



**United States  
Environmental Protection Agency**

**FISCAL YEAR 2022**

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

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## United States Environmental Protection Agency

### FY 2022 Budget Overview

The United States Environmental Protection Agency (EPA) is guided by a clear and vital mission: to protect human health and the environment. While the Agency has made great progress in advancing this mission over the last fifty years, much work remains to guarantee that all Americans share in the benefits of clean air, clean water, and safe communities and are protected from the urgent threats posed by climate change while creating good paying jobs. The FY 2022 President's Budget for the EPA confronts these challenges with the largest top-line request in the Agency's history and emphasizes four cross-cutting priorities: Tackling the Climate Crisis through Science, Advancing Environmental Justice, Supporting State, Tribal and Local Partners, and Expanding the Capacity of EPA.

The FY 2022 Budget request for EPA provides \$11.2 billion and 15,324 FTE to expand the capacity of EPA to safeguard human health and the environment for all communities. In today's dollars, the FY 2022 Budget returns EPA to similar levels from FY 2010 and the early 2000s. The Budget includes more than 1,000 new EPA FTE to address the Agency's priorities and work with our partners across the Nation to make a real difference in the lives of all Americans by meeting today's environmental challenges and preparing for tomorrow's. The FY 2022 Budget complements the transformational investments in the American Jobs Plan. The American Jobs Plan would address aging water infrastructure, replace all lead pipes and service lines in our drinking water systems, electrify 20 percent of our yellow school bus fleet, invest in monitoring and remediating PFAS (per- and polyfluoroalkyl substances) in drinking water, and accelerate the remediation and cleanup of contaminated land. The FY 2022 Budget and American Jobs Plan leverage existing programs at EPA to improve the environmental and public health challenges facing our Nation, while creating good paying jobs to rebuild America's infrastructure and support U.S. manufacturing.

The FY 2022 Budget request allocates \$1.8 billion to tackle the climate crisis and directs half of this investment toward advancing environmental justice. This investment recognizes that policies to tackle climate change also must clean up the legacy pollution that low-income communities and communities of color have suffered with for far too long. In the process of tackling the climate crisis there is a historic opportunity to make our communities more resilient to climate impacts, advance environmental justice, and create good paying jobs. The FY 2022 Budget commits to ensuring these communities benefit from the country's transition to a cleaner economy and more climate-resilient infrastructure.

The Agency is currently developing the new *FY 2022 – 2026 EPA Strategic Plan* to be issued in February 2022, which will establish a new framework- rooted in a commitment to science, adherence to the law, and environmental justice- to guide the Agency's priorities and progress. The plan will include the strategic goals, objectives, four-year long-term performance goals, and two-year agency priority goals that tether resource investments and strategies to the outcomes that will better protect human health and the environment.

## FY 2022 Funding Priorities

### Tackling the Climate Crisis

The FY 2022 Budget reprioritizes addressing climate change with the urgency the science demands. EPA's recently relaunched Climate Change Indicators website presents compelling and clear evidence of changes to our climate reflected in rising temperatures, ocean acidity, sea level rise, river flooding, droughts, heat waves, and wildfires. The Budget includes an increase of \$1.8 billion in programs to tackle the climate crisis while also delivering environmental justice to marginalized and over-burdened communities, investing in local economies, and creating good-paying jobs.

For FY 2022, EPA requests a \$100 million increase for air quality grants to states and tribes to help expand the efforts of air pollution control agencies to implement their programs and accelerate immediate on-the-ground efforts to reduce greenhouse gases. Every American deserves to know their exposure to air pollution. Toward that goal, and in concert with Section 222 of the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, the Budget invests \$100 million to develop a community air quality monitoring and notification system to provide real-time data to overburdened and marginalized communities and enforcement officials. By maximizing the transparency of air pollution levels at the community scale, we can better ensure that places with the most significant exposure are being targeted for action and measurable progress.

The FY 2022 Budget includes an additional \$60 million to conduct research and deepen our knowledge of the impacts of climate change on human health and the environment. This investment more than doubles EPA's climate change research while providing additional investments to decrease emissions of methane and hydrofluorocarbons. Half of this increase will fund collaborative research in climate adaptation and resilience with the new Advanced Research Projects Agency for Climate (ARPA-C) that will be located within the Department of Energy. The Budget also includes additional investments to decrease emissions of methane and hydrofluorocarbons (HFCs). The Agency is working to implement Executive Order 13990 on *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. In FY 2022, EPA will ensure that policy is guided by the best science and is protected by processes that encourage integrity in the Agency's decision-making.

Both climate mitigation and adaptation are essential components of the strategy to reduce the threats and impacts of climate change. The FY 2022 Budget will enable EPA to address the climate crisis while creating good paying jobs in four key ways: adapting to the impacts of climate change through infrastructure investment; mitigating climate change by reducing greenhouse gas emissions; expanding our climate research and policy development; and partnering with the global community to respond to this shared challenge.

### *Adapting to Climate Impacts through Infrastructure Investment*

Upgrading and adapting America's infrastructure to meet the demands of the changing climate is critical to keeping communities healthy and safe. As the climate warms, more extreme rainfall and flooding events can damage or overwhelm water systems, leaving entire communities without safe

water supplies for days or weeks. Flooding events also can disturb and circulate dangerous pollution from Superfund toxic waste sites, making remediation of these sites a priority for public health in a warming world.

In the FY 2022 Budget, EPA proposes a \$589 million increase in several existing water infrastructure programs, including the Clean Water State Revolving Funds (CWSRF), Drinking Water State Revolving Funds (DWSRF), the Water Infrastructure Finance and Innovation Act (WIFIA) program, and grant programs authorized in the America's Water Infrastructure Act of 2018 (AWIA) and the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). Together, these financing programs will advance the Agency's ongoing commitment to infrastructure repair and replacement and build climate resilience into the water sector. At the same time, these investments will create hundreds of thousands of good-paying jobs across the country.<sup>1</sup>

EPA estimates that the country needs to invest more than \$743 billion over the next 20 years to maintain, upgrade, and replace critical drinking water and wastewater infrastructure.<sup>2</sup> Today, up to 10 million homes in America and more than 400,000 schools and childcare centers rely on lead distribution lines—a clear and present danger to the health of children. EPA's State Revolving Fund (SRF) programs help states, municipalities, and other eligible borrowers to finance high-priority investments that improve water quality and protect human health. The FY 2022 Budget provides \$3.2 billion across the two SRF programs, a \$464 million increase above the FY 2021 enacted levels, representing nearly 30 percent of EPA's total resource request.

The FY 2022 Budget includes \$1.871 billion for the CWSRF Program, a \$232 million increase above the FY 2021 enacted level. The 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. It represents 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, and green infrastructure projects. In addition to capitalizing the CWSRF Program, a portion of the request will provide direct grants to communities in tribal nations and territories. The sanitation infrastructure in these communities often lags the rest of the country, causing significant public health concerns.

EPA's DWSRF is designed to assist public water systems in financing 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 FY 2022 Budget requests \$1.358 billion for the DWSRF, a \$232 million increase, to help finance critical infrastructure improvements to public drinking water systems. States have considerable flexibility to tailor their DWSRF Program to their unique circumstances and needs, allowing each state to carefully and strategically consider how best to achieve the maximum public health protection and infrastructure development that benefits all Americans and is resilient to the impacts of climate change.

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<sup>1</sup> Jobs Created estimates are based on the *U.S. Water Alliance: The Value of Water Campaign: The Economic Benefits of Investing in Water Infrastructure*.

<sup>2</sup> For more information on EPA's Clean Water and Drinking Water Needs Survey Reports, visit: <https://www.epa.gov/cwns> and <https://www.epa.gov/dwsrf/epas-6th-drinking-water-infrastructure-needs-survey-and-assessment>.

The WIFIA Program, created in 2014, is a critical tool to accelerate water infrastructure investments by leveraging public and private sources of funds to maximize the reach of federal funds. As of May 2021, the WIFIA Program had issued 50 loans to communities across the country totaling more than \$9 billion in credit assistance to help finance nearly \$20 billion for water infrastructure projects. WIFIA loans for these projects have saved communities more than \$4 billion, which they will use to accelerate additional infrastructure investment and keep rates affordable for water system users. These WIFIA financed projects support 49,000 jobs and serve more than 31 million people, demonstrating that WIFIA credit assistance is an effective tool to help address a variety of water infrastructure needs to support all manner of communities nationwide. The FY 2022 request expands the WIFIA credit subsidy by \$12.6 million, which would enable EPA to provide up to \$8 billion in direct credit assistance and help spur more than \$16 billion in total infrastructure investments.

A parallel goal of infrastructure repair and replacement is to advance agency efforts in addressing lead and other contaminants in drinking water, especially in small and underserved communities. AWIA strengthened many existing programs within EPA, including programs authorized by the Water Infrastructure Improvements for the Nation (WIIN) Act, while creating new programs to tackle significant public health and environmental concerns. The FY 2022 request expands the programmatic capacity to support small and disadvantaged communities, to reduce lead in drinking water, to provide lead testing in schools, to expand sewer overflow control grants, and to build drinking water resilience. In total, the FY 2022 Budget provides \$249.4 million in funding for the AWIA and WIIN grant programs.

Many communities also face the challenge of cleaning up contaminated lands so that they can be redeveloped and reused. The FY 2022 request enables the Agency to expedite the cleanup of hazardous waste sites that litter communities across the country, particularly low-income communities and communities of color. Of the total funding requested for Superfund, \$1.108 billion and 1,261 FTE would support Superfund cleanup programs, a \$299.4 million increase over last year. The cleanup programs include Superfund Remedial, Emergency Response and Removal, EPA Emergency Preparedness, and Federal Facilities programs. Federal data in a recent Government Accountability Office (GAO) report suggests that approximately 60 percent of Superfund sites overseen by EPA are in areas that are vulnerable to wildfires and different types of flooding—natural hazards that climate change will exacerbate.<sup>3</sup> The Agency is working to clean up these sites with climate change in mind to protect the populations most at risk of toxic chemical exposure, including children, the elderly, and low-income communities.

### ***Tackling the Climate Crisis through Pollution Reduction***

Cutting the pollution that causes climate change not only benefits the climate but also offers valuable co-benefits for human health. Long-term exposure to elevated levels of certain air pollutants has been associated with increased risk of cancer, premature mortality, and damage to the immune, neurological, reproductive, cardiovascular, and respiratory systems, while short-term exposure can exacerbate asthma and lead to other adverse health effects and economic costs.<sup>4</sup> The issues of highest importance for EPA's air program over the next decade will continue to be

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<sup>3</sup> For more information, please visit: <https://www.gao.gov/products/gao-20-73>.

<sup>4</sup> For more information, please visit: <https://www.epa.gov/air-research/research-health-effects-air-pollution>.

reducing emissions of greenhouse gases (GHG), ozone-forming pollutants and particulate matter, and air toxics. Relying on the latest science, EPA will work to reduce the sources of these pollutants from mobile and stationary sources while creating good paying jobs. The FY 2022 request leverages several approaches including regulatory tools, innovative market-based techniques, public and private-sector partnerships, community-based approaches, voluntary programs that promote environmental stewardship, and programs that encourage adoption of cost-effective technologies and practices.

EPA plays a lead role in implementing a global phasedown in the production and consumption of hydrofluorocarbons (HFCs). These potent greenhouse gases, which are common in refrigerants and aerosols, have global warming potentials hundreds to thousands of times larger than carbon dioxide. This uniform federal phasedown approach led by EPA will decrease the production and importation of HFCs in the United States by 85 percent over the next 15 years. As a result, it will help promote American leadership in innovation and manufacturing of new climate-safe products and create new jobs in this emerging sector. A global HFC phasedown is expected to avoid up to 0.5 degree Celsius of global warming by 2100.

Another EPA effort to reduce GHGs and dangerous air pollution is the Diesel Emissions Reduction Act (DERA) grant program. The FY 2022 request expands this proven grant program by 67 percent, or \$60 million, to expand the availability of DERA grants and rebates to reduce harmful diesel emissions and tackle the climate change crisis, with a focus on priority areas including school buses, ports, and disproportionately affected communities. DERA helps remove older dirtier diesel engines from the roads via retrofits, rebuilds, and replacements; fuel switching and electrification; and strategies to reduce idling. Pollution emissions from the legacy diesel engine fleet will fall over time as portions of the fleet are replaced with new engines that meet modern emission standards. However, without additional action, the Agency estimates that approximately one million old diesel engines will remain in use in 2030.<sup>5</sup> These grants accelerate the pace at which dirty engines are retired or retrofitted and target resources in areas with poor air quality, especially those with significant emissions from ports and goods movement. These locations also often are where lower income communities and communities of color suffer from higher levels of pollution.

Extraction and processing of natural resources, including fossil fuels, biomass, minerals, and metals, make up approximately 50 percent of the total greenhouse gas emissions.<sup>6</sup> As world population and economies grow, global competition for these finite resources will intensify and could drive habitat destruction, biodiversity loss, overly stressed fisheries and desertification. Further, in the United States, materials management is associated with an estimated 42 percent of total U.S. greenhouse gas emissions.<sup>7</sup>

By investing in domestic recycling and solid waste infrastructure that builds a circular economy, a system of activities that enables resources to maintain their highest values and designs out waste while being restorative to the environment, the United States would be positioned to find more

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<sup>5</sup> DERA Fourth Report to Congress: <https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf>.

<sup>6</sup> U.N. Environmental International Resource Panel, Global Resources Outlook, 2019, p. 8.

<sup>7</sup> Sustainable Materials Management: The Road Ahead, <https://www.epa.gov/sites/production/files/2015-09/documents/vision2.pdf>.

productive and sustainable ways to extract, use, and manage materials. This will benefit the environment and the economy. According to the U.S. EPA Recycling Economic Information Report, the U.S. recycling industry provides more than 757,000 jobs and \$6.7 billion annually in tax revenues. In addition to these human resources, the materials themselves hold great value, as recent data indicate that materials worth \$9 billion are thrown away each year. The FY 2022 Budget includes \$10.2 million and 43.4 FTE in the Resource Conservation and Recovery Act Waste Minimization and Recycling Program to better support the sustainable management of resources, including managing materials that sustainably promote economic growth and reduce environmental impacts. The Budget also includes a \$10 million Solid Waste Infrastructure for Recycling (SWIFR) pilot grant program to build innovation in the recycling industry. Addressing climate change mitigation through investment in U.S. recycling and solid waste infrastructure is the cornerstone of the pilot program requested in FY 2022.

### ***Tackling the Climate Crisis through Research and Policy***

EPA's climate change research is guided by scientific integrity and rigor that supports optimal policy making and regulatory action. Climate change is a public health and environmental justice crisis that is already impacting air and water quality, as well as posing increasing risks for the future. While all Americans are at risk, some communities and sensitive populations are especially vulnerable to poor air quality and the impacts of climate change, such as low-income communities without the resources to evacuate before a hurricane or bounce back from property loss.

The scientific discoveries made through EPA's research will guide the Agency in developing policy and regulatory action to address the climate crisis. The FY 2022 request provides an additional \$60 million and 30 FTE above the FY 2021 enacted levels, more than doubling EPA's climate research resources. This funding will help assess the consequences of climate change and the vulnerability of communities and ecosystems to its impacts, including wildfires and other extreme events, and identify and evaluate strategies to adapt to and build resilience to these risks. Funding will support work to further characterize disproportionate impacts of climate change and air pollution in communities with environmental justice and equity concerns, identify and evaluate strategies to reduce impacts in those communities, and develop and evaluate innovative multi-pollutant and sector-based approaches to preventing pollution.

In FY 2022, EPA will invest in funding research on energy efficiency and renewable energy in disadvantaged communities and evaluate strategies to bring the benefits of clean modernization in transportation and energy systems to these communities. In coordination with the Department of Energy, EPA will apply \$30 million to the ARPA model of high-risk accelerated research focused on achieving transformational technology investments needed to address climate change. EPA's research will provide insights on climate change adaptation, resilience, and mitigation solutions for communities across the country.

Legal support and analysis is needed for every major Agency action and plays a central role in the interpretation of all statutes--new and existing--under EPA's environmental authorities. When the Agency acts to protect the public and the environment from harmful pollutants, EPA program and regional offices rely on legal advice to ensure they take the most effective and appropriate action. In this way, the legal support programs are essential to advancing the mission. The FY 2022 request



includes an additional \$24.8 million and 37.6 FTE to increase the capacity of EPA's legal advice programs, particularly for work related to climate change and regulatory development.

### ***Tackling the Climate Crisis Together***

Environmental protection is a shared responsibility that crosses international borders, and climate change poses a threat that no one government can solve alone. Only through a collaborative, visible effort with our international counterparts can we make progress as a global society to abate pollution and tackle the climate crisis. On Earth Day 2021, President Biden held a two-day Climate Summit with leaders from the world's largest economies to galvanize efforts to reduce emissions during this critical decade. Together, we must combat the climate crisis with bold, progressive action that combines the full capacity of the federal government with efforts from our partners in every corner of our Nation to achieve our collective climate target of limiting the global average temperature increase to 1.5 degrees Celsius.

To this end, President Biden has ambitiously laid out a path that by 2030 the United States will cut emissions by at least half from 2005 levels. EPA is in a critical position to help demonstrate to our international partners that America is doing its part to reduce global emissions. The FY 2022 request contributes \$9 million in additional funding for EPA's contribution to the international Multilateral Fund (MLF) to support efforts related to the Kigali Amendment to the Montreal Protocol. In addition, the FY 2022 Budget includes \$6 million and 14 FTE to help implement provisions in the bipartisan American Innovation and Manufacturing (AIM) Act, efforts to implement the Kigali Amendment, and to build back staff capacity around efforts to tackle the climate crisis. EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation on climate change. These efforts help fulfill EPA's commitment to Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*.

### **Advancing Environmental Justice**

The communities hardest hit by pollution and climate change are most often communities of color, indigenous communities, rural communities, and communities of lower socioeconomic status. For generations, many of these communities, which also are amongst the most vulnerable, have been overburdened with higher instances of polluted air, water, and land. Neither an individual's skin color nor the wealth of their zip code should determine whether they have clean air to breathe, safe water to drink, or healthy environments for their kids to play in. And yet, the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, have too often not been fully considered with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA is working to change that by centering environmental equity and justice in our mission and incorporating these values into the fabric of our environmental programs.

EPA recognizes the importance of embedding environmental justice principles in all agency programs and implementing Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, and Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. To elevate environmental justice as a top agency priority, EPA proposes to create a new national environmental justice program office, headed by

a Senate-confirmed Assistant Administrator, to coordinate and maximize the benefits of the Agency's programs and activities for underserved communities.

The FY 2022 Budget reimagines how we implement our work by considering environmental justice impacts and benefits across programs. EPA will implement the President's Justice40 Initiative with the goal of delivering 40 percent of the overall benefits of relevant federal investments to disadvantaged communities. The FY 2022 Budget includes more than \$930 million in funding across programs to launch a new Accelerating Environmental and Economic Justice initiative and cement environmental justice as a core feature of EPA's mission.

The Accelerating Environmental and Economic Justice initiative, included in the broader climate change investment of \$1.8 billion, will significantly increase the number of new grant opportunities for community-based organizations, indigenous organizations, states, tribes, local governments, and territorial governments in pursuit of their ambitious environmental justice and climate goals. The Agency's initiative also will strengthen compliance with environmental laws, particularly in environmental justice communities, and revitalize communities by cleaning up Superfund sites and contaminated land. EPA also is looking at developing annual and internal measures to advance key programmatic areas and strategies. Specifically, EPA is currently evaluating its suite of measures and indicators related to environmental justice, including available data and programs where improved data sets are needed, in order to identify and/or develop useful performance measures for environmental justice programs.

### ***Enhance and Expand Environmental Justice Programmatic Efforts***

In FY 2022 the Agency will leverage existing programs while increasing the resources and FTE dedicated to identifying and assisting communities with environmental justice concerns. The Accelerating Environmental and Economic Justice initiative invests \$936 million in new and existing EPA programs that would help create good-paying jobs, clean up pollution, implement the Justice40 initiative, advance racial equity, and secure environmental justice for communities who too often have been left behind, including rural and tribal communities. This includes more than \$100 million to develop and implement a new community air quality monitoring and notification system that will monitor and provide real-time data to the public on environmental pollution. The request includes resources to fulfill the President's commitment to engage meaningfully with overburdened and vulnerable communities during the entire rulemaking process, from pre-proposal through final promulgation and implementation.

The FY 2022 Budget makes historic investments in environmental justice programs to address the disproportionate health impacts of communities overburdened by pollution sources. In total, the FY 2022 request includes an increase of \$287 million and 171 FTE to create new environmental justice programs. These resources will provide new grant opportunities, including: (1) Environmental Justice Community Grants Program, to competitively award grants to non-profit, community-based organizations to reduce the disproportionate health impacts of environmental pollution in communities with environmental justice concerns; (2) Environmental Justice State Grant Program, to establish or support state environmental justice programs; (3) Tribal Environmental Justice Grant Program, to support work to eliminate disproportionately adverse human health or environmental effects on environmental justice communities in Tribal and

Indigenous communities; and (4) a competitive, community-based Participatory Research Grant Program to award competitive grants to higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in communities with environmental justice concerns.

In FY 2022, the EPA Environmental Justice Program will establish an Environmental Justice Training Program to increase the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects. The Program also will establish EPA outreach centers housed in EPA regional offices to connect directly with communities, hold hearings, and support environmental justice efforts at the local level and throughout the country. The Agency's environmental justice program will support the National Environmental Justice Advisory Council (NEJAC) and provide funding and support for the White House Environmental Justice Advisory Council (WHEJAC) to advise the White House Interagency Council on Environmental Justice and Chair of the Council on Environmental Quality (CEQ).

To further inform equitable decision making across the federal government and within EPA, more granular data is needed to effectively target communities in need. The FY 2022 Budget includes an increase of \$5.9 million for EJSCREEN to help the Agency prioritize programmatic work in communities with environmental justice concerns. In addition, the Budget provides resources to support the development of a geospatial Climate and Economic Justice Screening Tool to enable EPA and other federal agencies to focus resources and program design to benefit communities with economic and environmental justice concerns and those most at risk of climate change.

### ***Ensuring Enforcement and Compliance***

Ensuring compliance and enforcement of cornerstone environmental laws is paramount to a fair and just society. In FY 2022, EPA will provide tools and technical assistance to foster the regulated community's compliance with environmental laws. The Agency will hold bad actors accountable for their violations, with a particular focus in communities with multiple pollution sources. In FY 2022, EPA will develop and implement a comprehensive action plan for integrating environmental justice and climate change considerations throughout all aspects of its enforcement and compliance assurance work.

Within EPA's Compliance Monitoring program, \$31.9 million in additional resources will allow the Agency to incorporate environmental justice considerations into all phases of work without displacing other important enforcement and compliance assurance efforts. EPA also will provide targeted oversight and support to state, local, and tribal programs. The Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. The Agency will maintain accessibility to the Integrated Compliance Information System (ICIS) for EPA, states, and tribes and make ICIS data available to the public via the internet-accessible Enforcement and Compliance History Online system (ECHO). As EPA's largest mission-focused data system, ICIS is a critical infrastructure used by the Agency, state, tribal, local and territorial governments, as well as the regulated community, to track compliance with and enforcement of all EPA statutes, which facilitates greater compliance and thus protection of human health and the environment. In FY 2022, EPA requests an additional 6

FTE and \$29.9 million to accelerate its efforts to modernize ICIS and support better integration with the public ECHO database. This modernization will enhance EPA's efforts to address compliance concerns, particularly in disadvantaged communities.

EPA's Civil Enforcement Program is designed to protect human health and the environment by ensuring compliance with the Nation's environmental laws. In FY 2022, EPA requests more than \$26 million in additional resources to develop and implement a comprehensive civil enforcement plan for addressing environmental justice, climate, per and polyfluoroalkyl substances (PFAS), and coal combustion residue (CCR) rule compliance. These new resources would support increasing climate and environmental justice-focused inspections and community outreach, prioritizing climate and environmental justice considerations in case-selection (to emphasize areas where greenhouse gas emissions can be reduced while providing co-benefits in underserved communities), and expanding inclusion of greenhouse gas mitigation and climate resilience remedies and prioritization of environmental justice concerns in case resolutions.

Overburdened and vulnerable communities are most often the victims of environmental crime. EPA's FY 2022 Budget supports the development of a specialized criminal enforcement task force to address environmental justice issues and casework in partnership with the Department of Justice (DOJ). This task force will include Special Agents and criminal justice analysts, as well as witness coordinators to identify and provide services to victims of environmental crimes in communities with environmental justice concerns. The FY 2022 request provides \$8 million and 32 FTE to expand EPA's capacity for criminal enforcement to hold illegal polluters accountable and enforce climate-related regulations, particularly in these vulnerable communities.

### ***Supporting Site Cleanup and Reuse***

In FY 2022, \$882.4 million is requested for the Superfund Remedial program, an investment of an additional \$293 million, which will enable the start of cleanup work at more than 20 National Priority List (NPL) sites with new remedial construction projects currently awaiting funding. This investment also will accelerate cleanup work at more than 15 NPL sites with large, ongoing construction projects, which require a substantial funding allocation over multiple years, and allow for enhanced engagement at lead sites. Cleaning up America's most contaminated land and reducing toxic substances are critical components for the Agency to bolster human health, particularly in underserved communities where many of these sites exist.

Approximately 73 million Americans live within three miles of a Superfund Remedial site, roughly 22 percent of the U.S. population. This includes 23 percent of all children in the U.S. under the age of 5.<sup>8</sup> Recent research shows Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 1.24 miles of a Superfund NPL site where lead is a contaminant of concern.<sup>9</sup> Remediating contaminated land and restoring it to productive use is not only an environmental imperative but presents an economic opportunity as well. A study conducted by researchers at Duke University and the University of Pittsburgh found

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<sup>8</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) site information as of the end of FY2019; and (3) population data from the 2015-2018 American Community Survey.

<sup>9</sup> Details can be found at <https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series>.

that residential property values within three miles of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL.<sup>10</sup>

Investing in brownfields cleanup and redevelopment can revitalize main streets, neighborhoods, and rural communities, increase property values, and create good-paying jobs. To advance this work, the FY 2022 Budget includes an additional investment of \$40 million to build on current work to provide financial and technical assistance to assess, cleanup, and plan reuse at brownfields sites. Since its inception, the EPA Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of April 2021, grants awarded by the program have led to more than 142,000 acres of idle land made ready for productive use and more than 176,800 jobs and \$34.5 billion leveraged.<sup>11</sup> With this increased investment, EPA anticipates leveraging approximately 13,400 jobs and \$2.6 billion in other funding sources.<sup>12</sup>

## **Supporting State, Tribal and Local Partners**

Addressing climate change and advancing environmental justice represent foundational challenges the Agency must tackle to deliver on its mission of protecting human health and the environment. A strong coordinated effort with our state, tribal and local partners will be critical for success. EPA will use all of its tools to support its partners, including providing targeted financial assistance to environmental programs, communicating clearly about the Agency's regulatory agenda, and lending technical support to areas of emerging environmental concern.

### ***Increasing Support for EPA Partners***

The Agency understands the difficulty many states face considering shrinking environmental budgets and rising environmental needs. Our partners rely on EPA assistance through a variety of financial vehicles such as grants, contracts, and low-interest loans to cover the shortfall and ensure that human health and the environment is prioritized in all corners of the Nation. Nearly 50 percent of the FY 2022 Budget request is specifically allocated to EPA's state and tribal partners through the State and Tribal Assistance Grant (STAG) appropriation. The FY 2022 request allocates \$1.242 billion to support our state and tribal partners through categorical grants, which represents a \$142 million increase above the FY 2021 enacted level. \$100 million of this increase is dedicated to the State and Local Air Quality Management and Tribal Air Quality Management programs to assist state governments and tribes in air monitoring, permitting, and pollution reduction efforts, specifically to accelerate immediate on-the-ground efforts to reduce greenhouse gases.

The Agency recognizes the important role federal assistance provides in protecting water bodies of special ecological and economic importance to our Nation. Through EPA's Geographic Water programs, the Agency assists state and multi-state partners and tribes in managing and accelerating the restoration of the ecological health of these water bodies. In total, the FY 2022 request provides an additional \$36.4 million above the FY 2021 enacted level to increase funding for all Geographic

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<sup>10</sup> 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>.

<sup>11</sup> EPA's ACRES database.

<sup>12</sup> 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.

Water programs and accelerate projects that target the most significant environmental problems in these important water bodies and watersheds. In FY 2022, EPA will provide resources to accelerate ecological restoration and sustainable management in the Chesapeake Bay, Columbia River, Gulf of Mexico, the Great Lakes, Lake Champlain, Lake Pontchartrain, Long Island Sound, Northwest Forest Watershed, Puget Sound, San Francisco Bay, South Florida, and Southeast New England. Funding will help monitor and restore these ecological treasures and enable sustainable use for years to come.

### ***Communicating with Partners about EPA's Agenda***

EPA's state, local, territorial, and tribal partners benefit from ongoing engagement and communication about the Agency's regulatory agenda. Successful rulemaking depends on this engagement in order to foster collaboration and stakeholder buy-in and support informed science-based policy decisions. This collaboration is a two-way street in which EPA needs to hear the views of all stakeholders as we work together to protect human health and the environment.

Throughout the FY 2022 request, the Agency provides the necessary resources to perform rule development and regulatory analysis. For example, through the Federal Support for Air Quality Management program, EPA will invest an additional \$17.3 million and 80 FTE to build back staff expertise, regulatory analysis, and capacity to implement climate change programs through the Clean Air Act. In EPA's Drinking Water program, an additional \$11.3 million and 53 FTE are included to support regulatory analysis, development and training, and technical assistance for state, tribal, and local communities in their efforts to ensure safe and affordable drinking water. This increase also supports development and implementation of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule. The Agency will continue to improve the effectiveness and efficiency of regulatory programs for states and tribes, including working to implement Justice40 and advance racial equity and environmental justice for communities that too often have been left behind, including rural and tribal communities. Likewise, the Agency plans to engage with all groups that have a vested interest in rulemakings related to the interpretation of Waters of the United States (WOTUS) in the Clean Water Act. From small farmers to environmental advocacy groups, EPA will engage with all parties and use the best available science to set policy, communicate with our partners, and provide the regulatory clarity they and the public need.

### ***PFAS Technical Assistance to Help Communities***

State, tribal, territorial, and local partners also depend on strong federal leadership to address areas of emerging environmental concern that no one party can solve alone. One area that demands heightened attention and increased focus in the FY 2022 Budget is per- and polyfluoroalkyl substances (PFAS). Partners are looking to EPA for resources, research grants, technical assistance, and regulatory clarity on these so-called "forever chemicals."

As part of the Administration's commitment to addressing PFAS pollution, the FY 2022 request provides a more than a \$10 million increase for PFAS work. A total of \$75 million will accelerate toxicity studies and fund research to inform the regulatory developments of designating PFAS as hazardous substances while setting enforceable limits for PFAS under the SDWA. Additional

funds for technical assistance grants also have been set aside for state and local governments to deal with PFAS contamination in their communities. To provide the technical assistance needed to our partners, we have established a new EPA Council on PFAS composed of senior EPA career officials to strategize the best ways to use the EPA's authorities, expertise, and partnerships to mitigate and reduce PFAS pollution and protect public health and the environment. The Council will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders.

### **Expanding the Capacity of EPA to Fulfill Its Mission**

The FY 2022 Budget serves as a critical inflection point to reverse the trend in recent years of a shrinking EPA workforce. Expanded capacity and growing the Agency is about achieving greater public health and environmental outcomes for the American people. EPA staff are public servants and include the front-line scientists, engineers, analysts, community coordinators, and program managers that implement EPA's mission each and every day. Without increases in full-time equivalent (FTE) and resources across EPA programs, the Agency will struggle to meet the multiple environmental challenges facing the country today and in the future. The FY 2022 Budget supports 15,324 FTEs for EPA, an increase of more than 1,000 compared to the current level of 14,297. Critically, the FY 2022 Budget also includes the payroll to support both existing and new FTE.

Expanding the capacity of EPA enables the Agency's staff to fulfill our mission more efficiently and effectively, leading to improved environmental and human health outcomes. Over the past four years, EPA has lost a significant number of career staff, impacting the Agency's ability to effectively carry out its core duties and functions to protect public health and the environment. The Budget invests in EPA's mission-critical capabilities needed to tackle climate change, bolster state climate programs, advance environmental justice, and prioritize the research and scientific integrity that guide agency efforts. Additionally, to reflect the changes to EPA's work over time, EPA is exploring the possibility of potential adjustments to the Agency's long-standing and complicated budget structure for future years.

Expanded capacity also extends to ensuring that rigorous scientific integrity guides policy and the Agency's regulatory process. Scientific and technological information, data, and evidence are central to the development and iterative improvement of sound policies and to the delivery of effective and equitable programs. Environmental challenges in the 21<sup>st</sup> century are increasingly complex. For example, the interplay between air quality, climate change, and emerging energy options require different thinking and solutions than those used in the past. These solutions require research that transcends disciplinary lines and involve EPA regions and programs working together with state, tribal and local partners, stakeholders, and communities. The FY 2022 request includes an additional \$72.2 million and 113.7 FTE to expand EPA's research programs.

Scientific integrity is imperative not only in the research the Agency conducts, but in the critical work of EPA advisory boards and committees. Going forward, EPA scientific experts will have freedom to provide independent scientific and technological advice and ensure that proper safeguards are instituted against potential conflicts of interest. To this end, the Agency has reset

memberships to the Science Advisory Board (SAB) and the Clean Air Scientific Advisory Committee (CASAC) to ensure the Agency receives the best possible scientific insights to support our work to protect human health and the environment. EPA's advisory committees, operating as catalysts for public participation in policy development, implementation, and decision making, have proven effective in building consensus among the Agency's diverse partners and stakeholders. In line with President Biden's Memorandum on *Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking*,<sup>13</sup> EPA remains committed to ensuring that highly qualified external experts serve on agency committees and that those members and future nominees of EPA advisory committees reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

The FY 2022 Budget provides additional resources to build agency capacity in managing chemical safety and toxic substances. EPA has significant responsibilities under amendments to the Toxic Substances Control Act (TSCA) for ensuring the safety of chemicals in or entering commerce and addressing unreasonable risks to human health or the environment. Chemicals and toxic substances are ubiquitous in our everyday lives and are often released into the environment from their manufacture, processing, use, and disposal. This work is particularly important to protect vulnerable populations, including low-income, minority, and indigenous populations, as well as children, who may be disproportionately affected by, and particularly at risk from, exposure to chemicals.

In FY 2022, the Agency is requesting an additional \$15 million and 87.6 FTE, a 35 percent increase from the FY 2021 enacted FTE level, to meet significant increased responsibilities imposed by the 2016 amendments to TSCA. Emphasis will be placed on quality, adherence to statutory intent and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, data development and information collection, and review of Confidential Business Information (CBI) claims. The increased resources are essential for EPA to effectively build capacity and manage the workload associated with new requirements for chemical risk evaluations and risk management.

Expanding and building the capacity of EPA to handle the changing research, chemical safety, and programmatic needs that will ensure human health and environmental protection for years to come means prioritizing the Agency's support programs through increasingly efficient operations. All EPA employees, whether they work at headquarters, in one of the Agency's 10 regional offices, research labs, or finance centers, play a pivotal role in protecting human health and environment. The Agency has one of the oldest workforces in the federal government, with nearly 30 percent of the workforce eligible to retire today or in one year.<sup>14</sup> The number jumps to over 43 percent of employees eligible to retire in the next five years. To address this potential shortfall and loss of institutional knowledge, the FY 2022 request focuses on immediate action to bolster the EPA workforce and build capacity by facilitating knowledge transfer and planning for the environmental and human health challenges of the future.

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<sup>13</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>.

<sup>14</sup> Information regarding Federal employment statistics can be found through OPM's online data tool, FedScope, located at <http://www.fedscope.opm.gov/>.



One way in which the Agency plans to expand capacity is by attracting and retaining the best employees: experts in the field who are dedicated to public service. The Budget request includes an expansion of authority for the Agency's Title 42 program to recruit world class scientists and scientific leaders for term appointments. The proposal directly supports the Administration's focus on elevating the importance of science across government. The proposal also expands Title 42 hiring authority to EPA's Office of Chemical Safety and Pollution Prevention (OCSPP) to better support chemical safety work at the Agency.

EPA also is building capacity in critical mission support offices to manage the increased portfolio of acquisition contracts and grants proposed in the Budget request. The investment will support agency-wide capacity building, including oversight and tracking of new and increased grant investments, and support EPA's contract activities, including planning, awarding, and administering contracts for the Agency. These investments ensure that EPA can get resources out the door in a timely and accurate manner. Specifically, the Budget invests an additional \$8.5 million and 40 FTE in the Acquisition Management program, \$7.6 million and 21.8 FTE in the Human Resources program, and \$3.3 million and 20 FTE in the Financial Assistance Grants/ Interagency Agreement program. In FY 2022, EPA is committed to ensuring members of underserved communities have equitable access to agency procurement and contracting opportunities.

EPA believes that transparency and independent oversight of EPA work is more important now than ever. The public should know how EPA utilizes its resources to ensure we are making the best use of taxpayer dollars. The FY 2022 request provides an additional \$11 million and 31 FTE to ensure EPA's Office of the Inspector General (OIG) has the necessary resources to ensure independent oversight, promote good governance, and contribute to improved human health and the environment. This increase supports the investigation of cybersecurity intrusions, COVID-19 disinfectant fraud, and the need for robust program oversight in the light of an expanded budget request. Resources also provide for enhanced support for data analytics and program fraud detection. Funding also will assist with oversight of supplemental appropriations EPA received as part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the American Rescue Plan Act of 2021.

The FY 2022 Budget makes investments needed for EPA and its partners to confront the urgent environmental challenges facing the country today, and for all of America to realize the return on these investments. We know that climate change is both a threat, and an opportunity to build a cleaner and healthier future. We know that for far too long the costs of pollution have been borne disproportionately in certain communities. We know that EPA will only succeed if we increase the support the Agency provides its state, tribal, and local partners who implement environmental laws alongside us. And we know that EPA will best deliver on our mission by fully leveraging the talents of a renewed and robust workforce of the 21<sup>st</sup> century. The FY 2022 Budget advances all of these areas and will strengthen EPA's and our partners' collective efforts in achieving the EPA's essential mission.





