limiting the use of chemicals, and (5) identifying the resources needed to conduct risk assessments and implement risk management decisions in order to meet its goal of ensuring chemical safety.	Pollution Prevention (OSCPP) (the EPA office that oversees the TSCA program) has engaged other EPA offices in a variety of ways to obtain information necessary to conduct risk evaluations and to leverage expertise and experience of other experts within EPA. In addition, according to EPA, OCSPP has implemented other ways of addressing challenges associated with the following, which were identified in our original recommendation: (1) obtaining toxicity and exposure data needed to conduct ongoing and future TSCA Work Plan risk assessments for existing chemicals; (2) gaining access to toxicity and exposure data provided to the European Chemicals Agency; (3) working with processors and processor associations to obtain exposure-related data; (4) banning or limiting the use of chemicals under section 6 of TSCA; and (5) identifying the resources needed to conduct risk assessments and implement risk management decisions in order to meet its goal of ensuring chemical safety. Although EPA officials believe that our 2013 findings and recommendations regarding impediments	

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				to the agency's ability to assess and control toxic chemicals under the previous statute have less relevance now than they did when issued, we have ongoing concerns about the sufficiency of resources to implement TSCA, as amended. In our report, we noted that many of the challenges EPA faced were rooted in TSCA's regulatory framework, and that we had previously suggested that Congress consider making statutory changes. Until such changes were made, we recommended that EPA take certain actions, but the statute has now been amended. EPA's implementation of the new law will determine whether this recommendation can be closed. We remain particularly concerned that EPA has not demonstrated a commitment to identify resources needed to conduct risk assessments and implement risk management decisions. The Lautenberg Act increased EPA's responsibility for regulating chemicals and in turn, its workload. Partially due to the increased workload, some EPA officials told us they have concerns about staff capacity. Staff in the office that implements TSCA said	

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				they do not have sufficient resources to do their work. This office is also drawing on the staff of other EPA offices such as the IRIS Program in order to meet deadlines. EPA recently used authority under the Lautenberg Act to finalize a rule collecting fees from companies, but EPA officials are uncertain how much the fees rule will generate the first year, though they believe that over the course of a few years, the amount of money generated should stabilize.	
Organizational Transformation: Enterprise Architecture Value Needs to Be Measured and Reported	GAO-12-791	2012-09-26	To enhance federal agencies' ability to realize enterprise architecture benefits, the Secretaries of the Departments of Agriculture, the Air Force, the Army, Commerce, Defense, Education, Energy, Homeland Security, the Interior, Labor, the Navy, State, Transportation, the Treasury, and Veterans Affairs; the Attorney General; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and Small Business	As of February 2018, the Environmental Protection Agency had not implemented this recommendation and did not have a specific plan to do so. In March 2014, the agency submitted its Enterprise Roadmap to the Office of Management and Budget, which included metrics associated with potential outcomes related to its enterprise architecture efforts, such as cost savings gained from consolidating and sharing services. However, the agency had not established steps to be followed for measuring architecture outcomes. Furthermore, according to its May 2015 Enterprise Roadmap, the agency no longer planned to measure architecture-related outcomes.	

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			Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office of Personnel Management should fully establish an approach for measuring enterprise architecture outcomes, including a documented method (i.e., steps to be followed) and metrics that are measurable, meaningful, repeatable, consistent, actionable, and aligned with the agency's enterprise architecture's strategic goals and intended purpose.	Nonetheless, we will continue to monitor the agency's efforts to implement the recommendation.	
Organizational Transformation: Enterprise Architecture Value Needs to Be Measured and Reported	GAO-12-791	2012-09-26	To enhance federal agencies' ability to realize enterprise architecture benefits, the Secretaries of the Departments of Agriculture, the Air Force, the Army, Commerce, Defense, Education, Energy, Homeland Security, the Interior, Labor, the Navy, State, Transportation, the Treasury, and	The Environmental Protection Agency has not implemented this recommendation. In March 2014, the agency submitted to the Office of Management and Budget its Enterprise Roadmap, which identified outcomes associated with its enterprise architecture efforts. For example, the agency reported cost savings achieved in fiscal year 2013 related to consolidating and sharing services.	

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			Veterans Affairs; the Attorney General; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and Small Business Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office of Personnel Management should periodically measure and report enterprise architecture outcomes and benefits to top agency officials (i.e., executives with authority to commit resources or make changes to the program) and to OMB.	However, the agency did not demonstrate that it reliably measured the outcome (i.e., it did not provide supporting documentation). More recently, according to its May 2015 Enterprise Roadmap, the agency no longer planned to measure architecture-related outcomes. As of February 2018, the agency had not demonstrated that it had taken additional actions to address this recommendation. Nonetheless, we continue to believe that it is important that the agency measure the value of its enterprise architecture and will monitor its efforts to implement the recommendation.	
Nonpoint Source Water Pollution: Greater Oversight and Additional Data Needed for Key EPA Water Program	GAO-12-335	2012-05-31	To help protect the quality of our nation's water resources, and to strengthen EPA's implementation of its responsibilities under the Clean Water Act's section 319 nonpoint source pollution control program, the Administrator of EPA should, in	In July 2016, we issued an update on our recommendations saying that EPA planned to change the program's measures of effectiveness. In June 2018, an EPA official said that the agency is working to significantly reduce the number of measures reported by the Office of Water by two-thirds, which will	

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			revising section 319 guidelines to states, and in addition to existing statutorily required reporting measures, emphasize measures that (1) more accurately reflect the overall health of targeted water bodies (e.g., the number, kind, and condition of living organisms) and (2) demonstrate states' focus on protecting high-quality water bodies, where appropriate.	impact the 319 program's ability to maintain current or create new measures. As a result, the 319 program will not pursue adding a new measure as we recommended. However, according to the official, the program is seeking to revise and broaden its measures in line with GAO's recommendation. Specifically, EPA revised its WQ-10 measure to capture varying types of nonpoint source success stories and to better account for removing nonpoint source impairments in individual waterbodies. According to EPA, the changes also enable it to report on different forms of water quality improvement, including those water quality standards restored that are based on state-specific biocriteria. Additionally, the program has made changes to its GRTS program to track work that is conducted to protect high-quality waters. According to EPA officials, they will also develop in 2019 a compendium of 319-funded protection projects and approaches to further inform nonpoint source protection activities. This will allow the agency to report on this work over time as it gathers more robust data.	

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Chemical Assessments: Challenges Remain with EPA's Integrated Risk Information System Program	GAO-12-42	2011-12-09	To better ensure the credibility of IRIS assessments by enhancing their timeliness and certainty, the EPA Administrator should require the Office of Research and Development to assess the feasibility and appropriateness of the established time frames for each step in the IRIS assessment process and determine whether different time frames should be established, based on complexity or other criteria, for different types of IRIS assessments.	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program officials have begun producing "fit for purpose" chemical assessments, intended to help the Program produce more targeted assessments on a faster timeline for EPA Program Offices. In addition, IRIS staff have begun using project management software to better plan assessment timelines and to better allocate staff time to work on assessments and related tasks. However, GAO has not received further documentation from IRIS Program officials, such as published guidance or other materials outlining the new "fit for purpose" timeframes, including documentation showing the scope of assessments currently underway and how that scope will translate to timeframes (e.g., evidence maps, level of effort assessments, and project plans for assessments in progress). GAO will leave this recommendation open until such documentation is available as well as information communicating assessments' progress and demonstrating a commitment to adjust timeframes based on	

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				complexity or other criteria.	
Chemical Assessments: Challenges Remain with EPA's Integrated Risk Information System Program	GAO-12-42	2011-12-09	To better ensure the credibility of IRIS assessments by enhancing their timeliness and certainty, the EPA Administrator should require the Office of Research and Development, should different time frames be necessary, to establish a written policy that clearly describes the applicability of the time frames for each type of IRIS assessment and ensures that the time frames are realistic and provide greater predictability to stakeholders.	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program officials have begun producing "fit for purpose" chemical assessments, intended to help the Program produce more targeted assessments on a faster timeline for EPA program and regional offices. Interviews with EPA Program Offices indicate that IRIS "clients" (EPA program and regional offices) are aware of new timelines and receive monthly updates on assessment progress via a conference call. However, EPA has not produced a formal memo or documentation from IRIS Program management identifying how timelines are decided for each assessment (including the goal to complete all of the internal Program and National Center for Environmental Assessment stages of the assessment process within 2 years). GAO will leave this recommendation open until such documentation is available.	
Chemical Assessments: Challenges Remain with EPA's Integrated Risk Information System Program	GAO-12-42	2011-12-09	To ensure that current and accurate information on chemicals that EPA plans to assess	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program was waiting on results of an EPA-wide survey of	

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			through IRIS is available to IRIS users--including stakeholders such as EPA program and regional offices, other federal agencies, and the public--the EPA Administrator should direct the Office of Research and Development to annually publish the IRIS agenda in the Federal Register each fiscal year.	chemical assessment needs to incorporate information into the IRIS workload (as appropriate) and the "Assessments in Development" page on the IRIS Website. GAO will leave this recommendation open until such information is available.	
Chemical Assessments: Challenges Remain with EPA's Integrated Risk Information System Program	GAO-12-42	2011-12-09	To ensure that current and accurate information on chemicals that EPA plans to assess through IRIS is available to IRIS users--including stakeholders such as EPA program and regional offices, other federal agencies, and the public--the EPA Administrator should direct the Office of Research and Development to indicate in published IRIS agendas which chemicals EPA is actively assessing and when EPA plans to start assessments of the other listed chemicals.	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program was waiting on results of an EPA-wide survey of chemical assessment needs to incorporate information into the "Assessments in Development" page on the IRIS Website. GAO will leave this recommendation open until the IRIS Program can demonstrate that it is communicating to the public current and accurate information on which chemicals EPA is actively assessing and when EPA plans to start assessments of the other listed chemicals.	
Chemical Assessments: Challenges Remain with EPA's Integrated Risk Information System Program	GAO-12-42	2011-12-09	To ensure that current and accurate information on chemicals that EPA plans to assess	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program website indicated that the information previously	

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			through IRIS is available to IRIS users--including stakeholders such as EPA program and regional offices, other federal agencies, and the public--the EPA Administrator should direct the Office of Research and Development to update the IRIS Substance Assessment Tracking System (IRISTrack) to display all current information on the status of assessments of chemicals on the IRIS agenda, including projected and actual start dates, and projected and actual dates for completion of steps in the IRIS process, and keep this information current.	contained in IRISTrack has been moved to a public-facing IRIS website, which includes a list of chemicals currently under assessment and identifies their stage of assessment. GAO will leave this recommendation open until the agency demonstrates that updates are routinely posted in a timely manner.	
Drinking Water: Unreliable State Data Limit EPA's Ability to Target Enforcement Priorities and Communicate Water Systems' Performance	GAO-11-381	2011-06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should resume data verification audits to routinely evaluate the quality of selected	As of May 2017, EPA reported that it had not resumed its data verification audits due to budgetary constraints, but was continuing on-site file reviews to support efficient and effective state programs. EPA completed 5 file reviews in 2015, 7 in 2016, and was planning to complete 10 in 2017. According to EPA, budgetary constraints may affect its ability to reach this goal. According to the	

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			drinking water data on health-based and monitoring violations that the states provide to EPA. These audits should also evaluate the quality of data on the enforcement actions that states and other primacy agencies have taken to correct violations.	agency, EPA continues to focus on developing its Safe Drinking Water Information System (SDWIS) Prime database, which it claims will reduce state burden, support effective management and prioritization of resources, and will enhance data quality and support the possibility of building an electronic data verification protocol. EPA said it plans to have the system operational in 2018. In addition, EPA said that it continues to provide training sessions as well as identify best practices that file reviewers can use to enhance file review implementation. For 2017-2018, EPA plans to continue quarterly national training events. A July 2017 report by EPA's Office of the Inspector General concluded that limitations to EPA's oversight tools impede the agency's ability to conduct consistent oversight of the national drinking water program and reduce the reliability of its monitoring and reporting data. The Inspector General did not make any recommendations because it concluded the agency is taking steps to address the shortcomings. For example, according to the Inspector General's	

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				report, EPA released the Compliance Monitoring Data Portal in September 2016. EPA water officials said the portal will enable public water systems and laboratories to report drinking water data electronically to primacy agencies. Utah became the first state to use the portal in March 2017 and EPA staff anticipate that five additional states will begin using the portal by the end of 2017. EPA anticipates this system will lead to fewer reporting errors, improved data quality, and reduced time needed to report state data to EPA.	
Drinking Water: Unreliable State Data Limit EPA's Ability to Target Enforcement Priorities and Communicate Water Systems' Performance	GAO-11-381	2011-06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should work with the states to establish a goal, or goals, for the completeness and accuracy of data on monitoring violations. In setting these goals, EPA may want to consider whether certain types of monitoring violations merit	As of May 2017, EPA has not worked with states to establish a national goal for the quality of monitoring violations. EPA stated that, without the ability to conduct on-site data verifications using a statistically-based sample size, it is unable to derive a goal that would capture both completeness of state reporting to EPA and whether the states correctly assigned a violation for missed monitoring. EPA said that it intends to work with states to evaluate the establishment of a monitoring data quality goal once the new Safe Drinking Water Information System (SDWIS) NextGen data	