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**APPROPRIATION SUMMARY**

Budget Authority  
(Dollars in Thousands)

	<u>FY 2020 Actuals</u>	<u>FY 2021 Enacted</u>	<u>FY 2022 Pres Budget</u>
Science & Technology	\$750,441.8	\$729,329.0	\$829,972.0
Environmental Programs & Management	\$2,713,792.7	\$2,761,550.0	\$3,427,494.0
Inspector General	\$43,076.0	\$43,500.0	\$54,347.0
Building and Facilities	\$46,542.0	\$33,752.0	\$62,752.0
Inland Oil Spill Programs	\$19,058.8	\$20,098.0	\$22,409.0
<i>IG Transfer</i>	\$10,498.1	\$11,586.0	\$11,800.0
<i>S&amp;T Transfer</i>	\$24,736.1	\$30,755.0	\$30,985.0
<i>Superfund Program</i>	\$1,245,721.6	\$1,163,470.0	\$1,491,029.0
Hazardous Substance Superfund*	\$1,280,955.8	\$1,205,811.0	\$1,533,814.0
Leaking Underground Storage Tanks	\$95,805.6	\$92,203.0	\$92,376.0
State and Tribal Assistance Grants	\$4,446,153.1	\$4,313,901.0	\$5,130,007.0
Hazardous Waste Electronic Manifest System Fund	\$20,432.0	\$0.0	\$0.0
Water Infrastructure Finance and Innovation Fund	\$40,760.6	\$65,000.0	\$80,108.0
<i>SUB-TOTAL, EPA</i>	<i>\$9,457,018.4</i>	<i>\$9,265,144.0</i>	<i>\$11,233,279.0</i>
Cancellation of Funds	\$0.0	-\$27,991.0	\$0.0
<i>TOTAL, EPA</i>	<i>\$9,457,018.4</i>	<i>\$9,237,153.0</i>	<i>\$11,233,279.0</i>

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

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**APPROPRIATION SUMMARY  
Budget Authority**

	<u>FY 2020 Actuals</u>	<u>FY 2021 Enacted</u>	<u>FY 2022 Pres Budget</u>
Science & Technology	1,962.9	1,987.7	2,136.9
Environmental Programs & Management	8,473.5	8,883.4	9,683.2
Inspector General	213.1	227.5	258.5
Inland Oil Spill Programs	77.3	84.8	84.8
<i>IG Transfer</i>	54.8	42.5	42.5
<i>S&amp;T Transfer</i>	62.5	63.1	63.1
<i>Superfund Program</i>	2,521.2	2,530.9	2,566.1
Hazardous Substance Superfund*	2,638.5	2,636.5	2,671.7
Leaking Underground Storage Tanks	43.0	46.6	46.6
State and Tribal Assistance Grants	10.2	7.0	7.0
Hazardous Waste Electronic Manifest System Fund	9.3	11.0	11.0
Water Infrastructure Finance and Innovation Fund	27.6	28.4	40.0
Rereg. & Exped. Proc. Rev Fund	163.8	135.3	135.3
WCF-Reimbursable	201.7	249.1	249.1
Deepwater Horizon Natural Resource Damage Assessment	4.7	0.0	0.0
Pesticide Registration Fund	72.2	0.0	0.0
UIC Injection Well Permit BLM	2.4	0.0	0.0
<b><i>SUB-TOTAL, EPA</i></b>	<b><i>13,900.2</i></b>	<b><i>14,297.3</i></b>	<b><i>15,324.1</i></b>
<b><i>TOTAL, EPA</i></b>	<b><i>13,900.2</i></b>	<b><i>14,297.3</i></b>	<b><i>15,324.1</i></b>

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





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**APPROPRIATION: Science & Technology  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Science &amp; Technology</b>				
Budget Authority	\$750,441.8	\$729,329.0	\$829,972.0	\$100,643.0
Total Workyears	1,962.9	1,987.7	2,136.9	149.2

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

**Bill Language: Science & 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; hire, maintenance, and operation of aircraft; and other operating expenses in support of research and development, \$829,972,000, to remain available until September 30, 2023.*

**Program Projects in S&T  
(Dollars in Thousands)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Clean Air and Climate				
Clean Air Allowance Trading Programs	\$7,537.7	\$6,793.0	\$8,800.0	\$2,007.0
Climate Protection	\$7,326.8	\$7,895.0	\$9,997.0	\$2,102.0
Federal Support for Air Quality Management	\$8,974.6	\$7,154.0	\$10,222.0	\$3,068.0
Federal Vehicle and Fuels Standards and Certification	\$98,543.9	\$96,783.0	\$110,169.0	\$13,386.0
Subtotal, Clean Air and Climate	\$122,383.0	\$118,625.0	\$139,188.0	\$20,563.0
Indoor Air and Radiation				
Indoor Air: Radon Program	\$39.9	\$157.0	\$157.0	\$0.0
Radiation: Protection	\$1,795.6	\$1,735.0	\$2,340.0	\$605.0
Radiation: Response Preparedness	\$3,402.1	\$3,096.0	\$4,039.0	\$943.0
Reduce Risks from Indoor Air	\$235.5	\$161.0	\$168.0	\$7.0
Subtotal, Indoor Air and Radiation	\$5,473.1	\$5,149.0	\$6,704.0	\$1,555.0

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Enforcement				
Forensics Support	\$13,726.2	\$14,000.0	\$14,114.0	\$114.0
Homeland Security				
Homeland Security: Critical Infrastructure Protection	\$12,926.2	\$10,380.0	\$14,342.0	\$3,962.0
Homeland Security: Preparedness, Response, and Recovery	\$27,021.6	\$24,852.0	\$25,545.0	\$693.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$443.0	\$501.0	\$501.0	\$0.0
Subtotal, Homeland Security	\$40,390.8	\$35,733.0	\$40,388.0	\$4,655.0
IT / Data Management / Security				
IT / Data Management	\$3,473.7	\$3,072.0	\$3,121.0	\$49.0
Operations and Administration				
Facilities Infrastructure and Operations	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$3,109.5	\$2,803.0	\$2,840.0	\$37.0
Pesticides: Protect the Environment from Pesticide Risk	\$1,757.7	\$2,207.0	\$2,230.0	\$23.0
Pesticides: Realize the Value of Pesticide Availability	\$379.9	\$876.0	\$970.0	\$94.0
Subtotal, Pesticides Licensing	\$5,247.1	\$5,886.0	\$6,040.0	\$154.0
Research: Air, Climate and Energy				
Research: Air, Climate and Energy	\$95,350.8	\$95,250.0	\$156,210.0	\$60,960.0
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	\$108,506.9	\$112,250.0	\$116,588.0	\$4,338.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$143,191.3	\$133,000.0	\$137,412.0	\$4,412.0
Research: Chemical Safety for Sustainability				

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Health and Environmental Risk Assessment	\$38,921.5	\$37,482.0	\$41,412.0	\$3,930.0
Research: Chemical Safety for Sustainability				
<i>Endocrine Disruptors</i>	\$19,833.8	\$16,304.0	\$16,851.0	\$547.0
<i>Computational Toxicology</i>	\$23,616.2	\$21,487.0	\$22,229.0	\$742.0
<i>Research: Chemical Safety for Sustainability (other activities)</i>	\$52,257.7	\$51,727.0	\$54,738.0	\$3,011.0
Subtotal, Research: Chemical Safety for Sustainability	\$95,707.7	\$89,518.0	\$93,818.0	\$4,300.0
Subtotal, Research: Chemical Safety for Sustainability	\$134,629.2	\$127,000.0	\$135,230.0	\$8,230.0
Water: Human Health Protection				
Drinking Water Programs	\$4,265.0	\$4,364.0	\$6,444.0	\$2,080.0
Congressional Priorities				
Water Quality Research and Support Grants	\$4,992.0	\$7,500.0	\$0.0	-\$7,500.0
<b>TOTAL S&amp;T</b>	<b>\$750,441.8</b>	<b>\$729,329.0</b>	<b>\$829,972.0</b>	<b>\$100,643.0</b>

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

## **Clean Air**

**Clean Air Allowance Trading Programs**  
Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$15,503.2	\$13,153.0	\$18,138.0	\$4,985.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$7,537.7</i></b>	<b><i>\$6,793.0</i></b>	<b><i>\$8,800.0</i></b>	<b><i>\$2,007.0</i></b>
Total Budget Authority	\$23,040.9	\$19,946.0	\$26,938.0	\$6,992.0
Total Workyears	63.9	63.7	78.7	15.0

**Program Project Description:**

This program is responsible for managing the Clean Air Status and Trends Network (CASTNET), an ambient monitoring network that has been continuously collecting data for more than 30 years. CASTNET serves as the Nation’s primary source for assessing long-term trends in atmospheric sulfur and nitrogen deposition, regional ground-level ozone, and other forms of particulate and gaseous air pollution. CASTNET sites are uniquely situated in remote and high elevation areas within 39 states and seven tribal boundaries. The network provides valuable data to support the ozone National Ambient Air Quality Standards (NAAQS) in many areas not monitored by state, local, and tribal monitoring agencies. Under this program, independent audits and performance evaluations are performed to meet the NAAQS requirements and provide high-quality data. Additionally, CASTNET ozone data are used for exceptional event assessments of international transport, background concentrations, wildfire events, and stratospheric ozone intrusions often leading to ozone exceedances. States are required to provide exceptional event demonstrations in order to exclude monitoring data from the NAAQS design values. Used in conjunction with the National Atmospheric Deposition Program’s wet deposition networks and other ambient air quality networks, CASTNET’s data products also are used to determine the effectiveness of national and regional emission control programs, validate satellite measurements, and provide near-real time data to support AirNow and Air Quality Index (AQI) reporting tools.

The CASTNET Program provides spatial and temporal trends in ambient air quality and is the largest network in the world reporting atmospheric deposition used to assess ecological impacts in sensitive ecosystems (e.g., national parks, freshwater bodies, and subalpine regions). The sites also fill in critical data gaps from urban networks that lack information on air quality issues affecting downwind population centers, such as oil and gas, wildfire smoke, and wood smoke in mountain valleys. Rural CASTNET sites are intentionally located away from stationary emission sources but are often located in or near areas with low income or minority communities. Maintaining the CASTNET monitoring network continues to be critical for assessing the environmental benefits realized from regional emission reduction programs (thereby reducing secondary pollutant formation of ozone and fine particles), as well as aiding states in exceptional events determinations. In 2020, impacts of the COVID-19 pandemic were greater in areas with poor air quality. EPA used CASTNET data to report local AQI values and assess changes in regional air quality as a result of stay-at-home orders.

EPA works closely with tribal governments to build tribal air monitoring capacity through partnerships with the CASTNET Program. Since 2002, CASTNET has added seven sites on tribal lands, including two new sites in the northwest U.S. By expanding tribal partnerships, CASTNET can fill important spatial gaps in ambient and deposition monitoring while simultaneously integrating sites operated by tribes into a national program. Tribes will benefit from dedicated tribal monitoring sites that build tribal technical skills, provide near-real time air quality data to the community, and provide environmental data that help tribes assess the impacts of air pollution on cultural or natural resources on tribal lands.

To support modernization efforts, CASTNET will use the existing network infrastructure to fill in gaps in continuous measurements necessary to evaluate changes in atmospheric chemistry and global climate impacts on air quality and deposition. The Program is well-situated to measure background or regional levels of air toxics (e.g., ethylene oxide) and persistent chemicals of concern (e.g., PFAS compounds). Measuring speciated reactive nitrogen will provide valuable data that states can use to determine which species are driving PM formation and make more informed decisions on emission control strategies. Furthermore, continuing to expand capacity while modernizing the CASTNET infrastructure ensures data can be made available in near-real time to address short-term changes in air quality resulting from meteorological conditions such as temperature inversions or natural disasters such as wildfires.

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

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries. The programs designed to control SO<sub>2</sub> and NO<sub>x</sub> include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), and the CSAPR Update. The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO<sub>2</sub>, hazardous air pollutants, and greenhouse gases.

Both the CSAPR and the CSAPR Update Rule require 27 states in the eastern U.S. to limit their statewide emissions of SO<sub>2</sub> and/or NO<sub>x</sub> in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states. They set emissions limitations that are defined in terms of maximum statewide "budgets" for emissions of annual SO<sub>2</sub>, annual NO<sub>x</sub>, and/or ozone-season NO<sub>x</sub> from each state's large electric generating units. EPA is supporting state efforts with respect to best available retrofit technology, reasonable progress, and



interstate visibility transport, as those obligations relate to SO<sub>2</sub> emissions from electricity generating units.<sup>15</sup>

### **FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of the EPA.

In FY 2022, EPA will:

- Continue to support 64 CASTNET, 31 NADP National Trends Network (NTN), 71 NADP Ammonia Monitoring Network (AMoN), and LTM monitoring sites that provide long-term atmospheric concentrations, deposition, and surface water quality data. Data are used to analyze and assess air quality, trends in sulfur and nitrogen deposition, critical loads, and other indicators of ecosystem health.
- Provide support for independent audits and required performance evaluations to assure high-quality data to support the NAAQS and environmental assessments.
- Continue progress toward increasing monitoring capacity by working to identify new tribal partners that would benefit from joining a national air monitoring program.
- Invest in technology and small businesses by replacing aging equipment, repairing monitoring shelters more than 30 years old that have deteriorated due to extreme weather and deploying new equipment and sites in rural, often low-income/minority areas. The CASTNET contractor allocates 55 percent of their subcontract dollars to small businesses responsible for performing calibrations, managing site operators, and data analyses.
- Upgrade aging CASTNET equipment. To improve overall data quality EPA will replace continuous ozone analyzers, and procure new gas analyzers (e.g., CO, VOCs, speciated nitrogen) that will support NAAQS assessments, emission control strategies, and regulatory actions in the future. Analyzers will be integrated into the existing automated calibration systems to improve network resiliency.
- Utilize existing infrastructure to expand network capacity by adding measurement systems for background and regional concentrations of air toxics and emerging pollutants of concern. Data will complement urban measurements and provide valuable information on atmospheric pathways and chemical transformations that will impact health risks.
- Modernize the data reporting tools and visualizations to improve user experiences and data access, particularly during emergencies (e.g., COVID-19 pandemic). Strengthening back-end and front-end data management platforms will improve system reliability and allows state and local agencies to quickly make critical decisions. Providing real-time air quality data during such events is valuable for informing vulnerable populations about health risks.

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<sup>15</sup> Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.

- Assure the continuation of ongoing SO<sub>2</sub> and NO<sub>x</sub> 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.<sup>16</sup>
- Ensure accurate and consistent results for the Clean Air Allowance Trading Programs. Continue work on performance specifications and investigating monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting.
- Work with states to implement emission reduction programs to comply with CAA Section 110(a)(2)(D)(i)(I) requirements, including conducting environmental justice analyses to consider the distributional impacts of emissions on overburdened communities.<sup>17</sup>

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2,007.0) This program change invests in technology updates such as replacing aging equipment, repairing monitoring shelters that have deteriorated over the past 30 years due to extreme weather, deploying new equipment and sites in rural, often low-income/minority areas, and modernizing data reporting tools critical during emergencies and emerging needs (e.g., COVID-19 pandemic, PFAS).

**Statutory Authority:**

Clean Air Act.

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<sup>2</sup> Clean Air Act §§ 110(a)(2)(D) and 401.

<sup>17</sup> For more information on program performance, please see: <https://www.epa.gov/airmarkets/progress>.

**Climate Protection**

Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$103,054.5	\$97,000.0	\$103,689.0	\$6,689.0
<b>Science &amp; Technology</b>	<b>\$7,326.8</b>	<b>\$7,895.0</b>	<b>\$9,997.0</b>	<b>\$2,102.0</b>
Total Budget Authority	\$110,381.3	\$104,895.0	\$113,686.0	\$8,791.0
Total Workyears	205.1	214.1	227.9	13.8

**Program Project Description:**

The Climate 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 2022 Activities and Performance Plan:**

Work in this program directly supports: Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*; and Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. Resources under this program will support implementation and compliance activities associated with EPA’s GHG and NHTSA’s fuel economy standards for light-duty and heavy-duty vehicles and engines. Resources will support the following activities:

Certification and Compliance

Implementation of the GHG emission standards for light-duty and heavy-duty vehicles and engines has significantly increased EPA’s certification and compliance responsibilities to ensure the programs achieve their climate goals. These GHG emission standards are not only resulting in a changing fleet of vehicles but also have introduced numerous innovative features into the vehicle certification process that provide greater flexibility for manufacturers in how they comply with the standards. These features include new and more comprehensive trading programs, credits for off-cycle emission reductions, and new federal test procedures. In FY 2022, EPA will be implementing a substantially expanded “Phase 2” of the heavy-duty vehicle and engine GHG program. This implementation requires significant expansions of EPA’s information technology systems, which provide an efficient means for manufacturers to apply for and receive certificates of conformity, to reflect the revised compliance and certification requirements of the new heavy-duty GHG standards.

### Vehicle and Engine Testing Services

Since FY 2012, EPA's National Vehicle & Fuel Emissions Laboratory (NVFEL) has invested significant resources to maintain critical vehicle and engine testing equipment and capabilities that were upgraded in the 2000's to implement new standards for fuel, vehicle, and engine emissions. This includes updates to its four-wheel drive dynamometers and analytical systems needed to perform regulation development and certification testing of light-duty, medium-duty, and heavy-duty vehicles, including battery electric and hybrid electric technologies. NVFEL also has led the development and implementation of new test methods for accurately measuring the efficiency and range of electrified vehicles and is developing new methods for gathering in-use fuel efficiency data from vehicles tested on the road.

NVFEL is investing in expanded electric vehicle charging infrastructure in the laboratory to support anticipated future test requirements for light-duty and heavy-duty vehicles and is preparing for testing of hydrogen fuel cell technologies. NVFEL's ongoing facility modernization has been essential to the implementation of requirements for EPA's Phase 2 GHG regulations for heavy-duty and medium-duty vehicles. Importantly, it also has enabled greater production of scientific data on new and emerging vehicle and engine technologies, leading to the development of more advanced computer models to support EPA's rulemaking activities. Future equipment modernization is needed to sustain a level playing field between foreign and domestic manufacturers, revealing instances of non-compliance attributable to design or defect, and can lead to equal opportunities for manufacturers to benefit from developing innovative solutions to emissions challenges.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$68.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,034.0 / +2.3 FTE) This program change increases support for the National Vehicle and Fuel Emissions Laboratory compliance/certification work and mobile source vehicle emissions analysis. Additional resources at the lab support restoring capacity to test and certify engines, fuels, and vehicles to ensure compliance with regulatory standards, and to generate emissions data to support regulatory development work essential to tackling the climate change crisis. This investment includes \$380.0 thousand in payroll costs.

### **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 and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$131,855.1	\$138,020.0	\$257,808.0	\$119,788.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$8,974.6</i></b>	<b><i>\$7,154.0</i></b>	<b><i>\$10,222.0</i></b>	<b><i>\$3,068.0</i></b>
Total Budget Authority	\$140,829.7	\$145,174.0	\$268,030.0	\$122,856.0
Total Workyears	824.6	843.0	923.0	80.0

**Program Project Description:**

Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management Program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, attaining, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The Program also supports development and provision of information, training, and tools to assist state, tribal, and local agencies, as well as communities, to reduce air toxics emissions and risks specific to their local areas. In addition, the Program supports activities related to the Clean Air Act (CAA) stationary source residual risk and technology review program. EPA is required to assess the level of risk remaining after promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP) that are based on Maximum Available Control Technology (MACT) within eight years of that promulgation. In addition, the Agency is required to review all NESHAP at least every eight years to determine if revisions are needed to reflect developments in practices, processes, and control technologies.

**FY 2022 Activities and Performance Plan:**

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

One of EPA’s priorities is to fulfill its statutory and court-ordered obligations. In FY 2022, EPA will continue to conduct the periodically required “technology reviews” of NESHAP and conduct required risk assessments for MACT-based NESHAP. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Program will prioritize

work with an emphasis on meeting court-ordered deadlines, and also incorporate environmental justice considerations as part of the decision-making process. EPA will continue to provide information and assistance to states and communities through documents, websites, webinars, and training sessions on tools to help them provide input to environmental justice assessments that can inform risk reduction strategies for air toxics. EPA will continue to communicate effectively to, and collaborate with, environmental justice communities to address air toxics concerns. EPA will continue its multi-pollutant air quality management work with state and local areas, factoring environmental justice into prioritization efforts, including providing tools to support state, tribal and local governments in strategy development. EPA will continue to look at all pollutants in an industrial sector and identify ways to take advantage of the co-benefits of pollution control. The focus of these efforts is to address an individual sector's emissions comprehensively and to prioritize regulatory efforts to address the sources and pollutants of greatest concern to overburdened communities. In developing sector and multi-pollutant approaches, EPA is building innovative solutions that address the differing and cumulative nature of the multiple pollutants and associated industrial sectors.

EPA works with other internal and external stakeholders on improving ambient air monitoring networks and measurement techniques to fill data gaps and to better estimate population exposure to criteria and toxic air pollutants. To ensure data quality, EPA will continue to implement and manage independent quality assurance programs for national monitoring networks as well as for federal and commercial laboratories that produce ambient air monitoring data.

In FY 2022, EPA will work with partners to continue improving emissions factors and inventories, including the National Emissions Inventory. This effort includes gathering improved activity data from emissions monitoring and using geographic information systems and satellite remote sensing systems, where possible, for key point, area, mobile, and fugitive sources, and global emission events.

### **Performance Measure Targets:**

Work under this program supports performance results in the Federal Support for Air Quality Management program under the EPM appropriation.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$463.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,605.0 / +11.0 FTE) This program change increases support for the development of science, technology, and methodologies to better implement the Clean Air Act, including enhancing risk assessment capabilities to better identify and determine impacts on communities, communicating and collaborating with environmental justice communities to address air toxics concerns, and improving ambient air monitoring networks and measurement techniques to fill data gaps to better estimate population exposure to criteria and toxic air pollutants. This investment includes \$2,161.0 thousand in payroll costs.

**Statutory Authority:**

Clean Air Act.

## Federal Vehicle and Fuels Standards and Certification

Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Science &amp; Technology</i></b>	<b><i>\$98,543.9</i></b>	<b><i>\$96,783.0</i></b>	<b><i>\$110,169.0</i></b>	<b><i>\$13,386.0</i></b>
Total Budget Authority	\$98,543.9	\$96,783.0	\$110,169.0	\$13,386.0
Total Workyears	311.1	308.5	313.5	5.0

### **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. The Program operates test cells that simultaneously measure criteria pollutants and greenhouse gas (GHG) emissions, reviews certification applications for light-duty vehicles and heavy-duty engines to approve applications for criteria pollutant and GHG emission standards and examines potential violations.

### 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, GHG, and fuel economy standards. The NVFEL conducts vehicle and engine emission tests as part of pre-production tests, certification audits, in-use assessments, and recall programs to ensure compliance with mobile source programs. The NVFEL also produces critical test data on new and emerging vehicle and engine technologies to support the development of future greenhouse gas and criteria pollutant regulations. Through cooperative partnerships and committee involvement, the lab leads the development and implementation of test methods and procedures for vehicles, engines, and fuels to ensure consistent data quality among manufacturers' labs, measure fuel efficiency, and verify compliance of electrified and conventional vehicles with EPA standards.

### Renewable Fuel Standard (RFS)

The RFS Program 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.



### Supporting 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 criteria pollutant and air toxics emissions and risks specific to their local areas. Reductions in emissions of mobile source air pollution, such as components of diesel exhaust, are achieved through: technical assistance of Clean Air Act mobile source programs in nonattainment and maintenance areas for EPA's national ambient air quality standards (NAAQS); establishing national emissions standards for vehicles, equipment, and fuels, research of mobile source health impacts and mitigation options; and partnership approaches working with state, local, and tribal governments, as well as a variety of non-governmental stakeholder groups.

### Prioritizing Environmental Justice

In response to the Administration's priorities and goals, EPA's mobile source programs are developed and implemented to ensure environmental justice and equity. This includes: 1) outreach and inclusion throughout the regulatory development process; 2) analysis of current conditions to understand economic inequities potentially related to our regulatory policies – as well as disparities in exposure to mobile source air pollution experienced by minorities, low-income populations, and tribal communities; 3) analysis of the equity and air quality improvements from our regulatory actions and voluntary programs; 4) technical assistance to state and local governments to reduce criteria pollutant and other emissions through regulatory and non-regulatory strategies; and 5) exploration of non-regulatory mitigation measures to further target improvements in air quality for those disproportionately exposed to mobile sources of air pollution.

### **FY 2022 Activities and Performance Plan:**

Work in this program directly supports the implementation of Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*; and Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*.

### Federal Vehicle and Fuels Standards and Certification Program

In FY 2022, 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 and expects to increase onroad measurements of in-use vehicle emissions. EPA anticipates reviewing and approving about 4,700 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. Demand for EPA's certification services has increased significantly, due in part to the addition of exhaust and fuel evaporative emissions certification requirements for marine, other nonroad, and small spark-ignited engines. Accordingly, NVFEL has expanded its compliance testing capabilities in each of these areas.

EPA utilizes in-use emissions data provided by light-duty vehicle manufacturers to measure compliance and determine if any follow-up evaluation or testing is necessary. Since 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 2,000 test results from more than 6,000 vehicles annually. EPA reviews the data and determines if there are any specific vehicles, models, or manufacturers that are failing emissions standards in-use. The Agency will use this information submitted by light-duty manufacturers, together with emissions data collected at NVFEL, to determine if there are vehicle models which should be recalled and repaired to address excess in-use emissions and 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.

#### Emission Standards for New Motor Vehicles

In FY 2022, EPA will take action to tackle climate change per the Presidential executive orders, by focusing on the transportation sector's largest contributors to GHG emissions: light-duty vehicles (LDVs) and heavy-duty vehicles (HDVs).

EPA is revising the light-duty vehicle GHG standards established under the previous Administration in April 2020 (the Safer Affordable Fuel Efficient Vehicles Rule), and plans to issue a proposed rule setting revised standards through model year (MY) 2026 by July 2021 and a final rule by the end of December 2021. Separately, EPA is undertaking a review of the prior Administration's withdrawal of the 2013 waiver of federal preemption given to California for its GHG standards and Zero Emission Vehicle mandate for light-duty vehicles. This review could lead to rescinding this withdrawal and a reinstatement of California's regulatory program.

The near-term rule will serve as a stepping-off point for longer-term standards. Under Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*, the President described the urgency of the global climate crisis and encouraged a whole of government approach to tackling it. One of EPA's actions under this EO will be to initiate a rulemaking to set strong standards for LDVs post-2026 that provide an incentive for transportation electrification. Many automakers have recently announced ambitious plans for electrifying their new LDV fleets in the 2030 to 2040 timeframe. EPA's standards will take into consideration these industry commitments.

In FY 2022, EPA also will take action to reduce GHG emissions from highway HDVs, the second-largest source of transportation GHG emissions. EPA will develop the next round of criteria and GHG emission standards for highway HDVs. The GHG elements of this multipollutant effort will build upon the final step of the "Phase 2" HD GHG standards that go into effect in CY 2027, and will recognize the impact that electrification of vehicles in this sector will have on future GHG standards for CY 2030 and beyond. One key focus for the GHG elements of this effort will be the shift from HDVs powered by internal combustion engines to those powered by zero emission battery or fuel-cell technologies. Several major truck manufacturers have announced their intention of electrify most of their HDVs in the 2035 to 2040 timeframe. EPA's future GHG standards for HDVs will build upon these industry commitments.

EPA will need to invest significant resources to address a myriad of new technical challenges to support these two sets of long-term rulemakings, which will include added LDV and HDV testing

and modeling capabilities at NVFEL. Key to this technical work is to understand the cost, feasibility, and infrastructure impacts of electrifying the broad range of products in the LDV and HDV sectors.

#### Fuel Economy Labeling Requirements

In FY 2022, 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, found inaccurate fuel economy labels on more than a million vehicles from several well-known manufacturers. While EPA temporarily suspended its coast-down testing due to the COVID-19 pandemic, the Agency expects to resume this testing when public health guidance allows it.

#### Tier 3 Standards

In FY 2022, EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers’ fleets for vehicle MY 2022 and MY 2023. 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 continue to maintain its critical laboratory equipment and testing resources to ensure that new cars and trucks are in compliance with the Tier 3 emissions standards.

#### Marine and Aircraft Emission Reduction Measures

EPA will continue working with the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) on programs to control pollutant emissions from marine and aircraft engines, respectively. EPA is supporting the State Department and Coast Guard on technical issues related to establishing measures to achieve GHG targets established at IMO. In FY 2022, EPA expects to transition from short-term to more ambitious medium-term measures. At ICAO, EPA has the opportunity to influence the emissions work to be performed over the next 3-year cycle, which will be decided in early FY 2022. Additionally, EPA is developing a domestic rule for aircraft engine PM standards, expected to be finalized in FY 2022.

In addition to the international efforts for aviation, EPA is continuing its work to address lead in aviation gasoline. In coordination with the Federal Aviation Administration (FAA) and working with airports, local air agencies, and communities, EPA is evaluating potential exposures to lead from the use of leaded aviation gasoline in piston-engine aircraft as well as potential mitigation measures.

#### Emissions Modeling

The Motor Vehicle Emission Simulator (MOVES) is the Agency’s emission modeling system that estimates emissions for onroad and nonroad sources at the national, county, and project levels for criteria air pollutants, GHGs, and air toxics. In FY 2022, MOVES3, the most recently released version of EPA’s model, will support the Agency’s emission control programs, as well as provide critical support to states in their determination of program needs, including the development of SIPs, to meet the NAAQS. The Agency also will support users on any release of a new model version based on the best available data and science.

### National Vehicle and Fuel Emissions Laboratory

EPA is pursuing an infrastructure upgrade project for the NVFEL. The Agency is evaluating an Energy Savings Performance Contract (ESPC), a private/public partnership contract vehicle run through the Department of Energy. ESPCs use the facilities' energy and operational savings to pay for most of the contract costs. EPA anticipates signing the proposed ESPC in FY 2022 with potential implementation costs in excess of \$30 million.

In FY 2022, the mechanical, electrical, control, and building management systems at NVFEL will be at or beyond the end of useful life with the completion of the current, 25-year, ESPC. NVFEL provides all laboratory testing and support functions necessary for the Agency to certify that all vehicles, engines, and fuels sold in the United States are in compliance with all U.S. emission standards, representing close to 5,000 certificates issued on an annual basis. Additional resources are critical to support the ability of NVFEL to carry-out its mission-critical work of certifying vehicle compliance. Ensuring industry's compliance is a priority goal for EPA and an essential safeguard that a level playing field exists for manufacturers of vehicles and engines introduced into commerce in the United States.

### Renewable Fuel Standards

A large portion of EPA's efforts on fuels will be centered on the implementation of the RFS program. In the statute, Congress established renewable fuel volume targets through FY 2022, leaving it to the Agency to establish the volumes for FY 2023 and beyond. By the end of FY 2022, EPA will issue a rulemaking to establish these volumes. In addition, EPA will continue the efforts associated with the ongoing implementation of the program. These include: 1) revising and improving the RFS regulations to improve its operation; 2) reviewing and approving the use of new biofuels and/or their feedstocks; 3) registering new facilities to enable them to generate RINs (the credits under the Program); 4) operating and upgrading the electronic moderated transaction system (EMTS) to provide oversight and verify compliance with the RFS Program; 5) ensuring the integrity of the RFS Program through enforcement actions against those using the program for fraudulent gain; and 6) supporting the Department of Justice in defending the Agency's implementation of the RFS Program in the numerous challenges in court.

In addition to the RFS Program, EPA will continue to implement its existing gasoline and diesel fuel quality standards and obligations under the Clean Air Act. This includes many of the same compliance and enforcement oversight activities mentioned above for the RFS. In addition, in late 2020 EPA finalized a fuel regulation streamlining rule that it will continue to implement in 2022. Finally, in 2022 EPA will continue its ongoing research into new opportunities to improve and/or protect fuel quality in ways that can reduce air pollution and improve public health and welfare.

EPA will continue to operate and maintain the credit trading systems under the RFS. EISA expanded the renewable fuels provisions of EPAct and requires additional studies in various areas of renewable fuel use. 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 2022, 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 2022, EPA will continue to implement its Fuel and Fuel Additive Registration program. The Agency will prioritize its review and decisions for Part 79 registrations.

In FY 2022, EPA will implement a rulemaking that streamlines and updates EPA's existing gasoline, diesel, and other fuels regulations to improve overall compliance assurance and maintain environmental performance, while reducing compliance burdens for industry, as well as EPA. This rule streamlines the existing fuels regulations by deleting expired provisions, eliminating redundant compliance provisions, removing unnecessary and out-of-date requirements, and replacing them with a single set of provisions that will apply across all gasoline, diesel, and other fuels programs under the current regulations. While the rule substantially reduced the overall volume of regulations, as with any regulatory change, implementing the new provisions will require substantial outreach and oversight by EPA to ensure regulated parties meet the new requirements, and will further necessitate investment in NVFEL's role as the fuels program reference standard for all regulated parties.

#### Supporting State and Local Governments

In FY 2022, EPA will continue to provide state and local governments with assistance in developing SIPs and 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, in partnership with the Department of Transportation, EPA will ensure national consistency in how transportation conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in SIPs, for use in conformity determinations.

EPA will continue to provide assistance to state and local transportation and air quality agencies working on PM<sub>2.5</sub> and PM<sub>10</sub> hotspot analyses. This will help ensure the latest available information is used, is nationally consistent, and protects public health in local communities - including minority and low-income communities - near new or expanded highway and freight terminal projects with significant increases in diesel truck traffic. In addition, EPA will continue to support states with respect to Clean Air Act-required 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 almost 30 states with EPA technical and programmatic guidance. EPA also will continue to provide technical assistance to certain states considering changes or removal of low Reid Vapor Pressure (RVP) fuel programs.

### Prioritizing Environmental Justice

In FY 2022, EPA will continue to work with a broad range of stakeholders - including communities with environmental justice concerns - to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and other goods movement facilities) to limit emissions from older, pre-2007 diesel engines not subject to stringent emissions standards. Millions of people in the U.S. currently live and work near ports and can be exposed to air pollution associated with emissions from diesel engines at ports, including particulate matter, nitrogen oxides, ozone, and air toxics.<sup>18</sup> The near-port communities that bear the brunt of air pollution from these diesel engines are often comprised of low-income populations and people of color. EPA will focus its efforts on reducing mobile source emissions in and around ports through EPA's Ports Initiative.<sup>19</sup> 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.

### **Performance Measure Targets:**

<b>(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.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	4,700	4,700

EPA is currently evaluating its suite of measures and indicators related to environmental justice and climate change, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice and Climate Change Programs. Measures are under development in this program to address environmental justice and climate change.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2,918.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$152.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.
- (+\$10,316.0 / +5.0 FTE) This program change increases support program activities to address the climate crisis, including the development of analytical methods and analyses to support climate protection, specifically regulations to control greenhouse gas emissions from cars and trucks. This investment includes \$930.0 thousand in payroll costs.

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<sup>18</sup> For more information, please see the DERA Fourth Report to Congress, July 2019, which may be found at: <https://www.epa.gov/cleandiesel/clean-diesel-reports-congress>.

<sup>19</sup> For more information, please visit <https://www.epa.gov/ports-initiative>.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$2,680.4	\$3,136.0	\$3,167.0	\$31.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$39.9</i></b>	<b><i>\$157.0</i></b>	<b><i>\$157.0</i></b>	<b><i>\$0.0</i></b>
Total Budget Authority	\$2,720.3	\$3,293.0	\$3,324.0	\$31.0
Total Workyears	8.5	9.0	9.0	0.0

**Program Project Description:**

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions 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, provides technical assistance to States, industry and the public, advises the public of steps they can take to reduce exposure and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year.<sup>20</sup> EPA’s non-regulatory Indoor Air: Radon Program promotes actions to reduce the public’s health risk from indoor radon. EPA and the Surgeon General recommend that people conduct a simple home radon test and, if levels above the EPA’s guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many are still in need of mitigation. This voluntary program promotes partnerships between national organizations, the private sector, and more than 50 state, local, and tribal governmental programs to reduce radon risk.

This program, combined with the Indoor Air: Radon EPM Program, supports the EPA Radon Reference and Intercomparison Program (ERRIP) of the National Air and Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama. The ERRIP is the only federal National Institute of Standards and Technology (NIST) traceable primary radon reference and calibration program accessible to the U.S. radon industry and is a critical element of the framework for promoting the availability of reliable, quality radon services for the public.

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<sup>20</sup> For additional information, please see: <https://www.epa.gov/radon>.

**FY 2022 Activities and Performance Plan:**

EPA will provide radon reference intercomparison samples to secondary radon chambers operating in North America. EPA will update and modernize program equipment and perform required QA/QC on program analytical process and procedures.

**Performance Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

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

**Radiation: Protection**

Program Area: Indoor Air and Radiation

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$8,912.4	\$7,661.0	\$10,342.0	\$2,681.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$1,795.6</i></b>	<b><i>\$1,735.0</i></b>	<b><i>\$2,340.0</i></b>	<b><i>\$605.0</i></b>
Hazardous Substance Superfund	\$2,323.3	\$1,985.0	\$2,612.0	\$627.0
Total Budget Authority	\$13,031.3	\$11,381.0	\$15,294.0	\$3,913.0
Total Workyears	56.4	53.8	66.7	12.9

**Program Project Description:**

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

**FY 2022 Activities and Performance Plan:**

In FY 2022, 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 essential training and direct site assistance, including field surveys and monitoring, laboratory analyses, health and safety, and risk assessment support at sites with actual or suspected radioactive contamination.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$33.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$572.0 / +2.2 FTE) This program change will address critical gaps in EPA's radiological protection capacity including the ability to provide ongoing site characterization and analytical support for site assessment activities, remediation technologies, and measurement and information systems. This investment includes \$372.0 thousand in payroll costs.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$2,616.2	\$2,404.0	\$2,908.0	\$504.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$3,402.1</i></b>	<b><i>\$3,096.0</i></b>	<b><i>\$4,039.0</i></b>	<b><i>\$943.0</i></b>
Total Budget Authority	\$6,018.3	\$5,500.0	\$6,947.0	\$1,447.0
Total Workyears	34.9	33.3	41.4	8.1

**Program Project Description:**

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

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA’s RERT will provide critical support for federal radiological emergency response and recovery operations under the National Response Framework and the National Oil and Hazardous Substances Pollution Contingency Plan. When necessary, EPA’s RERT will complement routine operations (e.g., on-site technical support/consultation, fixed laboratory, and mobile laboratory analyses) and provide for the rapid collection of field measurements/samples and accurate radionuclide analyses of environmental samples.<sup>21</sup>

In FY 2022, NAREL and NCRFO will build capacity in core levels of readiness for radiological emergency responses; participate in critical emergency exercises; and respond, as required, to radiological incidents. NAREL and NCRFO will prioritize rapid deployment capabilities to ensure that field teams and laboratory personnel are ready to provide scientific data, field measurement capabilities, analyses, and updated analytical techniques for radiation emergency response programs across the Agency.

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<sup>21</sup> For additional information, please visit: <https://www.epa.gov/radiation/radiological-emergency-response>.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$69.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$100.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.
- (+\$774.0 / +5.0 FTE) This program change is an increase in support activities for preparedness work, including basic laboratory analytic functions. This investment includes \$744.0 thousand in payroll costs.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$10,934.8	\$11,750.0	\$13,837.0	\$2,087.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$235.5</i></b>	<b><i>\$161.0</i></b>	<b><i>\$168.0</i></b>	<b><i>\$7.0</i></b>
Total Budget Authority	\$11,170.3	\$11,911.0	\$14,005.0	\$2,094.0
Total Workyears	35.2	37.2	47.2	10.0

**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. Poor indoor air quality represents one of the largest risks in EPA’s portfolio.<sup>22</sup> EPA uses a range of strategies, including partnerships with non-governmental, professional, federal, state and local organizations, to provide information, guidance and technical assistance to equip industry, the health care community, the residential, school and commercial building sectors, and the general public to take action to reduce health risks from poor indoor air quality in homes, schools, and other buildings. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

Tribes have identified indoor air quality as a high priority and often bear disproportionately high impacts from poor indoor air quality. For example, Native Americans and Alaska Natives are disproportionately exposed to increased indoor pollutant concentration and suffer from asthma-related health outcomes due to housing conditions.

**FY 2022 Activities and Performance Plan:**

Under this program, EPA will maintain indoor air monitoring and assessment equipment, conduct field measurements and assessments, and provide technical support and guidance for indoor air quality remediations, with a primary focus on assistance to tribal communities. In addition, EPA will conduct training and capacity building for tribal air quality professionals on indoor air assessments and field measurement technology and practices, including radon.

**Performance Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

<sup>22</sup> For additional information, please see: <https://www.epa.gov/iaq>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$7.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

**Statutory Authority:**

Title IV SARA; Title III Toxic Substances Control Act; Clean Air Act.



## **Enforcement**

**Forensics Support**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Science &amp; Technology</i></b>	<b><i>\$13,726.2</i></b>	<b><i>\$14,000.0</i></b>	<b><i>\$14,114.0</i></b>	<b><i>\$114.0</i></b>
Hazardous Substance Superfund	\$1,257.6	\$1,145.0	\$1,164.0	\$19.0
Total Budget Authority	\$14,983.8	\$15,145.0	\$15,278.0	\$133.0
Total Workyears	57.3	68.9	68.9	0.0

**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 analysis 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.<sup>23</sup> The NEIC maintains a sophisticated chemistry and physical science laboratory and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA’s Criminal Enforcement Program to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the Agency’s Civil Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA’s criminal and civil enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the Administration’s priorities. The Forensics Support Program provides expert scientific and technical support for EPA’s criminal and civil enforcement efforts. EPA’s FY 2022 budget proposal provides analytical and scientific support for environmental forensics to ensure compliance with environmental laws, especially in underserved communities.

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<sup>23</sup> 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](http://www.nap.edu/catalog.php?record_id=12589).

Effective enforcement relies on the best available science. In FY 2022, NEIC will support the President’s directive to “listen to science - and act. We must strengthen our clean air and water protections. We must hold polluters accountable for their actions. We must deliver environmental justice in communities all across America” (EO 14008, sec. 201).<sup>24</sup> To achieve these goals, the Agency will employ NEIC’s environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionately affected by pollution and environmental crime, and to target those areas more effectively.

In FY 2022, NEIC also will continue to streamline its forensics work, and identify enhancements to the Agency’s sampling and analytical methods, using existing and emerging technology. The NEIC also will build on its previous progress to maximize the efficiency and effectiveness of its operations, reduce the time for completion of civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. The results of these efforts will inform EPA’s work in FY 2022 and beyond.

The NEIC will seek to grow its support of EPA enforcement and compliance assurance programs. During FY 2019 and FY 2020, the NEIC accepted over 220 requests from all 10 EPA regions for technical enforcement support while declining over 149 requests due to a lack of capacity and staffing. During that same period, the NEIC provided testimony and expert reports in support of over 28 cases covering a variety of highly technical areas.

#### **Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$123.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$9.0) This program change realizes progress made in maximizing the efficiency and effectiveness of operations, including reducing the time for completion of civil inspection reports, improving procurement processes, and continuing to identify and implement further efficiencies in laboratory operations in providing analytical and scientific support for environmental forensics to ensure compliance with environmental laws.

#### **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

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<sup>24</sup> For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$990.3	\$909.0	\$1,008.0	\$99.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$12,926.2</i></b>	<b><i>\$10,380.0</i></b>	<b><i>\$14,342.0</i></b>	<b><i>\$3,962.0</i></b>
Total Budget Authority	\$13,916.5	\$11,289.0	\$15,350.0	\$4,061.0
Total Workyears	22.2	26.6	32.6	6.0

**Program Project Description:**

Under the federal homeland security system, EPA is the Sector-Specific Agency responsible for implementing statutory and Presidential directives relating to homeland security for the water sector. EPA’s Water Security Program is implemented through close partnerships with the water sector, state emergency response and water program officials, and other federal agencies—most notably the Department of Homeland Security (DHS), the U.S. Army Corps of Engineers, and the Intelligence Community. The Water Security Program engages federal, state, and local entities in defining annual objectives and identifying high priorities for immediate action.

**FY 2022 Activities and Performance Plan:**

This program provides critical resources to coordinate and support protection of the Nation’s critical water infrastructure from terrorist threats and all-hazard events. In FY 2022, under this homeland security program, EPA will provide exercises and technical support to about 1,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger water and wastewater services. EPA will provide tools, exercises, 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 adequate preparedness capabilities. In FY 2022, EPA will improve the preparedness of the water sector by providing nationwide exercises and technical support 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 exercises and workshops which will include: Incident Command System / National Incident Management System exercises; drought response; flood response; 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 interstate mutual aid agreements among water utilities;
- Implement lessons learned of relevance to the water sector from the most recent hurricane seasons, as identified by reports from the Federal Emergency Management Agency, the Water Agency Response Network, and EPA’s Inspector General;
- Continue to address high priority security areas, as identified in the stakeholder generated *2017 Roadmap to a Secure and Resilient Water and Wastewater Sector*,<sup>25</sup> 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 exercises with three critical, inter-dependent sectors: healthcare, emergency services, and energy. Most incidents, particularly natural disasters, have underscored the mutual reliance on the water sector with other lifeline sectors. Through exercises and technical support 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 and 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; and
- 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 2022 request includes \$4.7 million for necessary WSI Surveillance and Response System (SRS) activities to: 1) continue refining technical assistance products based on the five full-scale SRS pilots; 2) implement a monitoring and response program for water utilities focused on source water chemical spills; and 3) provide direct technical

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<sup>25</sup>For more information, please see:

[https://www.waterisac.org/sites/default/files/public/2017\\_CIPAC\\_Water\\_Sector\\_Roadmap\\_FINAL\\_051217.pdf](https://www.waterisac.org/sites/default/files/public/2017_CIPAC_Water_Sector_Roadmap_FINAL_051217.pdf).

assistance to the dozens of water utilities that seek to leverage EPA's expertise in deploying their own warning system.

In FY 2022, EPA will train approximately 50 drinking water utilities in the design, operation, and response components of early contaminant warning systems.

In particular, EPA will:

- Continue efforts to promote the water sector's adoption of Water Quality Surveillance and Response Systems. This will help to rapidly detect and respond to water quality problems, such as contamination in the distribution system, in order to reduce public health and economic consequences through the development of several online exercise 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)<sup>26</sup> and the new chemical spill and storage notification requirements in the America's Water Infrastructure Act of 2018. EPA will collaborate with water sector stakeholders, water utilities, and state environmental agencies, to identify specific information (e.g., what chemicals are stored upstream from a surface water intake), including Emergency Planning and Community Right-to-Know Act (EPCRA) Tier 2 data, that are valuable to developing a comprehensive source water contamination threat inventory. EPA will initiate work in three states to develop a comprehensive inventory and characterization of source water contamination threats with the objective of developing a defined process that other states could emulate. This effort will help 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 exercises for the SRS Capabilities Assessment Tool,<sup>27</sup> 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; and
- Continue the successful SRS implementation pilot program<sup>28</sup> within the water sector - the purpose of which is to: demonstrate the application of SRS tools in designing and operating an early warning system for contamination events; illustrate additional applications of SRS tools, such as extending the SRS approach to source water monitoring; and identify champions, within the industry, for implementing surveillance and response systems.

*Water Laboratory Alliance.* In a contamination event, the sheer volume or unconventional type of samples could quickly overwhelm the capacity or capability of a single laboratory. To address this

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<sup>26</sup> For more information, please see: <https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps>.

<sup>27</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2015-06/documents/srs\\_fact\\_sheet.pdf](https://www.epa.gov/sites/production/files/2015-06/documents/srs_fact_sheet.pdf).

<sup>28</sup> For more information, please see: <https://www.epa.gov/waterqualitysurveillance>.



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 level (e.g., the Centers for Disease Control and Prevention's (CDC) Laboratory Response Network). In FY 2022, EPA will continue to promote, through exercises, expert workshops, and association partnerships, the Water Laboratory Alliance Plan,<sup>29</sup> which provides a protocol for coordinated laboratory response to a surge of analytical needs. Approximately 15 exercises or workshops were completed in FY 2020. In FY 2022, under WLA, EPA will train approximately 50 laboratories in improving their ability to handle potential problems associated with surge capacity and analytical method capabilities during an emergency.

In particular, EPA will:

- Continue to work with regional and state environmental laboratories to conduct exercises and continue efforts to automate the exercises, enabling laboratories and other members of the water sector to participate in exercises simultaneously and continue the innovative practice of pursuing validation of methods through exercises;
- Continue to expand the membership of the WLA with the intention of achieving nationwide coverage. The WLA has 160 member laboratories that are geographically diverse and can provide a wide range of chemical, biological, and radiological analyses.<sup>30</sup> 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; and
- Continue to implement specific recommendations of the Water Decontamination Strategy as developed by EPA and water sector stakeholders (e.g., defining roles and responsibilities of local, state, and federal agencies during an event).

### Cybersecurity

Cybersecurity represents a substantial concern for the water sector, given the ubiquitous access to critical water treatment systems from the internet. Recent attacks perpetrated by state and other actors and their clear potential to disrupt essential lifeline services, such as drinking water supplies, are prompting a growing recognition that the federal government should adopt a more aggressive posture towards cybersecurity. EPA will work with each state, territory, and tribe to develop and train a cadre of technical assistance providers who can work directly with individual water systems

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<sup>29</sup> For more information, please see: <https://www.epa.gov/waterlabnetwork>.

<sup>30</sup> For more information, please see: <https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water>.

to assess and enhance their cybersecurity practices. This multi-year effort requires EPA to work with the Nation's 52,000 community water systems, many of which have limited or no technical capacity to address cyber issues. EPA also would seek to train individuals on how to integrate cyber training into their sanitary survey assessments.

In addition to expanding direct technical assistance, and in discussions with the National Security Council, EPA is pursuing regulatory options in the near-term for addressing cybersecurity in the water sector. Under this effort, EPA also is requesting resources to develop policies and/or regulations and associated activities. EPA will publish guidance for public water systems on what cybersecurity practices are recommended for safe operation and EPA will develop a nationwide training effort for all states, sanitary survey inspectors, and all public water systems on compliance and cybersecurity in general.

In FY 2022, EPA will continue to fulfill its obligations under Executive Order 13636<sup>31</sup> which designated EPA as the lead federal agency responsible for cybersecurity in the water sector. EPA will partner with the water sector to promote cybersecurity practices and gauge progress in the sector's implementation of these practices as directed by the Cybersecurity Enhancement Act of 2014. EPA will be conducting nationwide exercises and providing technical support on cybersecurity threats and countermeasures for about 200 water and wastewater utilities. The EPM Homeland Security: Critical Infrastructure Protection Program also can support cybersecurity related work.

Specifically, EPA will:

- Conduct one-day classroom exercises, at locations distributed nationally, on water sector cybersecurity. The exercises will address cybersecurity threats (including ransomware), vulnerabilities, consequences, best practices, and incident response planning;
- Update and/or develop new course materials owing to the evolving nature of cyber threats, 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; and
- Continue to implement a new training program for technical assistance providers that will create a nationwide, state-level network capable of providing direct assistance to water utilities in adopting and tracking cybersecurity practices in adopting and tracking cyber security practices as recommended in the sanitary survey guidance.

#### America's Water Infrastructure Act (AWIA)

In FY 2022, EPA will continue its efforts to fulfill the mandates of the Community Water System Risk and Resilience section of AWIA requiring community water systems, serving a population

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<sup>31</sup> For more information, please see: <https://www.dhs.gov/publication/executive-order-13636-improving-critical-infrastructure-cybersecurity>.

greater than 3,300, to prepare risk assessments and emergency response plans. EPA will provide technical assistance to these systems on how to conduct resilience assessments, prepare Emergency Response Plans (ERPs), and certify completion of these assessments and plans. In FY 2020, 22 trainings were completed on how to appropriately prepare Risk and Resilience Assessments (RRA) and ERPs. Additionally, 526 large systems certified the completion of their RRAs. In FY 2022, EPA, as required by the law, also will provide guidance to community water systems serving fewer than 3,300 people on how to develop a risk assessment and ERPs. EPA will provide technical assistance to water systems to address drinking water vulnerabilities where EPA determines an urgent and immediate need. The EPM Homeland Security: Critical Infrastructure Protection Program also can support AWIA homeland security related work.

**Performance Measure Targets:**

Work under this program supports Safe Drinking Water Act implementation and compliance and performance results in the Drinking Water Programs, under the EPM appropriation, to support safe drinking water for the nation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$89.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,873.0 / +6.0 FTE) This increase of resources and FTE supports the Water Sector Cybersecurity Program to enhance cyber incident preparation, response, recovery, information sharing, and intelligence for water utilities to protect infrastructure. This increase also includes \$1,037.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

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

## Homeland Security: Preparedness, Response, and Recovery

Program Area: Homeland Security

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Science &amp; Technology</i></b>	<b><i>\$27,021.6</i></b>	<b><i>\$24,852.0</i></b>	<b><i>\$25,545.0</i></b>	<b><i>\$693.0</i></b>
Hazardous Substance Superfund	\$32,992.9	\$33,020.0	\$33,264.0	\$244.0
Total Budget Authority	\$60,014.5	\$57,872.0	\$58,809.0	\$937.0
Total Workyears	119.3	124.1	125.8	1.7

### 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 research programs in EPA’s Office of Research and Development. Each of the six integrated and transdisciplinary research programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *HSRP FY 2019-2022 StRAP* continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

These StRAPs continue to reflect the research needs of the Agency’s program and regional offices, states, and tribes. The StRAPs received active collaboration and involvement from EPA and its stakeholders, which ensures that EPA’s scientific efforts are responsive to today’s environmental concerns.

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

Funding supports EPA in carrying out the primary mission essential function, including EPA’s efforts to help communities prepare for, endure, and recover from disasters – safeguarding their economic, environmental, and social well-being. HSRP collaborates with state, local, and private sector organizations and key federal agencies<sup>32</sup> to prioritize research needs and prevent the duplication of scientific and technical work. HSRP delivers effective tools, methods, information,

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<sup>32</sup> 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).

and guidance to local, state, and federal decision-makers that 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 radiation monitors, known as *RadNet*, under the Nuclear/Radiological Incident Annex to the National Response Framework. This network is critical in responding to large-scale incidents such as the accident at the Fukushima nuclear facility and is an EPA Critical Infrastructure/Key Resource asset. This monitoring network is supported by the IT system known as ARaDS, the Analytical Radiation Data System.

**Recent accomplishments include:**

- *Supporting EPA's Role in COVID-19 Response:* HSRP was instrumental in EPA's role in supporting reducing transmission of COVID-19 from the environment. HSRP worked with its EPA Program Office partners and with other federal, state, and local stakeholders (including DHS, CDC, and local transit authorities) to provide timely and reliable information from real-time research to address agency and stakeholder pressing needs.

The HSRP provided the following information:

- effective cleaning and disinfection approaches for specific scenarios,
- understanding of the potential effectiveness and utility of antimicrobial coating products claiming to provide residual disinfection of surfaces,
- determination of the effectiveness of disinfection devices such as UV lights,
- methods for disinfection of personal protective equipment, and
- assessment of technologies designed for reducing airborne transmission of viruses, including development of test methodologies useful at relevant scale consistent with the actual technology field use.

Research findings were regularly updated and communicated with a wide audience via webinars<sup>33</sup> (with attendance in the thousands), regular meetings with stakeholders and associations, and posted on the EPA COVID-19 research website<sup>34</sup>. Stakeholders (including the New York City Metro Transit Authority, the Los Angeles Metro, and many others) used the HSRP research to make informed decisions on their cleaning and disinfection approaches.

- *Supporting Preparedness for Bio-incident Response:* According to the National Biodefense Strategy (NBS)<sup>35</sup>, biological threats are among the most serious threats facing the United States and the international community. HSRP's biological response (consequence management) research is part of the coordinated effort under the NBS to combat the real and serious biothreats our country faces, whether they arise from natural outbreaks of disease, accidents involving high consequence pathogens, or the actions of terrorists or state actors. HSRP is focused on developing capabilities to protect human

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<sup>33</sup> For more information, please see: <https://www.epa.gov/emergency-response-research/webinar-series>

<sup>34</sup> For more information, please see: <https://www.epa.gov/healthresearch/research-covid-19-environment>

<sup>35</sup> For more information, please see:

<https://trumpwhitehouse.archives.gov/wp-content/uploads/2018/09/National-Biodefense-Strategy.pdf>

health and minimize the consequences of a biological incident, including public health emergencies arising from natural outbreaks. One important aspect of consequence management is rapidly and effectively determining areas of concern for public health due to exposure to pathogens in our everyday environments. Environmental sampling is critical for effective response to bio-incidents, specifically for addressing persistent biological agents like *Bacillus anthracis* spores or other pathogens that can survive or propagate in the environment (e.g., in biofilm or other host vectors). Various sampling methods have been developed and evaluated for characterizing and clearing potentially contaminated indoor sites; the performance of these sampling methods is not yet assessed for use in outdoor environments. To address this gap, HSRP conducted research to evaluate the detection and recovery of spores using various sampling methods on common urban outdoor surfaces.<sup>36</sup> This information will help responders determine which methods to consider for their specific situation. In addition, HSRP developed a virtual reality (VR) platform<sup>37</sup> for training personnel on biological surface sampling techniques. The training platform addresses the difficulty in training responders in realistic bio-incident situations by creating an immersive experience that allows the user to explore and interact with their environment through the use of VR. The sampling method evaluation and VR training platform provide essential resources to effectively respond to environmental contamination from bio-incidents.

- *Environmental Resilience Tools Wizard*: The Environmental Resilience Tools Wizard<sup>38</sup> addresses environmental problems associated with disasters and homeland security incidents that can have significant impact on human health. The wizard contains a database of curated EPA resilience tools and resources, including characteristics about each resource (e.g. resilience application, format, audience, scale, specialized requirements). The wizard helps to ensure communities have ready access to resources that can be directly used to build community resilience to disasters. The development of the wizard involved searching for, identifying, and categorizing the resources as well as designing and developing the tool interface. The wizard is intended to be used by emergency managers who need to address environmental aspects of resilience and environmental managers who need to address disaster resilience, including EPA Regional offices, state and local agencies, and utilities. One additional significant aspect of this tool is its usefulness in translating technical information about individual tools into resilience applications for audiences who have diverse expertise and resilience interests.
- *Improving Drinking Water Resilience*: Drinking water systems face multiple challenges, including natural disasters, aging infrastructure, water quality concerns, uncertainty in supply and demand, environmental emergencies, and terrorist attacks. All of these have the potential to disrupt a large portion of a water system causing damage to infrastructure and outages to customers. Increasing resilience to these types of challenges is essential to

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<sup>36</sup> For more information, please see: Comparison of surface sampling methods for an extended duration outdoor biological contamination study, <https://link.springer.com/article/10.1007/s10661-020-08434-8>.

<sup>37</sup> For more information, please see: Biological Sampling Training Simulator [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=CESER&dirEntryId=349129](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=CESER&dirEntryId=349129).

<sup>38</sup> For more information, please see: Environmental Resilience Tools Wizard, [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?dirEntryId=349765&Lab=CESER](https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349765&Lab=CESER).

improve overall water security. The Water Network Tool for Resilience (WNTR)<sup>39</sup> is a software package allowing for end-to-end evaluation of drinking water infrastructure's resilience to disasters. The software improves upon the existing EPA software (EPANET) capabilities by fully integrating hydraulic and water quality simulation, damage estimates and response actions, and resilience metrics into a single platform. This tool is important for drinking water systems around the world who want to better understand how their water systems can withstand natural disasters like earthquakes, floods, and power outages.

### **FY 2022 Activities and Performance Plan:**

Work in this program is subject to evaluation by the Agency's Board of Scientific Counselors (BOSC), which is an independent expert body that performs evaluations and lends advice on the strategic research planning for EPA's Research and Development Program.

The following work is reflected in the *HSRP FY 2019-2022 StRAP*. Research is planned and prioritized based on the needs of end-users of this science, including regional On-Scene Coordinators, water utility companies, states, and EPA program and regional offices.

*Characterizing Contamination and Assessing Consequence.* Research on contaminant characterization, coupled with an understanding of exposure potential, can be used to inform the public health consequences of contaminant exposure. HSRP addresses how contaminants behave in water systems and the built and natural environment, including the development of capabilities to support decision makers in their assessment of contamination threats to public health. HSRP will develop contaminant detection, environmental sampling, and analytical capabilities. These research areas provide essential information to support environmental response and remediation decision making to protect public health and the environment. In FY 2022, HSRP will:

- Conduct studies on biological, chemical, and radiological contaminant fate, transport, and inactivation and removal in water and wastewater systems to inform mitigation decisions.
- Develop rapid and widely-available biological sample collection and analysis methods for outdoor environmental matrices and protocols for target biological agent analysis.
- Develop sampling strategy and data management tools for wide-area biological incidents for urban wide-area environments.
- Develop indoor contaminant mapping capabilities for supporting radiological remediation decision making.

*Environmental Cleanup and Infrastructure Remediation.* EPA has extensive expertise in cleaning up contamination associated with accidental spills and industrial accidents. However, experience in remediating chemical, biological, radiological or nuclear (CBRN) contamination, released over wide areas such as outdoor urban centers or impacted water systems, is lacking. Such a release can pose a continual challenge for remediation with long-standing environmental and health

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<sup>39</sup> For more information, please see: Water Network Tool for Resilience (WNTR) [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?dirEntryId=349798&Lab=CESER](https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349798&Lab=CESER).

consequences. As the lead agency overseeing the water sector, EPA addresses water sector research needs identified by the Water Sector Coordinating Council and the Water Government Coordinating Council's Critical Infrastructure Partnership Advisory Council.<sup>40</sup>

EPA research under HSRP aims to fill the most critical capability gaps so that EPA can make the most informed mitigation and remediation decisions. HSRP research will focus on: 1) wide-area decontamination research to develop capabilities for addressing hazardous contaminants in the environment, including indoor and outdoor areas, 2) water treatment and decontamination of water systems, and 3) waste management as part of the response and remediation efforts. In FY 2022, HSRP will:

- Develop decontamination methods for biological agents that can effectively minimize the risk of transmission from environmental matrices, including research useful to support reducing environmental transmission in pandemic or other naturally occurring outbreaks.
- Develop decontamination methods for chemical agent contaminated areas, including methods for Non-Traditional Agents, opioids, and biotoxins.
- Conduct cybersecurity research to assess the impact to drinking water infrastructure from cyberattack.
- Develop decontamination approaches at the bench, pilot, and the full-scale Water Security Test Bed for contaminated drinking water infrastructure.
- Develop decision making tools to support waste management of chemical, biological, and radiological contaminated waste by assessing aerial photography, remote sensing, options for waste recycling/reusing, and best practices to minimize social, economic and environmental impacts.
- Improve on-site and off-site management of contaminated water and associated waste streams.

*System Approaches to Preparedness and Response.* Transitioning the research into field ready capabilities involves ensuring that decision makers and responders have knowledge of and access to the latest information. Decision makers need access to tools and information built from a systems approach where each of the research areas are brought together through their interdependencies and relative impacts. Priorities for HSRP address the development of systems-based tools by pulling together the connected elements of the research products to provide technical support and decision-support tools and this ensures that information is readily and easily accessible during an emergency. In FY 2022, HSRP will:

- Assess community resilience and better understand social aspects of remediation through the development of tools and training materials. This development will help local agencies

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<sup>40</sup> 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.



plan for resilience to disasters, incidents, and climate changes by identifying risks and vulnerabilities using indicators from locality-based knowledge and data.

- Develop integrated decision-support tools to enhance resiliency, response, and recovery from natural and man-made disasters. This development will improve decision making, data collection and management, and communication for responders during CBRN incident response as well as response to other large-scale, complex disasters.

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

In FY 2022, the Agency will continue to operate the *RadNet* air monitoring network, continue to add exposure rate meter capability to the network, and provide essential maintenance to the network. To best maximize resources, exposure rate meter capability will be added to monitors when needed repairs are called for. This expansion will enhance the federal government's ability to effectively communicate radiation measurement information to the public and to non-technical decision makers after a radiological release. In addition to aiding in explaining data to the public and decision makers, the addition of exposure rate meters aligns EPA's monitoring system with that of the international community.

### **Research Planning:**

The BOSC provides advice and recommendations to EPA's Research and Development Program on technical and management issues of its research programs. HSRP and the HSRP Subcommittee of the BOSC will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability, and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. The Agency is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement<sup>41</sup> is designed to inform states about EPA's research programs and its role within EPA, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include the Environmental Council of the States—with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council—and the Association of State and Territorial Health Officials, as well as state media

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<sup>41</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

associations such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators.

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$632.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$228.0) This change to fixed and other costs is a decrease due to the recalculation of lab fixed costs.
- (+\$521.0 / +1.7 FTE) This net program change reflects an increase to support research efforts to identify and address emerging threats to the water sector. This includes \$293.0 thousand in payroll costs and essential workforce support costs.
- (-\$232.0) This program change decreases resources for radiological emergency preparedness and reflects balancing of coordination efforts with partner agencies and other program efforts to maximize resources, including adding exposure rate meter capability to RadNet monitors when repairs are needed to those monitors.

**Statutory Authority:**

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

**Homeland Security: Protection of EPA Personnel and Infrastructure**  
 Program Area: Homeland Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$4,175.9	\$4,959.0	\$5,139.0	\$180.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$443.0</i></b>	<b><i>\$501.0</i></b>	<b><i>\$501.0</i></b>	<b><i>\$0.0</i></b>
Building and Facilities	\$14,325.7	\$6,676.0	\$6,676.0	\$0.0
Hazardous Substance Superfund	\$994.6	\$1,030.0	\$1,030.0	\$0.0
Total Budget Authority	\$19,939.2	\$13,166.0	\$13,346.0	\$180.0
Total Workyears	7.7	9.2	9.2	0.0

Total workyears in FY 2022 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

**Program Project Description:**

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

**FY 2022 Activities and Performance Plan:**

In FY 2022, the Agency will continue to provide enhanced physical security for the NVFEL and its employees. This funding supports the cost of security enhancements required as part of an agency security assessment review.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**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**

Program Area: IT / Data Management / Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$86,699.8	\$82,715.0	\$86,744.0	\$4,029.0
<b>Science &amp; Technology</b>	<b>\$3,473.7</b>	<b>\$3,072.0</b>	<b>\$3,121.0</b>	<b>\$49.0</b>
Hazardous Substance Superfund	\$15,168.6	\$13,826.0	\$15,202.0	\$1,376.0
Total Budget Authority	\$105,342.1	\$99,613.0	\$105,067.0	\$5,454.0
Total Workyears	442.3	482.4	486.4	4.0

Total workyears in FY 2022 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

**Program Project Description:**

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. Science and Technology (S&T) resources for EPA’s IT/DM Program fund the following activities: Quality Program,<sup>42</sup> EPA National Library Network, and One EPA Web.

The Quality Program provides quality policies and practices intended to ensure all environmentally related data activities performed by or for the Agency will result in the production of data that are of adequate quality to support their intended uses. The Quality Program provides Quality Assurance (QA) policies, training, oversight, and technical support to assist EPA’s programs in implementing quality management systems for all environmental data operations. It also oversees the implementation of EPA’s Information Quality Guidelines. EPA’s National Library Network provides information resources and services to EPA staff and to the public to support the mission of EPA. One EPA Web provides accessible, relevant, timely, accurate, and complete environmental information to the public through EPA’s internet pages, primarily [www.epa.gov](http://www.epa.gov).

**FY 2022 Activities and Performance Plan:**

EPA’s Quality Program provides technical support to all EPA offices and laboratories in implementing EPA quality policies, procedures, and standards. In FY 2022, the Quality Program will continue to manage and provide oversight for the Information Quality Guidelines to ensure that information disseminated by or for EPA conforms with the *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by the Environmental Protection Agency*<sup>43</sup> criteria.

In FY 2022, the Quality Program will facilitate the development of the Agency’s responses to public requests for correction of information disseminated by EPA and report this information to the Office of Management and Budget (OMB). The Quality Program also will continue to focus

<sup>42</sup> For more information about EPA’s Quality Program, please see: <http://www.epa.gov/quality>.

<sup>43</sup> For more information, please see: <https://www.epa.gov/quality/guidelines-ensuring-and-maximizing-quality-objectivity-utility-and-integrity-information>.

on implementing recommendations from the OIG Audit Report, *EPA Needs to Address Internal Control Deficiencies in the Agencywide Quality System*,<sup>44</sup> including review and action on all outdated quality policies, procedures, and guidance documents, and implementation of agencywide training modules. The Program will give priority to implementation of a revised Environmental Information Quality Policy and Environmental Information Quality Procedure, as well as development of an agencywide Quality Program Strategic Plan. The Quality Program will work to fully implement EPA's State and Tribal Quality Assurance Project Plans (QAPPs) directive,<sup>45</sup> and develop mechanisms to ensure that all work conducted at EPA, including work by contractors and grantees, adheres effectively to the agencywide quality system.

The Agency's S&T resources for IT/DM also will help provide library services through the EPA National Library Network to all EPA employees and access to environmental information to the public, as well as support the hosting of EPA's websites and web pages. One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes.

In FY 2022, EPA will work to transform the Agency's libraries to meet the needs of the 21<sup>st</sup> Century. This involves operating in an increasingly online and mobile environment; providing services and resources at the customer's point of need; prioritizing the thorough assessment of print materials to support strategic space usage; utilizing detailed data to ensure print collections are highly relevant to the Agency's needs and centralizing core services; and relying on technology and a team of professional librarians to disseminate information and connect people to resources they need to support their work.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from (Dollars in Thousands):**

- (+\$27.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$22.0) This program change increases support for IT infrastructure.

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<sup>44</sup> For more information, please see: <https://www.epa.gov/office-inspector-general/report-epa-needs-address-internal-control-deficiencies-agencywide-quality>.

<sup>45</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2016-06/documents/r5-final\\_0.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf).

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
<b>Science &amp; Technology</b>	<b>\$68,812.7</b>	<b>\$67,500.0</b>	<b>\$68,533.0</b>	<b>\$1,033.0</b>
Building and Facilities	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
Leaking Underground Storage Tanks	\$1,066.0	\$836.0	\$837.0	\$1.0
Inland Oil Spill Programs	\$640.2	\$682.0	\$683.0	\$1.0
Hazardous Substance Superfund	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Total Budget Authority	\$470,906.5	\$450,262.0	\$496,678.0	\$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

**Program Project Description:**

Science and Technology (S&T) resources in the Facilities Infrastructure and Operations Program fund the Agency’s rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

In response to the COVID-19 pandemic, EPA will continue ensuring the safety of EPA facilities and personnel by following the EPA Workplace Safety Plan in accordance with CDC guidelines. This includes adherence to requirements for mask-wearing, occupancy limits, procuring disinfecting and cleaning supplies, hand sanitizer for use by facility personnel and EPA staff, promoting physical distancing through signage, and procuring safety shields for personnel with increased contact with other people (e.g., security guards, badging office personnel, and administrative staff).

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to invest in the reconfiguration of EPA’s workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465,<sup>46</sup> the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will aim to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also

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<sup>46</sup> For additional information, please refer to: <https://www.congress.gov/bill/114th-congress/house-bill/4465>, *Federal Assets Sale and Transfer Act of 2016*.



will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.

EPA's long-term consolidation plan for FY 2018 – FY 2022 has the potential to provide a cumulative annual rent avoidance of approximately \$28 million across all appropriations by releasing 850,641 square feet. This will help offset EPA's escalating rent and security costs. In FY 2020, EPA released 116,425 square feet of unused office and warehouse space and is planning to release an additional 26,017 square feet in FY 2021. Planned consolidations and space releases in FY 2022 will allow EPA to release an expected 467,345 square feet of space. For FY 2022, the Agency is requesting \$29.9 million for rent, \$17.7 million for utilities, and \$13.7 million for security in the S&T appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>47</sup> EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. 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 funding to achieve long-term cost avoidance and sustainability goals.

EPA will continue to manage lease agreements with the General Services Administration (GSA) and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. In line with Executive Orders 14008<sup>48</sup> and 13990,<sup>49</sup> EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design (LEED) Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment will support EPA facilities infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC), which is necessary to meet federal sustainability goals. Additionally, EPA will direct all future fleet procurements, where economically feasible, to the purchase of electric vehicles, or lease through GSA electric vehicles. This allows EPA to prioritize energy efficiency and climate resilience in the rehabilitation of United States Government fleet vehicles and combat the climate crisis.

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 FY 2022, the

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<sup>47</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>48</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>49</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.

Agency will continue to partner with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

**Performance Measure Targets:**

Work under this program supports performance results in the Facilities Infrastructure and Operations Program and the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (-\$1,034.0) This change to fixed and other costs is a decrease due to the recalculation of rent, utilities, security, and transit subsidy.
- (+\$2,067.0) This program change is an increase to support ensuring a space footprint that accommodates a growing workforce and increasing EPA facility resiliency and sustainability to combat the effects of climate change.

**Statutory Authority:**

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

## **Pesticides Licensing**

**Pesticides: Protect Human Health from Pesticide Risk**

Program Area: Pesticides Licensing

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$60,580.8	\$60,181.0	\$60,929.0	\$748.0
<b>Science &amp; Technology</b>	<b>\$3,109.5</b>	<b>\$2,803.0</b>	<b>\$2,840.0</b>	<b>\$37.0</b>
Total Budget Authority	\$63,690.3	\$62,984.0	\$63,769.0	\$785.0
Total Workyears	393.7	385.6	385.6	0.0

Total program work years in FY 2022 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

**Program Project Description:**

EPA’s Pesticide Program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Extension Act of 2018 (PRIA),<sup>50</sup> EPA is responsible for registering and re-evaluating pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. To make regulatory decisions and establish tolerances (e.g., maximum allowable pesticide residues on food and feed) for food use pesticides and for residential or non-occupational use, EPA must find the pesticide safe. This involves considering cumulative and aggregate risks and ensuring extra protection for children. The Agency must balance the risks and benefits of other uses. For antimicrobial pesticides with public health claims, EPA requires that manufacturers perform tests to ensure the efficacy (*i.e.*, performance) of products per the labelling. In response to the ongoing COVID-19 pandemic and in anticipation of future public health emergencies, the Pesticide Program evaluates public health claims for antimicrobial products, including the accelerated availability of disinfectants determined to be effective against SARS-CoV-2 and development of study designs to support the generation of innovative products, including those that can reduce airborne transmission of the virus.

Under the Science and Technology appropriation, this program operates two laboratories, the Microbiology Laboratory<sup>51</sup> and the Analytical Laboratory,<sup>52</sup> 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.

<sup>50</sup> On Friday, March 8, 2019, the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4), which reauthorizes PRIA for 5 years through fiscal year 2023 and updates the fee collection provisions of the FIFRA was signed into law.

<sup>51</sup> For additional information, please visit: <https://www.epa.gov/aboutepa/about-microbiology-laboratory>.

<sup>52</sup> For additional information, please visit: <https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl>.

## **FY 2022 Activities and Performance Plan:**

The Microbiology Laboratory will continue to protect human health by ensuring the availability of scientific sound efficacy test methods for antimicrobial pesticides (e.g., hospital disinfectants used to treat surfaces). By developing new methods for new uses and emerging pathogens, the regulated community can register new products and new claims for existing products. These efforts will have an impact on the public because of the critical support the laboratory provides to inform regulatory actions for public health pesticides, identify pathways for approval of pathogen-specific claims, and allow for marketplace penetration of these products. Specifically, in FY 2022, EPA will:

- Complete the data collection, analysis, and development of regulatory guidance materials on a quantitative method that follows the Organization for Economic Cooperation and Development (OECD) quantitative method for bactericidal claims to support adoption of the method for regulatory purposes, including an analysis of data from the FY 2021 multi-laboratory studies.
- Complete analysis of FY 2021 multi-laboratory data and develop guidance materials and final method (through American Society for Testing and Materials [ASTM] review) for *Legionella* in recirculating water for cooling tower remediation.
- Issue prototype method and guidance for evaluating porous materials found in clinical and agricultural environments (room separation curtains, vinyl surfaces, wood, etc.)
- Provide efficacy testing and technical support for the first workplan on the Antimicrobial Product Evaluation Program (APEP) pursuant to EPA's response to the Office of the Inspector General (Report No. 16-P-0316).
- Develop residual self-sanitizing disinfectant protocol (SARS-CoV-2) and collect multi-laboratory data to support regulatory use.
- Complete data analysis and development of final ASTM method and regulatory guidance document for evaluating the efficacy of antimicrobial towelettes.
- Continue to develop laboratory capacity for conducting efficacy testing with Biosafety Level 3 (BSL-3) microorganisms at the Environmental Science Center, Ft. Meade, MD. SARS-CoV-2 is a BSL-3 microorganism; EPA's Office of Pesticide Programs has the only EPA laboratory with physical containment laboratories to manage BSL-3 microbes.

In FY 2022, 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.

- Provide analytical support to fill in data gaps for the Pesticide Programs’ risk assessments and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation.
- Develop protocols and generate data to improve the Pesticide programs’ dietary risk assessment considering potential exposure to residues of household antimicrobial disinfectant products that require potable water rinses of food contact surfaces after application.
- Provide analytical assistance and technical advice to all regional offices in support of their enforcement cases, including cases against imported disinfectant products with false claims against SARS-CoV-2. This could disproportionately impact members of EJ communities who might not speak English, who may be being targeted by illegal foreign imports, and who may not know to look for approved products (*i.e.*, List N products).
- Verify that pesticides are properly formulated (as requested).
- Operate EPA’s National Pesticide Standard Repository.

### Preventing Disease through Public Health Pesticides: Antimicrobial Testing

Antimicrobial pesticides play an important role in public health and safety by killing germs, bacteria, viruses, fungi, protozoa, algae, and slime. Some of these products are used to sterilize hard surfaces in hospitals. Chemical disinfection of hard, non-porous surfaces such as floors, bed rails, and tables is one component of the infection control systems in hospitals, food processing operations, and other places where disease-causing microorganisms, such as bacteria and viruses, may be present. In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness.<sup>53</sup>

EPA’s Antimicrobial Testing Program (ATP) has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is in the process of developing a new risk-based testing strategy in response to OIG recommendations made in FY 2016.<sup>54</sup> Consistent with the OIG recommendations, EPA suspended the ATP in November 2017 and released a draft risk-based strategy, renamed the Antimicrobial Performance Evaluation Program (APEP), in October 2019 for public comment and will continue to seek public input prior to implementation in FY 2022 and beyond. Implementation of the of APEP will have a positive impact on public health, by ensuring antimicrobials approved for use meet contemporary efficacy standards.

### 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 (*Clostridioides difficile* and

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<sup>53</sup> *See*, FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).

<sup>54</sup> For additional information, please visit: <https://www.epa.gov/pesticide-registration/antimicrobial-testing-program>.

biofilms) and selected formulation types (towelette) to ASTM workgroups for technical review in FY 2019. These methods were approved by ASTM. The peer-review process provided during the ASTM workgroup meetings helped optimize and improve the clarity of the methods, as well as making the methods more robust and relevant to real-world scenarios. The results of these efforts will help ensure products are available for control of *Clostridioides difficile* and biofilms and inform EPA's method development activities in FY 2022 and beyond.