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			specific targets. For example, the agency may decide that a goal for the states to completely and accurately report when required monitoring was not done should differ from a goal for reporting when monitoring was done but not reported on time.	system has been developed and electronic data verification functions are incorporated into the system. In April 2015, EPA indicated that the agency intends to separate monitoring violations from reporting violations in the new SDWIS Primacy Agency (Prime) data system. According to EPA, this will enable the primacy agencies and EPA to better understand the nature of system violations and with the violations delineated in this manner, EPA will be able to consider developing goals for monitoring and reporting violations. As of May 2017, EPA is scheduled to have SDWIS Prime available for testing in September 2017 and available for state users at the end of March 2018. EPA will consider GAO's recommendation once SDWIS Prime is fully operational and it is able to better establish such a goal.	
Drinking Water: Unreliable State Data Limit EPA's Ability to Target Enforcement Priorities and Communicate Water Systems' Performance	GAO-11-381	2011-06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should	In August 2017, EPA told GAO that it continues to use a variety of tools and resources to identify strategies that will enhance how the agency conveys to the public information on drinking water quality and potential health risks associated with exposure to contaminants. With	

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			consider whether EPA's performance measures for community water systems could be constructed to more clearly communicate the aggregate public health risk posed by these systems' noncompliance with SDWA and progress in having those systems return to compliance in a timely manner.	regard to GAO's recommendation, EPA told us it had previously collaborated with the EPA Regional managers to identify language that would enhance the communication of aggregate public health risk to consumers in regards to community water system measures. EPA developed the measure because it describes the percentage of people served by community water system that receive drinking water that meets all health-based drinking water standards, accounting for the duration of violations that occurred. EPA piloted this measure in Fiscal Year 2007 as an indicator measure. In Fiscal Year 2008, the measure was elevated to a strategic plan measure with established targets. After receiving positive response regarding this measure, in Fiscal Year 2015, the agency developed a measure for tribal community water systems. According to the agency, EPA will continue to take comments on existing and future measures during its 5 year strategic plan reviews.	
Safe Drinking Water Act: EPA Should Improve Implementation of Requirements on Whether to Regulate	GAO-11-254	2011-05-27	To increase EPA's consistency, transparency, and clarity in implementing the Safe Drinking	As of June 2018, EPA has taken no further action on this recommendation; as a result it remains open and GAO will continue	

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Additional Contaminants			Water Act in a way that better assures the public of safe drinking water, and to systematically implement the statutory requirement to consider for regulation the contaminants that present the greatest public health concern, the EPA Administrator should require that the Office of Water to develop a coordinated process for obtaining both the occurrence and health effects data that may be needed for the agency to make informed regulatory determinations on these priority contaminants.	to monitor EPA's progress. In May 2017, while EPA cited the January 2016 document, "EPA's Protocol for the Regulatory Determinations 3," that includes clearer, more explicit description of the occurrence data EPA uses and the health assessment sources, it does not address the recommendation's intent that EPA develop a coordinated process for obtaining both the occurrence and health effects data that may be needed for the agency to make informed regulatory determinations on priority contaminants. Since most, if not all of the sources cited are data that EPA was using at the time the report was issued, GAO is keeping this recommendation open. As GAO reported, the approach EPA currently uses does not provide the agency with all of the data it needs in a timely manner to support determinations for some priority contaminants.	
Safe Drinking Water Act: EPA Should Improve Implementation of Requirements on Whether to Regulate Additional Contaminants	GAO-11-254	2011-05-27	In light of EPA's decisions to issue health advisories in conjunction with determinations to not regulate certain contaminants that have been detected in some public water systems at levels of public	As of June 2018, EPA has taken no further action on this recommendation; as a result it remains open and GAO will continue to monitor EPA's progress. In May 2017, EPA indicated that its Drinking Water Standards and Health	

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			health concern, the EPA Administrator should (1) determine whether the Office of Water's use of health advisories provides sufficient information on these unregulated contaminants to support timely and effective actions by states, localities, public water systems, and the public to ensure the safety of public drinking water, and (2) if not, direct the Office of Water to develop a plan to more effectively communicate such information to these entities.	Advisories tables provide a summary of previously published concentrations of drinking water contaminants that are protective of public health, and that the agency periodically updates these tables to summarize health advisories and regulations published to date. Since the table was last updated in 2012, and work is underway to revise it and make the information more accessible, GAO will monitor EPA's progress before closing this recommendation.	
Environmental Protection Agency: EPA Needs to Complete a Strategy for Its Library Network to Meet Users' Needs	GAO-10-947	2010-09-30	To ensure that EPA's library network continues to meet its users' needs, the Administrator of EPA should, in future assistance agreements, make explicit that EPA can include in the agency's public online database, without obtaining prior permission from the copyright holder, any documents produced under the agreements.	EPA released its Plan to Increase Access to Results of EPA-Funded Scientific Research; dated November 29, 2016. According to the plan, its purpose is to describe steps that EPA will take to increase the availability of the results of EPA-funded research to the scientific community, environmental policy makers, other stakeholders, and the public in order to accelerate scientific breakthroughs that support the agency’s mission and policy making efforts. The plan notes that EPA will create a Forum on Increasing Public Access to EPA Research to implement	

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				the plan, and the forum should be established within 4 months after approval of the plan. The plan includes language stating that regulatory licenses for grants, contracts, and cooperative agreements allow the agency to provide the public with access. Upon full implementation, EPA plans to develop extramural award terms and provide guidance to future award recipients and contractors regarding public access to publications, including refraining from signing any agreements with publishers that purport to restrict EPA?s license rights, according to EPA.	
Environmental Protection Agency: EPA Needs to Complete a Strategy for Its Library Network to Meet Users' Needs	GAO-10-947	2010-09-30	To ensure that EPA's library network continues to meet its users' needs, and for future assistance agreements where EPA cannot make such an arrangement, EPA should digitize documents produced under the agreements and make them available to federal employees and other authorized users for federal government purposes.	EPA released its Plan to Increase Access to Results of EPA-Funded Scientific Research; dated November 29, 2016. According to the plan, its purpose is to describe steps that EPA will take to increase the availability of the results of EPA-funded research to the scientific community, environmental policy makers, other stakeholders, and the public in order to accelerate scientific breakthroughs that support the agency’s mission and policy making efforts. The plan notes that within 4 months of the approval of the plan, EPA will begin developing	

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				additional processes, infrastructure, language, and training needed to increase public access to EPA-funded extramural research publications and data. Once adopted, implementation will begin prospectively with 2018 funded extramural requests for applications for grants, contracts, and cooperative/assistance agreements, according to the plan.	
Chemical Assessments: Low Productivity and New Interagency Review Process Limit the Usefulness and Credibility of EPA's Integrated Risk Information System	GAO-08-440	2008-03-07	To develop timely chemical risk information that EPA needs to effectively conduct its mission, the Administrator, EPA, should require the Office of Research and Development to re-evaluate its draft proposed changes to the IRIS assessment process in light of the issues raised in this report and ensure that any revised process periodically assesses the level of resources that should be dedicated to this significant program to meet user needs and maintain a viable IRIS database.	As of September 2018, EPA's Integrated Risk Information System (IRIS) Program officials told GAO that they have drafted and sent for Agency review a "Handbook for Developing IRIS Assessments," intended to guide staff through the sequential stages of the IRIS assessment process. Since January 2017, IRIS Program staff have used project management techniques and software intended to help Program leadership better understand and utilize resources and monitor assessment progress. However, until the IRIS Program provides documentation demonstrating a stable IRIS process that periodically assesses the level of resources that should be dedicated to the program to meet user needs and maintain a viable IRIS database, and finalizes the Handbook, GAO will	

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				leave this recommendation open.	
Drinking Water: EPA Should Strengthen Ongoing Efforts to Ensure That Consumers Are Protected from Lead Contamination	GAO-06-148	2006-01-04	The Administrator, EPA, should take a number of steps to further protect the American public from elevated lead levels in drinking water. Specifically, to improve EPA's ability to oversee implementation of the lead rule and assess compliance and enforcement activities, EPA should ensure that data on water systems' test results, corrective action milestones, and violations are current, accurate, and complete.	In June 2017, EPA reported to GAO that the agency had been working with states through face-to-face trainings and webinars on the reporting of milestone data. GAO will continue to monitor these efforts and reevaluate whether water systems' test results, corrective action milestones and violations are current, accurate and complete subsequent to the completion of the Compliance Monitoring Data Portal and the Safe Drinking Water Information System (SDWIS) Prime, described briefly below. However, until these new tools are complete, the status of this recommendation remains open. According to EPA, SDWIS Prime will be available for testing in September 2017 and for state use at the end of March 2018. In an earlier update to GAO in June 2016, EPA highlighted several of its efforts to improve data quality, noting that it had given greater scrutiny to such improvements due to recent concerns about elevated lead in drinking water. For example, its SDWIS regional coordinators review all SDWIS data submissions for accuracy and timeliness	

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				before approving submittals to the agency. In addition, EPA provides the Regions and the States with a data quality matrix report that gives metrics on the accuracy and timeliness of the last submission, after each quarterly submission. The agency has also focused on promoting electronic reporting of drinking water data through development of the Compliance Monitoring Data Portal and is developing SDWIS Prime to improve state program efficiency, automate candidate violation notifications, increase data submission quality, and promote reporting of compliance monitoring data.	

EPA OIG Open Recommendations and Corrective Actions

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15-P00290-007	Recommendation 1: We recommend that the Chief Information Officer: 5. Implement the recommendation of the EPAs Information Security Task Force to manage the vulnerability management program.	2015-09-21
	Corrective Action 1-1: 2. Half of the Information Security Officer (ISO) Role-Based Training (RBT) program was implemented in FY 2017. The complete ISO RBT program will be implemented by 9/30/2018. Contractor oversight training will be implemented by 9/30/2018. *Status:* Delayed	
17-P00344-007	Recommendation 1: We recommend that the Assistant Administrator for Environmental Information: 3. Work with the Assistant Administrator for Administration and Resources Management to implement a process that requires appropriate Agency personnel to maintain a listing of contractor personnel who have significant information security responsibilities required to take role-based training. *Status:* TBD	2017-07-31
	Corrective Action 1-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 OEI agrees with the revised recommendation, with a few clarifications. First, we would ask that the recommendation be changed from “Implement a process” to state that “OEI will work with the Assistant Administrator for Administration and Resources Management to implement a process.” *Status:* TBD	
10-100029-130	Recommendation 1: 27. We recommend that OCFO ensure that all new financial management systems (including the IFMS replacement system) and those undergoing upgrades include a system requirement that the fielded system include an automated control to enforce separation of duties. *Status:* TBD	2009-11-16
	Corrective Action 1-1: *Planned:* 2015-12-31 *Completed:* 0000-00-00 27.9(REVISED) OTS will modify Compass user profiles to create specific security roles to allow Compass Security Officers to better manage user access. Update 1/7/2016 Notified OIG 1/7/2016 that, Per OTS, the date for CA is extended to 12/31/2017, "Due to other high priority projects such as Compass Version Enhancement and the Accounting Code Structure, OCFO was not able to allocate resources for this task. OTS will seek resources and enhance the Access Request Form application to add additional controls and logic to comply with the separation of duties policy." *Status:* Delayed	
	Corrective Action 1-2: *Planned:* 2015-12-31 *Completed:* 0000-00-00 27.10 (REVISED) OTS will enhance the Access Request Form application to add additional controls and automatic logic to check for approved waivers on File to prevent users to submit security options that violated the separation of duties policy. Update 1/7/2016 Notified OIG 1/7/2016 that, Per OTS, the date for CA is extended to 12/31/2017, "Due to other high priority projects	

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	such as Compass Version Enhancement and the Accounting Code Structure, OCFO was not able to allocate resources for this task. OTS will seek resources and enhance the Access Request Form application to add additional controls and logic to comply with the separation of duties policy." *Status:* Delayed	
16-F00040-130	Recommendation 1: 26. Implement an internal control process for transferring the management of an applications user access to the Application Management Staff.	2015-11-16
	Corrective Action 1-1: *Planned:* 2017-12-31 *Completed:* 0000-00-00 26.1 Upon availability of resources and completion of other high priority IT projects (i.e., CVE and Account Code Structure Project), OCFO will transfer the management of all application user access processes to the Office of Technology Solutions, Application Management Staff. *Status:* Delayed	
	Recommendation 2: 27. Conduct an inventory of OCFO systems managed by the Application Management Staff and create or update supporting access management documentation for each application.	
	Corrective Action 2-1: *Planned:* 2017-12-31 *Completed:* 0000-00-00 27.1 Upon availability of resources and completion of other high priority IT projects (i.e., CVE and ACS), OCFO will conduct an inventory of OCFO systems managed by OTS/AMS and create or update supporting access management documentation for each application. *Status:* Delayed	
	Recommendation 3: 36. Complete the corrective actions previously identified in Table 4.	
	Corrective Action 3-1: *Planned:* 2016-09-30 *Completed:* 0000-00-00 36.1 See below for information for Recommendations 37 thru 39 for the agency's planned actions to complete these recommendations. (Note: This CA will complete once all the CAs 37 thru 39 are completed.) December 2017 Update: CR 3020 which will address CA 28 has been deferred until further notice. *Status:* Delayed	
	Recommendation 4: 38. Follow the terms in the legal source documents when recording interest by ensuring interest is recorded in the system when a receivable becomes past due, either through Compass automatic calculations or manual interest calculations prepared by CFC.	
	Corrective Action 4-1: *Planned:* 2016-09-30 *Completed:* 0000-00-00 38.1 CFC will work with OTS to explore the level-of- effort needed for Compass to automatically accrue interest when a Superfund debt becomes delinquent. Until this is changed in Compass, staff will continue to manually uncheck the waiver flag once a debt becomes delinquent. December 2017 Update: CR 3020 will address this CA and is currently deferred until further notice. *Status:* Delayed	
16-P00333-130	Recommendation 1: Rec. 4 - 4. Modify the EPAs payroll and time and attendance system to include the enhanced internal controls,	2016-09-27

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	preventing employees from accumulating Religious Compensatory Time hours inconsistent with revised policies and procedures.	
	Corrective Action 1-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 The OCFO will coordinate with the Office of Administration and Resources Management and the Department of Interior's Interior Business Center, a shared service payroll provider, to implement necessary changes to the payroll system based on the revised Office of Human Resources policy. Once the requirements are defined, the OCFO will align the time and attendance system to interface with the modified payroll system. *Status:* Delayed	
17-F00046-130	Recommendation 1: Prepare a comprehensive quarterly reconciliation of Superfund special accounts general ledger balances to the special accounts database detail.	2016-11-15
	Corrective Action 1-1: *Planned:* 2016-12-31 *Completed:* 0000-00-00 3.1 - The agency will conduct the quarterly reconciliation of Superfund Special Accounts general ledger to the Special Accounts database detail. *Status:* Delayed	
	Recommendation 2: Work with the Compass Financials service provider to establish controls for creating and locking administrative accounts.	
	Corrective Action 2-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 9.1 - The agency will work with the service provider to analyze alternatives for controls and establish an action plan. *Status:* TBD	
	Recommendation 3: Work with the Compass Financials service provider to develop and implement a methodology to monitor accounts with administrative capabilities.	
	Corrective Action 3-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 10.1 - The agency will work with the service provider to analyze alternative methodologies and establish an action plan. *Status:* TBD	
19-F00003-130	Recommendation 1: Recommendation #1: Ensure that the special account reclassification entry include a review to determine whether previously reported earned revenue for future costs incurred, expenses incurred, unbilled oversight costs and special account collection movements should or should not be included, and include supporting documents identifying the accounts and amounts reviewed.	2018-11-14
	Corrective Action 1-1: *Planned:* 2019-03-29 *Completed:* 0000-00-00 The EPA agreed to modify the accounting model in Compass Financials, the agency's accounting system, and to prepare a comprehensive quarterly reconciliation of Superfund special accounts general ledger balances to the special accounts database. The accounting models are developed and will be implemented in the second quarter of FY 2019. The conversion of prior accounting data into the approved process will be made at that time. Pending the implemented solution, journal vouchers to reclassify special accounts and earned/unearned revenue activity were processed to ensure the accuracy of the accounts. *Status:* Delayed	

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	Recommendation 2: Recommendation #2: Require the Accounting and Cost Analysis Division, and the Las Vegas and Cincinnati Finance Centers, to research and resolve cash differences.	
	Corrective Action 2-1: *Planned:* 2019-03-29 *Completed:* 0000-00-00 The agency will continue to review processes and research old cash balance differences. *Status:* Delayed	
	Recommendation 3: Recommendation #6: Update the policy for the proper accounting and recognition of gains or losses from marketable securities based on the sale of stock.	
	Corrective Action 3-1: *Planned:* 2019-03-29 *Completed:* 0000-00-00 The agency will issue an administrative update to RMDS 2550D-14 "Superfund Accounts Receivable and Billings". *Status:* Delayed	
11-P00701-140	Recommendation 1: We recommend that the Assistant Administrator for Air and Radiation update the 2004 fees rule to increase the amount of MVECP costs it can recover.	2011-09-23
	Corrective Action 1-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 3/15/12 - OAR will begin planning for a new fees rule as part of the 2013 program prioritization and budget processes, and initiate formal work on rule making early in calendar year 2014 *Status:* Delayed	
13-P00161-140	Recommendation 1: We recommend that the Assistant Administrator for Air and Radiation: 2. Prioritize and update existing oil and gas production emission factors that are in greatest need of improvement and develop emission factors for key oil and gas production processes that do not currently have emission factors.	2013-02-20
	Corrective Action 1-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 2.4 The EPA will set forth procedures for developing emissions factors based on data collected with non-traditional measurement techniques and incorporate those procedures into WebFIRE. *Status:* Delayed	
16-P00275-140	Recommendation 1: We recommend that the Assistant Administrator for Air and Radiation: 3. Determine whether additional action is needed to mitigate any adverse air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act.	2016-08-18
	Corrective Action 1-1: *Planned:* 2024-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation, and we acknowledge the statute's requirement to determine whether additional action is needed to mitigate any adverse air quality impacts in light of the anti-backsliding study. That study, discussed in Corrective Action 2, would need to be completed prior to any such determination taking place. *Status:* Delayed	
	Recommendation 2: We recommend that the Assistant Administrator for Air and Radiation: 2. Complete the anti-backsliding study on the air quality impacts of	

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	the Renewable Fuel Standard as required by the Energy Independence and Security Act.	
	Corrective Action 2-1: *Planned:* 2024-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation, and we acknowledge the statutory obligation for an anti-backsliding study under Clean Air Act section 211(v) (as amended by EISA section 209). EPA has already taken a number of time-consuming and resource-intensive steps that are important prerequisites for the anti-backsliding study. *Status:* Delayed	
17-P00249-140	Recommendation 1: Revise the benzene regulations to require that attest engagements verify annual average benzene concentrations and volumes with batch reports, to ensure that credits needed or generated are correct.	2017-06-08
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees that this recommendation could further enhance our oversight of the gasoline benzene program but addressing this recommendation requires a change to our compliance regulations, which necessitates the promulgation of a rule. OAR agrees to propose specifications to address this recommendation in the next appropriate proposed fuels rule. *Status:* Delayed	
	Recommendation 2: Revise the annual benzene report so that facilities must report the number of benzene deficits or credits at the end of the current reporting year.	
	Corrective Action 2-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees that this recommendation could further enhance our oversight of the gasoline benzene program but addressing this recommendation requires a change to our compliance regulations, which necessitates the promulgation of a rule. OAR agrees to propose specifications to address this recommendation in the next appropriate proposed fuels rule. *Status:* Delayed	
18-P00105-140	Recommendation 1: Develop a process to provide assurances that data reported to the Air Quality System database have met the approved zero- and span-check validation criteria.	2018-02-28
	Corrective Action 1-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 The Office of Air and Radiation believes that the most important of the three critical criteria quality control checks Update 9/27/18- In progress. Though the needed QA/QC checks have recently been completed, they've not yet been incorporated into AQS due to competing priorities. *Status:* Delayed	
18-P00181-140	Recommendation 1: (1) Define performance measures to assess the performance of the EPAs light-duty vehicle compliance program.	2018-05-15
	Corrective Action 1-1: *Planned:* 2021-03-31 *Completed:* 0000-00-00 OAR will implement this recommendation in four phases: 1) develop the performance measures; 2) implement, gather data, and evaluate; 3) revise measures as informed by evaluation, then fully implement measures; and 4)use those measures to inform program management moving forward. We project that this will be a three-	

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	year process. Step one will be completed by the end of Q2, FY2019. Step two will be completed at the end of Q2, FY2020, and step three will be completed at the end of Q2, FY2021. Step 4 is ongoing. *Status:* Delayed	
	Recommendation 2: (3) Develop internal procedures or guidance on how special testing should be incorporated into certification, production and in-use testing programs to formalize the role of special testing in the EPAs light-duty vehicle compliance program.	
	Corrective Action 2-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OAR agrees with this recommendation and recognizes that it is important to have a formal process in place to memorialize the use of special testing in the light-duty vehicle compliance test programs. OTAQ anticipates preparing a document that describes how special testing is and will be integrated into our compliance oversight activities. *Status:* TBD	
	Recommendation 3: (7) Develop protocols for sharing information with the California Air Resources Board to facilitate sharing of emissions testing and other information for compliance assurance and enforcement purposes.	
	Corrective Action 3-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 OTAQ will engage CARB in developing two products to enhance the agencies' ability to take advantage of this information sharing provision. First, OTAQ and CARB will create and exchange documents to formalize the current understanding and application of 40 CFR 2.301(h)(3). Then the agencies will create and disseminate training materials and guidance for staff that clearly articulate the types of information that can be shared and the circumstances under which the information can be shared. *Status:* Delayed	
	Recommendation 4: (2) Conduct and document a formal risk assessment for the EPA's light-duty vehicle compliance program that prioritizes risk and links specific control activities to specific risks. Update the risk assessment on a scheduled and periodic basis.	
	Corrective Action 4-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 OAR will expand and formalize this process and will develop protocols for its implementation and documentation. *Status:* Delayed	
18-P00241-140	Recommendation 1: Develop standard operating procedures for the review and approval process for revising preferred air quality dispersion models.	2018-09-05
	Corrective Action 1-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 Update 9/27/18 - 3. In progress. OAQPS will not meet the expected AERMOD Development and Update Plan release date of September 30, 2018 given workload issues in meeting other Agency priorities. *Status:* Delayed	

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	Recommendation 2: Train the Air Quality Modeling Group staff concerning the standard operating procedures of preferred air quality dispersion model review and approval and EPA Quality System requirements.	
	Corrective Action 2-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 1. The AQMG Manager will work with staff in the DMT to define the annual review of SOPs by the team and coordinate with the OAQPS QA Manager to identify the appropriate training materials on the EPA Quality System requirements. *Status:* TBD	
	Recommendation 3: Revise the Office of Air Quality Planning and Standards Quality Management Plan to state whether the agency is developing quality assurance project plans or equivalent documents to meet EPA Quality System requirements for developing or revising preferred air quality dispersion models.	
	Corrective Action 3-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 1. The AQMG Manager will coordinate with the OAQPS QA Manager to modify the OAQPS QMP so that it clearly states how the process for developing and revising preferred air quality models is conducted and adheres to EPA Quality System requirements. *Status:* TBD	
	Recommendation 4: Develop a quality assurance project plan or equivalent documents describing the results of systematic planning before developing a new air quality dispersion model or undertaking any significant revisions in the future to existing preferred air quality dispersion models, which are codified in Appendix A to Appendix W of 40 CFR Part 51.	
	Corrective Action 4-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 In response to this recommendation, EPA proposes the following action: 1. EPA will develop the AERMOD System Development and Update Plan. The plan serves several functions. In addition to generally describing the SOPs for model development, the plan will provide detailed descriptions of the model development and update process outlined in EPA's Guideline which relies upon EPA's ADP requirements for the federal rulemaking process. The ADP process provides a robust process and documentation that ensures quality of its regulatory actions such that the model development and update process meets EPA's Quality System requirements. 2. As noted in the OIG report, EPA provides extensive documentation on model performance, function, and application (e.g., the AERMOD User's Guide, the AERMOD Formulation and Evaluation Document, and the AERMOD Implementation Guide). We believe these documents provide the documentation necessary to meet EPA's Quality System requirements. The connections between these documents and these requirements will be spelled	

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	out in updates to the OAQPS QMP (see response to recommendation 3). *Status:* TBD	
18-P00283-140	Recommendation 1: 1. Develop and distribute a supplement to the existing National Program Manager Guidance metrics to specifically identify state vehicle inspection and maintenance reports for regions to review. Include biennial program evaluation reports and verify that report quality complies with statutory requirements.	2018-09-25
	Corrective Action 1-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. As part of the next National Program Guidance negotiation between Headquarters and the EPA Regional Offices (ROs), OAR will develop and advocate for the distribution of a measure for applicable ROs to review these required reports within a fixed period after receipt and verify that such reports comply with statutory requirements. *Status:* Delayed	
	Recommendation 2: 2. Confirm that biennial program evaluation reports are submitted by states with enhanced inspection and maintenance programs and that EPA regions review the reports, sharing best practices and providing additional clarification.	
	Corrective Action 2-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. While OAR's response to Recommendation 1 will significantly address Recommendation 2, to ensure that the ROs remain on track to meet the revised or new National Program Guidance measure described above, OAR will direct OTAQ to solicit regular updates from the ROs as part of its monthly Regional I/M Contacts Calls. *Status:* Delayed	
	Recommendation 3: 3. Revise the vehicle inspection and maintenance rule to remove the cross reference to Title 40 51.353(b)(1) of the Code of Federal Regulations, and provide defined evaluation methodology guidance to enable states to quantify emission reductions.	
	Corrective Action 3-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OAR agrees with this recommendation and – as noted by OIG in its draft report – intends to direct OTAQ to revise the I/M rule to remove the reference the next time the rule is revised for more substantial revisions. Additionally, and in the interim, OAR will direct OTAQ to issue guidance to clarify this provision as well as that enhanced I/M programs that are not already using some other approved program evaluation methodology should be using the OTAQ guidance document issued in July 2004, Guidance on Use of Remote Sensing for Evaluation of I/M Program Performance (EPA420-B-04-010). *Status:* Delayed	
	Recommendation 4: 4. Verify whether states are performing mandatory on-road testing, or determine the reason why they are not and offer assistance to obtain compliance.	
	Corrective Action 4-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 OAR agrees with this recommendation and will respond by directing OTAQ to issue guidance that clarifies that on-road testing	