The Analytical Chemistry Laboratory completed the development of protocols to measure the residues of quaternary ammonium compounds and phenols left on a kitchen counter that was sprayed with an antimicrobial product and followed with a potable water rinse (PWR). These protocols are under review by EPA and, if approved, will be used by the manufacturers to collect residues data for active ingredients in antimicrobial products with indirect food uses. These data will help the Agency refine its dietary risk assessments, which historically, were based on no residue left after a PWR.

The Analytical Chemistry Laboratory program completed the study of the performance of all commercially available Sulfuryl Fluoride (SF) detection devices for their reliability and effectiveness in measuring the required SF clearance level for a safe re-entry into buildings/structures after fumigation. The program will provide webinar sessions on the results of this study for the registrants and device manufacturers in 2021. In FY 2022, the Program will continue to provide analytical support to the pesticide re-evaluation for SF detection devices, including developing performance criteria and continuing to monitor performance of devices in the marketplace.

#### **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 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$23.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$55.0) This change to fixed and other costs is a decrease due to the recalculation of laboratory fixed costs.
- (+\$69.0) This program change is an increase in resources to support the development of laboratory efficacy testing capacity in the Microbiology Laboratory and increasing laboratory efficiency at the Analytical Chemistry Laboratory.

#### **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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$37,650.6	\$39,543.0	\$39,952.0	\$409.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$1,757.7</i></b>	<b><i>\$2,207.0</i></b>	<b><i>\$2,230.0</i></b>	<b><i>\$23.0</i></b>
Total Budget Authority	\$39,408.3	\$41,750.0	\$42,182.0	\$432.0
Total Workyears	297.8	249.6	249.6	0.0

Total program work years in FY 2022 include 53.2 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

### **Program Project Description:**

In compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),<sup>55</sup> EPA conducts risk assessments using the latest scientific methods to determine the risks that pesticides pose to human health and the ecological effects on plants, animals, and ecosystems that are not the targets of the pesticide. The Agency’s significant regulatory decisions are posted for review and comment to ensure that these actions are transparent, and to allow stakeholders, including at-risk populations, to be engaged in decisions that affect their environment.

Under the Science and Technology appropriation, EPA’s Pesticide Program operates two laboratories, the Microbiology Laboratory<sup>56</sup> and the Analytical Laboratory,<sup>57</sup> 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.

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, development of new, standardized methodologies, or the development and submission of additional laboratory or field study data by the pesticide registrant.

<sup>55</sup> *See*, FIFRA, Sections 2 and 3, Definitions, Registration of Pesticides (7 U.S.C. §§ 136, 136a). Available online at: <https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act>. Section 3(c)(5) of FIFRA states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices, the product “will also not generally cause unreasonable adverse effects on the environment.” FIFRA defines “unreasonable adverse effects on the environment”, as “any unreasonable risk to man or the environment, considering the economic, social, and environmental costs and benefits of the use of any pesticide.”

<sup>56</sup> For additional information, please visit: <https://www.epa.gov/aboutepa/about-microbiology-laboratory>.

<sup>57</sup> For additional information, please visit: <https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl>.



In addition to FIFRA responsibilities, the Agency has responsibilities under the Endangered Species Act (ESA).<sup>58</sup> Under ESA, EPA must ensure that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or result in jeopardy to the continued existence of species listed by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS). Where risks are identified, EPA must work with FWS and NMFS in a consultation process to ensure these pesticide registrations also will meet ESA standard.

EPA's Pesticide Program laboratories provide a diverse range of environmental data that the Agency uses to make informed regulatory decisions. The Analytical Chemistry Laboratory and the Microbiology Laboratory each provide critical laboratory testing and support activities to assist the decision-making processes of the Agency. The laboratories develop standard methods to evaluate the performance of antimicrobial products such as disinfectants used in hospital settings, and validate analytical chemistry methods to ensure that EPA, the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), and the states have reliable methods to measure and monitor pesticide residues in food and in the environment.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, the Microbiology Laboratory will continue to work with the U.S. Department of Homeland Security and USDA to evaluate various environmentally-relevant materials such as porous materials (e.g., wood, concrete, fabric, tile, etc.) which simulate use sites in livestock, poultry, and other food animal rearing operations. Outbreaks of avian influenza, African swine fever, Newcastle Disease virus, etc., can be devastating to American agriculture and the persistence of these viruses on surfaces is not well understood. Currently, due to the unavailability of standardized quantitative test methods to simulate real-world conditions in the field, the response to an animal pathogen outbreak and submission of requests under FIFRA Section 18 to address these outbreaks relies on published, and often antiquated, data. Thus, the use of commonly available chemicals for remediation (e.g., citric acid, sodium hypochlorite, chlorine dioxide, etc.) of contaminated sites without extensive knowledge of their environmental impact from such widespread use is deemed problematic. The goal of the Laboratory is to develop a quantitative approach for assessing the effectiveness of antimicrobial products against high consequence animal viruses and other pathogens to provide a tool for the development of high-quality efficacy data on relevant surface materials. The availability of the method to the regulated community will support more effective, targeted chemistries and refined antimicrobial application techniques for porous materials, and the development of new antimicrobial products following contemporary regulatory requirements.

In FY 2022, 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 regional offices in support of their enforcement/complaint cases, including analysis of dicamba and its metabolites in soil and vegetation samples and analysis of products sold in online commerce. The Laboratory also will continue to support pesticide registration review by evaluating the accuracy and precision

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<sup>58</sup> See, ESA sections 7(a)(1) and 7(a)(2); Federal Agency Actions and Consultations (16 U.S.C. § 1536(a)). Available at the U.S. Fish and Wildlife Service ESA internet site: <http://www.fws.gov/Endangered/laws-policies/section-7.html>.

of sulfuryl fluoride detection devices used to detect the presence of a fumigant prior to re-entry. In addition, the Laboratory will continue to review the effectiveness of a potable water rinse at removing residues of antimicrobial active ingredients from different surface types to refine the exposure estimates used in risk assessments for these active ingredients. Finally, in FY 2022, the Analytical Chemistry Laboratory also will continue to provide national technical analytical support for the development of data needed for the Pesticides Program's risk assessments and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation.

**Performance Measure Targets:**

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$15.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$12.0) This change to fixed and other costs is a decrease due to the recalculation of laboratory fixed costs.
- (+\$20.0) This program change is an increase in resources to support the development of laboratory capacity in the Microbiology Laboratory for more effective, targeted chemistries and refined antimicrobial application techniques for porous materials.

**Statutory Authority:**

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

**Pesticides: Realize the Value of Pesticide Availability**

Program Area: Pesticides Licensing

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$6,173.0	\$7,730.0	\$7,792.0	\$62.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$379.9</i></b>	<b><i>\$876.0</i></b>	<b><i>\$970.0</i></b>	<b><i>\$94.0</i></b>
Total Budget Authority	\$6,552.9	\$8,606.0	\$8,762.0	\$156.0
Total Workyears	30.7	35.8	35.8	0.0

**Program Project Description:**

EPA’s Pesticide Program laboratories provide significant contributions to help the Agency realize the value of pesticides. They consist of the Microbiology Laboratory<sup>59</sup> and the Analytical Chemistry Laboratory,<sup>60</sup> that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development, and validation efforts.

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

The Analytical Chemistry Laboratory provides scientific, laboratory, and technical support through chemical analyses of pesticides and related chemicals to protect human health and the environment. The Analytical Chemistry Laboratory responsibilities include: providing technical support and chemical analyses of pesticides and related chemicals; developing new multi-residue analytical methods; and operating EPA’s *National Pesticide Standard Repository*, which collects and maintains pesticide standards (i.e., samples of pure active ingredients or technical grade active ingredients, regulated metabolites, degradates, and related compounds).

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

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will realize the benefits of pesticides by ensuring the continued operation of the National Pesticide Standard Repository. The laboratories will continue to conduct chemistry and efficacy evaluations for antimicrobials. As the recognized source for expertise in pesticide analytical method development, EPA’s Pesticide Program laboratories will continue to provide

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<sup>59</sup> For additional information, please visit: <https://www.epa.gov/aboutepa/about-microbiology-laboratory>.

<sup>60</sup> For additional information, please visit: <https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl>.

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 2022, the Microbiology Laboratory will continue to evaluate FIFRA Section 18 emergency exemptions and novel protocol requests for new uses and novel pathogens. The Laboratory will continue the development of data and methods to support Section 18 for high consequence animal pathogens (e.g., African swine fever, Newcastle disease virus, etc.). In addition, the continued work to develop new methods for emerging pathogens (e.g., *Legionella*, *Candida auris*, etc.) and clinical porous materials provides a pathway for registrants to add new claims to existing antimicrobial pesticides. In some cases, the methods will lead to the development of new products when currently registered formulations are not effective against emerging pathogens. The Laboratory anticipates supporting up to 25 requests for these activities during FY 2022.

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

The Microbiology Laboratory will continue to refine and develop methods to support EPA's Section 3 and Section 18 regulatory programs. In FY 2021, in support of these efforts, the Laboratory initiated work to confirm the efficacy of disinfectant products against SARS-CoV-2. In addition, the Laboratory collaborated with the Office of Research and Development's Homeland Security Research Program to develop guidance for registrants seeking to make long-term efficacy claims for disinfectants. In addition, the laboratories worked in tandem on a testing platform to address both durability of the surface materials and efficacy. Because label claims for most disinfectants are limited to hard surfaces, the Laboratory also began efforts to develop a quantitative efficacy test method which may provide a pathway for evaluating disinfectant claims for porous material (vinyl, room divider curtains, etc.).

The Analytical Chemistry Laboratory maintains EPA's *National Pesticide Standard Repository* pursuant to 40 CFR part 158. The Laboratory collects and maintains an inventory of analytical standards of registered pesticides in the United States, as well as some that are not currently registered. EPA provides the pesticide standards (approximately 4,000 to 5,000 annually) to qualified federal, state, territorial, and tribal laboratories for food and product testing and environmental monitoring. In FY 2018, efficiency reviews showed that the typical turnaround time for a standard request was approximately 15 working days. Using the results of the efficiency review, the Analytical Chemistry Laboratory is implementing procedural changes such as requiring requests be grouped for pesticide standards, instituting an inventory control system focusing on high demand standards, and installing a chemist as the lead staff person in the Repository to reduce the turnaround time to 12 days (for those pesticide standard requests that are not complicated and/or standards that are not expiring). These changes help federal agencies, states, and tribal laboratories expedite enforcement efforts. This process will continue to be improved in FY 2022 and beyond.

**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 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$31.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$73.0) This change to fixed and other costs reflects a decrease in Operations and Maintenance of the Pesticides Program Laboratories due to reduced rent, utilities, and security.
- (+\$136.0) This program change is an increase in resources to support method development and refinement in the Microbiology Laboratory and increasing efficiencies at the Analytical Chemistry Laboratory.

**Statutory Authority:**

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

## **Research: Air and Energy**

**Research: Air, Climate and Energy**

Program Area: Research: Air, Climate and Energy

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Science &amp; Technology</i></b>	<b><i>\$95,350.8</i></b>	<b><i>\$95,250.0</i></b>	<b><i>\$156,210.0</i></b>	<b><i>\$60,960.0</i></b>
Total Budget Authority	\$95,350.8	\$95,250.0	\$156,210.0	\$60,960.0
Total Workyears	254.3	258.0	288.0	30.0

**Program Project Description:**

Air pollution adversely affects human health, the environment, and the economy, yet millions of people still live in areas that do not meet national standards for air pollutants. While all Americans are at risk, some people and communities are especially vulnerable to poor air quality and the impacts of climate change, and communities with environmental justice and equity concerns bear a disproportionate share of the risks and impacts. Climate change is a public health and environmental justice crisis, and is already impacting air and water quality, as well as posing increasing risks for the future. For example, climate change has increased the extent and severity of wildfires<sup>61</sup>, which has substantially worsened air quality, especially in the Western U.S.<sup>62</sup> To address these issues, the Air, Climate, and Energy (ACE) Research Program provides scientific information to EPA program and regional offices, states, tribes, and other stakeholders. ACE strives to advance the science needed to achieve clean air, attain the National Ambient Air Quality Standards<sup>63</sup> (NAAQS), reduce emissions of hazardous air pollutants (HAPs), address the causes and consequences of climate change, and develop more resilient communities which will protect human health and ecosystems throughout the Nation. In addition, ACE will help contribute to the understanding of interventions to protect public health, strategies to prepare, adapt, and build resilience, and responses to the transformation of our energy system and its environmental benefits and impacts.

The ACE Research Program is one of six integrated and transdisciplinary research programs in EPA’s Office of Research and Development. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *ACE FY 2019-2022 StRAP* builds upon prior ACE StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

<sup>61</sup> Fourth National Climate Assessment (NCA4) - Figure 25.4, adapted from Abatzoglou and Williams 2016 (<https://nca2018.globalchange.gov/>)

<sup>62</sup> For more information, please see: <https://pubmed.ncbi.nlm.nih.gov/30012611/>.

<sup>63</sup> Section 109 of the Clean Air Act identifies two types of national ambient air quality standards – primary standards provide public health protection, including protecting the health of “sensitive” populations such as children, older adults, and persons with pre-existing disease such as asthma or cardiovascular disease and secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, wildlife, soils, water, crops, vegetation, and buildings. Unless otherwise stated, in this document the term NAAQS will refer to both primary and secondary standards.

The ACE Research Program is centered around three inter-related research topic areas: 1) Science for Air Quality Decisions; 2) Extreme Events and Emerging Risks; and 3) Next-generation Methods to Improve Public Health and the Environment. The ACE Research Program relies on successful partnerships with others, including academic and industry researchers, states, local and private sector organizations, as well as key federal agencies.

***Recent Accomplishments of the ACE Research Program include:***

- **Smoke from Wildland Fires:** EPA conducts research on emissions, air quality, health, and ecological impacts from wildland fires. In FY 2021, EPA researchers tested air pollution measurement methods to determine which are most accurate during periods of wildland fire smoke.<sup>64</sup> In FY 2020 and FY 2021, EPA published several major articles on health studies of smoke from wildland fires and developed a framework to analyze impacts from fires under different settings to inform options for fire management and meeting resiliency objectives.<sup>65</sup> Collaborations of EPA with the Missoula City-County Health Department in Montana and the Hoopa Valley Tribe in California continue to evaluate how air-handling systems can reduce indoor exposure to smoke and the efficacy of various portable air cleaners during wildfire smoke episodes.<sup>66</sup> In FY 2020, research on the efficiency of masks during periods of wildfire smoke informed recommendations for behaviors to reduce exposure to airborne viruses.<sup>67</sup>
- **Climate Change Impacts and Adaptation Planning Tools:** EPA researchers published several articles on the results of modeling studies evaluating how warming temperatures and increases in heavy precipitation<sup>68</sup> can lead to increased flooding and affect management practices used to reduce the risk of water quality and aquatic ecosystem impairment<sup>69</sup> in watersheds impacted by urban, agricultural, and forestry land uses. In FY 2020 and FY 2021, EPA researchers examined temporal patterns of greenhouse gas emissions from surfaces of water reservoirs thereby providing information to improve U.S. and global annual inventories.<sup>70</sup> EPA scientists authored a guide on coral reef restoration planning and design<sup>71</sup> as part of an international collaboration and assisted practitioner teams in American Samoa, Commonwealth of the Northern Mariana Islands, Guam and Hawaii to use this guide, resulting in all four jurisdictions successfully completing restoration action plans.
- **Toxic Air Pollutants Measurement and Transport Modeling:** Many states continue to work to address air toxics, such as ethyl oxide (EtO), a known hazardous substance used to sterilize medical equipment, and Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) emissions and waste. In FY 2020 and FY 2021, EPA improved and evaluated methods to

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<sup>64</sup> For more information, please see: <https://doi.org/10.5194/amt-14-1783-2021>.

<sup>65</sup> For more information, please see: <https://www.epa.gov/air-research/wildland-fire-research-health-effects-research>, <https://www.ahajournals.org/doi/full/10.1161/JAHA.119.014125>, and <https://ehp.niehs.nih.gov/doi/full/10.1289/EHP3860>.

<sup>66</sup> For more information please see: <https://www.epa.gov/air-research/science-matters-special-edition-wildland-fire-science-october-2019>.

<sup>67</sup> For more information, please see: <https://doi.org/10.1001/jamainternmed.2020.4221>.

<sup>68</sup> For more information, please see: <https://doi.org/10.1007/s10584-021-02963-y>.

<sup>69</sup> For more information, please see: <https://doi.org/10.13031/trans.13630> and <https://doi.org/10.2166/wcc.2020.031>.

<sup>70</sup> For more information, please see: <https://bg.copernicus.org/preprints/bg-2021-36/>.

<sup>71</sup> For more information, please see: [https://www.coris.noaa.gov/activities/restoration\\_guide/welcome.html](https://www.coris.noaa.gov/activities/restoration_guide/welcome.html).



measure ambient levels EtO.<sup>72</sup> EPA also is conducting field and laboratory research to develop methods to measure source emissions of PFAS, as well as products of incomplete combustion of PFAS resulting from incineration.<sup>73</sup> Research includes study of the fate and transport through ambient air and the resulting potential deposition to soil and water of PFAS from manufacturing facilities and incineration as a means of destroying PFAS waste. In FY 2021, EPA published the first modeling study of PFAS air emissions, transport, and deposition from a manufacturing facility.<sup>74</sup>

## **FY 2022 Activities and Performance Plan:**

In FY 2022, the ACE Research Program will continue research in areas that support EPA's mission to protect human health and the environment, fulfill the Agency's legislative mandates, advance cross-agency priorities, and provide research and scientific analyses, including the impacts of climate change and consideration of communities with environmental justice and equity concerns, to inform policymaking.

The ACE Research Program prioritizes key activities to support attainment of the NAAQS and implementation of stationary and mobile source regulations, as well as national and multi-state programs. The ACE Research Program continues to develop, evaluate, and apply methods and models to support air quality management programs and provides foundational science to inform decision making with consideration of increasing climate change impacts.

In FY 2022, the ACE Research Program will:

- Revitalize EPA's climate change program. EPA is requesting an increase of \$30 million to:
  1. Assess human and ecosystem exposures and effects associated with air pollutants on individual, community, regional, national, and global scales, both today and in the future under a changing climate.<sup>75</sup>
  2. Assess the consequences of climate change and the vulnerability of communities and ecosystems to climate change impacts, including wildfires and other extreme events, and identify and evaluate strategies to adapt to and build resilience to these impacts.
  3. Characterize disproportionate impacts of climate change and air pollution on communities with environmental justice and equity concerns, identify and evaluate strategies to reduce impacts in those communities, and develop and evaluate innovative multi-pollutant and sector-based approaches to preventing pollution.

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<sup>72</sup>For more information, please see: <https://www.epa.gov/air-research/ambient-air-methods-and-measurement-development-research#VOCs>.

<sup>73</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2019-09/documents/technical\\_brief\\_pfas\\_incineration\\_ioaa\\_approved\\_final\\_july\\_2019.pdf](https://www.epa.gov/sites/production/files/2019-09/documents/technical_brief_pfas_incineration_ioaa_approved_final_july_2019.pdf) and <https://www.epa.gov/newsreleases/epa-aggressively-working-increase-research-and-understand-pfas>.

<sup>74</sup> For more information, please see: <https://pubs.acs.org/doi/abs/10.1021/acs.est.0c06580>.

<sup>75</sup> Beyond effects associated with ambient air exposures, consideration of potential human and ecosystem exposures and effects associated with deposition of air pollutants to water and land also are evaluated.

4. Continue to fund research on energy efficiency and renewable energy in disadvantaged communities and evaluate strategies to bring the benefits of transformations in transportation and energy systems to these communities.
- Collaborate with Department of Energy’s ARPA-C. EPA is requesting an additional \$30 million increase to fund collaborative research in climate adaptation and resilience with the new Advanced Research Projects Agency for Climate (ARPA-C) that will be located within DOE. EPA will collaborate with users of climate adaptation and resilience science to develop technologies that will significantly expand the applicability, accessibility, and usability of EPA and other research for use by decision makers at regional, state, tribal, and local levels.
  - Provide human exposure and environmental modeling, monitoring, metrics, and information needed to inform air quality and climate change decision making at the federal, state, tribal, and local level, deliver state-of-the-art tools that states and tribes can use to identify effective emission reduction strategies to meet the NAAQS, and enhance air quality measurement and modeling methods to ascertain current and future compliance with the NAAQS, including potential impacts from the changing climate.
  - Ensure that agency program and regional information needs guide research that will advance EPA’s capabilities and understanding of air pollution sources, fate and transport, and effects and how these are impacted by the changing energy infrastructure and climate while addressing emerging areas of concern to EPA and state policymakers, including climate change, environmental justice and equity, PFAS, ethylene oxide, and wildland fires.
  - Develop and apply approaches to evaluate the positive and negative environmental impacts of the transition to a low-carbon energy system, including completion of a report to Congress on the environmental and resource conservation impacts of the Renewable Fuel Standard.<sup>76</sup>

### ***Research Planning:***

EPA’s Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The ACE Research Program met with the ACE Subcommittee of the BOSC in FY 2021 and is arranging for additional meetings in FY 2022 and over the next several years with the Subcommittee to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability, and timeliness of particular research products. This

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<sup>76</sup> Required by the Energy Independence and Security Act of 2007, PL110-140. For more information, please see: <https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act>. More information about the report is available at: [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=IO&dirEntryId=341491](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=IO&dirEntryId=341491)

provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement<sup>77</sup> is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the National Association of Clean Air Agencies.

EPA's commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

### **Performance Measure Targets:**

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

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$774.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$17.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$30,169.0 / +30.0 FTE) This program change increases funding and FTE for the Air, Climate, and Energy Research Program. This increase is targeted to EPA's commitment to enhance its efforts to combat the global issue of Climate Change. This increase will more than double its research to assess the impacts of climate change on human health and ecosystems. This investment includes \$5,239.0 thousand for payroll costs.
- (+\$30,000.0) This program change invests in the Air, Climate, and Energy Research Program for collaborative research in climate adaptation and resilience with the new Advanced Research Projects Agency for Climate (ARPA-C) that will be located within DOE. The ARPA model of high-risk, accelerated research is uniquely meant to conduct R&D that, if successful, results in transformational technology advancements.

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<sup>77</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

**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**

**Research: Safe and Sustainable Water Resources**

Program Area: Research: Safe and Sustainable Water Resources

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Science &amp; Technology</i></b>	<b><i>\$108,506.9</i></b>	<b><i>\$112,250.0</i></b>	<b><i>\$116,588.0</i></b>	<b><i>\$4,338.0</i></b>
Total Budget Authority	\$108,506.9	\$112,250.0	\$116,588.0	\$4,338.0
Total Workyears	352.0	358.1	378.1	20.0

**Program Project Description:**

The quality and availability of water, upon which human and ecosystem health and a robust economy depend, face myriad challenges. These challenges include aging water infrastructure, contaminants of emerging concern, waterborne pathogens, antimicrobial resistance, microplastics, excess nutrients and harmful algal blooms, stormwater runoff, and water shortages. Many of these concerns are more prevalent in disadvantaged communities and can be exacerbated by changing climate patterns, for example, higher temperatures and higher frequency, duration and intensity of precipitation events and extreme drought.

To address these current, emerging, and long-term water resource challenges, the Safe and Sustainable Water Resources (SSWR) Research Program produces robust research and scientific analyses for decision-making and inventive, practical solutions for the Agency and its stakeholders to protect and restore America’s watersheds and water infrastructure.

The SSWR Research Program is one of six integrated and transdisciplinary research programs in EPA’s Office of Research and Development (ORD). Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *SSWR FY 2019-2022 StRAP* continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

***Recent Accomplishments of the SSWR Research Program include:***

- **Contaminants of Emerging Concern:**
  - **SARS-CoV2.** EPA is collaborating with the Center for Disease Control and the State of Ohio to establish a wastewater monitoring network to detect and quantify SARS-CoV2. EPA researchers are linking viral concentrations in wastewater to clinical cases at local levels to evaluate the application of wastewater surveillance for monitoring trends in SARS-CoV2 prevalence in communities. EPA also is developing standardized methods for molecular detection and culturable virus to evaluate potential risks from wastewater management processes.

- **Per- and Polyfluoroalkyl Substances (PFAS).**

- **PFAS Treatment in Drinking Water.** EPA’s Drinking Water Treatability Database was updated to include 26 PFAS chemicals. The database provides information on best practices and technologies for PFAS treatment in drinking water. Information on cost models for PFAS treatment in drinking water were also generated.
- **PFAS Analytical Methods.**
  - EPA created the PFAS Analytical Website<sup>78</sup> which consolidates PFAS analytical and sampling methods for drinking water, groundwater, surface water, wastewater, air, and solids (soils, sediments, biota, and biosolids). The website includes analytical method resources from EPA and other federal agencies and non-governmental organizations, and sampling, data analysis, and laboratory certification resources.
  - ORD funded and provided technical support to develop and validate EPA drinking water Method 533. ORD also co-led the validation efforts for SW-846 Method 8327 for 24 PFAS in non-drinking water aqueous samples. A time and cost saving method was developed for PFAS analysis. ORD continues to provide technical support to validate an isotope dilution method in collaboration with EPA’s Office of Water and the Department of Defense. ORD also is developing a total organic fluorine method for possible future validation.

- **Water Infrastructure:**

- **Lead.** ORD developed sampling protocols and methodologies that can be used to identify lead service lines and continues to provide technical support to municipalities facing challenges with lead delivery lines.
- **Wastewater.** ORD published the *Non-potable Environmental and Economic Water Reuse (NEWRE) Calculator* – a practical tool to help stakeholders assess source water options for urban decentralized non-potable water reuse<sup>79</sup>. ORD also published results on the application and cost savings of alternative wastewater disinfection using combinations of peracetic acid, chlorine, and UV light.

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<sup>78</sup> For more information, please see the following: <https://www.epa.gov/water-research/pfas-analytical-methods-development-and-sampling-research>

<sup>79</sup> For more information, please see the following: <https://www.epa.gov/water-research/non-potable-environmental-and-economic-water-reuse-newre-calculator>

- **Water Reuse**<sup>80</sup>. ORD published several manuscripts<sup>81</sup> on risk models for fit-for-purpose water reuse. This much-needed information will help identify treatment targets for wastewater and other sources of water for multiple beneficial purposes, such as agriculture and irrigation, industrial processes, and groundwater replenishment.
- **Stormwater and Enhanced Aquifer Recharge (EAR)**. ORD completed a report using case studies to understand the influence of stormwater management practices on groundwater quality,<sup>82</sup> a draft report summarizing the current state-of-the-science leading to best practices for EAR using stormwater<sup>83</sup> and several manuscripts on groundwater recharge and quality.<sup>84</sup> EPA also collaborated on a multi-agency study of chemicals in urban stormwater runoff to understand potential risks, which will help in future decisions on the implementation of EAR using stormwater.<sup>85</sup>
- **Harmful Algal Blooms (HABs)**: ORD research contributed to improved understanding of adverse health outcomes from exposure to harmful algal toxins, the role of beach lagoons as reservoirs of cyanobacteria and their toxins, and the transport of freshwater biotoxins into coastal marine systems following extreme precipitation events. ORD also used the CyAN dataset for a new indicator that summarizes the national, regional, and state level presence of cyanobacteria in ~2,300 lakes across the continental United States.
- **Microplastics**: ORD advanced its sediment and surface water extraction and identification methods for characterizing the smaller micro- and nanoplastic particles. A citizen science project is assessing new methods to rapidly identify microplastics in sediment. Collaborations continue with the Southern California Coastal Water Research Project for its recommendations to the California State Water Board on a tiered drinking water method.
- **Recreational Waters and Public Health Protection**: To help reduce health risks associated with exposure to fecal contaminants in recreational waters, ORD focused on the development, performance evaluation, and implementation of methods to measure coliphage in recreational waters. Coliphage may more accurately indicate the probability of viral pathogen contamination. In addition, work is underway to develop certified DNA reference material that will support national implementation of multiple DNA-based methods designed to provide rapid (same day) beach water quality information and characterize sources of fecal contamination.

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<sup>80</sup> For more information, please see the following: <https://www.epa.gov/water-research/onsite-non-potable-water-reuse-research>.

<sup>81</sup> For more information, please see the following: <https://doi.org/10.1016/j.watres.2020.116635>, <https://doi.org/10.2166/wh.2020.221>, <https://doi.org/10.2166/wst.2020.104>, <https://doi.org/10.1021/acs.estlett.0c00752>, <https://doi.org/10.3390/su12135459>, <https://doi.org/10.1016/j.watres.2019.115213>, <https://doi.org/10.1016/j.scitotenv.2019.134297>.

<sup>82</sup> For more information, please see: [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?dirEntryId=350152&Lab=CESER](https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=350152&Lab=CESER).

<sup>83</sup> Final report will be published in June 2021 (EPA/600/R-21/037).

<sup>84</sup> For more information, please see: <https://doi.org/10.1016/j.jhydrol.2020.125720>, <https://doi.org/10.1016/j.jhydrol.2020.124569>.

<sup>85</sup> For more information, please see: [Urban Stormwater: An Overlooked Pathway of Extensive Mixed Contaminants to Surface and Groundwaters in the United States.](#)



While SSWR primarily supports clean and safe drinking water, it also supports efforts to: improve air quality through work on nitrogen, phosphorus, and wildland fires; revitalize land and prevent contamination through work on biosolids and groundwater; and ensure safety of chemicals through research on PFAS and other contaminants like lead.

In FY 2022, the SSWR Research Program will continue to focus on:

- **Water Infrastructure:**
  - Conduct research and provide technical support to deliver safe drinking water. Research will assess the distribution, composition, and potential health risks of known and emerging chemical and biological contaminants. Protocols for sampling lead and identification of lead service lines will support the availability of safe drinking water, especially in disadvantaged communities.
  - Assist states, communities, and utilities to address stormwater and wastewater infrastructure needs through applied models and technical assistance.
- **Climate Change Impacts/Resiliency**
  - Integrate the impacts of climate change on water bodies and water infrastructure, including wildland fire, extreme drought and precipitation events, harmful algal blooms, and other impacts on water quality and availability.
  - Develop risk assessments on stormwater capture for enhanced aquifer recharge.
  - Provide water reuse research support for safe, fit-for-purpose potable and non-potable use by states.
- **Harmful Algal Blooms/Nutrients:**
  - Investigate health impacts from exposure to harmful algal/cyanobacteria toxins, and develop innovative methods to monitor, characterize, and predict blooms for early action.
  - Support states' prioritization of watersheds for nutrient management and set water quality and aquatic life thresholds. These research and communication efforts will help states verify whether investments in implementing nutrient reduction management practices achieve their predicted benefits.
- **Microplastics:** Work with EPA program offices, regions, and states to refine methods for collection, extraction, characterization, quantification, and evaluation of microplastics in surface water and sediments. These standard methods will allow comparability across studies and aid in comprehensive exposure assessment and risk characterization of microplastics.

- **Recreational Waters and Public Health Protection:** Improve methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters. For example, improving rapid low-cost methods for real time notifications on the presence of pathogens will inform community decisions to close and reopen beaches more quickly to prevent human illness and unnecessary lost revenue.

In addition to the activities listed above, EPA also will conduct research across programs in the following areas:

- **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities understand and manage risks associated with these chemicals. A significant challenge for risk managers at the state and local level is how to identify and remove or treat PFAS chemicals that are impacting drinking water supplies. Additional knowledge is needed regarding how to measure and quantify different PFAS chemicals in water, how to remove or treat PFAS chemicals when detected, and how to estimate the cost of different treatment alternatives so that utilities can make informed investment decisions. Within the SSWR Research Program, EPA is: (1) developing and validating standard methods for measuring different PFAS chemicals in water and water treatment residuals (e.g. biosolids); (2) reviewing available literature on effectiveness and cost data for different water treatment technologies applied to different PFAS chemicals; and (3) conducting pilot- and bench-scale testing of the most promising technologies to further evaluate effectiveness. This work is being done in collaboration with water utilities and water treatment technology suppliers. The results of this work will be posted to EPA's public Drinking Water Treatability Database so the information will be widely available to stakeholders.<sup>86</sup>
- **Lead:** EPA, the Centers for Disease Control and Prevention, and the American Academy of Pediatrics unanimously agree that there is no safe level of lead in a child's blood and that even low levels can result in behavior and learning problems, lower IQ, and other health effects.<sup>87</sup> In response to overwhelming scientific consensus and continued public health concern, reducing childhood lead exposure is one of the highest priorities for EPA.<sup>88</sup> 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 evaluating treatment processes for removing lead from drinking water. The overall impact of this research will provide information and tools that EPA, states, tribes, utilities, and communities can use to minimize or eliminate lead exposure in drinking water.

### ***Research Planning:***

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA's Research and Development Program on technical and

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<sup>86</sup> For more information, please see: <https://iaspub.epa.gov/tdb/pages/general/home.do#content>.

<sup>87</sup> For more information, please see: <https://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm>.

<sup>88</sup> For more information, please see: <https://www.epa.gov/lead>.

management issues of its research programs. The SSWR Research Program and the SSWR Subcommittee of the BOSC will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability, and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA’s state engagement<sup>89</sup> is designed to inform states about their role within EPA and EPA’s research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators.

EPA’s commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

**Performance Measure Targets:**

<b>(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting stakeholder needs.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	81	82

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$930.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$57.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$3,351.0 / +20.0 FTE) This net program change increases funding and FTE for the Safe and Sustainable Water Research Program. These FTE will help to address the challenges

<sup>89</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

of aging water infrastructure, contaminants of concern, harmful algal blooms, and diminished water availability.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Science &amp; Technology</i></b>	<b><i>\$143,191.3</i></b>	<b><i>\$133,000.0</i></b>	<b><i>\$137,412.0</i></b>	<b><i>\$4,412.0</i></b>
Leaking Underground Storage Tanks	\$520.6	\$320.0	\$327.0	\$7.0
Inland Oil Spill Programs	\$428.2	\$664.0	\$668.0	\$4.0
Hazardous Substance Superfund	\$15,501.1	\$16,463.0	\$16,634.0	\$171.0
Total Budget Authority	\$159,641.2	\$150,447.0	\$155,041.0	\$4,594.0
Total Workyears	417.3	421.8	441.8	20.0

**Program Project Description:**

EPA’s Sustainable and Healthy Communities (SHC) Research Program conducts research to support the following broad community-based goals: (1) accelerate the pace of contaminated site cleanups; (2) return contaminated sites to beneficial use in their communities; (3) protect vulnerable groups, such as communities with environmental justice concerns and children; (4) revitalize the most vulnerable communities; and (5) understand the connections between healthy ecosystems, healthy people, and healthy communities. SHC provides technical support at federal, tribal, or state-led contaminated site clean-ups and during environmental emergencies. SHC research products provide decision-makers with the latest scientific information on the interrelationships between socio-economic, human health, and environmental factors. SHC scientists conduct health, environmental engineering, and ecological research and use the results to generate 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 resilience to the impacts of climate change across communities.

SHC has made a commitment to explore all possibilities to minimize and mitigate disproportionate, negative impacts and to foster environmental, public health, and economic benefits for overburdened communities. Improved tools as well as Superfund remedial technologies will directly support communities with environmental justice concerns and accelerate the understanding of the negative impacts Superfund sites pose for underserved communities. SHC also is making the commitment to emphasize remediation technologies that improve climate adaptation and climate resilience.

The SHC Research Program is one of six integrated and transdisciplinary research programs in EPA’s Office of Research and Development (ORD). Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *SHC FY 2019-2022 StRAP* builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

***Recent Accomplishments of the SHC Research Program include:***

- **Beneficial Use of Dredged Materials: Opportunities, Community Benefits, and Applied Guidance (Published in December 2020):**<sup>90</sup> Federal navigation channels throughout the US are maintained through operations and maintenance dredging of rivers and harbors. Much of this material is disposed through open water or contained disposal facility placement. While dredged materials may contain contaminants, there is a significant amount of material that is clean and may have beneficial uses in society. Thus, there is increased pressure to identify beneficial uses for dredged material, such as contaminated site remediation and aquatic habitat restoration. This project identified barriers and opportunities related to using clean dredged materials to remediate contaminated sites along with providing a tool for municipalities and other agencies to better understand the social and ecological benefits of utilizing dredged materials in cleanups or habitat restoration. The researchers started with a tool designed for EPA Region 5 and applied qualitative research and case study methodology to analyze specific decision contexts to refine the tool. The team also utilized and augmented the EPA ORD EcoService Models Library; developed a representative case study database; and produced a report to support decision-making for dredged materials. This project created a foundation of information, a use-refined tool, and a concept map to guide application for different stakeholders in future projects.
- **Supply Chain Emission Factors for US Commodities and Industries (Published in July 2020):**<sup>91</sup> Researchers have developed a comprehensive set of supply chain emission factors covering all categories of goods and services in the US economy to assist in quantifying emissions. Emissions from purchased goods and services and capital goods represent significant emissions sources for many organizations. The final factors are available in the Supply Chain Emission Factors for US Industries and Commodities dataset. This product includes a dataset and a report that describes the preparation of those factors, including background on the modeling associated with this preparation; and presents extensive analysis of the factors, including supporting equations and results in two appendices. These factors were prepared using U.S. Environmentally-Extended Input-Output (USEEIO) models which are life cycle models of goods and services in the US economy. Organizations can use these supply chain factors to calculate the life cycle greenhouse gas (GHG) emissions/carbon footprints of their purchases, or for reporting Scope 3 GHG emissions under the global Greenhouse Gas Protocol.
- **Community Health Estimates using Novel Approaches and Data Sources (articles Published October 2017-July 2020):**<sup>92</sup> This product outlines novel methods to quantify

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<sup>90</sup> For more information, please see: [https://intranet.ord.epa.gov/sites/default/files/2021-01/DMMT%20RESES%20Final%20Report\\_508.pdf](https://intranet.ord.epa.gov/sites/default/files/2021-01/DMMT%20RESES%20Final%20Report_508.pdf).

<sup>91</sup> For more information, please see: [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?dirEntryId=349324&Lab=CESER](https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349324&Lab=CESER).

<sup>92</sup> For more information, please see: <https://www.sciencedirect.com/science/article/pii/S0013935117304826>,  
<https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-018-3343-y>,  
[https://journals.lww.com/environepidem/Fulltext/2019/10001/Greater\\_residential\\_tree\\_cover\\_and\\_time\\_spent.327.aspx](https://journals.lww.com/environepidem/Fulltext/2019/10001/Greater_residential_tree_cover_and_time_spent.327.aspx),  
[https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=CPHEA&dirEntryId=348017](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=CPHEA&dirEntryId=348017), and  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7363776/>.

the effects of environmental conditions on human health by analyzing geospatial data and bio-chemical responses to stressors in the body. For example, an increase in greenspace around a residence was found to result in measurably lower biological stress markers. This product and its methods could be used by EPA and municipalities across the country to better understand the public health benefits of community revitalization programs and land-use decisions.

### **FY 2022 Activities and Performance Plan:**

The SHC Research Program provides science that supports work underway to accelerate the pace of Superfund and brownfields cleanups and return sites to beneficial use in their communities. These efforts support regulatory activities and protocol development for EPA's Land and Emergency Management Program, EPA's regional offices, and state-delegated programs. EPA research under SHC will provide technical support at federal-, tribal-, and state-managed cleanup sites and assistance during emergencies. It also will provide research and tools related to health disparities and social determinants of health, site restoration and revitalization benefits, and community resilience.