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	is required by the Clean Air Act (CAA) for all mandatory, enhanced I/M programs, that testing using Remote Sensing Devices (RSD) meets the definition of on-road testing, and that using RSD to perform program evaluation testing can be used to meet both the Act's on-road testing requirement for enhanced I/M areas as well as the biennial program evaluation requirement for enhanced I/M programs. OTAQ will also ask the EPA ROs to provide the status of applicable states performing mandatory on-road testing, to determine the reason(s) for any problems, and to identify technical assistance as needed to obtain compliance. *Status:* Delayed	
	Recommendation 5: 5. Develop and implement guidance on the calculation of individual test statistics in state reports to provide consistency in state reports across regions.	
	Corrective Action 5-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OAR agrees with this recommendation and will respond by directing OTAQ to issue guidance clarifying how program statistics such as the rates of vehicle failures, waivers, and disappearing vehicles should be calculated. *Status:* Delayed	
	Recommendation 6: 6. Conduct outreach to states with deficiencies in program implementation to determine whether there are any methods whereby inspection and failure rates, waiver rates and no known final outcome vehicles can comply with the rates claimed for the program in the approved State Implementation Plan, as required by the inspection and maintenance rule and/or above national averages.	
	Corrective Action 6-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. In addition to existing and ongoing outreach efforts that are already occurring in the field, OTAQ and the ROs will meet on an annual basis to identify and discuss such deficiencies, including a discussion of the reasons why certain areas greatly exceed the national average and what corrective actions might be taken. The results of these internal EPA meetings will help identify recommendations for additional outreach to specific areas, including how to address identified program deficiencies. *Status:* Delayed	
	Recommendation 7: 7. Issue guidance to address any trends or common problems identified by the outreach conducted to states with deficiencies in program implementation.	
	Corrective Action 7-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 OAR agrees with the recommendation and views the appropriate response to it as an extension of our response to Recommendation 6, with appropriate OTAQ guidance to be issued to address identified deficiencies. *Status:* Delayed	
17-P00407-150	Recommendation 1: 2. Issue new policy on retention incentives, including requirements for quarterly monitoring and performance ratings.	2017-09-26

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	Corrective Action 1-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 OARM will issue a new policy that includes requirements for quarterly monitoring and performance ratings. The new policy will be a part of the agency's recruitment, relocation and retention (3Rs) policy. *Status:* Delayed	
18-P00176-150	Recommendation 1: 9. Update the EPA Personal Property Manual with timeframes for sanitizing and excessing information technology property and verify that EPA regions and program offices are following the new disposal procedures.	2018-05-09
	Corrective Action 1-1: *Planned:* 2018-11-30 *Completed:* 0000-00-00 Once timeframes have been established with OEI, OARM will provide a Bulletin to update the EPA 4832 manual. *Status:* Delayed	
	Recommendation 2: 10. Verify that approved language on the responsibilities for managing government property has been included in employee performance standards for all staff responsible for managing government property at the supervisory level or below.	
	Corrective Action 2-1: *Planned:* 2019-01-31 *Completed:* 0000-00-00 Provide language and direct managers to include property roles in employee performance standards for staff responsible for managing government personal property at the supervisory level or below. *Status:* Delayed	
18-P00207-150	Recommendation 1: 1. Develop a plan that establishes a baseline to measure the future program operational efficiency of human resources operations.	2018-05-31
	Corrective Action 1-1: *Planned:* 2019-02-28 *Completed:* 0000-00-00 OARM will also engage the Human Resources Shared Service Centers Customer Advisory Group (CAG) and the PMO/RHRO community to review the posted Customer Service Standards to determine if they are effective measurements for customer service. The SSCs will evaluate the feasibility of measurement for these standards and as necessary establish standards that are both impactful and measurable. Based on this review the 18-P-0207 24 existing standards may be restructured, replaced or eliminated. *Status:* TBD	
	Recommendation 2: 2. Establish a workgroup comprising regional and program representatives to develop a baseline level of human resources support necessary for each program and regional office.	
	Corrective Action 2-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OARM will engage the PMO/RHRO community and others to understand the type of work/support being provided by those individuals, analyze best practices; ensure there are defined roles and responsibilities of all SSCs/programs/regions; and develop guidelines on core functions and necessary support staffing levels that program and regional offices can use in evaluating their current organizations. *Status:* TBD	

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	Recommendation 3: 3. Review human resources policies, prioritize the policies requiring updates, and update the policies with stakeholder input.	
	Corrective Action 3-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 OARM will have a subject matter expert reviewed draft ready for Directive Clearance Review and/or union negotiation for the following policies: Classification (target FY2018) Recruitment, Relocation and Retention (target FY2018) Merit Promotion (target CY2019) Premium Pay (target CY2019) Leave (target CY2019) Pay Setting (target CY2019) *Status:* Delayed	
18-P00231-150	Recommendation 1: 2. Develop and implement measurable controls in coordination with the Office of the Chief Financial Officer for each office's role in processing contract invoices and contract modifications to address the various administrative and processing errors.	2018-08-16
	Corrective Action 1-1: *Planned:* 2018-10-30 *Completed:* 0000-00-00 A closer examination and analysis of the number and nature of errors for a time period, to identify the type, prevalence, and potential commonality of their systemic root causes (i.e., other than random human error) could pinpoint where specific actions should be taken for process improvement given the respective roles of our two offices. Within the next 60 days from this response, the OARM will coordinate with the OCFO representatives to explore a joint approach to developing and implementing measurable controls towards error reduction. Based on the results of analysis, each office will then establish new or reinforce existing control mechanisms. *Status:* Delayed	
	Recommendation 2: 5. Verify contracting officers are performing oversight responsibilities as agreed in prior report corrective actions and implement agencywide measurable controls to address nonperformance of similar contractor officer duties. for the invoice process in accordance with Federal Acquisition Regulation Subpart 1.6; EPA Acquisition Guide Subsection 32.9.1; and the EPAs Performance Appraisal and Recognition System, as applicable.	
	Corrective Action 2-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 In addition, the OAM will enhance EP AAG Subsection 1.1.1, Performance Measurement and Management Program, to require that all acquisition offices ensure the inclusion in their internal assessment plan a specific requirement to verify compliance with EPAAG Subsection 32.9.1-Invoice Review. The OAM's Cincinnati Procurement Operations Division is already working on a training session and will provide training materials to the OAM University when completed. *Status:* Delayed	
18-P00232-150	Recommendation 1: 1. Conduct an assessment and determine how to enhance controls, reduce confusion and achieve compliance.	2018-08-20

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	Corrective Action 1-1: *Planned:* 2018-10-05 *Completed:* 0000-00-00 OARM will establish a work group consisting of representatives from the OAM/Purchase Card Team, Card Holders, and Approving Officials to conduct an assessment on the information from this audit and brainstorm how to enhance controls, reduce confusion, and achieve compliance with existing federal and agency purchase card regulations and guidance documents. Within the same time period, and using the results from the work group, OARM will issue a formal memorandum to the Senior Resource Officials (SROs) and Junior Resource Officials (JROs) requiring them to enhance more control, reduce confusion, and achieve compliance. As the controls are in place, it is the responsibility of the Cardholder (CH) to carry them out along with the Approving Official (AO). *Status:* Delayed	
	Recommendation 2: 8. Provide detailed training on EPA purchase card guidance, policy and expectations to cardholders and approving officials.	
	Corrective Action 2-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 As a result of this draft audit, the OARM has proactively started revising the Purchase Card Supplemental Training Course to address training issues raised in the report. OAM expects to finalize this training by August 2018. The training course will be available on the EPA Skillport site. OAM will also require all Cardholders and Approving Officials to complete the updated Purchase Card Supplemental Course in FY2019, 1st quarter. *Status:* TBD	
	Recommendation 3: 9. Take steps to rectify purchases made without prior funding approval.	
	Corrective Action 3-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 For the thirteen (13) incidents of purchase card and three (3) incidents of convenience check internal control lapses, OAM would need to identify the exact transactions, and further investigate the facts and circumstances of the purchases (e.g., whether or not funds were in fact available or whether vendors were paid) in order to take appropriate action. EPAAG 13.3.1.15 Financial Issues Related to Purchase Card, item (a) states that the before placing orders, cardholders must coordinate with their Funds Control Officer (FCO) to ensure funds are available. EPAAG 13.3.1.6 (d) states that FCOs are to certify to the availability of funds, ensure that the financial transaction complies with agency financial policy and procedures, and that all of the accounting data is accurate and complete. However, it also states that the method for funding purchase card orders will vary according to established office procedures, and that any method is acceptable as long as the cardholder ensures funds are available before making a purchase. OAM agrees to conduct factfinding and investigation on the transactions cited with funds availability verification issues and take the appropriate action(s) deemed necessary. *Status:* TBD	

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	Recommendation 4: 10. Implement a policy regarding the appropriate number and categories of purchase cardholders.	
	Corrective Action 4-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 OAM will analyze the number of cardholders per program office to determine if it is appropriate and in proportion to the recorded number of purchase card transactions for that office, and will implement a policy or guidance. *Status:* TBD	
18-P00288-150	Recommendation 1: 2. Develop a policy for fellowships funded through EPA cooperative agreements. The policy should include citizenship requirements for such fellowships.	2018-09-26
	Corrective Action 1-1: *Planned:* 2019-10-01 *Completed:* 0000-00-00 OARM, in consultation with OGC and ORD, will revise EPA"s December 2014 policy on EPA"s involvement in selecting fellows for cooperative agreement funded fellowship programs. The revised policy will specify that the terms and conditions of fellowship cooperative agreements require that program participants be U.S. citizens or permanent residents. *Status:* TBD	
	Recommendation 2: 1. Stipulate in future grants and cooperative agreements that result in fellowship awards that the fellowships can only be awarded to U.S. citizens or those holding a visa permitting permanent residency in the United States, consistent with citizenship requirements for fellowships awarded directly by the EPA.	
	Corrective Action 2-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 In future cooperative agreements, ORD will include programmatic terms and conditions requiring that fellowship program participants be citizens or permanent residents. It would be inappropriate for EPA to unilaterally revise the terms and conditions of current agreements. *Status:* TBD	
	Recommendation 3: 3.Perform advanced administrative monitoring reviews for the American Association for the Advancement of Science and the Association of Schools and Programs of Public Health, to ensure that recipients complied with cooperative agreement terms and conditions. The results of each review must be transmitted to the recipient and recorded in the Integrated Grants Management System database.	
	Corrective Action 3-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 OARM will perform advanced monitoring reviews to include transaction testing of a sample of drawdowns documentation to ensure that payments to the cooperative agreement recipients are accurate and adequately supported by source documentation. *Status:* TBD	
10-P00066-164	Recommendation 1: 2-4 Establish criteria and procedures outlining what chemicals or classes of chemicals will undergo risk assessments for low-level and cumulative exposure. Periodically update and revise risk assessment tools and models with latest research and technology developments.	2010-02-17

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	Corrective Action 1-1: *Planned:* 2017-12-31 *Completed:* 0000-00-00 OCSPP will initiate work on assessing phthalates under the TSCA Work Plan by December 31, 2017. *Status:* Delayed	
16-P00316-164	Recommendation 1: Develop a risk-based antimicrobial testing strategy to assure the effectiveness of public health pesticides used in hospital settings once products are in the marketplace. At a minimum, the strategy should: a. Include a framework for periodic testing to assure products continue to be effective after registration. b. Define a program scope that is flexible and responsive to current and relevant public health risks. c. Identify risk factors for selecting products to test. d. Identify the method to be used for obtaining samples for testing. e. Designate a date to commence risk-based post-registration testing.	2016-09-19
	Corrective Action 1-1: *Planned:* 2018-11-30 *Completed:* 0000-00-00 Timeframe: By November 2018, OCSPP will develop a risk-based strategy to assure the effectiveness of public health pesticides used in hospital settings once products are in the marketplace. *Status:* Delayed	
17-P00053-164	Recommendation 1: Rec 2: Provide label language that clearly defines the criteria for meeting the applicator stewardship training requirement, including the frequency of training.	2016-12-12
	Corrective Action 1-1: *Planned:* 2017-11-30 *Completed:* 0000-00-00 Within one year of the final OIG report, by November 30, 2017, OCSPP will create additional (interim) guidance language which clarifies the criteria for meeting the applicator stewardship training requirement, including the frequency of training. *Status:* Delayed	
	Recommendation 2: Rec 3: Conduct an assessment of clearance devices to validate their effectiveness in detecting required clearance levels, as part of the Office of Pesticide Programs' ongoing re-evaluation of structural fumigants.	
	Corrective Action 2-1: *Planned:* 2018-11-30 *Completed:* 0000-00-00 Within two years of the final report, by November 30, 2018, OCSPP will validate and implement new device clearance guidance. *Status:* Delayed	
17-P00278-164	Recommendation 1: Consider requiring mechanisms of action be included on relevant herbicide labels.	2017-06-21
	Corrective Action 1-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 Corr Act 1 -- By June 2019, OCSPP will consider whether initiating a rulemaking to place MOA information on labels might be appropriate or needed to advance this effort. *Status:* Delayed	
	Recommendation 2: Determine whether synergistic effects data should be required for the pesticide registration process, and document the results of that determination.	
	Corrective Action 2-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 Rec 2 -- [OCSPP initially disagreed with this recommendation but] after further discussions, OCSPP amended its response. OCSPP	

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	stated that synergy is not related to herbicide resistance management, but it is a factor that should be considered in evaluating risk. OCSPP will consider how best to use this type of information in future evaluations and decisions by June 2019. *Status:* Delayed	
17-P00294-164	Recommendation 1: Develop and implement management controls that formalize the Office of Chemical Safety and Pollution Preventions processes for collaborating with the Office of Research and Development to maintain current products and develop future products.	2017-06-23
	Corrective Action 1-1: *Planned:* 2018-05-31 *Completed:* 0000-00-00 By May 31, 2018, OCSPP will develop a document that describes and formalizes OCSPP's processes for consistently collaborating with ORD to most effectively utilize its revised CSS product development process for current and future products. This effort will be led by OCSPP's Office of Science Coordination and Policy in cooperation with ORD, OPPT and OPP. This document will specify that the processes described therein will be implemented by all three OCSPP offices within 6 months, or by November 30, 2018. *Status:* Delayed	
	Recommendation 2: Conduct a needs assessment that identifies and addresses the challenges, timeframes, training and resources necessary to effectively incorporate Office of Research and Development products into Office of Chemical Safety and Pollution Prevention programs.	
	Corrective Action 2-1: *Planned:* 2018-05-31 *Completed:* 0000-00-00 By May 31, 2018, OCSPP will conduct a needs assessment which, at a minimum, identifies and addresses the challenges, timeframes, training, and resources necessary to effectively incorporate Office of Research and Development products into OCSPP's programs. This effort will be led by OCSPP's Office of Science Coordination and Policy (OSCP) in cooperation with ORD, OPPT and OPP. *Status:* Delayed	
17-P00395-164	Recommendation 1: Develop and implement a plan to reduce excess Pesticides Reregistration and Expedited Processing Fund and Pesticide Registration Fund balances within the established target range.	2017-09-18
	Corrective Action 1-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 Assess progress in achieving 2019 spend down projections, as described in 11/13/17 memo from OCSPP to OIG entitled "Response to Final Report: EPA Needs to Manage Pesticide Funds More Efficiently," Report No. 17-P-0395. *Status:* Delayed	
	Corrective Action 1-2: *Planned:* 2020-12-31 *Completed:* 0000-00-00 Assess progress in achieving 2020 spend down projections, as described in 11/13/17 memo from OCSPP to OIG entitled "Response to Final Report: EPA Needs to Manage Pesticide Funds More Efficiently," Report No. 17-P-0395. *Status:* Delayed	

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	Corrective Action 1-3: *Planned:* 2021-12-31 *Completed:* 0000-00-00 Assess progress in achieving 2021 spend down projections, as described in 11/13/17 memo from OCSPP to OIG entitled "Response to Final Report: EPA Needs to Manage Pesticide Funds More Efficiently," Report No. 17-P-0395. *Status:* Delayed	
18-P00281-164	Recommendation 1: 2. Determine which application review performance target for emergency exemption applications the Office of Pesticide Programs plans to meet, and make that target consistent between its Annual Performance Goal and its internal controls governing the emergency exemption process.	2018-09-25
	Corrective Action 1-1: *Planned:* 2019-07-31 *Completed:* 0000-00-00 By July 2019, OCSPP will consistently reference the 45-day decision period, as is reflected in EPA's Annual Performance Assessment *Status:* Delayed	
	Recommendation 2: 3. Update and finalize the draft standard operating procedure that the Office of Pesticide Programs uses to guide the emergency exemption process.	
	Corrective Action 2-1: *Planned:* 2019-07-31 *Completed:* 0000-00-00 OCSPP will update and finalize the standard operating procedures and/or guidance for emergency exemptions by July 2019. *Status:* Delayed	
	Recommendation 3: 4. Develop formal emergency exemption application review procedures that detail specific data collection, management and reporting control steps, as well as procedures that require specific management controls for accurately and consistently updating the Office of Pesticide Programs Section 18 database.	
	Corrective Action 3-1: *Planned:* 2019-07-31 *Completed:* 0000-00-00 OCSPP will update and finalize the standard operating procedures and/or guidance for emergency exemptions by July 2019. *Status:* Delayed	
17-P00378-166	Recommendation 1: We recommend that the Assistant Administrator for Research and Development: 1. Review the Community-Focused Exposure and Risk Screening Tool and develop an action plan with timeframes to address issues identified, including considerations on whether to retain the tool. If retained: a.Develop metrics for measuring the tools performance and establish a regular schedule for performance evaluations. b.Survey users to obtain feedback on tool utilization and any needed improvements.	2017-09-07
	Corrective Action 1-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 11/27/18 Update: ORD re-visited the originally proposed corrective action for Recommendation I and will no longer retain C-FERST. ORD initiated activities to identify unique aspects of C-FERST to be incorporated into other EPA tools. Once these actions are complete, the remaining pages of the C-FERST website and the tool itself will be archived. *Status:* Delayed	

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	Recommendation 2: We recommend that the Assistant Administrator for Research and Development: 3. Review new and existing Office of Research and Development research tools to determine the applicability of the agency's information technology requirements.	
	Corrective Action 2-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 11/27/18 Update: ORD agrees, and as stated in the response to recommendation #2, The CIO signed the Agency wide policy and implementation is forthcoming. *Status:* Delayed	
	Recommendation 3: We recommend that the Assistant Administrator for Research and Development: 4. Work with agency offices responsible for other geospatial mapping tools to develop a decision support matrix for when to use certain tools and for what purposes.	
	Corrective Action 3-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 ORD agrees that such a decision matrix is valuable and will work other offices, predominantly OEI on this effort. ORD has started to develop ORD controlled tools and will coordinate with OEI for a wider review in 2017 and 2018, with a final assessment by 3/31/2019. *Status:* Delayed	
18-P00240-166	Recommendation 1: Build capacity for managing the use of citizen science, and expand awareness of citizen science resources, by: a. Finalizing the checklist on administrative and legal factors for agency staff to consider when developing citizen science projects, as well as identifying and developing any procedures needed to ensure compliance with steps in the checklist; b. Conducting training and/or marketing on the EPAs citizen science intranet site for program and regional staff in developing projects; and c. Finalizing and distributing materials highlighting project successes and how the EPA has used results of its investment in citizen science.	2018-09-05
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 ORD will consult with OGC and other relevant EPA programs and regions to finalize the checklist on administrative and legal factors for agency staff to consider when developing citizen science projects. ORD will conduct training and marketing for program and regional staff. Finally, ORD will have an active communication and outreach strategy that will include communications materials highlighting project successes and how EPA has used results of its investment in citizen science. *Status:* Delayed	
	Recommendation 2: Finalize, in coordination with the Office of Environmental Information and Region 1, the Draft Quality Assurance Handbook for Citizen Science, and communicate to agency staff and citizen science groups the availability and content of this handbook.	
	Corrective Action 2-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 ORD and OEI will jointly finalize the Draft Quality Assurance	

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	Handbook for Citizen Science because the EPA's Office of Environmental Information has the responsibility for the Agency's Quality System – including issuance of national Quality Assurance guidance – and EPA's Office of Research and Development has the responsibility for building the Agency's capacity for managing the use of citizen science. After issuing the report, EPA will implement an external and internal outreach and communications plan to help EPA, states and tribes, and citizen science groups to strengthen quality assurance practices. *Status:* Delayed	
12-P00253-167	Recommendation 1: 1d. Improve oversight of facilities regulated by EPAs oil pollution prevention program by: Producing a biennial public assessment of the quality and consistency of SPCC Plans and FRPs based on inspected facilities.	2012-02-06
	Corrective Action 1-1,1-2,1-3: *Planned:* 2013-10-0 *Completed:* 0000-00-00 OEM is initiating work on the SPCC corrective action and will complete it by the end of December 2018. OEM will then, based on the process developed for the SPCC corrective action, initiate and complete the FRP corrective action by the end of June 2020. However, reduced extramural resources, available personnel, program implementation priorities (including program/inspection support and training) and new program priorities delay completion of this milestone. In addition, while the regulatory work associated with and the SPCC rule amendments due to the Water Resources Reform and Development Act (WRRDA) have been put on hold, any regulatory changes to the SPCC rule due to the pending FUELS ACT may also shift priorities on the SPCC program. *Status:* TBD	
12-P00289-167	Recommendation 1: Require EPA and states to enter into MOAs that reflect program changes from the 2005 Energy Policy Act and address oversight of municipalities conducting inspections.	2012-02-15
	Corrective Action 1-1: *Planned:* 2013-08-01 *Completed:* 0000-00-00 By August 1, 2013, by which time the regulations are expected to be finalized, we will share the specific date on which the MOAs will be in place. The new proposed completion date is April 12, 2019 *Status:* TBD	
13-P00178-167	Recommendation 1: Revise inspection guidance to recommend minimum inspection scope for the various types of facilities covered under the program and provide more detailed examples of minimum reporting.	2013-03-21
	Corrective Action 1-1: *Planned:* 2014-07-31 *Completed:* 0000-00-00 Publish final guidance which specifies minimum inspection scope and examples for various types of inspections to assist Regions in focusing their limited resources on the most significant issues at facilities. The OLEM Acting AA approved the revision of this milestone date from February 28, 2019 to June 30, 2022. The new date is based on	

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	the completion date of RMP Reconsideration rule. OLEM will need at least 2 years after its completion to start the development of guidance which will specify the minimum inspection scope for each of the facility types regulated by the RMP program and revise reporting guidance to provide detailed examples of compliance. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This effort will take 2-3 years and must be completed in that timeframe to give facilities time to review the guidance and comply with the new requirements under the RMP program. *Status:* TBD	
	Recommendation 2: Develop and implement an inspection monitoring and oversight program to better manage and assess the quality of program inspections, reports, supervisory oversight, and compliance with inspection guidance.	
	Corrective Action 2-1: *Planned:* 2014-09-30 *Completed:* 0000-00-00 September 30, 2019. This action requires the development on an on-line system for the Regions to file/submit each of their inspection reports.	
17-P00397-167	Recommendation 1: We recommend that the Assistant Administrator for Land and Emergency Management: 1. In coordination with the Chief Financial Officer, develop and implement actions to address past obstacles that have affected the EPAs ability to make progress on the allocation of human resources. Obstacles include managements unwillingness to change its human resource allocation process and perceived short-term disruptions that would result from such a change. *Status:* TBD	2017-09-19
	Corrective Action 1-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 1.2 OLEM will partner with OCDO to develop a multi-year regional FTE distribution plan for the Superfund program to facilitate EPA"s ability to make progress on the allocation of human resources. For recommendations 1.2 and 3; OLEM will need additional time to coordinate with partners to develop a multi-year national FTE distribution plan for the Superfund program. The revised completion date is March 29, 2019. *Status:* TBD	
	Recommendation 2: We recommend that the Assistant Administrator for Land and Emergency Management: 3. Implement a national prioritization of all sites including risk and other factors in the prioritization and regularly distribute regional full-time equivalents according to the national prioritization. *Status:* TBD	
	Corrective Action 2-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 3.1 OLEM will work with OECA, OCFO and the regions to develop a multi-year national FTE distribution plan for the	

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	Superfund program. Distribution of FTE will occur regularly according to the national prioritization. For recommendations 1.2 and 3; OLEM will need additional time to coordinate with partners to develop a multi-year national FTE distribution plan for the Superfund program. The revised completion date is March 29, 2019. *Status:* TBD	
18-P00059-167	Recommendation 1: Conduct a study to qualitatively and quantitatively analyze and evaluate the program effectiveness and resource requirements to EPA of the corporate self-insurance instruments, including the financial test and corporate guarantee, in the Resource Conservation and Recovery Act regulations and the Superfund Program for current settlements and orders. Assess adequacy of self-insurance instruments for companies with multiple environmental liabilities and the nature and extent of any problems identified.	2017-12-22
	Corrective Action 1-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 1.a. OLEM, with support from OECA, will conduct a study to qualitatively and quantitatively analyze and evaluate the program effectiveness and resource requirements to EPA of the corporate self-insurance instruments, including the financial test and corporate guarantee, in the Resource Conservation and Recovery Act Subtitle C regulations. Assess adequacy of self-insurance for companies with multiple environmental liabilities and the nature and extent of any problems identified. *Status:* Delayed	
	Corrective Action 1-2: *Planned:* 2019-03-31 *Completed:* 0000-00-00 1.b. OECA, with support from OLEM/OSRTI, will conduct an analysis of the Superfund Program's use of corporate self-insurance instruments for current settlements and orders at sites where the Superfund program follows the general framework of the Resource Conservation and Recovery Action regulations for financial assurance. *Status:* Delayed	
	Recommendation 2: Once the study in Recommendation 1 is complete, use the information to develop appropriate risk management actions to mitigate any identified problems in line with Agency practices for enterprise risk management under Office of Management and Budget Circular A-123, and determine whether additional controls, such as the requirement for full disclosure of all self-insured environmental liabilities over corporate self-insurance, should be implemented and if corporate self-insurance should continue as an option	
	Corrective Action 2-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 2. Once Recommendation 1 is complete, OLEM, with support from OECA, will use the information to develop appropriate risk management actions to mitigate any identified problems in line with Agency practices for enterprise risk management under OMB Circular A-123, and determine whether additional controls, such as a requirement for full disclosure of all self-insured environmental	

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	liabilities in corporate self-insurance demonstrations and/or disallowance of corporate self-insurance, should be pursued at that time. *Status:* Delayed	
	Recommendation 3: Update standard operating procedures and data systems to accommodate the implemented risk management actions.	
	Corrective Action 3-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 3. OLEM, with support from OECA, will update standard operating procedures and data systems to accommodate the implemented risk management actions. *Status:* Delayed	
	Recommendation 4: Train staff on the implemented risk management actions.	
	Corrective Action 4-1: *Planned:* 2021-12-31 *Completed:* 0000-00-00 4. OLEM, with support from OECA, will train staff on the implemented risk management actions. *Status:* Delayed	
	Recommendation 5: Develop and include procedures for checking with other regions for facilities/sites with multiple self-insured liabilities in the standard operating procedures created for Recommendation 5.	
	Corrective Action 5-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 6. In the RCRA program, EPA will inventory and assess existing guidance and/or SOPs, outline OLEM and OECA roles and responsibilities for overseeing the validity of RCRA financial assurance instruments, communicate existing guidance and/or SOPs to financial assurance community, and develop or update SOPs and provide to financial assurance community. The RCRA program will develop and include procedures for checking with other regions or states when facilities/sites with multiple self-insured liabilities exist. *Status:* Delayed	
	Recommendation 6: Develop standard operating procedures that outline the Office of Land and Emergency Management and Office of Enforcement and Compliance Assurance roles and responsibilities for overseeing the validity of Resource Conservation and Recovery Act and Superfund financial assurance instruments.	
	Corrective Action 6-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 5. EPA will, for the RCRA program, inventory and assess existing guidance and/or SOPs, outline OLEM and OECA roles and responsibilities for overseeing the validity of RCRA financial assurance instruments, communicate existing guidance and/or SOPs to financial assurance community, and develop or update SOPs and provide to financial assurance community. *Status:* Delayed	
	Recommendation 7: Develop and include instructions on the steps to take when an invalid financial assurance instrument (expired, insufficient in dollar amount, or not provided) is identified in the standard operating procedures created for Recommendation 5 and collect information on the causes of invalid financial assurance.	