SHC's FY 2022 research will focus on three topic areas: (1) Contaminated Sites; (2) Waste and Sustainable Materials Management; and (3) Healthy and Resilient Communities. This research will integrate and translate public health, environmental engineering, and ecosystem science to provide:

- Remediation solutions through permanent remedies and innovative treatment technologies for returning contaminated sites to safe and productive use;
- Operational tools for waste sites and for sustainable materials management; and
- Approaches for revitalizing communities, particularly those that are underserved and overburdened, impacted by contamination and natural disasters.

The SHC Research Program provides state-of-the-science methods, models, tools, and technologies that the Land and Emergency Management Program uses in programmatic guidance and that EPA decision makers use in the site cleanup process. These tools will address contaminated sediments and groundwater, as well as health risks posed by vapor intrusion and chemicals of immediate concern, such as per- and polyfluoroalkyl substances (PFAS) and lead. These tools also will support communities affected by contaminated sites in their resilience and climate adaptation planning efforts.

Specifically, in FY 2022, SHC research will be in the following areas:

- **Contaminated Sites:** EPA research under SHC's Contaminated Sites will provide technical support, investigate remedial alternatives for soils, sediments and groundwater, investigate solvent vapor intrusion, and research contaminants of immediate concern (e.g. PFAS and lead). Primarily the research efforts focus on developing and testing remedial alternatives for treating contaminated soils, sediments, groundwater sites, vapor intrusion



sites, sites with PFAS and Pb contamination, and providing the technical support to the Office of Land and Emergency Management (OLEM), the Regions and States to translate the research into usable approaches.

- **Waste and Sustainable Materials Management:** EPA research under SHC’s Waste and Sustainable Materials Management aims to strengthen the scientific basis for the Nation’s materials management decisions and guidance. Primary research efforts will focus on developing lifecycle-based assessment tools for sustainable materials management, evaluating the design, application, and use of landfills as well as the degradation of liner material and improved monitoring strategies and their long-term impact on human health and the environment, and developing waste-management methodologies that can minimize adverse impacts to human health and the environment through proposed beneficial use and reuse. This work will include research that increases the effectiveness of food waste campaigns and examines food waste collection and pretreatment technologies from a lifecycle perspective. These efforts support an agency-wide goal to reduce domestic food loss and waste by half by the year 2030.<sup>93</sup>
- **Healthy and Resilient Communities - Remediation, Restoration, and Revitalization:** The SHC Research Program will evaluate and communicate the benefits from remediation, restoration, and revitalization of contaminated sites and provide community-driven solutions with measurable outcomes. These efforts will help communities meet their needs for building resilience to the impacts of climate change, including the health and well-being of those most vulnerable. Research under the Healthy and Resilient Communities topic will provide the scientific basis for guidance, best practices, and tools to support decisions by the Agency, its stakeholders, states, and tribes to optimize health and well-being outcomes while minimizing unintended consequences.
- **Contaminated Sites – Chemicals of Immediate Concern:**
  - **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. A significant challenge for risk managers at the state and local level is how to remove or treat PFAS at contaminated sites. Within the SHC Research Program, EPA aims to understand: environmental PFAS contamination and pathways of exposure for the public; how PFAS can be removed from the environment through safe destruction or degradation; the significant sources, fate and transport pathways, and exposures to humans and ecosystems; and the costs and effectiveness of different methods for removing and remediating PFAS in the natural and built environment. SHC is specifically researching analytical methods development, human exposure measurement and estimates, contaminated sites source zone characterization, hard to treat streams such as landfill leachate, fate and transport of PFAS in groundwater, remediation performance (treatability and cost models), immobilization/stabilization of PFAS, and novel remedial technologies. This work is being done in collaboration with the Department of Defense through

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<sup>93</sup> For more information, please visit: <https://www.epa.gov/sustainable-management-food>.

participation in their Strategic Environmental Research and Development Program.<sup>94</sup> EPA research under the SHC also is focusing on end-of-life management of PFAS-containing materials (e.g., industrial waste, household waste) to ensure that PFAS from these materials do not impact the environment. This work provides technical support and assistance to states, tribes, and local communities on issues pertaining to ecological and human health risk assessment and site engineering challenges related to PFAS.

- **Lead Research:** *The Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* was produced by the President’s Task Force on Environmental Health Risks and Safety Risks to Children, comprised of 17 federal agencies and co-led by EPA. It is a blueprint to reduce lead exposure and associated harms to children.<sup>95</sup> EPA’s Research and Development Program has co-led Action Plan efforts to develop science and technology to support efforts to reduce lead exposures and related health risks. SHC is working to identify locations of high exposures and blood lead levels to target lead sources for mitigation, develop innovative methods for cleaning up Superfund and other contaminated sites, and strengthen the scientific basis of the Agency’s lead-related regulatory and clean-up decisions. The SHC Research Program also will work to enhance models and methods that determine key drivers of blood lead levels to inform regulatory decisions, develop tools to identify and prioritize communities with higher incidence of increased blood lead levels in children, and provide the data needed to reduce uncertainty in lead exposure and risk analysis. EPA’s research in this area is essential to support ongoing EPA regulatory and non-regulatory efforts, as well as filling in the data gaps for federal partners, states, tribes, and local communities.

### ***Research Planning:***

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

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA’s state engagement<sup>96</sup> is designed to inform states about their role within EPA and EPA’s research programs, and to better understand the science needs of state environmental and health

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<sup>94</sup> For more information about SERDP, please see: <https://www.serdp-estcp.org/About-SERDP-and-ESTCP/About-SERDP>.

<sup>95</sup> For more information, please see: <https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure>.

<sup>96</sup> For more information on EPA’s work with states, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

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

EPA’s commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

**Performance Measure Targets:**

<b>(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting stakeholder needs.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	81	82

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$951.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$53.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$3,408.0 / +20.0 FTE) This net program change increases funding and FTE for the Sustainable and Healthy Communities Research Program. These FTE will help to address the acceleration of cleanup and return of contaminated sites to beneficial use, protection of vulnerable populations, and the revitalization of vulnerable communities.

**Statutory Authority:**

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

**Research: Chemical Safety and Sustainability**

## **Research: Chemical Safety for Sustainability**

Program Area: Research: Chemical Safety for Sustainability

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$143.0	\$0.0	\$0.0	\$0.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$95,707.7</i></b>	<b><i>\$89,518.0</i></b>	<b><i>\$93,818.0</i></b>	<b><i>\$4,300.0</i></b>
Hazardous Substance Superfund	\$4,115.6	\$0.0	\$0.0	\$0.0
Total Budget Authority	\$99,966.3	\$89,518.0	\$93,818.0	\$4,300.0
Total Workyears	270.6	273.9	295.9	22.0

Total Workyears include 3.2 FTE funded by TSCA fees in both FY 2021 and FY 2022.

### **Program Project Description:**

The Chemical Safety for Sustainability (CSS) Research Program provides scientific and technical approaches, information, tools, and methods to make better-informed, more-timely decisions about chemicals and their potential risks to human health and the environment.<sup>97</sup> CSS products strengthen the Agency's ability to evaluate and predict human health and ecological impacts from the use, reuse, recycling, and disposal of manufactured and naturally occurring chemicals and their by-products.

The CSS Research Program is one of six integrated and transdisciplinary research programs in EPA's Office of Research and Development (ORD). CSS research addresses real-world problems, informs agency implementation of environmental regulations, and helps EPA and its stakeholders make timely decisions based on the best available science. Each of the six programs is guided by a Strategic Research Action Plan (StRAP)<sup>98</sup> that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *CSS FY 2019-2022 StRAP* builds upon the science foundation for chemical evaluations built by research in prior years and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

CSS research informs agency decisions about chemicals, accelerates the pace of chemical assessment and decision-making, and helps to replace, reduce, and refine the use of mammals used to evaluate chemical risk to ecological and human health. CSS products inform agency programs as they implement environmental regulations that govern agency actions, including the evaluation of existing and new chemicals (Toxic Substances Control Act [TSCA]), development and use of alternative testing protocols (TSCA, Federal Insecticide Fungicide and Rodenticide Act [FIFRA], Food Quality Protection Act [FQPA], Federal Food Drug Cosmetics Act [FFDCA]), chemical prioritization (TSCA, Safe Drinking Water Act [SDWA]), evaluation of pesticide registrations (FIFRA, Endangered Species Act), and mitigation activity at Superfund sites (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]). CSS

<sup>97</sup> For the CSS StRAP, please see: <https://www.epa.gov/research/chemical-safety-sustainability-strategic-research-action-plan-2019-2022>.

<sup>98</sup> For all ORD StRAPs, please see: <https://www.epa.gov/research/strategic-research-action-plans-2019-2022>.

research activities are coordinated with the activities of other national research programs to inform high priority research topics, such as research focused on per- and polyfluoroalkyl substances (PFAS). Coordination with the Human and Environmental Risk Assessment (HERA) Research Program ensures that the approaches, tools, and information produced by CSS can be used to improve chemical risk assessments, reduce uncertainties associated with those assessments, and increase the speed of delivering chemical information to the Agency.

***Recent Accomplishments of the CSS Research Program include:***

- **Protecting Children’s Health Through Improved Developmental Neurotoxicity (DNT) Screening of Chemicals:** The potential effects of chemicals on the development of the human nervous system in children is a high priority concern of multiple agency programs. Currently available whole animal methods that evaluate developmental neurotoxicity (DNT) are costly, animal intensive, and encumbered with challenges and technical issues. Thus, they are infrequently used in decision-making. CSS scientists have developed alternative new approach methods (NAMs) for DNT endpoints that can be used to screen chemical libraries for potential DNT activity. These new assays include an *in vitro* method to evaluate neuronal network formation and function using specialized microelectrode arrays and a high content imaging approach to microscopically evaluate neuronal cell lines for effects of chemicals on key cellular processes of development. These methods, along with those developed by international collaborators, provide a battery of assays that represent many of the key events and processes necessary for normal nervous system development. These DNT NAMs were successfully reviewed by the FIFRA SAP in the Fall of 2020. Further development of the battery and additional testing of chemicals through the battery will provide essential data for evaluating the DNT potential of chemicals.
- **Development of innovative methods and tools for estimating exposure for thousands of chemicals:** As part of ORD’s efforts to support implementation of the Toxic Substances Control Act (TSCA), CSS scientists have developed tools and methods to inform high-throughput exposure predictions for thousands of chemicals. It is critical to develop tools which allow for estimation of exposures needed for the evaluation of risk which can be applied even when data is limited. The Stochastic Human Exposure and Dose Simulation High-Throughput (SHEDS-HT)<sup>99</sup> model developed by CSS scientists models population level distributions of exposure to nearfield chemical sources. The model accounts for multiple routes, scenarios, and pathways of exposure so that we can understand total exposure to chemicals. CSS investigators have additionally developed critical data sets needed as input for the SHEDS-HT model, including the Chemical and Products Database (CPDat)<sup>100</sup>. CPDat includes nearly 4 million data points on chemicals relevant to estimation of exposure, including data types such as chemical use categorizations, general use and consumer product specific use, consumer product composition, and chemical functional use. The database maps these data points to more than 29,000 unique chemical structures and includes data on more than 500,000 products. Because an individual’s

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<sup>99</sup> For more information, please see: <https://www.epa.gov/chemical-research/stochastic-human-exposure-and-dose-simulation-sheds-estimate-human-exposure>.

<sup>100</sup> For more information, please see: <https://www.epa.gov/chemical-research/chemical-and-products-database-cpdats>.

exposure to chemicals is correlated with their use of consumer products and associated behaviors, investigators are able to use both the CPDat database and the SHEDS-HT model to examine differences in chemical exposure for different subpopulations, including stratification of exposure by age (e.g. children vs. elderly), race and ethnicities, and household socioeconomic level.

- **Continued Release, Evolution, and Updating of Multiple Digital Information Products to Inform Decision Making:** The *Computational Toxicology Chemicals Dashboard*<sup>101</sup> is the Agency's 'first-stop-shop' for the delivery of information on chemical physico-chemical properties, structure, toxicity, exposure, and persistence. The *Dashboard* is used by the Agency and its external stakeholders, and allows for real-time quantitative structure-activity relationship (QSAR) predictions for chemical property and toxicity endpoints, and flexible searches including chemical and functional use, supporting mass spectrometry (mass and formula) and batch search functionality. As of the June 2021 release, the *Dashboard* houses curated data on 900,000 chemicals. The *ECOTOX Knowledgebase*<sup>102</sup> serves as the comprehensive, publicly available source of environmental toxicity data on aquatic life, terrestrial plants, and wildlife. The March 2021 release of the ECOTOX Knowledgebase contains over 1 million records and provides information on over 12,000 chemicals and over 13,000 species from over 50,000 references. The *Chemical Transformation Simulator* continues development as a web-based tool for predicting environmental and biological transformation pathways for organic chemicals. Recently, the *Simulator* was expanded to include environmental transformation information for PFAS chemicals. *SeqAPASS*<sup>103</sup> – Sequence Alignment to Predict Across Species Susceptibility – is a tool enabling extrapolation of toxicity information across species. Version 5.0, released in December 2020, features improved functionalities and visualization of results. Research and development for all these systems continues in order to meet the information needs of decision makers.
- **Development and Advancement of New Approach Methods (NAMs):** CSS objectives and research activities are strongly supporting the development of new approach methods (NAMs) that are improving understanding of chemical toxicity. NAMs are focused on providing better understanding of toxicity with faster, less expensive approaches that reduce the use of mammals and other vertebrate animals for toxicity testing. CSS continues to collaborate closely with the Chemical Safety and Pollution Prevention Program to implement the June 2018 TSCA Strategic Plan<sup>104</sup> to promote the development and implementation of alternative test methods. Additionally, CSS has a central role in the implementation of the June 2020 NAMs workplan.<sup>105</sup> Critical to this effort is implementation of a tiered hazard evaluation strategy. CSS investigators are currently advancing methods in high-throughput phenotypic profiling (HTTP) and high-throughput transcriptomics (HTTr), to be used for chemical prioritization and grouping of chemicals.

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<sup>101</sup> For more information, please see: <https://comptox.epa.gov/dashboard>.

<sup>102</sup> For more information, please see: <https://cfpub.epa.gov/ecotox/>.

<sup>103</sup> For more information, please see: <https://www.epa.gov/chemical-research/sequence-alignment-predict-across-species-susceptibility>.

<sup>104</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2018-06/documents/epa\\_alt\\_strat\\_plan\\_6-20-18\\_clean\\_final.pdf](https://www.epa.gov/sites/production/files/2018-06/documents/epa_alt_strat_plan_6-20-18_clean_final.pdf).

<sup>105</sup> For more information, please see: <https://www.epa.gov/chemical-research/new-approach-methods-work-plan>.

Additionally, investigators are exploring approaches and models for species extrapolation in the ecotoxicology domain, and development of high-throughput exposure and toxicokinetic models in the exposure domain.

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

### **FY 2022 Activities and Performance Plan:**

In FY 2022, CSS research will continue to provide information needed to inform agency decisions about chemicals. Research efforts will focus on replacing, reducing, and refining the use of vertebrates in testing, while accelerating the pace of chemical assessment and decision-making. CSS research products will continue to use innovative *in vitro* and *in silico* (computer modeling) approaches to provide timelier, more comprehensive information about chemical hazard and exposure while still providing information of equal or greater biological predictivity than current *in vivo* animal models. The objective of CSS research activities is to provide chemical information informing risk-based decisions made by EPA programs, states, tribes, and others. Of particular relevance are 'chemicals of emerging concern,' such as PFAS, which heighten the need for rapid, scientifically-sound approaches to evaluate potential chemical safety.

The CSS Research Program is organized into eight, integrated research areas that include research on toxicity, exposure, human health, ecological health, chemical modeling and prediction, and chemical integration and informatics. Selected research areas are highlighted below for work in FY 2022.

- **High-Throughput Toxicity (HTT) Testing:** CSS research in the HTT research area is focused on developing, testing, and applying NAMs to evaluate chemical hazards. NAMs address EPA's need to evaluate large numbers of chemicals more efficiently for potential adverse human and ecological effects. Scientific and technological advances have paved the way for using additional NAMs in the HTT research area. These will enable EPA to make better, more timely decisions about chemicals by increasing toxicological information for more chemicals. Specifically, high-throughput methods research is focused on developmental neurotoxicology, inhalation toxicology assessment, and methodologically challenging chemicals. This research directly supports the Agency's efforts to fulfill requirements for: chemical evaluation under TSCA as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act; pesticide evaluation under FIFRA; chemical testing for endocrine system impacts under FQPA; and chemical evaluation as part of SDWA.
- **Rapid Exposure Modeling and Dosimetry:** In FY 2022, EPA research under the CSS Research Program will continue to provide data, models, and tools to characterize total human exposure to environmental chemicals. This will inform agency chemical prioritizations and evaluations (TSCA, SDWA); agency implementation of TSCA Section



5 (New Chemicals) and Section 6 (Existing Chemicals); and identify contaminants of emerging concern. Research in the Rapid Exposure Modeling and Dosimetry research area parallels work in the HTT research area to provide information to inform agency chemical risk assessment activities. Chemical exposure research also includes the continued development of advanced analytical and computational tools, such as non-targeted analysis, to detect and identify unknown chemicals in complex environmental media, biological media, and consumer products.

- **PFAS Research:**<sup>106</sup> PFAS are a class of substances of concern and EPA is committed to supporting states, tribes, and local communities in understanding and managing risks associated with these chemicals.<sup>107</sup> With research integrated across multiple CSS research areas, CSS has responded with research designed to: expand understanding of the toxicity of PFAS chemicals; evaluate PFAS fate, transport, occurrence, and persistence in the environment and in consumer products; and deliver chemical information to the Agency and its stakeholders in the government and private sector. The PFAS class of compounds include over 6,000 different chemicals, of which approximately 1,200 have been or are being used in commerce. For most PFAS chemicals, there are little or no published toxicity data available.<sup>108</sup> CSS is addressing this gap by conducting high-throughput toxicological screening assays on hundreds of PFAS chemicals. The chemicals were selected to represent a broad array of PFAS chemical and physical structural properties and to represent specific interests of EPA program and regional offices and the states. The results will be used to identify categories of PFAS chemicals having similar structural and toxicological properties that may inform the development and strength of predictive toxicological models. These *in vivo* and *in silico* methods are combined with targeted *in vivo* tests to reduce uncertainties and improve the reliability of toxicity predications. This work is being done in collaboration with the National Institute of Environmental Health Sciences: National Toxicology Program. Resources requested in FY 2022 will build upon the research foundation formed from completed work outlined in the *PFAS Action Plan*.
- **Improved Understanding of Biological Impacts:** The CSS Research Program will employ data generated from its chemical evaluation research to develop interpretive frameworks and models to place complex information into biological, chemical, and toxicological context. This information is captured in adverse outcome pathways (AOPs) which link molecular initiating events at the cellular level to apical outcomes expressed at the whole animal level. These pathways help decision-makers understand the significance of chemical impacts on biological systems as commonly determined by *in vitro* assays. Included in the development of these AOPs are data developed in the HTT and Virtual Tissue Modeling (VTM) research areas to capture information on chemical impacts to molecular pathways, cells, and complex tissues. This is especially important to understanding chemical impacts on developmental and reproductive biology. As part of the CSS Ecotoxicology and Modeling research area, CSS is applying AOP frameworks to model ecological outcomes across broad taxonomic and ecological scales.

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<sup>106</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2019-02/documents/pfas\\_action\\_plan\\_021319\\_508compliant\\_1.pdf](https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf).

<sup>107</sup> For more information, please see: <https://www.epa.gov/pfas/pfas-community-engagement>.

<sup>108</sup> For more information, please see: <https://www.epa.gov/pfas/epa-pfas-research>.

- **Delivery of Chemical Information:** The CSS Research Program will deliver integrated chemical data and related information to the Agency in a scientifically robust, transparent manner. In FY 2022, CSS will continue to expand the tools highlighted previously under recent accomplishments. Additionally, the Chemical Safety Analytics research area of CSS provides computational, predictive tools to estimate physicochemical, toxicological, and exposure information for data poor chemicals. The Informatics, Synthesis, and Integration research area brings together chemical information developed by the CSS Research Program with information from other sources to inform agency decision makers. Building on this foundation, CSS is working with the Agency to build program-specific applications, such as RapidTox, an interactive series of customized workflows that facilitate access and use of relevant information to support different decision contexts. These applications will give risk assessors and decision-makers confidence that the new approaches, data, and tools developed in CSS are both scientifically sound and relevant to environmental decision making.

### ***Research Planning:***

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs.<sup>109</sup> The CSS Research Program and the Chemical Safety Subcommittee of the BOSC will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement program<sup>110</sup> is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

EPA's commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

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<sup>109</sup> For more information, please see: <https://www.epa.gov/bosc>.

<sup>110</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

**Performance Measure Targets:**

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting stakeholder needs.	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	81	82

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$660.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$11.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$3,629.0 / +22.0 FTE) This net program change increases funding and FTE for the Chemical Safety and Sustainability Research Program. These FTE will assist in providing scientific and technical approaches, information tools, and methods to better inform decision-making.

**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).

**Health and Environmental Risk Assessment**

Program Area: Research: Chemical Safety for Sustainability

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Science &amp; Technology</i></b>	<b><i>\$38,921.5</i></b>	<b><i>\$37,482.0</i></b>	<b><i>\$41,412.0</i></b>	<b><i>\$3,930.0</i></b>
Hazardous Substance Superfund	\$3,882.1	\$12,824.0	\$12,876.0	\$52.0
Total Budget Authority	\$42,803.6	\$50,306.0	\$54,288.0	\$3,982.0
Total Workyears	152.3	154.9	174.9	20.0

**Program Project Description:**

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

The HERA Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *HERA FY 2019-2022 StRAP* builds upon prior Human Health Risk Assessment StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

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

- Science Assessments and Translation:** The Science Assessments and Translation topic showcases EPA’s focus on the science and practice of assessment development. A portfolio of assessment products will be produced that are responsive to agency priorities and timelines. The portfolio will include assessments from among the traditional product lines – Integrated Risk Information System (IRIS), Integrated Science Assessment (ISAs), and Provisional Peer-Reviewed Toxicity Values (PPRTVs) – in addition to a wide range of innovative ‘fit-for-purpose’ products. Additionally, significant emphasis will be placed on providing scientific and technical support throughout the lifecycle of decisions, from development to application of the assessment products.
- Advancing the Science and Practice of Risk Assessment:** The HERA Research Program is multidisciplinary and aimed at incorporating scientific innovations to advance analytic approaches and applications for risk assessment. Research under this topic is targeted at enhancing hazard characterization, expanding the repertoire of dose-response methods and models, and characterizing the utility of emerging data and new computational tools as

applied to risk assessment. It also enhances and maintains critical assessment infrastructure, including databases, models, and software support, to ensure transparency and to facilitate understanding and translation to agency partners and external stakeholders. Refinements to current approaches will be anchored in assessment development and are expected to improve the accuracy, efficiency, flexibility, and utility of applications across a large landscape of assessment activities.

***Recent Accomplishments of the HERA Research Program include:***

The HERA Research Program has been developing assessment products to enhance timely responses, improve screening capabilities, and augment toxicity value derivations for use in risk assessments.

- **PFAS-related Toxicity Values:** Decision-making at the state and local level is hindered by a limited number of standard toxicity values (such as reference doses and cancer risk estimates) for many per- and polyfluoroalkyl substances (PFAS) of interest. The Agency continues to provide toxicity values with current values available for PFOA and PFOS,<sup>111</sup> as well as draft toxicity assessments for GenX<sup>112</sup> chemicals. In FY 2021, HERA released the final *Human Health Toxicity Values for Perfluorobutane Sulfonic Acid (CASRN 375-73-5) and Related Compound Potassium Perfluorobutane Sulfonate (CASRN 29420-49-3)*<sup>113</sup>, providing additional toxicity values for these substances.
- **Portfolio of Assessment Products:** In April 2021, HERA released the final *Human Health Toxicity Values for Perfluorobutane Sulfonic Acid (CASRN 375-73-5) and Related Compound Potassium Perfluorobutane Sulfonate (CASRN 29420-49-3)*<sup>114</sup>, delivering on EPA’s commitment to address PFAS in the environment. HERA anticipates posting final IRIS assessments for ethyl tertiary butyl ether and tert-butyl alcohol, as well as publicly releasing assessment materials for mercury salts, vanadium and compounds (oral exposure), and vanadium and compounds (inhalation exposure).<sup>115</sup> HERA anticipates delivering nine high-priority PPRTV assessments in FY 2021 to support Superfund priorities;<sup>116</sup> at least eight more assessments are expected in FY 2022. The *ISA for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter - Ecological Criteria* was released in October 2020<sup>117</sup>, after peer review by the Clean Air Scientific Advisory Committee.
- **Innovations in Risk Assessment:** HERA peer reviewed and anticipates finalizing the EPA version of the multi-path particle dosimetry (MPPD) model and software in the fall of 2021 for improved mechanistic modeling of inhalation dosimetry for particles. Continued advancements were made to HERA’s dose-response analysis tool, Benchmark Dose

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<sup>1</sup> Perfluorooctanoic Acid (PFOA), Perfluorooctanesulphonic Acid (PFOS).

<sup>112</sup> GenX chemicals assessment is owned by EPA’s Water Program; the timeline for this assessment is different than PFBS. For more information on the timeline of this assessment, please contact EPA’s Water Program.

<sup>113</sup> For more information, please see: <https://www.epa.gov/pfas/learn-about-human-health-toxicity-assessment-pfbs>.

<sup>114</sup> For more information, please see: <https://www.epa.gov/pfas/learn-about-human-health-toxicity-assessment-pfbs>.

<sup>115</sup> For more information, please see: <https://www.epa.gov/iris/iris-recent-additions>.

<sup>116</sup> For more information, please see: <https://www.epa.gov/pprtv>.

<sup>117</sup> For more information, please see: <https://www.epa.gov/isa/integrated-science-assessment-isa-oxides-nitrogen-oxides-sulfur-and-particulate-matter>.

Software (BMDS),<sup>118</sup> as well as critical information management databases including HERA's *Health and Environmental Research Online*<sup>119</sup> and the *Health Assessment and Workplace Collaborative*<sup>120</sup>. Having modernized its assessment infrastructure, EPA research under HERA is using evidence mapping to provide a better understanding of the extent and nature of data available to address agency chemical assessment priorities, including PFAS. It also serves to focus the assessments on support for specific decision contexts (*i.e.*, 'fit for purpose'). This approach is expected to improve assessment throughput and prioritize more timely assessments responsive to the priority needs of the Agency.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, the HERA Research Program's work will focus on efforts integral to achieving EPA priorities and informing the Agency's implementation of key environmental decisions. Specifically, in FY 2022, HERA will:

- Continue developing additional assessments through IRIS of perfluorinated compounds as described in *EPA's PFAS Action Plan*,<sup>121</sup> as well as other priority chemicals as identified by EPA's Water Program, Air and Radiation Program, and Land and Emergency Management Program. These HERA assessments include polychlorinated biphenyls, methylmercury, mercury salts, vanadium compounds, hexavalent chromium, inorganic arsenic, and formaldehyde. HERA also will provide support to the Air and Radiation Program with the development of the ISA for Lead to support review of the National Ambient Air Quality Standards (NAAQS). HERA will continue to provide scientific and technical support on assessments, such as to the Air and Radiation Program on decisions to retain or revise the NAAQS, and to the Chemical Safety and Pollution Prevention Program on TSCA implementation.
- Continue to develop and apply evidence mapping to provide a better understanding of the extent and nature of evidence available to address priority needs of the Agency and its partners, and focus the assessments on support for specific decision contexts (*i.e.*, 'fit for purpose') through a modernized assessment infrastructure.
- Provide the resources and workflow to two of the five Research and Development Program's Superfund technical support centers (TSCs)<sup>122</sup> to provide localized and tailored technical assistance and scientific expertise on human and ecological risk assessments to states, tribes, and EPA's program and regional offices. This includes direct support in cases of emergencies and other rapid response situations.

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<sup>118</sup> For more information, please see: <https://www.epa.gov/bmnds>.

<sup>119</sup> For more information, please see: <https://hero.epa.gov/hero/>.

<sup>120</sup> For more information, please see: <https://hawcprd.epa.gov/>.

<sup>121</sup> For more information, please see: <https://www.epa.gov/pfas/epas-pfas-action-plan>.

<sup>122</sup> HERA supports the Superfund Health Risk Technical Support Center (STSC) and the Ecological Risk Assessment Support Center (ERASC). For more information on EPA's five TSCs, please see: <https://www.epa.gov/land-research/epas-technical-support-centers>.

- 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’s program and regional offices, in cooperation with the Chemical Safety for Sustainability Research Program.
- Provide training to staff, partners, and stakeholders on risk assessment practice, assessment tool literacy, and standard operating procedures for assessment development via easy to access modules.

In addition to the activities listed above, EPA also conducts research across programs in the following areas:

- **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. There are still large numbers of other PFAS of high interest to stakeholders which currently have no federal published, peer-reviewed toxicity values. Within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values. This will result in an expanded set of high-quality peer-reviewed toxicity values for use by federal, state, and tribal decision makers in making risk assessment and management decisions. In addition, EPA is identifying, reviewing, organizing and presenting relevant health information on PFAS through systematic evidence mapping to identify data gaps, inform prioritization and hazard characterization, and facilitate human health assessments for PFAS.
- **Lead:** Childhood lead exposure continues to be one of the highest priorities for EPA. To advance lead exposure and biokinetic models used in EPA regulatory decisions and site assessments, research focuses on enhancing, evaluating, and applying lead exposure and biokinetic models used for estimating potential blood lead levels and related analyses for regulatory determinations. Additionally, the Exposure Factors Handbook<sup>123</sup> 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) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The HERA Research Program and the HERA Subcommittee of the BOSC will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability, and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation

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<sup>123</sup> For more information, please see: <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252>.

process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement<sup>124</sup> is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

EPA's commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

### **Performance Measure Targets:**

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

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$406.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,524.0 / +20.0 FTE) This program change increases funding and FTE for the Health and Environmental Assessment program. These FTE will assist in advancing science assessments, such as IRIS, as well as analytical approaches for the applications of risk assessments. This investment includes \$3,502.0 thousand in payroll costs.

### **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).

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<sup>124</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.



## **Water: Human Health Protection**

## Drinking Water Programs

Program Area: Water: Human Health Protection

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$101,007.3	\$106,903.0	\$118,265.0	\$11,362.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$4,265.0</i></b>	<b><i>\$4,364.0</i></b>	<b><i>\$6,444.0</i></b>	<b><i>\$2,080.0</i></b>
Total Budget Authority	\$105,272.3	\$111,267.0	\$124,709.0	\$13,442.0
Total Workyears	472.2	475.2	531.0	55.8

### **Program Project Description:**

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

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA is requesting an increase of over \$2.0 million and 4.0 FTE for the Drinking Water Technical Support Center to carry out the following activities:

- Lead the development, revision, evaluation, and approval of 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]). This work supports the activities underway for the Agency’s PFAS Action Plan;
- Implement EPA’s Drinking Water Laboratory Certification Program,<sup>125</sup> which sets direction for oversight of state, municipal, and commercial laboratories that analyze drinking water samples. Conduct three regional program reviews during FY 2022 and deliver two laboratory certification officer training courses (chemistry and microbiology) for state and regional representatives to ensure the quality of analytical results;
- Partner with states and water systems to optimize their treatment technology and distribution systems under the drinking water Area Wide Optimization Program (AWOP).<sup>126</sup> AWOP is a highly successful technical/compliance assistance and training program that enhances the ability of public water systems to comply with existing microbial, disinfectant, and disinfection byproduct standards, and addresses distribution

<sup>125</sup> For more information, please see: <https://www.epa.gov/dwlabcert>.

<sup>126</sup> For more information, please see: <https://www.epa.gov/sdwa/optimization-program-drinking-water-systems>.

system integrity and water quality issues. During FY 2022, EPA expects to work with states and tribes to expand efforts to train and assist systems, including those in disadvantaged and tribal communities. This effort includes identifying performance limiting factors at public water systems and developing and applying tailored tools to help them overcome operational challenges, achieving performance and optimization levels, and addressing health-based compliance challenges; and

- The Unregulated Contaminant Monitoring Rule (UCMR) is a federal direct implementation program coordinated by EPA, as directed by the Safe Drinking Water Act (SDWA). The data collected are used by EPA as part of the Agency's determination of whether to establish health-based standards to protect public health. Sampling activities under the fourth cycle of the Program (UCMR 4) will conclude in 2021 and EPA will compile and publish a final data set in early FY 2022. The Agency also will publish the final rule for the fifth cycle of UCMR monitoring (UCMR 5) and conduct pre-monitoring implementation activities to prepare for the UCMR 5 sampling period (anticipated to be from January 2023 through December 2025). In March 2021, EPA published the proposed UCMR 5 Federal Register notice for public comment. UCMR 5 would be the first cycle of UCMR to implement the monitoring provisions of the America's Water Infrastructure Act of 2018 (AWIA), which requires, subject to the availability of appropriations and adequate laboratory capacity, sampling at all public water systems (PWSs) serving between 3,300 and 10,000 persons, and a representative sample of PWSs serving fewer than 3,300 persons. 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.

### **Performance Measure Targets:**

Work under this program supports the Safe Drinking Water Act implementation and compliance and requirements in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision Programs under the STAG appropriation to support safe drinking water for the nation.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$66.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,014.0 / +4.0 FTE) This increase of resources and FTE supports regulatory analyses, development and training, and technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. The increase also supports development and implementation of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule. This total includes \$9.0 thousand in non-pay and 1.0 FTE to support

implementation of the Evidence Act. This investment also includes \$705.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

SDWA.

## **Congressional Priorities**

**Water Quality Research and Support Grants**  
Program Area: Congressional Priorities

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$15,000.0	\$21,700.0	\$0.0	-\$21,700.0
<b><i>Science &amp; Technology</i></b>	<b><i>\$4,992.0</i></b>	<b><i>\$7,500.0</i></b>	<b><i>\$0.0</i></b>	<b><i>-\$7,500.0</i></b>
Total Budget Authority	\$19,992.0	\$29,200.0	\$0.0	-\$29,200.0

**Program Project Description:**

In FY 2021, Congress appropriated \$7.5 million in the Science and Technology appropriation to fund high priority water quality and water availability research. EPA was instructed by Congress 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 2022 Activities and Performance Plan:**

Resources are proposed for elimination for this Program in FY 2022.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (-\$7,500.0) This Program is eliminated in the FY 2022 President's Budget. The goals of this Program can be accomplished through core statutory programs.

**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; CWPRA; 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; WRRRA; and WWWQA.







Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification

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**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Environmental Programs & Management  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Environmental Programs &amp; Management</b>				
Budget Authority	\$2,713,792.7	\$2,761,550.0	\$3,427,494.0	\$665,944.0
Total Workyears	8,473.5	8,883.4	9,683.2	799.8

**Bill Language: Environmental Programs & Management**

*For environmental programs and management, including necessary expenses not otherwise provided for, for personnel and related costs and travel expenses; hire and purchase 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; implementation of a coal combustion residual permit program under section 2301 of the Water and Waste Act of 2016; and not to exceed \$9,000 for official reception and representation expenses, \$3,427,494,000, to remain available until September 30, 2023: Provided, That of the funds included under this heading, \$578,336,000 shall be for Geographic Programs specified in the explanatory statement.: Provided further, That of the funds included under this heading, the Chemical Risk Review and Reduction program project shall be allocated for this fiscal year, excluding the amount of any fees appropriated, not less than the amount of appropriations for that program project for fiscal year 2014: Provided further, That of the funds included under this heading, \$140,000,000, to remain available until expended, shall be for environmental justice implementation grants, of which \$50,000,000 shall be for competitive grants to reduce the disproportionate health impacts of environmental pollution in the environmental justice community; \$25,000,000 shall be for an Environmental Justice Community Grant Program for grants to nonprofits to reduce the disproportionate health impacts of environmental pollution in the environmental justice community; \$25,000,000 shall be for an Environmental Justice State Grant Program for grants to states to create or support state environmental justice programs; \$25,000,000 shall be for a Tribal Environmental Justice Grant Program for grants to tribes or intertribal consortia to support tribal work to eliminate disproportionately adverse human health or environmental effects on environmental justice communities in Tribal and indigenous communities; and \$15,000,000 shall be for a competitive Community-based Participatory Research Grant Program for grants to institutions of higher education to develop partnerships with community-based organizations to improve the health outcomes of residents and workers in environmental justice communities: Provided further, That of the funds included under this heading, \$10,000,000, to remain available until expended, shall be for an Environmental Justice Training Program for grants to nonprofits for multi-media or single media activities to increase the capacity of residents of underserved communities to identify and address disproportionately*

*adverse human health or environmental effects of pollution: Provided further, That the Administrator, jointly with the Secretary of Energy, and in consultation with the Administrator of the General Services Agency and the Administrator of the Office of Federal Procurement Policy, shall design and implement a "Buy Clean" procurement pilot that places preference on the purchase or acquisition of goods, products, or materials that are in a manner that results in, or otherwise promotes, the reduction of greenhouse gas emissions.*

**Program Projects in EPM**  
(Dollars in Thousands)

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Clean Air and Climate				
Clean Air Allowance Trading Programs	\$15,503.2	\$13,153.0	\$18,138.0	\$4,985.0
Climate Protection	\$103,054.5	\$97,000.0	\$103,689.0	\$6,689.0
Federal Stationary Source Regulations	\$21,244.6	\$20,733.0	\$26,618.0	\$5,885.0
Federal Support for Air Quality Management	\$131,855.1	\$138,020.0	\$257,808.0	\$119,788.0
Stratospheric Ozone: Domestic Programs	\$4,872.4	\$4,633.0	\$10,901.0	\$6,268.0
Stratospheric Ozone: Multilateral Fund	\$8,347.0	\$8,711.0	\$18,000.0	\$9,289.0
Subtotal, Clean Air and Climate	\$284,876.8	\$282,250.0	\$435,154.0	\$152,904.0
Indoor Air and Radiation				
Indoor Air: Radon Program	\$2,680.4	\$3,136.0	\$3,167.0	\$31.0
Radiation: Protection	\$8,912.4	\$7,661.0	\$10,342.0	\$2,681.0
Radiation: Response Preparedness	\$2,616.2	\$2,404.0	\$2,908.0	\$504.0
Reduce Risks from Indoor Air	\$10,934.8	\$11,750.0	\$13,837.0	\$2,087.0
Subtotal, Indoor Air and Radiation	\$25,143.8	\$24,951.0	\$30,254.0	\$5,303.0
Brownfields				
Brownfields	\$23,332.9	\$24,000.0	\$24,197.0	\$197.0
Compliance				
Compliance Monitoring	\$98,418.4	\$102,500.0	\$132,350.0	\$29,850.0
Enforcement				
Civil Enforcement	\$162,505.0	\$168,341.0	\$194,623.0	\$26,282.0
Criminal Enforcement	\$50,326.2	\$51,275.0	\$59,121.0	\$7,846.0
Environmental Justice	\$9,482.5	\$11,838.0	\$293,862.0	\$282,024.0
NEPA Implementation	\$15,337.8	\$16,943.0	\$18,966.0	\$2,023.0
Subtotal, Enforcement	\$237,651.5	\$248,397.0	\$566,572.0	\$318,175.0
Geographic Programs				
Geographic Program: Chesapeake Bay	\$87,690.4	\$87,500.0	\$90,500.0	\$3,000.0
Geographic Program: Gulf of Mexico	\$13,833.9	\$20,000.0	\$22,447.0	\$2,447.0

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Geographic Program: Lake Champlain	\$13,387.0	\$15,000.0	\$20,000.0	\$5,000.0
Geographic Program: Long Island Sound	\$20,642.6	\$30,400.0	\$40,000.0	\$9,600.0
Geographic Program: Other				
<i>Lake Pontchartrain</i>	\$947.0	\$1,442.0	\$1,737.0	\$295.0
<i>S.New England Estuary (SNEE)</i>	\$5,244.8	\$5,400.0	\$6,252.0	\$852.0
<i>Geographic Program: Other (other activities)</i>	\$3,672.1	\$3,558.0	\$3,245.0	-\$313.0
Subtotal, Geographic Program: Other	\$9,863.9	\$10,400.0	\$11,234.0	\$834.0
Great Lakes Restoration	\$346,143.7	\$330,000.0	\$340,000.0	\$10,000.0
Geographic Program: South Florida	\$2,739.6	\$6,000.0	\$7,155.0	\$1,155.0
Geographic Program: San Francisco Bay	\$5,907.2	\$8,922.0	\$12,000.0	\$3,078.0
Geographic Program: Puget Sound	\$32,861.0	\$33,750.0	\$35,000.0	\$1,250.0
Subtotal, Geographic Programs	\$533,069.3	\$541,972.0	\$578,336.0	\$36,364.0
Homeland Security				
Homeland Security: Communication and Information	\$4,935.3	\$4,145.0	\$4,557.0	\$412.0
Homeland Security: Critical Infrastructure Protection	\$990.3	\$909.0	\$1,008.0	\$99.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$4,175.9	\$4,959.0	\$5,139.0	\$180.0
Subtotal, Homeland Security	\$10,101.5	\$10,013.0	\$10,704.0	\$691.0
Information Exchange / Outreach				
State and Local Prevention and Preparedness	\$13,660.5	\$13,736.0	\$14,003.0	\$267.0
TRI / Right to Know	\$12,225.3	\$13,206.0	\$13,450.0	\$244.0
Tribal - Capacity Building	\$13,639.3	\$12,902.0	\$15,971.0	\$3,069.0
Executive Management and Operations	\$50,346.8	\$46,836.0	\$54,792.0	\$7,956.0
Environmental Education	\$6,388.7	\$8,580.0	\$8,615.0	\$35.0
Exchange Network	\$14,906.1	\$14,084.0	\$14,226.0	\$142.0
Small Minority Business Assistance	\$1,363.2	\$1,680.0	\$1,884.0	\$204.0
Small Business Ombudsman	\$2,145.2	\$1,778.0	\$1,929.0	\$151.0
Children and Other Sensitive Populations: Agency Coordination	\$6,209.9	\$6,173.0	\$6,247.0	\$74.0
Subtotal, Information Exchange / Outreach	\$120,885.0	\$118,975.0	\$131,117.0	\$12,142.0
International Programs				
US Mexico Border	\$2,955.4	\$2,837.0	\$3,192.0	\$355.0
International Sources of Pollution	\$6,240.6	\$6,746.0	\$8,006.0	\$1,260.0
Trade and Governance	\$5,608.4	\$5,292.0	\$6,080.0	\$788.0
Subtotal, International Programs	\$14,804.4	\$14,875.0	\$17,278.0	\$2,403.0



<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
IT / Data Management / Security				
Information Security	\$6,190.4	\$8,285.0	\$14,116.0	\$5,831.0
IT / Data Management	\$86,699.8	\$82,715.0	\$86,744.0	\$4,029.0
Subtotal, IT / Data Management / Security	\$92,890.2	\$91,000.0	\$100,860.0	\$9,860.0
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	\$11,398.1	\$9,475.0	\$17,719.0	\$8,244.0
Administrative Law	\$4,524.5	\$4,975.0	\$5,704.0	\$729.0
Alternative Dispute Resolution	\$800.2	\$864.0	\$1,141.0	\$277.0
Civil Rights Program	\$9,468.4	\$9,205.0	\$13,946.0	\$4,741.0
Legal Advice: Environmental Program	\$49,878.3	\$49,595.0	\$71,895.0	\$22,300.0
Legal Advice: Support Program	\$14,475.0	\$15,865.0	\$18,315.0	\$2,450.0
Regional Science and Technology	\$1,060.5	\$638.0	\$1,174.0	\$536.0
Science Advisory Board	\$3,903.2	\$3,205.0	\$3,475.0	\$270.0
Regulatory/Economic-Management and Analysis	\$12,643.4	\$12,421.0	\$13,463.0	\$1,042.0
Subtotal, Legal / Science / Regulatory / Economic Review	\$108,151.6	\$106,243.0	\$146,832.0	\$40,589.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$70,751.8	\$76,718.0	\$81,563.0	\$4,845.0
Facilities Infrastructure and Operations	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
Acquisition Management	\$27,433.0	\$32,247.0	\$34,121.0	\$1,874.0
Human Resources Management	\$47,042.8	\$46,229.0	\$53,254.0	\$7,025.0
Financial Assistance Grants / IAG Management	\$26,319.8	\$25,430.0	\$28,730.0	\$3,300.0
Subtotal, Operations and Administration	\$456,984.7	\$466,065.0	\$495,416.0	\$29,351.0
Pesticides Licensing				
Science Policy and Biotechnology	\$1,887.3	\$1,546.0	\$1,546.0	\$0.0
Pesticides: Protect Human Health from Pesticide Risk	\$60,580.8	\$60,181.0	\$60,929.0	\$748.0
Pesticides: Protect the Environment from Pesticide Risk	\$37,650.6	\$39,543.0	\$39,952.0	\$409.0
Pesticides: Realize the Value of Pesticide Availability	\$6,173.0	\$7,730.0	\$7,792.0	\$62.0
Subtotal, Pesticides Licensing	\$106,291.7	\$109,000.0	\$110,219.0	\$1,219.0
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	\$143.0	\$0.0	\$0.0	\$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	\$35,671.5	\$38,453.0	\$38,836.0	\$383.0
RCRA: Waste Management	\$64,884.9	\$70,465.0	\$71,082.0	\$617.0

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
RCRA: Waste Minimization & Recycling	\$9,051.3	\$9,982.0	\$10,202.0	\$220.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	\$109,607.7	\$118,900.0	\$120,120.0	\$1,220.0
Toxics Risk Review and Prevention				
Endocrine Disruptors	\$11,030.3	\$7,533.0	\$7,565.0	\$32.0
Pollution Prevention Program	\$11,475.6	\$12,558.0	\$12,588.0	\$30.0
Toxic Substances: Chemical Risk Management	\$0.0	\$0.0	\$0.0	\$0.0
Toxic Substances: Chemical Risk Review and Reduction	\$67,369.7	\$60,280.0	\$75,519.0	\$15,239.0
Toxic Substances: Lead Risk Reduction Program	\$11,859.6	\$13,129.0	\$13,385.0	\$256.0
Subtotal, Toxics Risk Review and Prevention	\$101,735.2	\$93,500.0	\$109,057.0	\$15,557.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$10,841.7	\$11,250.0	\$11,443.0	\$193.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	\$30,863.9	\$31,822.0	\$31,963.0	\$141.0
Wetlands	\$20,212.0	\$19,300.0	\$24,899.0	\$5,599.0
Subtotal, Water: Ecosystems	\$51,075.9	\$51,122.0	\$56,862.0	\$5,740.0
Water: Human Health Protection				
Beach / Fish Programs	\$1,337.2	\$1,584.0	\$1,804.0	\$220.0
Drinking Water Programs	\$101,007.3	\$106,903.0	\$118,265.0	\$11,362.0
Subtotal, Water: Human Health Protection	\$102,344.5	\$108,487.0	\$120,069.0	\$11,582.0
Water Quality Protection				
Marine Pollution	\$9,153.2	\$9,468.0	\$12,072.0	\$2,604.0
Surface Water Protection	\$201,289.7	\$206,882.0	\$218,582.0	\$11,700.0
Subtotal, Water Quality Protection	\$210,442.9	\$216,350.0	\$230,654.0	\$14,304.0
Congressional Priorities				
Water Quality Research and Support Grants	\$15,000.0	\$21,700.0	\$0.0	-\$21,700.0
<b>TOTAL EPM</b>	<b>\$2,713,792.7</b>	<b>\$2,761,550.0</b>	<b>\$3,427,494.0</b>	<b>\$665,944.0</b>

## **Clean Air**

**Clean Air Allowance Trading Programs**  
Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$15,503.2</i></b>	<b><i>\$13,153.0</i></b>	<b><i>\$18,138.0</i></b>	<b><i>\$4,985.0</i></b>
Science & Technology	\$7,537.7	\$6,793.0	\$8,800.0	\$2,007.0
Total Budget Authority	\$23,040.9	\$19,946.0	\$26,938.0	\$6,992.0
Total Workyears	63.9	63.7	78.7	15.0

**Program Project Description:**

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries. The programs, designed to control sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>), key precursors of both fine particulate matter (PM<sub>2.5</sub>) and ozone (O<sub>3</sub>), include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update, and the revised CSAPR Update. The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO<sub>2</sub>, hazardous air pollutants, and greenhouse gases.

The Clean Air Allowance Trading Programs establish a total emission limit across affected emission sources, which must hold allowances as authorizations to emit one ton of the regulated pollutant(s) in a specific emission control period. The owners and operators of affected emission sources may select among different methods of compliance—installing pollution control equipment, switching fuel types, shifting generation to lower-emitting units, purchasing allowances, or other strategies. By offering the flexibility to determine how the sources comply, the programs lower the overall cost, making it feasible to pursue greater emission reductions. These programs are managed through a centralized database system operated by EPA.<sup>127</sup> Data collected under these programs are made available to the public through EPA’s Clean Air Markets Data Resources website<sup>128</sup>, which provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through charts, reports, and downloadable datasets. To implement the Clean Air Allowance Trading Programs, EPA operates an emission measurement and reporting program, market operations program, environmental monitoring programs, and a communication and stakeholder engagement program.

For emissions measurement and reporting, Part 75 requires almost 4,300 affected units to monitor and report emission and operation data.<sup>129</sup> The Part 75 program requires high degrees of accuracy and reliability from continuous emission monitoring systems or approved alternative methods at the affected sources. EPA provides the affected emission sources with technical assistance to facilitate compliance with the monitoring requirements, and software, the Emissions Collection

<sup>127</sup> Clean Air Act § 403(d).

<sup>128</sup> For additional information, please refer to <https://www.epa.gov/airmarkets/data-resources>.

<sup>129</sup> Clean Air Act § 412; Clean Air Act Amendments of 1990, P.L. 101-549 § 821.

and Monitoring Plan System (ECMPS), to process, quality assure, and report data to EPA. To assess the quality of the data, the Agency conducts electronic audits, desk reviews, and field audits of the emission data and monitoring systems. In addition to the Clean Air Allowance Trading Programs, the emission measurement program and ECMPS software support several state and federal emission control and reporting programs, including the Texas SO<sub>2</sub> Trading Program, Regional Greenhouse Gas Initiative (RGGI), and Mercury and Air Toxics Standards (MATS). It also interfaces with the Greenhouse Gas Reporting Program (GHGRP), ensuring the Part 75 data is seamlessly transferred to that program's infrastructure (Electronic Greenhouse Gas Reporting Tool (eGGRT)).

EPA's centralized market operation system (the allowance tracking system) manages accounts and records allowance allocations and transfers.<sup>130</sup> 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.<sup>131</sup> In 2020, total annual SO<sub>2</sub> emissions from Acid Rain Program-affected emission sources were 788,000 tons, or over 90 percent below the statutory nationwide emissions cap, a level not seen since early in the 20<sup>th</sup> Century. Total annual 2020 NO<sub>x</sub> emissions were 759,000 tons, an almost 9 million ton reduction from projected levels, exceeding the program's goal of a 2 million ton reduction from projected levels.<sup>132</sup> The allowance tracking system also supports several state and federal emission control and reporting programs, including the Texas SO<sub>2</sub> Trading Program, RGGI, and MATS.

The Clean Air Act's Good Neighbor provision<sup>133</sup> requires states or, in some circumstances, the Agency to reduce interstate pollution that significantly contributes to nonattainment or interferes with maintenance of the National Ambient Air Quality Standards. Under this authority, EPA issued CSAPR, which requires 27 states in the eastern U.S. to limit their state-wide emissions of SO<sub>2</sub> and/or NO<sub>x</sub> to reduce or eliminate the states' contributions to PM<sub>2.5</sub> and/or ground-level ozone non-attainment of the NAAQS in downwind states. The emission limitations are defined in terms of maximum statewide "budgets" for emissions of annual SO<sub>2</sub>, annual NO<sub>x</sub>, and/or ozone-season NO<sub>x</sub> emissions from certain large stationary sources in each state. In 2016, EPA issued the CSAPR Update to address interstate transport of ozone for the 2008 ozone NAAQS in the eastern United States. EPA revised the CSAPR Update on March 15, 2021, to address a ruling of the U.S. Court of Appeals for the D.C. Circuit. In addition, EPA is supporting state efforts to address regional haze including best available retrofit technology and reasonable progress, as well as interstate air pollution transport contributing to downwind nonattainment of NAAQS as those obligations relate to emissions from electricity generating units.<sup>134</sup> EPA is conducting environmental justice analyses of the distribution of these emissions and associated public health impacts on overburdened communities.

EPA manages the Clean Air Status and Trends Network (CASTNET), which monitors ambient ozone, sulfate, and nitrate concentrations, dry sulfur and nitrogen deposition, and other air quality indicators. In addition, EPA participates in the National Atmospheric Deposition Program, which

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<sup>130</sup> Clean Air Act § 403(d).

<sup>131</sup> For more information, please refer to: <http://www3.epa.gov/airmarkets/progress/reports/index.html>.

<sup>132</sup> For more information, please refer to: <https://www.epa.gov/airmarkets/power-plant-emission-trends>.

<sup>133</sup> Clean Air Act § 110(a)(2)(D); also refer to Clean Air Act § 110(c).

<sup>134</sup> Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.

monitors wet deposition of sulfur, nitrogen, and mercury, as well as ambient concentrations of mercury and ammonia. EPA also manages the Long-Term Monitoring (LTM) program to assess how lakes, streams, 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<sub>2</sub>, NO<sub>x</sub>, mercury, and CO<sub>2</sub> emissions data from the Part 75 monitoring program and mercury emissions data from the MATS reporting 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, CSAPR, and the CSAPR Update, and pollution controls installed and emissions reductions achieved by MATS.<sup>135</sup> Required by Congress in the FY 2019 and FY 2020 appropriations reports, these annual progress reports highlight reductions in SO<sub>2</sub> and NO<sub>x</sub> emissions, and impacts of these reductions on air quality (e.g., ozone and PM<sub>2.5</sub> levels), acid deposition, surface water acidity, forest health, and other environmental indicators.

EPA produces several tools to inform the public and key stakeholders about power sector emissions, operations, and environmental data. The Emissions & Generation Resource Integrated Database (eGRID)<sup>136</sup> is a comprehensive source of data on the environmental characteristics of almost all electric power generated in the U.S. eGRID data are used by other EPA programs, state energy and air agencies, and researchers. Between 2015 and 2020, eGRID was cited by more than 1,300 academic papers. Power Profiler<sup>137</sup> is a web application where electricity consumers can see the fuel mix and air emissions rates of their region's electricity and determine the air emissions associated with their electricity use. In keeping with the Agency's renewed commitment to energy equity and environmental justice, EPA is developing analytical and mapping tools to better understand and communicate the impact of electricity generation on low-income communities and communities of color. EPA also operates several initiatives to engage key stakeholders, including working closely with tribal governments to build tribal air monitoring capacity through partnerships with the CASTNET program. The EmPOWER Air Data Challenge<sup>138</sup> encourages academic researchers to propose how to integrate the EPA emissions and/or environmental data in their research. The Ask CAMD webinars provide an opportunity for stakeholders to ask EPA's Clean Air Markets Division staff about the Clean Air Allowance Trading Programs, Part 75 emission reporting program, and the emission and environmental data.

EPA also develops multiple models and tools to project future emissions from the power sector to inform EPA's air quality modeling and air, water, and land regulations affecting power plants. The Integrated Planning Model (IPM) is a state-of-the-art, peer-reviewed, dynamic linear programming model that EPA develops to project power sector behavior under future business-as-usual conditions and to examine prospective air pollution control policies throughout the contiguous United States for the entire electric power system. EPA uses IPM, along with the National Energy Modeling System (NEMS) and the Regional Energy Deployment System (ReEDS), to project likely future electricity market conditions and associated pollutant emissions with and without legislative and regulatory policies under consideration by Congress and the

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<sup>135</sup> To view the progress reports, please refer to: <http://www3.epa.gov/airmarkets/progress/reports/index.html>.

<sup>136</sup> To view eGRID, please refer to <https://www.epa.gov/egrid>.

<sup>137</sup> To view Power Profiler, please refer to <https://www.epa.gov/egrid/power-profiler>.

<sup>138</sup> For more information about the challenge, refer to <https://www.epa.gov/airmarkets/empower-air-data-challenge>.

Administration. The National Electric Energy Data System (NEEDS) includes geographic, operating, air emissions, and other data on existing and planned grid-connected electric generating units across the contiguous United States. EPA updates and publishes NEEDS on a quarterly basis to inform emission modeling projections and to provide timely information to air quality planners and policy-makers developing regulations to address power sector pollution. EPA is augmenting these power sector models and tools to include important information pertinent to environmental justice analyses and community-level impacts.

### **FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President’s priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of EPA.

In FY 2022, EPA will continue to operate the Clean Air Allowance Trading Programs and the systems to assess compliance with the programs’ regulatory requirements and the programs’ progress toward the environmental goals required by the Clean Air Act. EPA will work to meet requirements and requests for modeling in support of the power sector and for legal defense of regulatory actions. The Program will continue to support emission reporting for other state and federal programs, including MATS and GHGRP.<sup>139</sup>

#### Allowance tracking and compliance assessment

EPA will allocate SO<sub>2</sub> and NO<sub>x</sub> allowances to affected emission sources and other account holders as established in the Clean Air Act<sup>140</sup> and state and federal CSAPR implementation plans. These allowance holdings and subsequent allowance transfers will be maintained in an allowance tracking system (i.e., central database).<sup>141</sup> 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.<sup>142</sup>

#### Emission measurement and data collection and review

EPA will operate the Part 75 emission measurement program to collect, verify, and track emissions of air pollutants and air toxics from approximately 4,300 fossil-fuel-fired electric generating units.<sup>143</sup>

#### Program assessment and communication

EPA will continue to monitor ambient air, deposition, and other environmental indicators through the CASTNET and LTM programs, serve as a part of the National Atmospheric Deposition Program, publish the power sector progress reports required by Congress, and produce other information to communicate the extent of the progress made by the Clean Air Allowance Trading

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<sup>139</sup> Refer to, 40 C.F.R. Part 63, Subpart UUUUU (*National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units*) and 40 C.F.R. Part 98, Subpart D (*Mandatory Greenhouse Gas Reporting: Electricity Generation*).

<sup>140</sup> Clean Air Act §§ 110 and 403.

<sup>141</sup> Clean Air Act §§ 110 and 403.

<sup>142</sup> Clean Air Act §§ 110 and 404-405, and state CSAPR implementation plans.

<sup>143</sup> Clean Air Act § 412; Clean Air Act Amendments of 1990, P.L. 101-549 § 821; and 40 C.F.R. Part 63, Subpart UUUUU.

Programs.<sup>144</sup> EPA will publish emissions and environmental data on our Air Markets and eGRID websites.

#### Redesign system applications

EPA will continue the redesign of its Air Markets Program Data website and Emission Collection Monitoring Plan System software. These mission critical systems support the trading programs, as well as other emissions reporting programs operated by the states (e.g., RGGI) and EPA (e.g., MATS, GHGRP). Reengineering these decade-old systems will enable EPA to enhance the user experience, comply with EPA security and technology requirements, consolidate software systems, and reduce long-term operation and maintenance costs.

#### Assistance to states

EPA will work with states to develop emission reduction programs to comply with the Clean Air Act Good Neighbor Provision and Regional Haze program requirements.<sup>145</sup>

#### Stakeholder engagement

EPA will continue to engage our stakeholder communities through efforts to maintain and strengthen current tribal air monitoring partnerships and build new ones to the extent possible. In addition, EPA has new efforts underway to identify how power plant pollution impacts historically marginalized and overburdened disadvantaged communities, and how EPA air rules can mitigate those impacts. EPA also seeks to communicate information about power plant emissions and the contributions to low-income communities and communities of color, and encourage the use of the Clean Air Allowance Trading Programs' data for scientific analysis and communication through various programs and tools such as CAMD(ej), EmPOWER Air Data Challenge, and Ask CAMD webinars.

#### Policy and regulatory development

EPA will contribute multipollutant and multi-media (air, water, land) power sector analyses informing EPA's policy agenda to tackle the climate crisis and protect public health and the environment, including environmental justice analyses to consider the distributional impacts of emissions on overburdened communities. Analytic and policy topics addressing climate change and air pollution that could be analyzed include a wide range of power sector actions under the CAA, as well as analysis of interactions between alternative vehicle electrification futures and associated changes in electric power generation.

#### **Performance Measure Targets:**

EPA's FY 2022 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>.

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<sup>144</sup> Government Performance and Results Act § 1115.

<sup>145</sup> Clean Air Act § 110(a)(2)(D).



**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$303.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$4,682.0 / +15.0 FTE) This program change increases support to emissions trading programs that protect human health and the environment by delivering substantial emissions reductions in the power sector of SO<sub>2</sub>, NO<sub>x</sub>, and hazardous air pollutants, along with significant improvements in air quality and the environment. This proposal expands EPA's ability to perform advanced power sector analyses to tackle the climate crisis, including developing environmental justice tools to consider the distributional impacts of emissions on overburdened communities. This investment includes \$2,520.0 thousand in payroll costs.

**Statutory Authority:**

Clean Air Act.

**Climate Protection**

Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$103,054.5</i></b>	<b><i>\$97,000.0</i></b>	<b><i>\$103,689.0</i></b>	<b><i>\$6,689.0</i></b>
Science & Technology	\$7,326.8	\$7,895.0	\$9,997.0	\$2,102.0
Total Budget Authority	\$110,381.3	\$104,895.0	\$113,686.0	\$8,791.0
Total Workyears	205.1	214.1	227.9	13.8

**Program Project Description:**

EPA’s Climate Protection Program is working to tackle the climate crisis at home and abroad through an integrated approach of regulations, partnerships, and technical assistance. This Program takes strong action to limit carbon dioxide (CO<sub>2</sub>) and methane emissions as well as working to reduce high-global warming potential climate pollutants, like hydrofluorocarbons (HFCs), that will help the U.S. realize near-term climate benefits. Through partnerships, tools, verification, and publication of greenhouse gas (GHG) emissions data, advancing our understanding of climate science and impacts, and economic modeling and policy analysis, EPA provides flexibility and lower costs for federal, state and local government agencies and key GHG-emitting sectors, and works to ensure environmental and public health benefits for all Americans. EPA also extends this expertise internationally and plays critical roles in shaping and advancing international agreements and solutions. This international collaboration helps to both improve public health and air quality in the United States and level the playing field for American businesses by retaining and creating union jobs.

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 8,100 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*; support federal and state-level policy development; support regulatory development; and to share GHG emissions and supply data with state and local governments, tribes, community groups, industry stakeholders, academia, the research community, and the general public.

Inventory of U.S. Greenhouse Gas Emissions and Sinks:

To fulfill U.S. Treaty obligations, under Article 4 of the 1992 Framework Convention on Climate Change, which was ratified by the U.S. Senate, EPA prepares the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. The *Inventory* provides information on total annual U.S. emissions and removals by source, economic sector, and GHG. The *Inventory* is used to inform U.S. policy and for tracking progress towards the U.S. Nationally Determined Contribution under the Paris Agreement. 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 CAA to ensure a smooth transition away from ozone-depleting substances (ODS) to safer alternatives. Applying a comparative risk assessment, the Significant New Alternatives Policy (SNAP) Program evaluates the health and environmental effects of alternatives in the sectors and subsectors where ODS and high-global warming potential HFCs are used, providing additional options for use in key sectors such as refrigeration and air conditioning.

#### Phasing Down HFCs:

EPA implements the American Innovation and Manufacturing (AIM) Act, enacted to address the climate impact of HFCs by phasing down HFC production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. This phasedown will decrease the production and import of HFCs in the United States by 85 percent over the next 15 years resulting in significant climate benefits.

#### ENERGY STAR:

ENERGY STAR 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, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and climate goals. ENERGY STAR is the national symbol for energy efficiency, recognized by more than 90 percent of American households, and is a critical tool to fight the climate crisis and deliver on environmental justice.

ENERGY STAR achieves significant and growing GHG reductions by promoting the adoption of cost-effective, energy-efficient technologies and practices in the residential, commercial, and industrial sectors. The Program yields significant environmental and economic results through its network of thousands of partners. In 2019 alone, ENERGY STAR and its partners helped American families and businesses save nearly 500 billion kilowatt-hours of electricity and avoid \$39 billion in energy costs. These savings resulted in emission reductions of nearly 390 million metric tons of GHGs (roughly equivalent to 5 percent of U.S. total GHG emissions) and more than 470 thousand tons of criteria air pollutants (SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>2.5</sub>), resulting in an estimated \$7 to \$17 billion in estimated public health benefits.<sup>146</sup> These investments in turn drive job creation across the economy. More than 800,000 Americans are employed in manufacturing or installing ENERGY STAR certified equipment alone – nearly 35 percent of all energy efficiency jobs in 2019, with energy efficiency accounting for 40 percent of all energy sector jobs overall.<sup>147</sup>

EPA manages the ENERGY STAR program with clearly defined support from the U.S. Department of Energy. Specifically, EPA manages and implements the following activities: the

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<sup>146</sup> For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here: [https://www.energystar.gov/about/origins\\_mission/impacts](https://www.energystar.gov/about/origins_mission/impacts). For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: <https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf>

<sup>147</sup> NASEO and Energy Futures Initiative. (2020). U.S. Energy and Employment Report. <https://www.usenergyjobs.org/> (link is external). The survey does not account for retail employment.

specification development process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Residential New Construction Program for single-family homes, manufactured homes, and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as certification monitoring and verification, setting performance levels for building types, and managing and maintaining the ENERGY STAR Portfolio Manager tool to measure and track energy use in buildings, and managing the integrity of the ENERGY STAR brand.

ENERGY STAR also supports equitable energy solutions that can deliver significant cost savings for low-income families and other disadvantaged populations. The Program prioritizes outreach to low-income populations on products that have the greatest opportunity to save energy and dollars. The ENERGY STAR Program also looks for affordable alternatives to products that may be cost-prohibitive, such as replacement windows, (e.g., storm windows). In addition, roughly 20 percent of ENERGY STAR home builder partners work in the affordable housing space, including 550 Habitat for Humanity affiliates (18,000 ENERGY STAR certified homes constructed), 80 manufactured housing plants (more than 66,500 ENERGY STAR certified manufactured homes built), and the multifamily sector (more than 75 percent of ENERGY STAR multifamily high-rise projects are identified as affordable housing).<sup>148</sup>

#### Renewable Energy Programs:

EPA works with industry and other key groups to encourage efficient, clean technologies. The EPA Green Power Partnership drives voluntary participation in the green power market. The program provides information, technical assistance, and recognition to companies that use green power. Current partners' green power use represents nearly 43 percent of the U.S. voluntary green power market (that goes beyond required purchases under state renewable portfolio standards). Since 2001, the program has helped prevent nearly 280 million metric tons of GHG emissions.<sup>149</sup> The Combined Heat and Power Partnership offers tools and services to facilitate and promote cost-effective, highly efficient CHP projects.

#### State, Local and Tribal Climate and Energy Programs:

EPA works with state, local and tribal governments to identify and implement cost-effective programs that reduce GHG emissions, save energy, and improve air quality. EPA provides tools, data, and technical expertise to help state, local, and tribal governments implement clean energy policies and programs that reduce emissions, maximize co-benefits, and prioritize low-income and environmental justice (EJ) communities. The Program helps governments develop emissions inventories, discover best practices for emissions reductions and heat island mitigation, and analyze the emissions and health benefits of clean energy strategies. The Program also highlights the best examples across the country on how to deliver inclusive climate programs and provides resources to help governments deliver energy efficiency and renewable energy to low-income communities.

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<sup>148</sup> For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here:

[https://www.energystar.gov/about/origins\\_mission/impacts](https://www.energystar.gov/about/origins_mission/impacts). For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: <https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf>

<sup>149</sup> For more information on the EPA Green Power Partnership's environmental, human health, and economic impacts, please see here: <https://www.epa.gov/greenpower/green-power-partnership-program-success-metrics>.

### SmartWay Transport:

Launched in 2004, SmartWay is the only voluntary program working across the entire freight system to comprehensively address economic and environmental goals related to sustainability. Over 3,700 businesses that receive, ship, or carry freight rely upon SmartWay supply chain accounting tools and methods to assess, track, and reduce transportation-related carbon, energy use, and air emissions. By accelerating deployment of cleaner, more efficient technologies and operational strategies across supply chains, SmartWay partners have avoided significant amounts of pollution, pollutants, helping to address the climate crisis, and contributing to healthier air for disadvantaged communities living close to freight hubs and routes. Improving supply chain efficiency also helps grow the economy and protect and generate jobs while contributing to energy security.

EPA is the SmartWay brand manager and is responsible for the specification process for hundreds of product and vehicle categories, including both family (passenger) vehicles and commercial (heavy duty freight truck and trailer) vehicles, and the SmartWay Partnership and SmartWay Affiliate recognition programs. EPA's technology verification program enables manufacturers to voluntarily demonstrate fuel saving and emission reduction performance using standard testing protocols. SmartWay partner fleets as well as others in the trucking industry use EPA's verified technology lists to identify products that have been demonstrated to save fuel and reduce emissions.

### Partnerships to Reduce Methane Emissions:

EPA operates several partnership programs that promote cost-effective reductions of methane by working collaboratively with industry. Methane programs offer excellent opportunities for reducing the concentration of GHGs in the atmosphere and providing a clean energy resource in the process. Methane is a significant source of GHG emissions and has a relatively short atmospheric lifetime of about 9 to 15 years, which means that reductions made today will yield positive results in the near term. Unlike other GHGs, methane is an important energy resource that allows for cost-effective mitigation. There are many opportunities to recover and re-use or sell methane from the agriculture (manure management), coal mining, oil and gas, and landfill sectors. The AgSTAR Program, which is a collaboration between EPA and the Department of Agriculture, focuses on methane emission reductions from livestock waste management operations through biogas recovery systems. The Coalbed Methane Outreach Program promotes opportunities to profitably recover and use methane emitted from coal mining activities. The Landfill Methane Outreach Program promotes abatement and energy recovery of methane emitted from landfills. The Natural Gas STAR and Methane Challenge Programs spur the adoption of cost-effective technologies and practices that reduce methane emissions from the oil and natural gas sector through collaborative partnerships with companies.

EPA also manages the implementation of the Global Methane Initiative (GMI), a U.S. led, international public-private partnership that brings together over 40 partner governments and over 1,000 public and private sector organizations to advance methane recovery and use methane as a clean energy source. GMI builds on the success of EPA's domestic methane programs and focuses on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater. With assistance from several agencies—particularly EPA and U.S. State Department—the U.S. Government has supported identification and implementation of more than 1,100 methane mitigation projects since 2005. These projects have reduced methane emissions by

more than 409 million tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e), including 39.4 MMTCO<sub>2</sub>e in 2018. Since 2005, U.S. efforts under the auspices of GMI also have identified additional possible mitigation projects with an estimated cumulative potential to reduce another 576 MMTCO<sub>2</sub>e.<sup>150</sup>

#### Partnerships to Reduce Fluorinated Greenhouse Gas Emissions:

EPA operates partnership programs that promote cost-effective reductions of fluorinated greenhouse gases (FGHG) by working collaboratively with industry. EPA's FGHG partnership programs continue to make significant reductions in potent GHG emissions, such as perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF<sub>3</sub>), and hexafluoride (SF<sub>6</sub>). Through its partnership programs, EPA works closely with participating industries to identify cost-effective emissions reduction opportunities, recognize industry accomplishments, and facilitate the transition toward environmentally friendlier technologies and chemicals and best environmental practices. Although FGHGs account for a small portion of total U.S. GHG emissions, they have very high global warming potentials.

#### Science, Economic, and Technical Analyses:

EPA conducts a range of economic, scientific, and technical analyses for CAA regulatory actions and to support the Administration's efforts to address climate change. These efforts include the communication of the science of climate change to the public by providing information on the indicators of climate change, climate risks, and actions that can be taken to mitigate the impacts. These efforts also include the development of multiple models and tools to project future multipollutant emissions (including GHGs) from the power sector to inform EPA's air quality modeling and air, water, and land regulations affecting power plants. EPA applies our modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement, responding to requests for the U.S. Special Presidential Envoy for Climate for analysis and technical expertise, and conducting legislative analyses as requested by Congressional staff. Furthermore, EPA provides critical, world renowned non-CO<sub>2</sub>, agriculture and forestry analyses and participates in the interagency process to improve and apply the models and analyses as needed. Finally, EPA is expanding its ability to conduct equity and environmental justice analyses to identify policy implications and improve collaboration with underserved and front-line communities.

#### **FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of EPA.

In FY 2022, EPA will continue to implement the Greenhouse Gas Reporting Program covering a total of 41 sectors, with approximately 8,100 reporters. Focus areas for the Program will include:

- Developing and implementing regulatory revisions across multiple sectors, including oil and gas to streamline reporting where appropriate;
- Aligning the electronic GHG reporting tool with those regulatory amendments;

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<sup>150</sup>For more information on the Global Methane Initiative's environmental, human health, and economic impacts, please see here: <https://www.epa.gov/gmi/us-government-global-methane-initiative-accomplishments>.

- Ensuring that the electronic reporting system continues to meet all Agency security requirements;
- Coding changes to the GHGRP's electronic GHG reporting tool to accommodate HFC supply data submitted by industry to meet the reporting requirements of the American Innovation and Manufacturing (AIM) Act regulations;
- Conducting a QA/QC and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary;
- Publishing reported data while enhancing the Facility Level Information on GHG Tool (FLIGHT) mapping feature to visually display the distribution of GHG emissions and sources of GHG supply in areas of the country of environmental justice and equity concern;
- Continued review and approval of the increased number of Carbon Capture and Storage Monitoring Reporting and Verification (MRV) plans that are submitted to the GHG Reporting Program due to changes in the IRS tax code.

In addition, EPA will work to complete the annual *Inventory of U.S. Greenhouse Emissions and Sinks*. Focus areas will include:

- Continued improvements to inventory methodologies in areas such as oil and gas, land-use, and waste, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines, and to meet upcoming Paris reporting requirements;
- Disaggregating the national *Inventory of U.S. Greenhouse Gas Emissions and Sinks* to the state level and publishing the results annually through the online Data Explorer tool;
- Developing the capacity to publish an annual gridded methane inventory, which is essential for use by atmospheric researchers and as input to other studies;
- Creating a new GHG emission calculator, linked to Portfolio Manager, to develop building GHG inventories that fully comply with accounting protocols and local mandates; and
- Enhancing GHG inventory tools and technical assistance to states, local governments, and tribes.

In FY 2022, EPA will continue to implement the ENERGY STAR Program, partnering with more than 840 utilities (\$8.4 billion investment), state and local governments, and nonprofits that leverage ENERGY STAR in their efficiency programs to achieve GHG reductions in major economic sectors, consistent with national commitments.

ENERGY STAR will work in the Residential Sector to enable and accelerate the adoption of energy efficiency. In FY 2022, the Program will:

- Update up to 25 product specifications for ENERGY STAR-labeled products to ensure top efficiency performance;
- Further amend up to 14 ENERGY STAR specifications in response to changes in Department of Energy (DOE) minimum efficiency standards and test procedures;
- Maintain third-party certification to ensure consumer confidence in more than 75 categories for ENERGY STAR labeled products, which includes overseeing 500 recognized laboratories worldwide and 20 certification bodies;
- Further drive long-term climate goals by advancing the cutting edge of the current and future market through the ENERGY STAR Emerging Technology Awards and the

- ENERGY STAR Most Efficient recognition program, which certifies 3,600 product models from over 280 manufacturers;
- Target energy-saving resources to underserved and energy burdened households with expanded efforts to leverage the ENERGY STAR market power to advance utility-scale uptake of equitable financing approaches for home energy upgrades, a key opportunity to support environmental justice goals; and
- Implement critical program requirement updates for EPA's ENERGY STAR Residential New Construction Programs, including implementing a multi-step specification development process that will be at least 10 percent more efficient than the 2021 International Energy Conservation Code.

In addition, ENERGY STAR will continue to partner with businesses and public-sector organizations to advance energy efficiency in the commercial sector. In FY 2022, the program will:

- Continue to operate and maintain ENERGY STAR Portfolio Manager, as well as deliver critical enhancements to accommodate the more than 300 commercial software vendors and utilities, and add reporting and tracking functionality and enhanced data quality checks to increase support to corporate and federal, state and local government users;
- Update and expand ENERGY STAR building scores, used to understand how a building's energy consumption compares with similar buildings nationwide;
- Verify an estimated more than 6,000 buildings with EPA's ENERGY STAR label, including conducting approximately 250 spot audits;
- Provide technical assistance to the nearly 40 local governments and states that have adopted mandatory or voluntary energy benchmarking and disclosure policies and/or building performance standards that require use of EPA's ENERGY STAR Portfolio Manager; and
- Produce a public dataset and data visualization tools from Portfolio Manager to understand the range of energy use and intensity across multiple building types and geographic locations.

ENERGY STAR will continue to work with partners in the industrial sector to improve efficiency and reduce costs while protecting the environment. In FY 2022, the Program will:

- Continue to support ENERGY STAR industrial partners across 33 diverse industrial sectors through webinars, focus industry meetings, and company-to-company mentoring;
- Update and develop new Energy Performance Indicators (EPIs) to incorporate key factors that impact energy use in the plant and converts electricity inputs to source energy; and
- Work with, review, and audit an expected 200 industrial plants applications registered to achieve the ENERGY STAR Challenge for Industry in which industrial sites commit to reducing their energy intensity by 10 percent within five years.

In FY 2022, EPA will implement the Green Power Partnership and accelerate the transition to a carbon-pollution free electricity sector. In FY 2022, the Program will:

- Update and develop new credible resources, educational tools, and recognition of actions and leadership to incentivize all sectors of Green Power Partners;



- Drive market leadership by recognizing the actions of partnering organizations that significantly advance the development of green power markets and renewable energy development; and
- Partner with over 100 Green Power Communities to encourage local efforts to increase their use of and investment in renewable electricity, including disadvantaged communities that have traditionally lacked adequate access to green power.

In FY 2022, EPA will implement other partnerships to achieve GHG reductions in major economic sectors, consistent with national climate commitments. Focus areas of the programs will include:

- Operating the Combined Heat and Power (CHP) Partnership, promoting efficient and environmentally beneficial CHP;
- Implementing the Center for Corporate Climate Leadership program, promoting cost-effective corporate GHG management practices; and
- Developing and enhancing guidance and tools to assist public companies with GHG emission reductions and climate disclosure of GHG emissions in their operations and supply chains.