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	Corrective Action 7-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 7. In the RCRA program, EPA will inventory and assess existing guidance and/or SOPs, outline OLEM and OECA roles and responsibilities for overseeing the validity of RCRA financial assurance instruments, communicate existing guidance and/or SOPs to financial assurance community, and develop or update SOPs and provide to financial assurance community. The RCRA program will develop and include in the guidance and/or SOPs: (1) instructions on the steps to take when an invalid financial assurance instrument (expired, insufficient in dollar amount, or not provided) is identified and (2) where and when to collect and document causes of invalid financial assurance. *Status:* Delayed	
	Recommendation 8: Train staff on the procedures and instructions developed for Recommendations 5 through 7.	
	Corrective Action 8-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 8. In the RCRA program, EPA will hold webinar for EPA regions and states, add SOPs to existing training materials, and evaluate financial assurance training needs and develop training plan for recommendations 5 through 7. *Status:* Delayed	
	Recommendation 9: Develop and distribute to EPA regions and states annual reports that include progress on the reduction of financial assurance that is expired, insufficient and/or not provided.	
	Corrective Action 9-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 10. For RCRA, annually track progress to improve financial assurance data in RCRAInfo to reduce the number of facilities that, based on available data, have financial assurance that is expired, insufficient in amount and/or not provided; and distribute to EPA regions and states, as applicable. *Status:* Delayed	
	Recommendation 10: Work with EPA regions and states to identify and implement appropriate metrics, including metrics to help identify, track, and correct, on a facility level, where there are monetary gaps in the amount of Resource Conservation and Recovery Act financial assurance required and provided. Develop and distribute in EPA regions and states annual reports in these metrics.	
	Corrective Action 10-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 9.a. Develop and distribute to EPA regions and states annual reports that include the total dollar amount of Superfund financial assurance required and provided. *Status:* TBD	
	Corrective Action 10-2: *Planned:* 2019-12-31 *Completed:* 0000-00-00 9.b. ORCR, with support from OECA, will work with EPA regions and states to identify and implement appropriate metrics, including metrics to help identify, track, and correct, on a facility level, where there are monetary gaps in the amount of Resource Conservation and Recovery Act financial assurance required and provided. Develop and distribute to EPA regions and states annual reports on these metrics. *Status:* TBD	

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18-P00217-167	Recommendation 1: In coordination with the EPA Office of Environmental Information and the National Institute of Standards and Technology, determine whether the Electronic Manifest systems hazardous material information should be handled as Pollution Prevention and Control Information or Inventory Control Information with special considerations for hazardous materials, and re-evaluate the security categorization accordingly.	2018-06-21
	Corrective Action 1-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 OLEM will coordinate with the EPA Office of Environmental Information and, as necessary, the National Institute of Standards and Technology to determine whether the Electronic Manifest system's hazardous waste information should be handled as Pollution Prevention and Control Information or Inventory Control Information with special considerations for hazardous wastes, and determine whether re-evaluation of the security categorization, independent of the annual re-evaluation, is necessary. *Status:* TBD	
18-P00227-167	Recommendation 1: Work with EPA regions to identify and track rules for which states have not sought authorization under the Resource Conservation and Recovery Act Subtitle C hazardous waste program and identify the reason authorization has not been pursued by the state, and then prioritize rules for authorization by the states	2018-07-31
	Corrective Action 1-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 OLEM will interview regional staff from all ten EPA regions and document the reasons why states have not pursued authorization for specific rules. OLEM will also prioritize rules for authorization by the states as appropriate and track them. *Status:* TBD	
	Recommendation 2: Develop and implement a plan to collect the necessary data on state authorizations to identify the cause of delays and make informed decisions on how to improve the process.	
	Corrective Action 2-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 OLEM will interview staff from all ten EPA regions and document the cause of delays in authorization. These data will be factored into the Agency's Lean process reform efforts, which will include national recommendations to improve the authorization process. *Status:* Delayed	
	Recommendation 3: Improve data quality for state authorizations under the Resource Conservation and Recovery Act Subtitle C hazardous waste program by implementing internal controls to verify the accuracy and completeness of the data.	
	Corrective Action 3-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 OLEM will develop data reporting standards and deadlines for the regional offices to ensure that new data events are fully reported and entered into the State Authorization Tracking Systems (StATS). *Status:* TBD	
	Recommendation 4: Develop and implement state authorization performance measures for the Resource Conservation and Recovery Act Subtitle C hazardous waste program to track annual progress.	

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	Corrective Action 4-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 OLEM will develop and implement RCRA state authorization performance measures to track annual progress. *Status:* TBD	
15-P00295-168	Recommendation 1: Develop and implement an approved system authorization package (i.e., a risk assessment, System Security Plan, and Authorization to Operate), and perform annual security assessments for the PMOS application.	2015-09-24
	Corrective Action 1-1: *Planned:* 2016-05-31 *Completed:* 0000-00-00 Based on OMB Circular A-130 and NIST 800-1, the application system (PMOS) has an agency approved Application Security Certification form which sets forth any and all requirements applicable for OWs PMOS system to operate. (See Attachment 1). The current OW PISO and the OEI PISO concur that this minor application system (PMOS) is categorized as low and does not require nor have in effect any omitted application specific controls that would require any additional system security authorizations (i.e., a risk assessment, System Security Plan, and Authorization to Operate) . The security controls for this minor application are captured in the GSS security plan, based on OMB Circular A-130 and NIST 800-18. It is requested that if there are deficient controls found by the OIG that they be explicitly supplied to OEI/OW in order to review and comply. *Status:* Delayed	
17-P00174-168	Recommendation 1: 1. Provide updated guidance to states and tribes on clear and effective risk communication methods for fish advisories, especially for high-risk groups. This guidance could recommend posting fish advisory information at locations where fish are caught; and using up-to-date communication methods that include social media, webinars, emails, newsletters, etc.	2017-04-12
	Corrective Action 1-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 Develop a draft updated version of Volume 4: Risk Communication of the Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. *Status:* TBD	
	Recommendation 2: 2. Working with states and tribes, develop and disseminate best practices they can use to measure evaluate the effectiveness of fish advisories in providing risk information to subpopulations, such as subsistence fishers, tribes and other high fish-consuming groups.	
	Corrective Action 2-1: *Planned:* 2020-03-30 *Completed:* 0000-00-00 EPA concurs with the end goal of the recommendation – making sure high-risk subpopulations receive information on risks of eating certain fish. EPA understands the benefits of evaluating the effectiveness of fish advisory programs and agrees that working with the states and tribes in that area would benefit the fish advisory programs as well as the fishing population. *Status:* TBD	
	Recommendation 3: 3. Develop and implement methods to ensure that tribal members receive current fish advisory information.	
	Corrective Action 3-1: *Planned:* 2017-09-30 *Completed:* 0000-00-00 EPA agrees with the goal of tribes receiving fish advisory	

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	information and thinks EPA can facilitate that communication. *Status:* Delayed	
	Recommendation 4: 4. Conduct an assessment for methylmercury to determine whether the reference dose requires updating, as indicated by the Integrated Risk Information System, and as proposed in the systems 2012 and 2015 agendas.	
	Corrective Action 4-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 Following discussion with OIG, we have come to an understanding of OIG's use of the term "assessment" as presented in the existing recommendation. ORD generally concurs with the recommendation pending clarifications to the report language, including OIG conclusions as noted below and in the Technical Comments Attachment. *Status:* Delayed	
17-P00352-168	Recommendation 1: 1. Share WaterSense program practices in program design, implementation and reporting with the agency's Program Management Improvement Officer.	2017-08-01
	Corrective Action 1-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 The EPA concurs with the goal of the recommendation. Over the past several years, program staff have met with staff in other parts of the agency to share how a third party certification program works. Staff will continue to share best practices with other interested parts of the agency and the new Program Management Improvement Officer when that person is appointed to the position. *Status:* TBD	
18-P00221-168	Recommendation 1: 2. Include in the revised Lead and Copper Rule the most protective protocols for monitoring and corrosion control.	2018-07-19
	Corrective Action 1-1: *Planned:* 2019-02-28 *Completed:* 0000-00-00 OW concurs with this recommendation regarding the importance of proper implementation of the protocol for monitoring and corrosion control, and we continue to work on the long-term revisions to the existing LCR. Most recently, OW engaged stakeholders as part of a federalism consultation. The Agency is evaluating input we received from our state, local and tribal partners as well as the best available peer-reviewed science to ensure the Rule reflects the best ways to improve public health protection. *Status:* Delayed	
	Recommendation 2: 7. Implement a system to identify management risks in state drinking water programs, including elements such as atypical events, emerging public health concerns, environmental justice concerns and public health analyses.	
	Corrective Action 2-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 EPA has initiated a workgroup with participation from OECA, OW and the Regions. The workgroup will explore how best to use drinking water data and measures to identify public water systems that present or are likely to present a significant risk to public health. The workgroup will develop procedures and strategies to ensure timely and effective intervention where risks to public health are identified. *Status:* Delayed	

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	Recommendation 3: 8. Create a system that tracks citizen complaints and gathers information on emerging issues. The system should assess the risk associated with the complaints, including efficient and effective resolution.	
	Corrective Action 3-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 Identify potential enhancements to existing systems and/or identify new system requirements that can support tracking of citizen complaints. *Status:* Delayed	
	Recommendation 4: 8. Create a system that tracks citizen complaints and gathers information on emerging issues. The system should assess the risk associated with the complaints, including efficient and effective resolution.	
	Corrective Action 4-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 Identify potential enhancements to existing systems and/or identify new system requirements that can support tracking of citizen complaints. *Status:* Delayed	
	Recommendation 5: 6. Provide regular training for EPA drinking water staff, managers and senior leaders on Safe Drinking Water Act tools and authorities; state and agency roles and responsibilities; and any Safe Drinking Water Act amendments or Lead and Copper Rule revisions.	
	Corrective Action 5-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 As noted during our May 7, 2018 teleconference with OIG, OECA and OW share responsibility for such trainings and plan to work together to implement this recommendation. *Status:* Delayed	
	Recommendation 6: 9. Improve oversight by establishing a clear and credible escalation policy for EPA intervention in states. The policy should provide steps the EPA will take when states do not act.	
	Corrective Action 6-1: *Planned:* 2019-07-31 *Completed:* 0000-00-00 OECA expects to make a decision after this engagement process by July 2019. *Status:* Delayed	
	Recommendation 7: 1. Establish controls to annually verify that states are monitoring compliance with all Lead and Copper Rule requirements, including accurately identifying tier 1 sampling sites and maintaining continuous corrosion control.	
	Corrective Action 7-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 In December 2018, EPA will hold a meeting with the regional branch chiefs to review and update the protocol used for the FY2018 annual Public Water System program reviews. The changes made will be implemented in the FY2019 and future annual program reviews. *Status:* TBD	
10-P00224-180	Recommendation 1: 2-2 Develop a systematic approach to identify which States have outdated or inconsistent MOAs, renegotiate and update those MOAs using the MOA template, and secure the active involvement and final, documented concurrence of Headquarters to ensure national consistency.	2010-09-14

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	Corrective Action 1-1: *Planned:* 2017-09-30 *Completed:* 0000-00-00 Revised due date: 9/28/18 (The OW received an extension approval from the OIG to complete this correct action). The revised due date is 9/30/2020. Per OC. Completion date: pending *Status:* Delayed	
15-P00156-180	Recommendation 1: We recommend that the Assistant Administrator for Chemical Safety and Pollution Prevention and the Assistant Administrator for Enforcement and Compliance Assurance: 2. Ensure that required FIFRA project officer training is conducted periodically and the above guidance is included in the training.	2015-05-15
	Corrective Action 1-1: *Planned:* 2018-12-30 *Completed:* 0000-00-00 November 2018 - Together OPP and OC are working on the eLearning course and require more time for completion. Convert 3 day training content to E-learning module to post online and make available to FIFRA POs. *Status:* Delayed	
17-P00412-180	Recommendation 1: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 1. Establish national compliance monitoring goals based on assessment and consideration of available regional resources.	2017-09-28
	Corrective Action 1-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 Assessment and consideration of available regional resources for inspections are already conducted and is represented by Annual Commitment System. (For non-inspection import related compliance assurance activities, identify opportunities for strengthening internal controls, establishing goals, communicating progress of regional accomplishments). *Status:* Delayed	
	Recommendation 2: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 2. Implement internal controls to monitor and communicate progress on regional goals.	
	Corrective Action 2-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 Assessment and consideration of available regional resources for inspections are already conducted and is represented by Annual Commitment System. (For non-inspection import related compliance assurance activities, identify opportunities for strengthening internal controls, establishing goals, communicating progress of regional accomplishments). *Status:* Delayed	
	Recommendation 3: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 4. Direct each EPA region to develop guidance or protocols that define how the region will coordinate with local U.S. Customs and Border Protection offices on illegal pesticides that are imported without Notices of Arrival.	
	Corrective Action 3-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 September 2018 - OCE requested additional time to complete regional coordination to develop the required protocols. *Status:* TBD	

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18-P00001-180	Recommendation 1: 2. After the implementation of mandatory electronic Discharge Monitoring Reports, review the usefulness of the Discharge Monitoring Report Comparison Dashboard for identifying possible unpermitted surface water dischargers using Toxics Release Inventory data, and modify as appropriate	2017-10-05
	Corrective Action 1-1: *Planned:* 2018-06-30 *Completed:* 0000-00-00 October 2018: OC requires additional time to complete the corrective action, an extension until 12/28/18, has been updated in MATS. *Status:* TBD	
18-P00059-180	Recommendation 1: Conduct a study to determine the costs associated with modifying the existing regulations to include (a) a requirement for full disclosure of all self-insured environmental liabilities; and (b) eliminating the use of corporate self-insurance instruments, including the financial test and corporate guarantee, for Resource Conservation and Recovery Act and Superfund financial assurance.	2017-12-22
	Corrective Action 1-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 1B - OECA w/support from OLEM, will conduct an analysis of the SF program's use of corporate self-insurance instruments for current settlements and orders at sites where the SF program follows the general framework of the RCRA regulations for FA. *Status:* Delayed	
	Recommendation 2: Once the study in Recommendation 1 is complete, implement the selected measure (1a or 1b).	
	Corrective Action 2-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 2) Once recommendation 1 is complete, OLEM with support from OECA, will use the information to develop appropriate risk management actions to mitigate any identified problems in line with Agency practices for enterprise risk management under OMB Circular A-123, and determine whether additional controls, such as a requirement for full disclosure of all self-insured environmental liabilities in corporate self-insurance demonstrations and/or disallowance of corporate self-insurance, should be pursued at that time. *Status:* Delayed	
	Recommendation 3: Update standard operating procedures and data systems to accommodate the changes implemented for Recommendation 2	
	Corrective Action 3-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 3) OLEM, w/support from OECA, will update SOPs and data systems to accommodate the implemented risk management actions. *Status:* Delayed	
	Recommendation 4: Train staff on the changes implemented for Recommendation 2.	
	Corrective Action 4-1: *Planned:* 2021-12-31 *Completed:* 0000-00-00 4) OLEM, w/support from OECA will train staff on the implemented risk management actions *Status:* Delayed	
	Recommendation 5: Develop or update existing standard operating procedures to outline the Office of Land and Emergency Management and Office of Enforcement and Compliance	

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	Assurance roles and responsibilities for overseeing the validity of Resource Conservation and Recovery Act and Superfund financial assurance instruments, where needed.	
	Corrective Action 5-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 5 - 7) Develop CERCLA SOPs that include: 1) Roles and responsibilities for overseeing the validity of SF FA instruments; 2) procedures for checking w/other regions for facilities/sites w/multiple self-insured liabilities; 3) instructions on the steps to take when an invalid FA instrument (expired, insufficient, in dollar amount, or not provided) is identified; and 4) where and when to collect and document causes of invalid FA. *Status:* Delayed	
	Recommendation 6: Develop and include procedures for checking with other regions for facilities/sites with multiple self-insured liabilities in the standard operating procedures created for Recommendation 5.	
	Corrective Action 6-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 5 - 7) Develop CERCLA SOPs that include: 1) Roles and responsibilities for overseeing the validity of SF FA instruments; 2) procedures for checking w/other regions for facilities/sites w/multiple self-insured liabilities; 3) instructions on the steps to take when an invalid FA instrument (expired, insufficient, in dollar amount, or not provided) is identified; and 4) where and when to collect and document causes of invalid FA. *Status:* Delayed	
	Recommendation 7: In the standard operating procedures created for Recommendation 5, develop and include instructions on (1) the steps to take when an invalid financial assurance instrument (expired, insufficient in dollar amount, or not provided) is identified and (2) how to collect information on the causes of invalid financial assurance.	
	Corrective Action 7-1: *Planned:* 2019-03-31 *Completed:* 0000-00-00 5 - 7) Develop CERCLA SOPs that include: 1) Roles and responsibilities for overseeing the validity of SF FA instruments; 2) procedures for checking w/other regions for facilities/sites w/multiple self-insured liabilities; 3) instructions on the steps to take when an invalid FA instrument (expired, insufficient, in dollar amount, or not provided) is identified; and 4) where and when to collect and document causes of invalid FA. *Status:* Delayed	
	Recommendation 8: Train staff on the procedures and instructions developed for Recommendations 5 through 7.	
	Corrective Action 8-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 8) Train staff on procedures and instructions developed for recommendations 5 through 7. *Status:* Delayed	
	Recommendation 9: Train staff on how to use the new data field created for Recommendation 11.	

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	Corrective Action 9-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 December 2018: Extension requested...The financial assurance training will be incorporated into a SEMS enforcement data entry webinar planned for Spring 2019, and will address other SEMS data entry topics. There are plans to record the webinar so that it can be used as an ongoing training resource. 12) Train staff on how to use the system modifications implemented for recommendation 11. *Status:* Delayed	
	Recommendation 10: Develop and distribute to EPA regions and states annual reports that include progress on the reduction of financial assurance that is expired, insufficient and/or not provided.	
	Corrective Action 10-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 10)Annually track progress on the reduction of SF FA that, based on available data, is expired, insufficient in amount and/or not provided; and distribute to EPA regions, as applicable. *Status:* Delayed	
	Recommendation 11: Develop and distribute to EPA regions and states annual reports that include the total dollar amount of Resource Conservation and Recovery Act and Superfund financial assurance required and provided.	
	Corrective Action 11-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 9A2) Develop and distribute to EPA regions annual reports that include the total dollar amount of SF FA required and provided. *Status:* Delayed	
18-P00079-180	Recommendation 1: 1. Develop and implement additional Federal Insecticide, Fungicide, and Rodenticide Act guidance to assist Project Officers in evaluating whether funding is reasonable given projected work plan tasks.	2018-02-13
	Corrective Action 1-1: *Planned:* 2019-11-30 *Completed:* 0000-00-00 Develop additional FIFRA guidance to assist POs in evaluating whether funding is reasonable given projected work plan tasks. *Status:* Delayed	
	Recommendation 2: 2. Conduct a national review of state work plans and performance for Federal Insecticide, Fungicide, and Rodenticide Act cooperative agreements to verify the consistent application of agency guidance and achievement of agency goals and requirements.	
	Corrective Action 2-1: *Planned:* 2019-05-31 *Completed:* 0000-00-00 OECA is prepared to expand its existing national review of state cooperative agreements to include an analysis of grantee performance as it relates to agency guidance/goals. *Status:* Delayed	
18-P00221-180	Recommendation 1: 6. Provide regular training for EPA drinking water staff, managers and senior leaders on Safe Drinking Water Act tools and authorities; state and agency roles and responsibilities; and any Safe Drinking Water Act amendments or Lead and Copper Rule revisions.	2018-07-19
	Corrective Action 1-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 OCE will re-evaluated training needs:	

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	OCE has provided and will continue to provide regular training nationally to staff and managers about SDWA tools and authorities, like Sections 1414 and 1431, and various NPDWRs, including LCR. EPA will also make these trainings available to senior leaders. As part of ongoing Agency efforts to enhance national implementation of the LCR, EPA has been providing training on the Rule's optimal corrosion control treatment and optimal water quality parameter requirements. The workshops provide a review of LCR requirements and emphasize the tools and authorities drinking water programs can leverage to implement the requirements more effectively. The training has been delivered through in-person workshops at each of the EPA Regions, as well as through special conference sessions. *Status:* Delayed	
	Recommendation 2: 9. Improve oversight by establishing a clear and credible escalation policy for EPA intervention in states. The policy should provide steps the EPA will take when states do not act.	
	Corrective Action 2-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 OCE has initiated a workgroup with participation from OECA, OW and the Regions. The workgroup will develop procedures and strategies to ensure timely and effective EPA intervention where a state's response to the risk is insufficient to protect the public's health. Interim due dates for seeking State input 6/30/18 Public Comment 11/30/18 Decision 7/31/19 *Status:* Delayed	
	Recommendation 3: 1. Establish controls to annually verify that states are monitoring compliance with all Lead and Copper Rule requirements, including accurately identifying tier 1 sampling sites and maintaining continuous corrosion control.	
	Corrective Action 3-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 February 2019 - OW confirmed OW meet with regional branch chiefs. Corrective action expected to be completed by 9/30/19, as provided by OW email (S. Moore on 2/11/19). In December 2018, EPA will hold a meeting with the regional branch chiefs to review and update the protocol used for the FY 2018 annual Public Water System Supervision program reviews. As part of this review, EPA will amend the Public Water System program review protocol as needed to verify that states are implementing Lead and Copper Rule requirements. The changes will be implemented in FY 2019 and the future annual program reviews. *Status:* Delayed	

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18-P00270-180	Recommendation 1: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 2. Inform local educational agencies, in coordination with the EPA regions, that they must comply with the requirements of the Asbestos-Containing Materials in Schools Rule, 40 CFR 763.93, to develop and maintain an asbestos management plan, regardless of the presence of an exclusion statement, and monitor compliance.	2018-09-17
	Corrective Action 1-1: *Planned:* 2019-09-29 *Completed:* 0000-00-00 OECA will issue a reminder and clarification to the regions that 1) ACS Measure "TSCA 01 OC" requires a program breakdown of projected inspections; 2) ACS Measure "TSCA 02 OC" requires a program breakdown for other compliance. *Status:* Delayed	
	Recommendation 2: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 1. Require the EPA regions, through the National Program Manager Guidance, to incorporate asbestos strategies in their Toxic Substances Control Act compliance monitoring efforts.	
	Corrective Action 2-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OECA will develop compliance assistance material specifically focused on compliance with schools maintaining an asbestos management plan (40 CFR 763.93). *Status:* Delayed	
12-300444-320	Recommendation 1: We recommend that the Action Official confirm that the recipient took the corrective action identified in the single audit report. If the recipient has not implemented/completed its corrective action, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the findings in the report.	2012-05-03
	Corrective Action 1-1: *Planned:* 2014-03-31 *Completed:* 0000-00-00 Region 2 has received and accepted the recipient's Corrective Action Plan. Update 9/20/2018: The above referenced review continues. Completion of corrective action is now estimated for September 30, 2019. *Status:* Delayed	
15-P00137-320	Recommendation 1: To improve oversight of the UST/LUST program, establish an updated UST/LUST Memorandum of Agreement with the USVI that reflects changes and new provisions resulting from the EPAct 2005. The Memorandum of Agreement should also outline roles, responsibilities and expectations	2015-04-17
	Corrective Action 1-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 Update 9/27/18: October 13, 2018 is the effective date of EPA's 2015 UST regulation revision, and the date that states which have State Program Approval (SPA) must re-apply for SPA. Region 2's MOU with VIDPNR is targeted for execution on October 13, 2018. Update 12/7/18: Region 2 is awaiting final comments from DPNR on the draft MOU. During the programmatic call scheduled for next week, Region 2 will ask DPNR for an update on the status. *Status:* Delayed	

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
	Recommendation 2: Develop a plan to address currently uncompleted tasks and activities and develop a schedule for reprogramming grant funds to accomplish these tasks if USVI does not or cannot complete them. Upon completion of the financial management corrective actions, follow the Office of the Chief Financial Officer's Resource Management Directive System 2520-03 to determine whether any of the current unspent funds of approximately $37 million under the USVI assistance agreements could be put to better use.	
	Corrective Action 2-1: *Planned:* 2018-09-30 *Completed:* 0000-00-00 Region 2 anticipates performing an onsite review sometime in the Fall of FY 2019 to verify and confirm that VIDPNR has fully implemented the required corrective actions, with issuance of a report sometime in the Winter of FY 2019. *Status:* Delayed	
17-P00402-320	Recommendation 1: We recommend that the Regional Administrator, Region 2: 4. Determine whether the cooperative agreements under Grant Numbers 99206921 and 99206922 have the proper support for the fringe benefit costs requested for car allowances.	2017-09-25
	Corrective Action 1-1: *Planned:* 2018-03-31 *Completed:* 0000-00-00 Region 2 will make the appropriate determination of support for the costs and take necessary action. Update 12/7/18: CCSJBE will resolve the issue of questioned costs by reimbursing EPA in full for the funds drawn down and not supported with proper documentation. Region 2 is working with CCSJBE to return the funds to EPA. *Status:* Delayed	
13-R00297-360	Recommendation 1: Recover federal funds of $2,904,578 unless the foundation provides a verifiable and enforceable remedy to reduce diesel emissions in the Baton Rouge ozone nonattainment area, as required by the cooperative agreement.	2013-06-20
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 Two of the five rebuilt locomotives will continue to operate in the Baton Rouge nonattainment area. Per William Rhea on February 5, 2018: Table and pie charts in 4th qtr. 2017 reports show two locomotives continuing to operate in the Baton Rouge non-attainment area *Status:* Delayed	
	Corrective Action 1-2: *Planned:* 2020-09-30 *Completed:* 0000-00-00 The remaining three rebuilt locomotives will continue to operate between Baton Rouge and New Orleans until economic conditions in Baton Rouge necessitate moving as many locomotives as possible back to the Baton Rouge non-attainment area. Status of RRF October 1 through December 31, 2017 report. Table and pie charts in 4th qtr. 2017 reports show three locomotives operating in the exception area *Status:* Delayed	
	Corrective Action 1-3: *Planned:* 2020-09-30 *Completed:* 0000-00-00 RRF will provide locomotive location data to EPA on a quarterly basis showing where the five locomotives were operated.	