In FY 2022, EPA will implement the State, Local, and Tribal Climate and Energy Program to support state and local activity that is essential to tackling the climate crisis. Focus areas of the Program will include:

- Providing technical support to dozens of state, local, and tribal governments as they implement climate and clean energy policies;
- Updating major analytical tools to enable state, local and tribal governments to develop and analyze GHG inventories and pollutant emissions impacts on public health;
- Developing the Energy Savings and Impacts Scenario Tool (ESIST) to help users assess a set of long-term impacts from utility energy efficiency programs;
- Updating EPA's State Guide to Action on Clean Energy, including adding best practices for addressing equity in program design and implementation; and
- Helping local governments implement heat island reduction initiatives that are a priority of environmental justice communities.

In FY 2022, EPA will continue to achieve significant reductions in climate and other harmful emissions from freight transportation by expanding SmartWay efforts to:

- Develop and refine GHG accounting protocols for freight carriers and their customers;
- Continue to provide expertise and serve as a technical test bed in support of the Agency's efforts to reduce GHG emissions;
- Transition SmartWay partner tools to an online platform making it easier to benchmark and track performance and expanding access to SmartWay for smaller businesses;
- Encourage adoption of SmartWay approaches globally under international frameworks and agreements, including co-administering SmartWay with Canada and establishing a SmartWay pilot in Mexico;
- Contribute to development of an ISO standard to calculate GHG from transportation operations; and,

- Update GHG requirements for federal purchases of passenger vehicles under the Energy Independence and Security Act as needed.

In FY 2022, EPA will continue to mitigate domestic methane and fluorinated greenhouse gases emissions by implementing partnership outreach programs focused on providing technical information on best practices and cost-effective technologies in the petroleum and natural gas systems, municipal solid waste landfills, livestock manure anaerobic digestion and biogas systems, coal mining, and electric power transmission sectors.

EPA also will continue implementing and promoting global methane mitigation opportunities across multiple sectors (oil and gas, coal mining, municipal solid waste, wastewater, agriculture/manure management) in support of the Global Methane Initiative (GMI) by:

- Running the secretariat of the GMI, coordinating and organizing overall activities;
- Providing technical leadership across multiple sectors; and
- Coordinating with key methane-focused initiatives such as United Nations Economic Commission for Europe, Climate & Clean Air Coalition, and the International Energy Agency.

In FY 2022, EPA will maintain and expand the EPA climate change website that was relaunched in 2021 in the ongoing effort to restore the capacity of EPA by developing web products that reach the American public and effectively communicate the causes and effects of climate change and Administration priorities.

EPA also will support the State Department as the technical lead in developing projections and compiling information on GHG mitigation policies and measures as part of the upcoming U.S. Biennial Report and National Communication as required by the U.N. Framework Convention on Climate Change.

EPA will continue UNFCCC engagement by serving as negotiators on U.S. delegations, for example, for transparency and working to assess mitigation potential and information from other countries. EPA also will review national inventory and related reports submitted by other countries, including other major economies such as Brazil, Germany, and China.

EPA will continue to improve work on climate change impacts modeling including how risks and economic impacts can be reduced under mitigation and adaptation scenarios by:

- Advancing the scientific literature on climate impacts through the Climate Impacts and Risk Analysis (CIRA) project by publishing sectoral impact methodologies and reduced form approaches to improve analytical and communication capacity;
- Quantifying and monetizing the risk of climate change on socially vulnerable populations; and
- Making the Climate Change Indicators more accessible through enhanced visualization tools.

EPA also will analyze program data on GHG emissions from petroleum and natural gas facilities and support Agency regulatory development by:

- Developing more detailed oil and gas projections to support the nationally determined contributions (NDCs) under the Paris Agreement and
- Performing technical analyses, regulatory development, regulatory impact analyses, and litigation support.

In FY 2022, through significant contributions to the Interagency Work Group, EPA will complete work to finalize the Social Cost of Greenhouse Gases (SC-GHG) and recommend a process for reviewing and updating SC-GHG as required under Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. The final values will be key to understanding the benefits of actions across the federal government and beyond to address climate change.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program. Measures are under development to address climate and environmental justice priorities.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$648.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,041.0 / +11.5 FTE) This program change increases support for programs that help reduce greenhouse gas emissions while also addressing environmental justice through an integrated approach of regulations, partnerships, and technical assistance. The increase enables EPA to take strong action on CO<sub>2</sub> and methane as well as high global warming potential climate pollutants such as hydrofluorocarbons (HFCs); restores the capacity of EPA’s climate partnership programs to provide essential contributions to our nation’s climate, economic, and justice goals; and strengthens EPA’s capacity to apply its modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement. This change also will support EPA’s work to finalize the Social Cost of Greenhouse Gases (SC-GHG) and recommend a process for reviewing and updating SC-GHG as required under Executive Order 13990. This investment includes \$2,006.0 thousand in payroll costs.

**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; American Innovation and Manufacturing (AIM) Act.

**Federal Stationary Source Regulations**

Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$21,244.6</i></b>	<b><i>\$20,733.0</i></b>	<b><i>\$26,618.0</i></b>	<b><i>\$5,885.0</i></b>
Total Budget Authority	\$21,244.6	\$20,733.0	\$26,618.0	\$5,885.0
Total Workyears	108.2	108.5	128.5	20.0

**Program Project Description:**

The Clean Air Act (CAA) requires EPA to take action to improve and protect air quality and limit emissions of harmful air pollutants from a variety of sources. The CAA directs EPA to set National Ambient Air Quality Standards (NAAQS) for six “criteria” pollutants considered harmful to public health and the environment. The NAAQS pollutants are particulate matter (PM), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment. Section 109 of the CAA Amendments of 1990 established two types of NAAQS. Primary standards are set at a level requisite to protect public health with an adequate margin of safety. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects.

Sections 111, 112, and 129 of the CAA direct EPA to take actions targeted at controlling air emissions of toxic, criteria, and other pollutants from stationary sources. Specifically, to address air toxics, the CAA S.112 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 CAA Section 111 Program requires issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for criteria and a subset of listed pollutants from certain new, modified, or reconstructed sources of air emissions; issuing emissions guidelines for states to apply to certain existing sources; and providing guidance on Reasonably Available Control Technology through issuance and periodic review and revision of control technique guidelines. The CAA Section 129 Program further requires EPA to develop and periodically review standards of performance and emissions guidelines covering air emissions from waste combustion sources.

Sections 169A and 169B of the CAA require protection of air quality related values (AQRV) for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Visibility is one such AQRV, and Congress established a national goal of returning visibility in the

Class I areas to natural conditions, i.e., the visibility conditions which existed without manmade air pollution. The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

## **FY 2022 Activities and Performance Plan:**

### NAAQS

The President directed the EPA to review the 2020 PM NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, and EPA has requested additional resources in FY 2022 to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee in support of this review. In FY 2022, EPA will continue reviewing the NAAQS and make revisions, as appropriate. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

EPA will work to achieve and maintain compliance with existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1987 PM<sub>10</sub> standards; the 2012, 2006, and 1997 PM<sub>2.5</sub> standards; the 2008 and 1978 lead standards;<sup>151</sup> the 2010 NO<sub>2</sub> standard;<sup>152</sup> the 1971 CO standard; and the 2010 SO<sub>2</sub> standard<sup>153</sup>. 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.

EPA also will, in close collaboration with states and tribes, work to reduce the number of areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

### Air Toxics

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

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<sup>151</sup> In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision.

<sup>152</sup> In April 2018, EPA completed the review of the 2010 NO<sub>2</sub> NAAQS and retained the standards without revision.

<sup>153</sup> In February 2019, EPA completed the review of the 2010 SO<sub>2</sub> NAAQS and retained the standards without revision.

In FY 2022, EPA will undertake these required reviews and associated rulemakings. The air toxics program will prioritize conducting reviews of NESHAP for 41 source categories, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts. EPA also will be undertaking three actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires. EPA expects to promulgate 15 final rules in FY 2022. EPA further expects to take action under Section 112 in FY 2022 to carry out the directive in Executive Order 13990, that EPA review the "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review". EPA will enhance risk assessment capabilities to better identify and determine impacts of exposures to air toxics on communities. The Program will prioritize its work, as resources allow, with an emphasis on meeting court-ordered deadlines, and also incorporate environmental justice considerations as part of the decision-making process.

Finally, as called for in the Administrator's April 27, 2021, *Memorandum Regarding Per- and Polyfluoroalkyl Substances*, EPA will take actions to address PFAS pollution. The Agency's new EPA Council on PFAS will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders. This includes consideration of appropriate actions using existing CAA authorities.

#### NSPS

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

EPA further expects to take action under Section 111 in FY 2022 to carry out the directive in Executive Order 13990, which requires that EPA consider "proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments, by September 2021."

In FY 2022, EPA will work to fulfill the CAA's NSPS requirements for seven source categories in 12 rulemaking actions, all of which are subject to court or executive orders or are in litigation. In addition, under Section 129 of the CAA, EPA plans to address the statutorily mandated reviews and court-ordered regulatory revisions for rules involving solid waste incineration units, such as the Other Solid Waste Incinerators rule, and to review developments regarding incineration and control technologies to support these rulemaking efforts. EPA expects to promulgate one final rule under Section 129 in FY 2022.

EPA also will undertake other projects, such as those required by statute or executive order, such as overdue NSPS and area source technology reviews related to source categories in addition to those described above. EPA will continue work on case-by-case regional and national NESHAP and NSPS applicability determinations.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$924.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$4,961.0 / +20.0 FTE) This program change increases support for the regulation of stationary sources of air pollution through developing and implementing emissions standards, regulations, and guidelines in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This includes support for program activities to address the climate crisis, including the development of analytical methods and approaches to support climate protection, specifically regulations to control greenhouse gas emissions from stationary sources. It also includes support for enhancing risk assessment capabilities to better characterize the effects of air toxics on communities, including incorporating environmental justice considerations as part of the decision-making process. This investment includes \$3,467.0 thousand in payroll costs.

**Statutory Authority:**

Clean Air Act.

**Federal Support for Air Quality Management**  
Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$131,855.1</i></b>	<b><i>\$138,020.0</i></b>	<b><i>\$257,808.0</i></b>	<b><i>\$119,788.0</i></b>
Science & Technology	\$8,974.6	\$7,154.0	\$10,222.0	\$3,068.0
Total Budget Authority	\$140,829.7	\$145,174.0	\$268,030.0	\$122,856.0
Total Workyears	824.6	843.0	923.0	80.0

**Program Project Description:**

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

NAAQS Development

The Clean Air Act (CAA) requires EPA to set the NAAQS for six “criteria” pollutants considered harmful to public health and the environment. The NAAQS pollutants are particulate matter (PM), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), and lead (Pb). Section 109 of the CAA Amendments of 1990 established two types of NAAQS - primary and secondary standards. Primary standards are set at a level requisite to protect public health with an adequate margin of safety, including the health of at-risk populations. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects, such as decreased visibility and damage to animals, crops, vegetation, and buildings. The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Air Pollution Information Tracking

For each of the six criteria pollutants, under Section 110 of the CAA, EPA tracks two kinds of air pollution information: air pollutant concentrations based on actual measurements in the ambient (outside) air at monitoring sites throughout the country; and pollutant emissions based on engineering estimates or measurements of the total tons of pollutants released into the air each year.



### Air Quality Management Planning

Under CAA Section 110, EPA develops regulations and guidance to clarify requirements for state and local air agencies for developing State Implementation Plans (SIPs) for implementing the NAAQS. EPA works with state and local governments to ensure the technical integrity of emission source controls in SIPs and with tribes on Tribal Implementation Plans (TIPs). EPA also reviews SIPs to ensure they are consistent with applicable requirements of the CAA and takes regulatory action on SIP submissions consistent with CAA responsibilities.

### New Source Review (NSR) Preconstruction Permit Program

The NSR preconstruction permit program in Title I of the CAA is a part of state plans to attain and maintain the NAAQS. The two primary aspects of this program are the Prevention of Significant Deterioration Program, described in Section 165 of the CAA; and the Nonattainment NSR Program, described in various parts of the CAA, including Sections 173 and 182.

### Protection of Class I Areas

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

### Control of Air Toxics

Toxic air pollutants are known to cause or are suspected of causing increased risk of cancer and other serious health effects, such as neurological damage and reproductive harm. The Federal Support Program assists state, tribal, and local air pollution control agencies in characterizing the nature and scope of their air toxics issues through modeling, emission inventories, monitoring, and assessments. For example, this program maintains updated air toxic emission and exposure data, incorporating current toxicity data to provide recent information on air toxics risks from a national perspective. EPA also supports programs that reduce inhalation risk and multi-pathway risk posed by deposition of air toxics to water bodies and ecosystems, facilitates international cooperation to reduce transboundary and intercontinental air toxics pollution, develops risk assessment methodologies for toxic air pollutants, and provides training for air pollution professionals.

The provisions of the CAA that address the control of air toxics are located primarily in Section 112. This section requires issuing National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of all NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. EPA has promulgated approximately 180 rules to control air toxics under Section 112 and is continually engaged in their periodic review and revision. Section 129 of the CAA requires a similar approach to review regulations applicable to solid waste incinerators. EPA has promulgated approximately

six rules to control air toxics under Section 129 and is continually engaged in their periodic review and revision. In addition to this regulatory work, EPA also provides determinations to states and industry seeking information about source-specific applicability of these regulations. EPA is making improvements to the database that tracks applicability determinations.

### Climate Change

The President has prioritized action to tackle climate change with a focus on an equitable transition to clean energy. These plans call for cuts in greenhouse gas (GHG) pollution to reduce the contribution of human activities to climate change and its impacts on public health, while investing in communities who are the front line of impacts. The Federal Support Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs to reduce GHG pollution. The Program also supports the Agency's work with international partners to combat short-lived climate pollutants.

### **FY 2022 Activities and Performance Plan:**

#### Addressing Climate Change

EPA expects to take action under Section 111 in FY 2022 to carry out the directive in Executive Order 13990, that EPA consider "proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments, by September 2021." This request includes resources to fulfill the President's commitment to engage meaningfully with environmental justice communities during the entire rulemaking process, from pre-proposal through final promulgation and implementation.

EPA will continue to work with other countries to take action to address climate change. EPA will consider the results of a range of international assessments to address the climate impacts of short-lived climate pollutants. These air pollutants, including black carbon (a component of PM), and tropospheric ozone, are contributing to and accelerating the impacts of climate change. Reducing emissions of these pollutants can create near-term climate and public health benefits. EPA will continue to identify the most significant domestic and international sources of black carbon and ozone precursor emissions by working with the multilateral Climate and Clean Air Coalition (CCAC), the Arctic Council, the Convention on Long-range Transboundary Air Pollution (LRTAP), and other related international efforts. Based on these findings and enhanced analytical capabilities, EPA will pursue effective steps for reducing these emissions. For instance, EPA is scaling up efforts in low-and middle-income countries to implement best practices for addressing air pollution in ways that achieve climate co-benefits.

Finally, in FY 2022, the Agency will provide on-the-ground resources to assist overburdened and vulnerable communities as they work to engage on EPA's regulatory efforts and address the impacts of climate change. These community resource coordinators will work with external partners such as community stakeholder organizations, other federal agencies, state, local and regional governments, private sector entities, academic institutions, and foundations to assist communities as they begin to plan for climate change and implement actions to increase resilience to climate impacts.

### Improving Air Quality

In FY 2022, resources are increased to support efforts to maintain and rebuild programmatic capabilities that focus on protecting clean air. Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Between 1990 and 2019, for example, national average levels have decreased by 25 percent for ozone, 46 percent for particulate matter, 90 percent for sulfur dioxide, and 98 percent for lead.<sup>154</sup> In FY 2022, EPA will continue to prioritize key activities in support of attainment of the NAAQS and implementation of stationary source regulations by state, tribal, and local air agencies.

### NAAQS Review

In FY 2022, EPA will continue its CAA-mandated responsibilities to review the science upon which the NAAQS are based and the standards themselves. Periodic review of the NAAQS requires significant resources and analysis of scientific and technical information to ensure for each NAAQS that public health is protected with an adequate margin of safety, considering at-risk populations. The President directed the EPA to review the 2020 PM NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. EPA's request includes additional resources to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee.

EPA will continue to administer the NAAQS by reviewing state plans and decisions consistent with statutory obligations; taking federal oversight actions, such as action on SIP and TIP submittals; and developing regulations and policies to ensure continued health and welfare protection during the transition between existing and new standards. EPA will work with air agencies to determine the need for additional federal rulemakings and guidance documents to support state and tribal efforts to implement CAA SIP requirements, in alignment with capacity and priorities. EPA will provide technical and policy assistance to states and tribes developing or revising SIPs/TIPs.

### NAAQS Nonattainment Areas

EPA, in close collaboration with states and tribes, will work to improve air quality and reduce the number of areas not in attainment with the NAAQS. The Agency will continue to implement process changes 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 in a timely manner. EPA will maximize use of its comprehensive, online State Planning Electronic Collaboration System (SPeCS) to promote efficiencies for states to submit SIP revisions to EPA, and for EPA to track and process state submittals. Since it launched in January 2018, more than 1,250 SIP submittals (about 90 percent official submissions and 10 percent draft submittals) have come through SPeCS, and more than 400 users have registered from all 50 states and eight air districts. EPA also will further develop SPeCS functionality to provide additional transparency to the public about NAAQS nonattainment areas, state SIP requirements, and related EPA actions.

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<sup>154</sup> For additional information on air quality trends, please see Air Quality -National Summary at: <https://www.epa.gov/air-trends/air-quality-national-summary> and at *Our Nation's Air: Status and Trends Through 2019*, found at: <https://gispub.epa.gov/air/trendsreport/2020/#home>.

### SIPs for Regional Haze

In FY 2021, states are due to submit regional haze SIP revisions for the second planning period. In FY 2022, EPA will begin reviewing those SIPs and continue providing technical assistance to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. Under the Regional Haze Rule, states are required to submit updates to their plans to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals.

### Fulfilling Legal Obligations

One of EPA's priorities is to fulfill its statutory and court-ordered obligations. Section 112 of the CAA sets deadlines for EPA to review and update, as necessary, all NESHAP every eight years, accounting for developments in practices, processes, and technologies related to those standards. Section 112 also requires that EPA conduct risk assessments within eight years of promulgation of each MACT-based NESHAP to determine if it appropriately protects public health and to revise it as needed. EPA also will be undertaking three actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires. In FY 2022, EPA will undertake these required reviews and associated rulemakings. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Program will prioritize conducting reviews of NESHAP for 41 source categories, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts, and also incorporate environmental justice considerations as part of the decision-making process. From this work, EPA expects to promulgate 15 final rules in FY 2022. EPA further expects to take action under Section 112 in FY 2022 that results from EPA's adherence to Executive Order 13990, which directs EPA to review the "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review".

In FY 2022, EPA also will review regulations applicable to solid waste incinerators, as CAA Section 129 requires, for one source category and expects to promulgate one final rule under Section 129.

### Technical Assistance to External Government Partners

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

In FY 2022, EPA will provide technical assistance to state, local, and tribal air agencies for both NSR and Title V (operating) permits. This support will occur at appropriate times and as requested, consistent with applicable requirements, before and during the permitting process. EPA expects to implement such support in an efficient manner and consistent with established timeframes for applicable oversight of state, tribal, and local air agencies during the permitting process. EPA's Electronic Permitting System will improve EPA interaction with state, local, and tribal air agencies and improve data availability and transparency.

EPA will assist state, tribal, and local air agencies with various technical activities. EPA develops and provides a broad suite of analytical tools, such as source characterization analyses, emission factors and inventories, statistical analyses, source apportionment techniques, quality assurance protocols and audits, improved source testing and monitoring techniques, source-specific dispersion and regional-scale photochemical air quality models, and augmented cost/benefit tools, to assess control strategies.<sup>155</sup> 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, efficient and comprehensive air quality management by state, local, and tribal agencies.

In FY 2022, EPA will continue to provide information and assistance to states and communities through documents, websites, webinars and training sessions on tools to help them provide input into environmental justice assessments that can inform risk reduction strategies for air toxics. The Agency will continue to communicate effectively to, and collaborate with, environmental justice communities to address air toxics concerns.

In FY 2022, state and local air agencies will have the lead in implementing the National Air Toxics Trends Sites (NATTS). The NATTS is designed to capture the impacts of widespread air toxics and is comprised of long-term monitoring sites throughout the Nation.<sup>156</sup> EPA will consult on priority data gaps to better assess population exposure to toxic air pollution.

#### Maintaining Analytical Capabilities and Continuing Data Management

EPA will maintain baseline analytical capabilities required to develop effective regulations including: analyzing the economic impacts and health benefits of regulations and policies; developing and refining source sampling measurement techniques to determine emissions from stationary sources; updating dispersion models for use in source permitting; and conducting air quality modeling that characterizes the atmospheric processes that disperse a pollutant emitted by a source. Resources from the Science and Technology appropriation component of this program support the scientific development of these capabilities.

In FY 2022, EPA will initiate a nationwide effort to ensure and enhance the resiliency, capacity, and capability of air monitoring systems for National Ambient Air Quality Standards (NAAQS) and local-scale monitoring implemented by state, local, and tribal organizations (SLTs) through: 1) system modernization (e.g., infrastructure improvements, enhanced network automation, greater system reliability, and data integration for assessments); 2) expanded functionality (e.g., increased use of continuous monitoring equipment); and 3) local-scale monitoring to, for example, characterize air toxics and better address air quality burdens in environmental justice communities. Key to the success of this effort will be close, meaningful collaboration with our state, local and tribal air partners. The COVID-19 pandemic exposed the vulnerabilities of our aging monitoring infrastructure and the need for modernization in the Nation's ambient air monitoring network, and the recommendations of a 2020 GAO report echoed the need for the Agency to develop an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public.

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<sup>155</sup> For additional information, please see: <https://www.epa.gov/technical-air-pollution-resources>.

<sup>156</sup> For additional information, please see: <http://www.epa.gov/ttn/amtic/airtoxpg.html>.

The President’s FY 2022 budget request includes \$100 million for a new community air quality monitoring and notification program to support efforts to deliver environmental justice for overburdened and marginalized communities. This community air quality monitoring and notification program will be able to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. The Agency will work closely with states, Tribes and local air quality agencies to develop the most effective approach to meet community concerns. Funds will support a number of efforts, including state, local, and tribal grants that supplement the national ambient air quality monitoring network by enhancing air quality characterization in communities, a competitive grant program promoting air monitoring partnerships with communities, and systems to manage and deliver real-time air quality data to the public.

In FY 2022, EPA will operate and 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. Data show the public is increasingly relying on AirNow for air quality information during wildfires. AirNow received over 109 million web page views during the 2020 fire season. This includes a single day during the 2020 fire season when AirNow had more than 6 million website hits. In FY 2022, EPA will collaborate with the Forest Service to assist with air quality information during wildfire events, including continued work on a pilot project to add data from low-cost sensors to the innovative Fire and Smoke map.

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 develop strategies to manage those risks, as well as support multi-pollutant analysis covering air emissions. EPA will continue to implement previously identified Lean strategies to streamline NEI development and reduce the burden for industry to meet their emissions data reporting requirements through the Combined Air Emissions Reporting (CAER) e-Enterprise effort. The CAER project, when fully developed and deployed, will streamline multiple emissions reporting processes and is expected to reduce the cost to industry and government for providing and managing environmental data and to improve decision-making capacity through more timely availability of data.

**Performance Measure Targets:**

<b>(PM NA1) Number of Nonattainment Areas.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	121	101

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful

performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$5,096.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$100,000.0) This program change supports efforts to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. This increase supports work to reduce GHG emissions to tackle the climate crisis and ensure equitable environmental outcomes to advance environmental justice.
- (+\$14,692.0 /+69.0 FTE) This program change increases support for critical work to implement climate and clean air regulations, including anticipated emission guidelines for existing oil and gas facilities. These resources also will be used to continue the development of a standard reporting system for states to use for submitting plans and tracking their compliance data, and to ensure that communities have access to that data. In addition, these resources will support an increase in support for NAAQS review work and implementation activities; the timely issuance of guidance; ongoing outreach to states and other entities; development of NAAQS implementation tools; and efforts to reduce the SIP backlog as well as ensure timeliness of review of incoming SIPs, permitting needs (both NAAQS and GHG-related), and air quality monitoring and analysis needs. This investment includes \$11,817.0 thousand in payroll costs.

**Statutory Authority:**

Clean Air Act.

**Stratospheric Ozone: Domestic Programs**

Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$4,872.4</i></b>	<b><i>\$4,633.0</i></b>	<b><i>\$10,901.0</i></b>	<b><i>\$6,268.0</i></b>
Total Budget Authority	\$4,872.4	\$4,633.0	\$10,901.0	\$6,268.0
Total Workyears	20.5	18.9	32.9	14.0

**Program Project Description:**

The stratospheric ozone layer protects life by shielding the Earth’s surface from harmful ultraviolet (UV) radiation from the sun. Scientific evidence demonstrates that ozone-depleting substances (ODS) used around the world destroy the stratospheric ozone layer,<sup>157</sup> which raises the incidence of skin cancer, cataracts, and other illnesses through overexposure to increased levels of UV radiation.<sup>158</sup>

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) is the international treaty designed to protect the ozone layer by facilitating a global phaseout of ODS and since 2016, phasing down climate-damaging hydrofluorocarbons (HFCs) under the Kigali Amendment. The United States implements its treaty obligations primarily through Title VI of the Clean Air Act and, in the event that the U.S. Senate ratifies the Kigali Amendment and the United States joins the Kigali Amendment to the Montreal Protocol, through the American Innovation and Manufacturing (AIM) Act of 2020. The AIM Act addresses the climate impact of HFCs by phasing down their production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. A global phase down of HFCs is expected to prevent up to 0.5° C of global warming by 2100.

EPA uses a combination of regulatory and partnership programs to implement Title VI of the CAA and the AIM Act. Title VI provides for a phaseout 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. Title VI also prohibits venting ODS and their substitutes and requires listing of alternatives that reduce overall risks to human health and the environment, ensuring that businesses and consumers have alternatives that are safer for the ozone layer than the chemicals they replace. Based on recent updates to EPA’s peer-reviewed Atmospheric and Health

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<sup>157</sup> World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland. 2014.

<sup>158</sup> Fahey, D.W., and M.I. Heggin (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>.



Effects Framework model, the Montreal Protocol is expected to prevent approximately 443 million cases of skin cancer, 2.3 million skin cancer deaths, and 63 million cases of cataracts for people in the United States born in the years 1890–2100.<sup>159</sup> EPA developed this model to better understand the benefits to public health of stratospheric protection.

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. In 2007, with U.S. leadership, the Parties to the Montreal Protocol agreed to a more aggressive phaseout 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 the Montreal Protocol to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate.<sup>160</sup> The Parties to the Montreal Protocol agreed to the Kigali Amendment in 2016,<sup>161</sup> which seeks to globally phase down the production and consumption of HFCs. In the event that the U.S. Senate ratifies the Kigali Amendment and the United States decides to join the Kigali Amendment, the AIM Act provides authority to implement the domestic phase down of HFCs consistent with the Kigali Amendment. Furthermore, the CAA and AIM Act provide the necessary authority to ensure EPA can collect and validate data as well as report data on production and consumption of controlled substances to the Montreal Protocol on behalf of the United States.

Partnership programs are calibrated to increase benefits by focusing on specific areas where the Agency has identified significant opportunities. The Responsible Appliance Disposal (RAD) Program<sup>162</sup> is a partnership that protects the ozone layer and reduces emissions of greenhouse gases through the recovery of ODS and HFCs from old refrigerators, freezers, air conditioners, and dehumidifiers prior to disposal. RAD has more than 40 partners, including manufacturers, retailers, utilities, and state governments. The GreenChill Partnership<sup>163</sup> helps supermarkets transition to environmentally friendlier refrigerants, reduce harmful refrigerant emissions, and move to advanced refrigeration technologies, strategies, and practices that lower the industry's impact on the ozone layer and climate. The Program includes stores in all 50 states and represents over 30 percent of the United States' supermarkets. GreenChill partners are reducing refrigerant leak rates to half the estimated national average and developing annual plans for further improvements.

## **FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President's priorities to tackle the climate crisis, advance environmental justice, and restore the capacity of EPA. In carrying out the requirements of the CAA and the Montreal Protocol in FY 2022, EPA will continue to meet its ODS import caps and work toward the required gradual reduction in production and consumption of ODS. In

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<sup>159</sup> U.S. Environmental Protection Agency (EPA). Updating the Atmospheric and Health Effects Framework Model: Stratospheric Ozone Protection and Human Health Benefits. EPA: Washington, DC. May 2020. Available on the internet at: [https://www.epa.gov/sites/production/files/2020-04/documents/2020\\_ahef\\_report.pdf](https://www.epa.gov/sites/production/files/2020-04/documents/2020_ahef_report.pdf).

<sup>160</sup> *Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons)*.

<sup>161</sup> Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Kigali 15 October 2016, found at: <https://treaties.un.org/doc/Publication/CN/2016/CN.872.2016-Eng.pdf>.

<sup>162</sup> For more information, see: <http://www.epa.gov/rad>.

<sup>163</sup> For more information, see: <http://www.epa.gov/greenchill>.

FY 2022, EPA is considering developing notice and comment rulemakings on process agents and feedstock uses of ODS. To meet targets for FY 2022 and beyond, EPA will: issue allocations for HCFC production and import in accordance with the requirements established under CAA Sections 605 and 606; review petitions to import used ODS under sections 604 and 605; manage information that industry identifies as confidential 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 plans to also finalize a rule regulating HFC-23 emissions associated with HCFC production, as well as initiate rulemakings to align ODS import and production requirements with relevant rules implemented the AIM Act. EPA also will prepare and submit an annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS to ensure U.S. compliance with that treaty.<sup>164</sup>

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) Program<sup>165</sup> to both find those that pose less overall risk to human health and the environment and ensure 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 DC Circuit Court partially vacated a 2015 rule "to the extent it requires manufacturers to replace HFCs with a substitute substance" and remanded the rule to EPA for further proceedings. A second court decision applies similarly to a 2016 rule. EPA expects to propose a notice-and-comment rulemaking in FY 2022 that would address the court decisions, including potentially making changes to the SNAP Program's scope and applicability. In addition, EPA will consider a number of submissions and petitions that would expand the list of acceptable lower-GWP alternatives, particularly for end-uses where there is an urgent need for more options which also will support implementation of the AIM Act. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption of alternatives through support for changes to industry codes and standards.

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 finalized a rule in FY 2021 that incorporated by reference industry, consensus-based standards for MVAC systems and will implement it in FY 2022.

As required by the AIM Act, in FY 2022 EPA will start developing a rule to update the refrigerant management program regulatory requirements as well as continuing 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 educate stakeholders about the rules concerning servicing, maintenance, repair and disposal of air conditioning and refrigeration

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<sup>164</sup> The Article 7 report prepared by EPA on behalf of the United States contains chemical-specific production, import and export data that is not available publicly. To protect potential confidential information the report is not available on the internet; however, the data included in the report is aggregated and available at: <https://ozone.unep.org/countries/profile/usa>.

<sup>165</sup> For more information, please see: <http://www.epa.gov/ozone/snap/index.html>.

appliances. EPA will monitor industry standards and may adopt the standards into its regulations through incorporation by reference, as appropriate.

In FY 2022, the Agency also will continue to implement the AIM Act HFC phasedown through an allowance allocation and trading program established in FY 2021. As part of that implementation EPA will propose separate regulations to address maximizing reclamation and minimizing releases of HFCs and their substitutes. Lastly, under AIM, the Agency will propose regulations on transition to next-generation technologies. Activities include granting and/or denying petitions for sector-based restrictions on HFCs and, if granted, ensuing development of regulations including the potential use of negotiated rulemaking under subsection (i) of the AIM Act; establishing requirements for the management of HFCs and their substitutes to increase reclamation and reduce emissions; and providing allowances for the next period of the phasedown.

As part of AIM, the Agency will implement an HFC tracking system to better ensure compliance with the phasedown regulations, and work with other agencies to prevent illegal imports. EPA also will work to support federal sector management and transition from HFCs through continued cooperation with organizations such as Department of Defense and the General Services Administration.

In FY 2022, 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 phaseout of ODS, in particular HCFCs and halons.

Additionally, EPA will continue to work with federal and international agencies to stem illegal imports of ODS to support a level playing field for companies that have transitioned to non-ODS alternatives. This is particularly important in light of recent atmospheric measurements showing unexpected increased emissions of CFC-11, an ODS phased out of production globally.<sup>166,167</sup> EPA will continue data exchange with U.S. Customs and Border Protection and Homeland Security Investigations on ODS importers and exporters to determine admissibility and target illegal ODS shipments entering the United States, as well as reviewing and approving ODS imports flagged in the Automated Customs Environment.

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<sup>166</sup> See, Montzka *et al.* An unexpected and persistent increase in global emissions of ozone-depleting CFC-11, *Nature*, volume 557, pages 413–417, 2018. Available on the internet at: <https://www.nature.com/articles/s41586-018-0106-2>.

<sup>167</sup> See, Rigby *et al.* Increase in CFC-11 emissions from eastern China based on atmospheric observations, *Nature*, volume 569, pages 546–550, 2019. Available on the internet at: <https://www.nature.com/articles/s41586-019-1193-4>.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$131.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,137.0 / +14.0 FTE) This program change provides increased support to implement provisions in the American Innovation and Manufacturing Act to phase down the use of HFCs, to facilitate U.S. entry to the Kigali amendment to the Montreal Protocol, and to build back staff capacity around efforts to tackle the climate crisis. This investment includes \$2,375.0 in payroll costs.

**Statutory Authority:**

Title VI of the Clean Air Act and the American Innovation and Manufacturing Act.

**Stratospheric Ozone: Multilateral Fund**

Program Area: Clean Air and Climate

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$8,347.0</b>	<b>\$8,711.0</b>	<b>\$18,000.0</b>	<b>\$9,289.0</b>
Total Budget Authority	\$8,347.0	\$8,711.0	\$18,000.0	\$9,289.0

**Program Project Description:**

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) is the international treaty designed to protect the ozone layer by facilitating a global phaseout of ozone-depleting substances (ODS) and since 2016, phasing down climate-damaging hydrofluorocarbons (HFCs) under the Kigali Amendment. The United States implements its treaty obligations primarily through Title VI of the Clean Air Act and in the event that the U.S. Senate ratifies the Kigali Amendment and the United States joins the Kigali Amendment to the Montreal Protocol, through the American Innovation and Manufacturing (AIM) Act of 2020. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. A global phase down of HFCs is expected to prevent up to 0.5° C of global warming by 2100.

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 ODS and phase down HFCs following agreed schedules. 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. In addition, the United States holds a permanent seat on the Multilateral Fund’s governing body (the Executive Committee) and can help focus efforts on cost-effective assistance and encourage climate-friendly transitions.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President’s priority to tackle the climate crisis. EPA’s contributions to the Multilateral Fund in FY 2022 will help continue support for cost-effective projects designed to build capacity and eliminate ODS production and consumption in over 140 developing countries and begin to lay the groundwork for the global phasedown of HFCs. Through 2019, the Multilateral Fund supported over 7,600 activities in 146 countries that, when fully implemented, will phase out more than 490,000 ozone-depletion potential tons. Additional projects will be submitted, considered, and approved in accordance with Multilateral Fund guidelines.

In FY 2022, the United States will continue to promote developing country transitions away from ODS directly into lower-global warming potential alternatives. The United States also will support activities such as establishing HFC baselines, phasedown starting points, and other preparatory activities to ensure that the global HFC phasedown will leverage the expertise and experience

gained during the 30-year history with phasing out ODS. Taken together, this work will support developing country compliance with Protocol obligations.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$9,289.0) This program change is an increase to help fund additional activities associated with the adoption of the Kigali Amendment and developing country phase down of HFCs while continuing to support ODS phaseout activities.

**Statutory Authority:**

Title VI of the Clean Air Act.

## **Brownfields**

**Brownfields**

Program Area: Brownfields

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$23,332.9</b>	<b>\$24,000.0</b>	<b>\$24,197.0</b>	<b>\$197.0</b>
Total Budget Authority	\$23,332.9	\$24,000.0	\$24,197.0	\$197.0
Total Workyears	116.2	127.5	127.5	0.0

**Program Project Description:**

Brownfields sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields can be found in the heart of America's main streets and former economic centers. The Brownfields Program supports efforts to revitalize these sites by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.<sup>168</sup> As of April 2021, grants awarded by the Program have led to over 130,000 acres of idle land made ready for productive use and over 176,800 jobs and \$34.5 billion leveraged.<sup>169</sup>

The Brownfields Program directly support President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).<sup>170</sup> This program supports the operating expenses for the Brownfields Program. Operating activities include: 1) conducting the annual, high volume cooperative agreement competitions; 2) awarding new cooperative agreements; 3) managing the ongoing cooperative agreement workload; 4) providing technical assistance and ongoing support to grantees; 5) providing contractor supported technical assistance to non-grantee communities with Brownfields; 6) collaborating with other agency programs; 7) operating the Assessment Cleanup and Redevelopment Exchange System (ACRES) online grantee reporting tool; 8) assisting communities to explore land reuse opportunities under the Land Revitalization Program; and 9) developing guidance and tools that clarify potential environmental cleanup liabilities.

**FY 2022 Activities and Performance Plan:**

In FY 2022, the Brownfields Program will continue to manage approximately 1,000 assessment, cleanup, Revolving Loan Fund (RLF), multi-purpose, and Environmental Workforce Development and Job Training (EWDJT) cooperative agreements, as well as state and tribal

<sup>168</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

<sup>169</sup> EPA's ACRES database.

<sup>170</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.



assistance agreements; training, research, and technical assistance agreements; Targeted Brownfields Assessments; and land revitalization projects. The Brownfields Program also will continue to foster federal, state, tribal, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged and environmental justice communities.

In FY 2022, the Brownfields Program will support the following activities:

- **Compete and Award New Cooperative Agreements:** Review, select, and award an estimated 345 new cooperative agreements, as well as providing over 40 existing RLF recipients with \$45 million in supplemental funds, which will lead to approximately \$2.4 billion and 12,360 jobs leveraged in future years.
- **Oversight and Management of Existing Cooperative Agreements:** Continue federal fiduciary responsibility to manage approximately 1,000 existing brownfields cooperative agreements in a reduced capacity, while ensuring the terms and conditions of the agreements are met and provide limited technical assistance. The Program also will provide targeted environmental oversight support to grantees (*e.g.*, site eligibility determinations, review of environmental site assessment and cleanup reports).
- **Technical Assistance:** Provide technical assistance to states, tribes, and local communities in the form of research, training, analysis, and support for community led planning workshops. This can lead to cost effective implementation of brownfields redevelopment projects by providing communities with the knowledge necessary to understand market conditions, economic development and other community revitalization strategies, and how cleanup and reuse can be catalyzed by small businesses.
- **Collaboration:** The Program will work collaboratively with our partners at the state, tribal, and local level on innovative approaches to help achieve land reuse. It also will continue to develop guidance and tools that clarify potential environmental cleanup liabilities, thereby providing greater certainty for parties seeking to reuse these properties. The Program also can provide direct support to facilitate transactions for parties seeking to reuse contaminated properties.
- **Accomplishment Tracking:** Support the maintenance of the ACRES online grantee reporting tool. This enables grantees to track accomplishments and report on the number of sites assessed and cleaned up, and the amount of dollars and jobs leveraged with brownfields grants.
- **Land Revitalization Program Support:** Provide support for approximately two communities as part of EPA's Land Revitalization Program. The Land Revitalization Program supports communities in their efforts to restore contaminated lands into sustainable community assets.