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
	Status of RRF Quarterly Reporting for the Period October 1, 2017 through December 31, 2017 as of 1/15/18: Table and pie charts in 4th qtr. 2017 reports show location of the 5 locomotives, 2 in Baton Rouge and 3 in excepted area. *Status:* Delayed	
	Corrective Action 1-4: *Planned:* 2020-09-30 *Completed:* 0000-00-00 As a penalty for noncompliance, RRF will remit to the U.S. EPA $4,841 for each locomotives for each month any of the five locomotives are operated outside of the restricted area for more than 10 plus consecutive days, outside the Baton Rouge non-attainment area and the Exception area (for other than maintenance). Status of RRF Quarterly Reporting for the Period October 1, 2017 through December 31, 2017 as of 1/15/18: Table and pie charts 4th quarter 2017 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area unless they were in maintenance. *Status:* Delayed	
	Corrective Action 1-5: *Planned:* 2020-09-30 *Completed:* 0000-00-00 Each of the five locomotives will operate in Baton Rouge area or the Exception area for 10 years after the date each engine was placed back into service. Table and pie charts in 4th quarter 2017 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. *Status:* Delayed	
14-P00109-360	Recommendation 1: Direct COs to require that the contractor adjust all its billings to reflect the application of the correct rate to team subcontract ODCs.	2014-02-04
	Corrective Action 1-1: *Planned:* 2024-09-30 *Completed:* 0000-00-00 Region 6 concurs with Recommendation No. 3 and agrees to require the contractor to adjust all of its past billings to reflect the application of the composite rate to team-subcontractor ODCs that were arranged for and paid for by the team-subcontractor. We intend to implement the corrective action when final indirect cost rates (OCR) are established. Therefore, the CO will be directed to defer past billing adjustments until the Defense Contract Audit Agency (DCAA) audits the indirect cost rates and the EPA Financial Administrative Contracting Officer (FACO) approves and issues a Final Indirect Cost (ICR) Agreement for the past billing periods (i.e. Years 2007 to 2013). *Status:* Delayed	
18-P00233-360	Recommendation 1: We recommend that the EPA Regional Administrators, Regions 6 and 9: 1. Complete the necessary removal site evaluations and engineering evaluations/cost analyses.	2018-08-22
	Corrective Action 1-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 1.1 Complete removal site evaluations (RSEs).	

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
	As of January 30, 2019 post-Government Shutdown: Yes, Regions 6/9 would be allowed an extension for the length of the shutdown, which was 5 weeks, or 35 days. In MATS, you can revise your completion dates as such, and please also include a note indicating the reason for the added extension (government shutdown) - - thank you - - Pat No written approval necessary. You are requesting a 6 month extension and therefore no written request or approval needed – the additional 35-day extension is granted based on the exceptional circumstance of a government shutdown. Patrick J. Milligan US EPA - Office of Inspector General Project Manager Phone: (215) 814-2326 Fax: (215) 814-2351 *Status:* Delayed	
	Corrective Action 1-2: *Planned:* 2020-12-31 *Completed:* 0000-00-00 1.2 Complete engineering evaluations/cost analyses. *Status:* Delayed	
	Recommendation 2: We recommend that the EPA Regional Administrators, Regions 6 and 9: 2. Fully develop and implement prioritization and resource allocation methodologies for the Tronox abandoned uranium mine sites on or near Navajo Nation lands.	
	Corrective Action 2-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 1.1 Complete development of prioritization methodology. As of January 30, 2019 post-Government Shutdown: see 1-1, above	
	Corrective Action 2-2: *Planned:* 2020-12-31 *Completed:* 0000-00-00 1.2 Refine prioritization methodology *Status:* Delayed	
	Corrective Action 2-3: *Planned:* 2020-12-31 *Completed:* 0000-00-00 1.3 Conduct mine cleanup prioritization. *Status:* Delayed	
	Corrective Action 2-4: *Planned:* 2021-12-31 *Completed:* 0000-00-00 1.4 Complete development and implementation of resource allocation methodology following the cost analysis of the preferred remedies. *Status:* Delayed	
12-100560-380	Recommendation 1: Ensure the grantee addresses the recommendations and recover questioned and unsupported costs	2007-09-24
	Corrective Action 1-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 3/20/15: OGD and the Region are discussing contents of proposed Final Determination Letter and need for a waiver request. Projected completion date is June 30, 2015. *Status:* TBD	

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
16-P00218-390	Recommendation 1: 1. Reevaluate the status of the fundable projects and Hawaii DOH's progress on implementing the corrective action plan items prior to awarding the FY 2016 allotment of $8,312,000 and any future award. The reevaluation should continue until Hawaii DOH meets the agency's funding utilization target.	2016-06-28
	Corrective Action 1-1: *Planned:* 2017-07-31 *Completed:* 0000-00-00 On 2/14/19, Region 9 notified HDOH by letter that EPA will be conducting its annual review and will focus on the HDOH progress in implementing the LGTS system. The target date for corrective action and review will be revised to 8/30/2019. *Status:* Delayed	
16-P00320-390	Recommendation 1: Disallow ineligible costs of $178,030 claimed by the Manchester Band of Pomo Indians and recover the ineligible federal share of $174,970.	2016-09-21
	Corrective Action 1-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 As of 2/6/19,comments from both the LVFC and the EPA Claims Officer in HQ advised the re-payment schedule be set up on a monthly, quarterly, or annual payment basis. On 2/4/19 Grants office notified the tribal contact and tribal Attorney to consult with the Manchester Tribal Council as to which of these methods would work best for the tribe. Once the Tribal Council meets, later this month re-payment schedule will be off for review and concurrence. *Status:* TBD	
	Recommendation 2: Disallow unsupported costs of $172,691 and recover the unsupported federal share of $169,970, unless the Manchester Band of Pomo Indians provides supporting documentation that meets federal requirements.	
	Corrective Action 2-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 As of 2/6/19,comments from both the LVFC and the EPA Claims Officer in HQ advised the re-payment schedule be set up on a monthly, quarterly, or annual payment basis. On 2/4/19 Grants office notified the tribal contact and tribal Attorney to consult with the Manchester Tribal Council as to which of these methods would work best for the tribe. Once the Tribal Council meets, later this re-payment schedule will be off for review and concurrence. *Status:* TBD	
	Recommendation 3: Disallow all remaining costs claimed, currently determined to be $27,959, for grant tasks that remain incomplete under the two EPA grants for the Manchester Band of Pomo Indians, and recover the federal share of $27,778, unless Manchester provides adequate documents to substantiate completion of grant tasks.	
	Corrective Action 3-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 As of 2/6/19,comments from both the LVFC and the EPA Claims Officer in HQ advised the re-payment schedule be set up on a monthly, quarterly, or annual payment basis. On 2/4/19 Grants office notified the tribal contact and tribal Attorney to consult with the Manchester Tribal Council as to which of these methods would	

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
	work best for the tribe. Once the Tribal Council meets, later this monthly re-payment schedule will be off for review and concurrence. *Status:* TBD	
	Recommendation 4: Designate the Manchester Band of Pomo Indians as a high-risk grantee, in accordance with 40 CFR 31.12, and place appropriate special conditions upon any future awards until Manchester implements policies and procedures to make sure: a. Timekeeping support for labor charges meets federal requirements. b. Travel is properly reviewed and approved, and sufficient documentation is maintained to support allowable travel expenses. c. Direct versus indirect costs are properly identified and charged. d. Tribal management and staff responsible for federal grant activities have adequate knowledge and skills to implement and monitor grant program activities, including application of federal laws, regulations and cost principles.	
	Corrective Action 4-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 The Uniform Grant Guidance (UGG), 2 CFR Part 200, replaced 40 CFR Part 31 on December 26, 2014. The UGG no longer refers to recipients as "high-risk"; however, the UGG allows Federal agencies to impose specific terms and conditions as needed (e.g. for recipients who have a history of failure to comply with the general or specific terms and conditions of a Federal award). 2 CFR §200.207. Region 9 will ensure that future grant and cooperative agreements awarded to Manchester will include specific terms and conditions as shown in EPA's Response to Recommendation 5. The corrective action is not applicable since there has not been any new awards issued to Manchester. *Status:* TBD	
	Recommendation 5: Implement special grant conditions for future awards to the Manchester Band of Pomo Indians requiring completion of grant tasks before grant payments are made.	
	Corrective Action 5-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 EPA Region 9 concurs with the recommendation to implement a special grant conditions for future awards. For example, the following condition will be added to future awards issued to Manchester: The corrective action is not applicable since there has not been any new awards issued to Manchester. *Status:* TBD	
18-P00233-390	Recommendation 1: We recommend that the EPA Regional Administrators, Regions 6 and 9: 1. Complete the necessary removal site evaluations and engineering evaluations/cost analyses.	2018-08-22

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 1.2 Complete engineering evaluations/cost analyses-12/31/2020 *Status:* Delayed	
	Recommendation 2: We recommend that the EPA Regional Administrators, Regions 6 and 9: 1. Complete the necessary removal site evaluations and engineering evaluations/cost analyses.	
	Corrective Action 2-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 2.1.1 Complete removal site evaluations -12/31/18 Due to the government shutdown, the completion date is delayed to 8/4/19. *Status:* Delayed	
	Recommendation 3: We recommend that the EPA Regional Administrators, Regions 6 and 9: 2. Fully develop and implement prioritization and resource allocation methodologies for the Tronox abandoned uranium mine sites on or near Navajo Nation lands.	
	Corrective Action 3-1: *Planned:* 2018-12-31 *Completed:* 0000-00-00 2.1.1 Complete development of prioritization methodology-12/31/18 Due to the government shutdown, the completion date is delayed to 6/4/19. *Status:* Delayed	
	Corrective Action 3-2: *Planned:* 2021-12-31 *Completed:* 0000-00-00 1.4 Complete development and implementation of resource allocation methodology following the cost analysis of the preferred remedies-12/31/2021 *Status:* Delayed	
	Corrective Action 3-3: *Planned:* 2020-12-31 *Completed:* 0000-00-00 1.2 Refine prioritization methodology-12/31/2020 *Status:* Delayed	
	Corrective Action 3-4: *Planned:* 2020-12-20 *Completed:* 0000-00-00 1.3 Conduct mine cleanup prioritization-12/31/2020 *Status:* Delayed	
19-S00034-410	Recommendation 1: Recover the $28,705 in questioned ineligible costs.	2018-11-30
	Corrective Action 1-1: *Planned:* 2019-05-30 *Completed:* 0000-00-00 12/17/2018: Initial follow-up letter mailed to tribe requesting corrective action/response by 01/30/2019. *Status:* Delayed	
	Recommendation 2: Confirm the corrective action the recipient identified in the single audit report was implemented. If the corrective action has not been implemented, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the finding in the report.	
	Corrective Action 2-1: *Planned:* 2019-05-30 *Completed:* 0000-00-00 Finding: Ensure timely filing of financial statements. 12/17/2018: Initial follow-up letter mailed to tribe requesting corrective action/response by 01/30/2019. The Uniform Guidance states that the reporting package must be submitted no later than 30 days after the reports are received from the auditors but no later than 9 months after the end of the audit period. *Status:* Delayed	

FY Audit Number	Recommendations, Corrective Actions and Status	Report Date
19-S00051-410	Recommendation 1: We recommend that the Action Official confirm the corrective action the recipient identified in the single audit report was implemented. If the corrective action has not been implemented, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the finding in the report.	2018-12-18
	Corrective Action 1-1: *Planned:* 2019-06-18 *Completed:* 0000-00-00 12/18/2018: Initial follow-up corrective action letter mailed to grantee requesting: 1) assurance of internal controls to ensure compliance with federal Davis-Bacon Act (prevailing wage) and suspension & debarment requirements; 2)FY2016, District did not obtain written certification, insert a clause into the contract or review EPLS to verify contractor not suspended/disbarred. *Status:* Delayed	