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$462.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$265.0) This program change will reduce contract supported technical assistance to non-grantee communities.

**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

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$98,418.4</i></b>	<b><i>\$102,500.0</i></b>	<b><i>\$132,350.0</i></b>	<b><i>\$29,850.0</i></b>
Inland Oil Spill Programs	\$181.4	\$139.0	\$2,142.0	\$2,003.0
Hazardous Substance Superfund	\$1,054.3	\$1,000.0	\$1,006.0	\$6.0
Total Budget Authority	\$99,654.1	\$103,639.0	\$135,498.0	\$31,859.0
Total Workyears	433.6	453.9	459.9	6.0

**Program Project Description:**

The Compliance Monitoring Program is a key component of EPA’s Enforcement and Compliance Assurance Program that supports both compliance with federal environmental laws as well as efforts to identify noncompliance. Compliance monitoring activities, such as inspections, investigations, and review of self-reported compliance monitoring information are conducted by EPA and our coregulators (states, federally-recognized Indian tribes, and territories) to determine if regulated entities are complying with environmental statutes as well as applicable regulations and permit conditions. These activities also can be utilized to identify conditions that may present imminent and substantial endangerment to human health and the environment and thereby warrant immediate regulatory attention. Given the large number of regulated entities, effective targeting of compliance monitoring plays a critical role in achieving the goals EPA has set forth for protecting health and the environment.

Tools in the Compliance Monitoring Program include:

- **Compliance Program Data Management and 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. As EPA’s largest mission-focused data system, ICIS is a critical infrastructure used by the Agency, state, tribal, local and territorial governments, as well as the regulated community, to track compliance with and enforcement of all EPA statutes, which facilitates greater compliance and thus protection of human health and the environment. States are a major user of this resource. For instance, twenty-one state governments depend on ICIS to directly manage their clean water permitting and compliance activities. EPA utilizes ICIS enforcement and compliance data and other information technology tools to: (1) identify potential violations of the federal environmental laws; (2) facilitate efficient enforcement; and (3) promote compliance with these requirements. EPA also makes ICIS data available to the public via the internet-accessible Enforcement and Compliance History Online (ECHO) system. Using ICIS and ECHO to electronically track its civil enforcement work allows EPA to better ensure that its enforcement resources are used to facilitate transparency and address the most significant noncompliance problems, including noncompliance affecting disadvantaged communities and noncompliance that leads to climate impacts. EPA

collaborates with state, local, federal, tribal, and industry partners, through the E-Enterprise initiative, to leverage technologies such as promoting electronic reporting and permitting, to reduce promote efficiencies across all programs including compliance and enforcement. For example, EPA and states are implementing the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule through ICIS, one key tool for improving the availability of clean water compliance data to EPA, states, and the public.<sup>171</sup>

- **National Pollutant Discharge Elimination System (NPDES):** The Agency will continue to implement Phase 2 of the NPDES Electronic Reporting Rule which covers electronic permitting and compliance monitoring reporting and data sharing requirements for EPA and states. EPA will continue to work with states to evaluate and prioritize the development of additional electronic reporting tools that support states.
- **Compliance Monitoring Inspector Credential Policies and Training for EPA, and State Tribal and Local Governments:** To ensure the quality of compliance monitoring activities, EPA develops national policies, updates inspection manuals, establishes training requirements for inspectors, and issues inspector credentials. EPA delivers critical in-person and online training courses to new and experienced federal, state, tribal and local inspectors to ensure the integrity of the national Compliance Monitoring Program, as well as other training for federal and state personnel on critical and emerging compliance issues. EPA hosts several in-person inspector training programs, such as the annual Clean Water Act NPDES Technical Inspector Workshop and the Federal Insecticide, Fungicide, and Rodenticide Act Pesticide Inspector Residential Training Program.
- **Compliance Assistance:** Compliance assistance is a valuable tool to assist regulated facilities in understanding their compliance obligations. EPA provides compliance assistance work with third-party organizations and federal agencies to support seventeen web-based, sector-specific centers and other web-based assistance resources. In addition, the Enforcement and Compliance Assurance Program develops technical assistance webinars, Compliance Advisories, and other assistance materials to help the regulated community understand their compliance expectations.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will develop and implement a comprehensive action plan for integrating environmental justice (EJ) and climate change considerations throughout all aspects of the Program. This effort answers the President’s call to “strengthen enforcement of environmental violations with disproportionate impact on underserved communities through the Office of Enforcement and Compliance Assurance” (EO 14008, sec. 222(b)(i)), and to “combat the climate crisis with bold, progressive action” (EO 14008, sec. 201).<sup>172</sup> Additional resources will enhance EPA’s ability to incorporate EJ considerations into all phases of work without displacing other important enforcement and compliance assurance efforts. This work includes, but is not limited to,

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<sup>171</sup> For more information, please see: <https://www.epa.gov/compliance/npdes-ereporting>.

<sup>172</sup> For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

multi-state/multi-regional matters, issues of national significance, and emergency situations. In addition, EPA also will provide some targeted oversight and support to state, local, and tribal programs. To accomplish this objective, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. The Agency also will maintain accessibility to ICIS for EPA, states, and tribes.

EPA will continue the data system modernization effort to better support states/tribes/local governments and the public's need for information with modernized technology and implement EPA's enterprise-wide Digital Strategy with shared IT services. Modernization also will facilitate EPA's efforts to better target noncompliance that impacts disadvantaged communities and will increase the availability of information about environmental conditions in those communities and elsewhere.

In FY 2022, EPA requests an additional 6 FTE and \$29.85 million to accelerate its efforts to modernize ICIS and support better integration with the public ECHO database. As a result of this data integration, EPA will be in a better position to focus compliance monitoring resources on areas of highest risk and to increase transparency to the public. It also will provide a more complete set of information for this program and improve data quality. Resources will be used to complete scoping on the business requirements and possible technological approaches and to continue development of new software. EPA will make adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (e.g., from EPA's EJSCREEN tool) to EPA and states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in disadvantaged communities.

FY 2022 funding also will allow EPA to expand software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections conducted by EPA and authorized states. Beginning in FY 2020 and continuing through FY 2021, EPA is rolling out its Smart Tools for inspectors in the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Program and the NPDES Program. Smart Tools software makes the process of documenting field inspections and preparing reports on the results of the inspections more efficient. This tool allows EPA to use its compliance monitoring resources more efficiently, including monitoring for noncompliance, which affect disadvantaged communities, or which may have climate impacts. It also allows EPA to make inspection reports more readily and timely available to the regulated entity and to the general public in affected communities. Work on design and development of software for additional inspection programs is scheduled to begin during the second half of FY 2021 and continue through FY 2022.

Additional funding will further allow EPA to increase its implementation of the Evidence Act.<sup>173</sup> Safe drinking water is critical to the health of communities and each year, thousands of community water systems violate one or more health-based drinking water standards. In FY 2021-2023, EPA will collect new information and conduct studies to develop statistically valid data to identify effective policy instruments. In FY 2022 and beyond, EPA will work with states, tribes, and academic experts to improve the effectiveness of enforcement and compliance programs by: prioritizing the most pressing programmatic questions; planning evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance.

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<sup>173</sup> *Foundations for Evidence-Based Policymaking Act* (Public Law 115-435).

FY 2022 funding also will allow EPA to expand the Agency’s Circuit Rider Program, which reduces noncompliance at small public water systems (PWSs) and small wastewater treatment facilities (WWTFs) by providing hands-on technical assistance. To date, Circuit Riders have provided support to approximately 100 small PWSs and 50 WWTFs in under-resourced communities nationwide (across all Regions – covering 10 states, Puerto Rico and four tribes). There are hundreds more small systems and facilities across environmental justice areas through the nation that need technical support to help them stay in compliance and provide clean and safe water to the communities they serve. All the systems currently supported by the Circuit Rider Program are small communities (less than 10,000 population) and approximately 94 percent are in areas with environmental justice concerns. Even with limited travel in 2020, Circuit Riders helped a tribal PWS correct more than 30 significant deficiencies and developed more than 15 recommendations reports for individual systems and standard operating procedure documents to facilitate sustained operational compliance. Also, this program includes multi-media assistance in Indian Country where systems and facilities are disproportionately small and isolated. In addition to supporting drinking water and wastewater needs, tribes will be offered additional multimedia assistance with respect to underground injection wells, underground storage tanks, and other programs as appropriate. There is significant demand for circuit rider assistance that can be targeted where existing technical support efforts cannot meet the needs of the community. The Circuit Rider Program supplements other efforts across the Agency.

**Performance Measure Targets:**

<b>(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	10,000	10,000

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,154.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$22,827.0 / +5.0 FTE) This program increase will allow EPA to accelerate the modernization of the Integrated Compliance Information System and enhance its integration with the Enforcement and Compliance History Online family of internet-based services. The increased resources will fund adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (e.g., from EPA’s EJSCREEN tool) to EPA and states and to the public. This modernization will enhance EPA’s efforts to address compliance concerns in disadvantaged communities. This investment includes \$827.0 thousand in payroll.
- (+\$2,000.0) This program increase will allow EPA to advance work on the Smart Tools for Field Inspectors to develop the tool for some of the smaller programs that have more of a direct impact for EJ communities such as the TSCA lead-based paint programs.

- (+\$3,249.0) This program increase will build capacity for the inspection program and provide increased training to staff to conduct inspections and perform other compliance monitoring activities. This funding will enhance EPA's compliance monitoring programmatic capabilities to enhance efforts to address pollution in overburdened and marginalized communities.
- (+\$620.0 / +1.0 FTE) This program increase will allow EPA to support evidence-gathering activities in support of the Evidence Act. This investment includes \$165.0 thousand in payroll.

**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); 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; Oil Pollution Act; Resource Conservation and Recovery Act; Rivers and Harbors Act; Safe Drinking Water Act; Toxic Substances Control Act.



## **Enforcement**

**Civil Enforcement**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$162,505.0</i></b>	<b><i>\$168,341.0</i></b>	<b><i>\$194,623.0</i></b>	<b><i>\$26,282.0</i></b>
Leaking Underground Storage Tanks	\$657.3	\$620.0	\$634.0	\$14.0
Inland Oil Spill Programs	\$2,237.2	\$2,413.0	\$2,462.0	\$49.0
Total Budget Authority	\$165,399.5	\$171,374.0	\$197,719.0	\$26,345.0
Total Workyears	899.6	916.2	965.2	49.0

**Program Project Description:**

The overall goal of EPA’s Civil Enforcement Program is to protect human health and the environment by ensuring compliance with the Nation’s environmental laws and regulations and to deter noncompliance. The Civil Enforcement Program works in partnership with its state, local and tribal partners to compel regulated entities to correct violations and to assess appropriate penalties for violations, including removing any economic benefit that a violator gained from noncompliance.

The Civil Enforcement Program works closely with the U.S. Department of Justice, state and local governments, tribal governments, territories, and other federal agencies to ensure consistent and fair enforcement of all major environmental statutes and numerous regulations implementing each of those statutes. Millions of regulated federal and private entities are subject to one or more of these statutory requirements. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws. In FY 2020, because of EPA civil enforcement actions, approximately 426 million pounds of air, water, and toxic pollutants were reduced, treated, or eliminated, and over 1.6 billion pounds of hazardous and non-hazardous waste were treated, minimized, or properly disposed.<sup>174</sup>

EPA is responsible for direct implementation of programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a program (or program component). Examples of programs that are not delegable include the Clean Air Act (CAA) mobile source and Ozone Depleting Substances programs; pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act; the new and existing chemicals program under the Toxic Substances Control Act (TSCA); and enforcement in Indian Country (except where the Tribe has been delegated). Many statutes have programs or regulations that states have not obtained authority to implement, including portions of the Resource Conservation and Recovery Act (RCRA), the Clean Water Act, the Safe Drinking Water Act, TSCA (lead-based paint program), and the CAA (chemical accident prevention).

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<sup>174</sup> For additional information on EPA’s FY 2020 enforcement and compliance assurance program results, please see: <https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2020>.

EPA works with authorized states and tribes to ensure a level playing field and assists states and tribes in their implementation of delegated programs when needed, such as in cases where the Agency maintains a unique expertise or capability. The Agency also carries out its statutory oversight responsibilities to ensure states and tribes are meeting national compliance monitoring standards and taking timely and appropriate actions to return facilities to compliance. Our work to protect communities with environmental justice (EJ) concerns is a shared goal and responsibility of EPA and our partner agencies.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to focus efforts toward areas where EPA’s enforcement actions can address the most substantial impacts to human health and the environment. EPA will continue to focus its resources on: the six current national initiatives to improve air quality, provide for clean and safe water, ensure chemical safety;<sup>175</sup> the enforcement of rules to prevent exposure to lead; and attention to emerging contaminants, like per- and poly-fluoroalkyl substances (PFAS). In addition, the Agency hopes to expand efforts to address environmental justice, climate concerns, and coal combustion wastes.

In FY 2022, EPA is requesting an increase of 49 FTE and \$26.2 million. These additional resources are largely to develop and implement a comprehensive action plan for integrating environmental justice, climate, PFAS, and coal combustion residuals (CCR) rule considerations throughout all aspects of EPA’s Civil Enforcement Program (e.g., private parties and federal facilities) in headquarters and across EPA’s 10 regional offices. These resources are necessary to answer the President’s call to “strengthen enforcement of environmental violations with disproportionate impact on underserved communities through the Office of Enforcement and Compliance Assurance” (EO 14008, sec. 222(b)(i)), and to “combat the climate crisis with bold, progressive action” (EO 14008, sec. 201).<sup>176</sup>

Additional resources will enhance EPA’s ability to incorporate EJ and climate considerations into all phases of case development without displacing other important enforcement and compliance assurance work, including by increasing climate and EJ-focused inspections and community outreach, prioritizing climate and EJ considerations in case-selection (e.g., to emphasize areas where greenhouse gas emission can be reduced while providing co-benefits in underserved communities), and expanding inclusion of mitigation and resilience remedies in case resolutions. In addition, resources are needed to ensure that the increasing number of climate and EJ rules, policies, and permit-related provisions are enforceable and implementable, to expand databases to track climate and EJ enforcement activities, to enhance or create networks of staff focused on advancing the Administration’s climate and EJ goals, and to develop and provide comprehensive and ongoing training on climate and EJ issues to equip staff for the long term.

In addition, EPA may use some of the increased resources to actively investigate and pursue enforcement to address releases and cleanup of PFAS under multiple environmental statutes.

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<sup>175</sup> For additional information, please see: <https://www.epa.gov/enforcement/national-compliance-initiatives>.

<sup>176</sup> For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

Enforcement for PFAS contamination is hampered by the lack of standards for PFAS. There are no Maximum Contaminant Levels, Clean Water Act effluent limits or pretreatment standards. Currently, PFAS is not a listed hazardous waste under RCRA or hazardous substance under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) either individually or as a class. Because of the lack of standards, the Agency must rely on its imminent and substantial endangerment authorities to address PFAS contamination and compel cleanup by private parties and federal agencies, where a federal facility is not on CERCLA’s National Priorities List.

In FY 2022, new statutory and regulatory requirements will mean an increased need to evaluate and address noncompliance with the rules. Therefore, the Agency may use some of the new funding to cover enforcement of the CCR Rule. EPA’s review of publicly posted CCR Rule compliance information already suggests widespread noncompliance with CCR regulations. The additional funding will allow EPA to enforce the CCR Rule, thereby making coal ash units more resilient to extreme weather events, reducing contamination in communities near CCR units, and supporting the transition to cleaner power generation by placing the cost of CCR contamination on the companies that generate the CCR waste.

EPA expects that the six current national initiatives can have a significant impact on addressing potential climate change concerns and protecting the health of communities with potential EJ concerns.

- Creating Cleaner Air for Communities – focuses on noncompliance that results in excess emissions of either volatile organic compounds or hazardous air pollutants, especially where emissions may adversely affect an area’s attainment of National Ambient Air Quality Standards or may adversely affect vulnerable populations.
- Stopping Aftermarket Defeat Devices for Vehicles and Engines – focuses on stopping the manufacture, sale, and installation of defeat devices on vehicles and engines, which contribute excess pollution, harming public health and air quality.
- Reducing Hazardous Air Emissions from Hazardous Waste Facilities – focuses on improving compliance with regulations that require the control of organic air emissions from certain hazardous waste management units and activities.
- Reducing Risks of Accidental Releases at Industrial and Chemical Facilities – focuses on decreasing the likelihood of chemical accidents and reducing risk to communities.
- Reducing Significant Non-Compliance with National Pollutant Discharge Elimination System (NPDES) Permits – focuses on improving compliance rates with NPDES permits and ensuring the worst violations are timely and appropriately addressed.
- Reducing Non-Compliance with Drinking Water Standards at Community Water Systems – focuses on ensuring safe and clean drinking water from the 50,000 regulated community drinking water systems.

**Performance Measure Targets:**

<b>(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	325	325

<b>(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	99	99

<b>(PM 444) Percentage of EPA inspection reports timely completed and sent within 70 days of inspection.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	75	75

<b>(PM 446) Quarterly percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	12.7	10.1

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2,715.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$23,567.0 / +49.0 FTE) This program change will support increased focus on environmental justice, climate change, PFAS, and CCR considerations by developing and implementing a comprehensive action plan for integrating climate and EJ considerations throughout all aspects of EPA’s Civil Enforcement Program (e.g., private parties and federal facilities) in headquarters and across EPA’s 10 regional offices. This investment includes \$8,479.0 thousand in payroll.

**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); 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; Oil Pollution Act; Resource Conservation and Recovery Act; Safe Drinking Water Act; and Toxic Substances Control Act.

**Criminal Enforcement**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$50,326.2</i></b>	<b><i>\$51,275.0</i></b>	<b><i>\$59,121.0</i></b>	<b><i>\$7,846.0</i></b>
Hazardous Substance Superfund	\$7,292.3	\$7,647.0	\$7,786.0	\$139.0
Total Budget Authority	\$57,618.5	\$58,922.0	\$66,907.0	\$7,985.0
Total Workyears	239.8	257.7	289.7	32.0

**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 Criminal Enforcement Program collaborates with other EPA offices, the environmental justice (EJ) Program, and the U.S. Department of Justice (DOJ) to ensure our enforcement and compliance assurance work is informed and targeted to address the disproportionate impacts of environmental pollution faced by overburdened communities and to expand outreach opportunities through those offices.

Criminal Enforcement Special 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 U.S. Attorneys and the DOJ’s Environmental Crimes Section. In FY 2020, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 95.29 percent.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the administration’s priorities, with a focus on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes. In FY 2022, EPA is requesting an additional 32 FTE and \$7.85 million to expand EPA’s capacity for criminal enforcement and work to support the criminal program, with an emphasis in several priority areas.

The funding will support the development of a specialized Criminal Enforcement task force within the Enforcement and Compliance Assurance Program to address EJ issues and casework, in partnership with the DOJ. This task force will include Special Agents and criminal justice analysts,

as well as witness coordinators to identify and provide services to victims of environmental crimes in EJ communities. These additional resources will allow the Agency to devote resources toward, and more effectively target, those areas and communities that are disproportionately affected by pollution and environmental crime.

The requested staffing increase also will allow the Criminal Enforcement Program to work more effectively and collaboratively with the DOJ's Environment and Natural Resource Division to address the plight of affected communities and populations across the United States, including developing an Environmental Justice enforcement strategy. In FY 2022, EPA's Environmental Crime Victim Assistance Program will more closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's EJ work. Activities will include data mining and mapping to identify where EJ communities, crime victims, and public health impacts overlap. This strategy will aid the Program in identifying sources of pollution impacting these communities and to focus criminal enforcement resources on the Nation's most vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in EJ communities.

In addition, in FY 2022 the Criminal Enforcement Program will work with Interpol to combat climate change at the international law enforcement level. Hiring additional data analysts will lead to formalized information sharing related to preventing illegal importation of prohibited products that contribute to global climate instability and will support travel and capacity building with other countries.

In FY 2022 the Criminal Enforcement Program also will increase its collaboration and coordination with the Civil Enforcement Program to ensure that EPA's Enforcement Program identifies the most egregious cases and responds to them as effectively as possible. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,388.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,458.0 / +32.0 FTE) This net program change supports expanding EPA's capacity for criminal enforcement, the expansion of the enforcement in communities with environmental justice concerns, enforcement of climate-related regulations, and increased polluter accountability. This investment includes \$6,685.0 thousand for payroll.

**Statutory Authority:**

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA’s organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Emergency Planning and Community Right-To-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act; Rivers and Harbors Act; Pollution Prosecution Act of 1990.



**Environmental Justice**  
Program Area: Enforcement

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Environmental Programs &amp; Management</b>	<b>\$9,482.5</b>	<b>\$11,838.0</b>	<b>\$293,862.0</b>	<b>\$282,024.0</b>
Hazardous Substance Superfund	\$566.3	\$826.0	\$5,841.0	\$5,015.0
Total Budget Authority	\$10,048.8	\$12,664.0	\$299,703.0	\$287,039.0
Total Workyears	30.2	39.9	211.9	172.0

**Program Project Description:**

EPA’s Environmental Justice Program coordinates the Agency’s efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and working collaboratively with all stakeholders to build healthy, sustainable communities based on residents’ needs and desires. EPA’s Environmental Justice (EJ) Program works constructively and collaboratively by providing financial and technical assistance to communities to address environmental justice issues. The Program also works with local, state, tribal, and federal governments; community organizations and their stakeholders; business and industry; and academia to establish partnerships seeking to achieve protection from environmental and public health hazards for people of color, low-income, and indigenous communities.

Work in this program directly supports EPA Administrator Michael Regan’s message “Our Commitment to Environmental Justice” issued on April 7, 2021,<sup>177</sup> in addition to supporting implementation of Executive Order (EO) 13985,<sup>178</sup> *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and EO 14008, *Tackling the Climate Crisis at Home and Abroad*.<sup>179</sup> In accordance with the 2018 American Water Infrastructure Act, every EPA regional office employs a dedicated EJ coordinator and the Agency maintains a list of these persons on the EPA’s website.<sup>180</sup>

**FY 2022 Activities and Performance Plan:**

In FY 2020 and FY 2021, EPA continued its series of training webinars focused on integrating EJ at all levels of government, with additional focus on tribal governments and indigenous populations. The three State EJ Training Webinars conducted in FY 2020 – FY 2021 had 5,449 registrants and were part of a series now totaling seven that involved representatives of government

<sup>177</sup> For more information, please see: <https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiatives-support-environmental-justice-and>.

<sup>178</sup> For more information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

<sup>179</sup> For more information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

<sup>180</sup> For more information on EPA’s regional office contacts, please see: <https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice>.

agencies in all fifty states, Guam, Puerto Rico, and the District of Columbia.<sup>181</sup> As of March 2021, EJ Program members conducted over 300 EJ engagements and training activities for their EPA colleagues and engaged and partnered with over 300 stakeholder groups and reached approximately 6,000 community members in various outreach and educational activities. For the tribal series in FY 2021, seven webinars have been held with over 2,400 registrants, representing tribes, indigenous organizations, Pacific Islanders, state and local governments, universities, medical professionals, business/industry, environmental organizations, federal agencies and international organizations. The topics covered included: EPA EJ tribal/indigenous policy, EJ financial assistance programs, applying for and managing a grant, EPA Tribal partnership groups, wildfires and air quality, and advancing equity and EJ in Indian country and indigenous communities.<sup>182</sup> EPA's FY 2020 and FY 2021 EJ grants program saw an increase in the scope and level of funding available. EPA also relaunched the State Environmental Justice Cooperative Agreement (SEJCA) Program due to additional congressional resource allocation. The SEJCA Program was made available to proposals from states, tribes, local governments, and territorial governments and had a special emphasis on projects focused on engaging and supporting community efforts in response to the COVID-19 pandemic. In FY 2021, the EJ Program will accept applications for both its EJ Small Grants and its EJ Collaborative Problem-Solving cooperative agreements and anticipates awarding an unprecedented number of awards during that cycle.

In FY 2022, EPA requests an additional \$282 million and 170 FTE for the Environmental Justice Program in the EPM appropriation. This investment will allow the Agency to develop, manage, and award new competitive grants to reduce the historically disproportionate health impacts of pollution in EJ communities as well as increasing support for existing grant projects. This investment also will support climate initiatives in EJ communities, and in support of EJ training, education, and outreach programs. This investment will provide paramount support to community-based organizations, indigenous organizations, states, tribes, local governments, and territorial governments in pursuit of identifying and addressing EJ issues.

In FY 2022, EPA will continue to support the successful completion of grant projects funded in previous fiscal years while significantly increasing the number of grant opportunities through new programs, including: 1) a \$25 million Environmental Justice Community Grants Program, to competitively award a comprehensive suite of grants to non-profit, community-based organizations to reduce the disproportionate health impacts of environmental pollution in the EJ community; 2) a \$25 million Environmental Justice State Grant Program that would establish or support state EJ programs; 3) a \$25 million Tribal Environmental Justice Grant Program, to support work to eliminate disproportionately adverse human health or environmental effects on EJ communities in Tribal and Indigenous communities; and 4) a \$15 million competitive, community-based Participatory Research Grant Program to award competitive grants to higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in EJ communities.

In FY 2022, EPA will continue to support the efforts of the National Environmental Justice Advisory Council in addition to supporting the efforts of the White House Environmental Justice

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<sup>181</sup> For more information, please see: <https://www.epa.gov/environmentaljustice/state-and-local-government>.

<sup>182</sup> For more information, please see: <https://www.epa.gov/environmentaljustice/tribes>.

Advisory Council established by EO 14008. EPA also will support the Council on Environmental Quality as they lead the Interagency Council on Environmental Justice. In FY 2022, EPA requests an increase of \$10 million and 3 FTE to develop education, training, and outreach programs associated with EJ. These resources will be deployed to establish: 1) an EJ Training Program to increase the capacity of EJ community residents to identify and address negative impacts; 2) outreach centers in the EPA regional offices to work directly with EJ communities; and 3) an EJ Clearinghouse to serve as online resources for EJ information.

In FY 2022, EPA will continue to support and improve our national EJ screening tool, EJSCREEN. Efforts will focus on continuing to identify and add valuable new data sources to the tool with a focus on climate-relevant data, in addition to enhancing user interface elements. This investment is intended to further inform equitable decision making across the federal government and within EPA and more robust and diverse data is needed to effectively prioritize communities in need. The budget request includes an increase of \$5.9 million for EJSCREEN to bolster Agency use of nationally consistent data that combines environmental and demographic indicators in mapping and targeting communities with environmental justice concerns. Efforts will focus on continuing to identify and add valuable new data sources to the tool with a focus on climate-relevant data, in addition to enhancing user interface elements. These enhancements will enable EPA to further focus federal resources and program design to benefit environmental justice communities and those most at risk of climate change. In addition, resources are included to update EPA's IT systems to support the development of a geospatial Climate and Economic Justice Screening tool, as outlined in EO 14008.

The FY 2022 Budget identifies environmental justice priority areas that aim to expand EPA's work to ensure environmental justice in underserved communities. It includes proposed authorization language to carry out new environmental justice grants aimed at reducing the disproportionate health impacts of environmental pollution and to establish an Environmental Justice Training Program charged with increasing the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects.

### **Performance Measure Targets:**

EPA is currently evaluating its suite of measures and indicators related to environmental justice, including available data and programs where improved data sets are needed to develop useful performance measures for the Environmental Justice Program. Measures are under development in this program to address environmental justice.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,622.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$88,596.0 / + 61.5 FTE) This net program change supports EJ work across the Agency, including substantial increases for FTE support. This investment supports the significantly

expanded base activity and agencywide coordination required across the EJ Program. This increase includes \$9,615.0 thousand in payroll.

- (+\$9,906.0 / +63.5 FTE) This program change supports EJ work in the regions. This investment supports the significantly expanded base activity and agency-wide coordination required in the regional offices. This increase includes \$9,906.0 thousand in payroll.
- (+\$50,000.0 / +5.0 FTE) This program change increases competitive grants aiming to broadly reduce the disproportionate health impacts of environmental pollution in the EJ community. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$780.0 thousand in payroll.
- (+\$25,000.0 / +2.0 FTE) This program change is an increase to establish an Environmental Justice Community Grant Program. Eligible recipients would be nonprofit, community-based organizations that conduct activities to reduce the disproportionate health impacts of environmental pollution in the EJ community. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$312.0 thousand in payroll.
- (+\$25,000.0 / +2.0 FTE) This program change is an increase to establish an Environmental Justice State Grant Program that would establish or support state EJ programs. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$312.0 thousand in payroll.
- (+\$25,000.0 / +2.0 FTE) This program change is an increase to establish a Tribal Environmental Justice Grant Program. This program would support tribal work to eliminate disproportionately adverse human health or environmental effects on environmental justice communities in Tribal and Indigenous communities. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$312.0 thousand in payroll.
- (+\$15,000.0 / +1.0 FTE) This program change is an increase to establish a competitive, community-based Participatory Research Grant Program. Eligible recipients would be higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in EJ communities. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$156.0 thousand in payroll.
- (+\$4,000.0 / +5.0 FTE) This program change is an increase to support the Climate National Environmental Justice Advisory Council and other federal advisory council activities. The EJ Program will provide funding and support for the White House Environmental Justice Advisory Council to advise the Interagency Council and Chair of the Council on

Environmental Quality (CEQ) in addition to ongoing support for the National Environmental Justice Advisory Council to advise the EPA Administrator. This investment includes \$780.0 thousand in payroll.

- (+\$10,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice Training Program to increase the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects. The establishment of this grant program will require authorization from Congress, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$468.0 thousand in payroll.
- (+\$10,000.0 / +12.0 FTE) This program change is an increase to establish EPA outreach centers housed in EPA regional offices to connect directly with communities, hold hearings, and support local EJ efforts. This investment includes \$1,872.0 thousand in payroll.
- (+\$4,000.0 / +3.0 FTE) This program change increases legal support with a focus on EJ issues. This investment includes \$468.0 thousand in payroll.
- (+\$3,000.0 / +3.0 FTE) This program change increases external EJ coordination with other federal agencies. This includes developing and expanding federal best practices around EJ and supporting other federal efforts to expand EJ programs. This investment includes \$468.0 thousand in payroll.
- (+\$5,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice Clearinghouse, which would serve as an online resource for information on EJ, including training materials and a directory of experts and organizations with the capability to provide advice or technical assistance to underserved communities. This investment includes \$468.0 thousand in payroll.
- (+\$5,900.0 / +4.0 FTE) This program change is an increase for EJSCREEN to improve how the Agency utilizes nationally consistent data that combines environmental and demographic indicators in mapping and identifying communities with environmental justice concerns. In addition, resources are included to update EPA's IT systems to support the development of a geospatial Climate and Economic Justice Screening tool. This investment includes \$624.0 thousand in payroll.

**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).

**NEPA Implementation**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$15,337.8</i></b>	<b><i>\$16,943.0</i></b>	<b><i>\$18,966.0</i></b>	<b><i>\$2,023.0</i></b>
Total Budget Authority	\$15,337.8	\$16,943.0	\$18,966.0	\$2,023.0
Total Workyears	89.5	89.9	90.9	1.0

**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 and ensures the §309 draft and final environmental impact statement (EIS) comment letters are made publicly available. The Program guides EPA’s compliance with NEPA, and other related statutes and executive orders. The Program manages the official EIS filing system for all federal EISs, in accordance with a Memorandum of Understanding (MOU) with the Council on Environmental Quality (CEQ).<sup>183</sup> EPA uses e-NEPA, a web-based system, as the official EIS filing system for federal agencies and EIS clearinghouse to meet the CEQ MOU commitments. All §309 comment letters are publicly available on e-NEPA. The NEPA Implementation Program also operates, uses, and promotes NEPAAssist, a publicly available geographic information system to help users (EPA, other federal agencies, and the public) with environmental reviews under NEPA. The Program also is responsible for managing the review of EISs of non-governmental activities in Antarctica, in accordance with the Antarctic Science, Tourism, and Conservation Act.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will focus its reviews on areas where the Agency has statutory authority and subject matter expertise. EPA will continue to work with the Office of Management and Budget, CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process. Under the CAA §309 Program, EPA reviews over 280 EISs each year from other federally agencies. Under the Antarctica Program, EPA reviews on average 25 initial environmental evaluations each year. In FY 2020, EPA engaged early with the lead federal agency on 78 percent of projects where a draft EIS was published.

Executive Order (EO) 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*<sup>184</sup> directs CEQ to review and update “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas (GHG) Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews,” 81 FR 51866

<sup>183</sup> Memorandum of Agreement No. 1 Between the Council on Environmental Quality and the Environmental Protection Agency, October 1977.

<sup>184</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>.

(August 5, 2016). EO 14008: *Tackling the Climate Crisis at Home and Abroad*,<sup>185</sup> directs CEQ to create a climate and environmental justice (EJ) screening tool. Consistent with EO 13990, CEQ is reviewing the 2020 CEQ NEPA regulations final rule for potential update. In addition, CEQ has stated there is a high likelihood that there will be a need to pursue a notice of proposed rulemaking to update to the 2020 CEQ NEPA regulations. EPA's CAA §309 role in FY 2022 will be to review agencies' EISs and provide recommendations and technical assistance to agencies to improve environmental outcomes, including associated updates to NEPA regulations, addressing guidance on GHG emissions and climate resiliency and adaptation, and addressing guidance when working with communities with EJ concerns, identifying, avoiding and minimize impacts. In FY 2022, the NEPA Implementation Program will develop updated guidance, tools and resources for federal agencies and CAA §309 reviewers to assist in the transparent, consistent and high quality identification and disclosure of opportunities to avoid, minimize and mitigate impacts to communities with EJ concerns; reduce impacts of GHG emissions in all major sectors; and identify and develop climate-resilient alternatives. This will include identifying opportunities to improve and enhance the NEPAAssist to incorporate tools and/or additional layers/information as needed, updating the platform to improve functionality for users; enhancing existing interface between NEPAAssist and EJSCREEN, and identifying other tools and support as CEQ updates, GHG guidance and provides direction with respect to the climate and EJ screening tools.

#### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$320.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,703.0 / +1.0 FTE) This program change is an increase to support the incorporation of EJ data into the NEPAAssist geospatial planning tool to ensure EJ impact is considered when using the tool. This includes \$171.0 in payroll.

#### **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; and Title 41 of the Fixing America's Surface Transportation Act.

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<sup>185</sup>For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

## **Geographic Programs**



**Geographic Program: Chesapeake Bay**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$87,690.4</i></b>	<b><i>\$87,500.0</i></b>	<b><i>\$90,500.0</i></b>	<b><i>\$3,000.0</i></b>
Total Budget Authority	\$87,690.4	\$87,500.0	\$90,500.0	\$3,000.0
Total Workyears	36.5	38.2	38.2	0.0

**Program Project Description:**

The Chesapeake Bay is the largest estuary in the United States with a drainage area that covers six separate states in the mid-Atlantic. The Bay is not only treasured for recreational purposes but also serves as a vital resource for ecological and economic activities in the region and beyond. The Chesapeake Bay Program is a voluntary partnership initiated in 1983 that now includes the Chesapeake Bay watershed states (Delaware, Maryland, New York, Virginia, Pennsylvania, and West Virginia), the District of Columbia, the Chesapeake Bay Commission, and the federal government. EPA represents the federal government on the partnership’s Chesapeake Executive Council and, under the authority of Section 117 of the Clean Water Act, works with the Executive Council to coordinate activities of the partnership. On June 16, 2014, the Chesapeake Bay Program partners signed the most recent Chesapeake Bay Watershed Agreement,<sup>186</sup> 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, with Management Strategies and two-year Logic & Action Plans covering all 31 outcomes.

EPA, the watershed jurisdictions, and other key federal agencies set two-year water quality milestones that measure progress made in achieving the Bay Total Maximum Daily Load (TMDL) and the jurisdictions’ Watershed Implementation Plans.<sup>187</sup> The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under Court-approved consent decrees for Virginia and the District of Columbia dating to the late 1990s.<sup>188</sup> The TMDL is designed to ensure all nitrogen, phosphorus, and sediment pollution control efforts needed to restore the Bay and its tidal rivers are in place by 2025.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will focus on supporting implementation of the two-year Logic & Action Plans for the 25 Management Strategies developed under the Agreement, with particular focus on accelerating implementation of outcomes where progress is lagging. The program is increasing

<sup>186</sup> The Chesapeake Bay Watershed Agreement (2014) available at: [http://www.chesapeakebay.net/documents/FINAL\\_Ches\\_Bay\\_Watershed\\_Agreement.withsignatures-Hires.pdf](http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-Hires.pdf).

<sup>187</sup> 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](http://executiveorder.chesapeakebay.net/EO_13508_Water_Quality_Milestones-2012-01-06.pdf). The jurisdictional milestones are available at: <https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-milestones>.

<sup>188</sup> The Chesapeake Bay TMDL, available at: <http://www.epa.gov/chesapeakebaytmdl/>.

focus on environmental justice ensuring the benefits of the Chesapeake Bay Program are distributed equitably. In addition, the Program is increasing efforts in the climate change space by focusing initiatives on the resiliency of the watershed. Specific emphases include:

- Implementation of the water quality outcomes that describe the commitment of the Agreement signatories for having all practices in place by 2025 to achieve the necessary pollutant reductions;
- Accelerating implementation of outcomes that help keep the watershed resilient in the face of climate change (including forest and wetland protection and restoration);
- Maintaining the historically strong submerged aquatic vegetation, and tidal and non-tidal water quality monitoring programs implemented through state grants and federal interagency agreements;
- Ensuring the most up-to-date science is used throughout the Chesapeake Bay Program to support decision-making, implementation, and future condition assessment. For example, improving computer models to help predict the impact of climate change on the Chesapeake Bay Program's ability to meet water quality standards in the tidal waters of the Chesapeake Bay; and
- Implementing an action plan to improve diversity, equity, inclusion, and justice in Chesapeake Bay Program restoration efforts.

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.

States have reported that, as of 2019, best management practices to reduce pollution are in place to achieve 39 percent of the nitrogen reductions, 49 percent of the phosphorus reductions, and 100 percent of the sediment reductions needed to attain applicable water quality standards when compared to the 2009 baseline established in the Chesapeake Bay Total Maximum Daily Load.<sup>189</sup>

EPA will continue to provide the Chesapeake Bay Program partnership with funding and technical assistance, track and report progress, and coordinate and facilitate partnership efforts to reach our mutual goals of a healthy Bay and watershed. While continuing progress toward restoring the Bay watershed, EPA and other Executive Council members signed and released the historic *Statement in Support of Diversity, Equity, Inclusion and Justice*.<sup>190</sup> This statement reaffirmed our commitment to recruit and retain staff and volunteers that reflect the diversity of the watershed, foster a culture of inclusion and respect across all partner organizations, and ensure the benefits of our science, restoration, and partnership programs are distributed equitably without disproportionate impacts on vulnerable populations.

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<sup>189</sup> For more information, please see <https://www.chesapeakeprogress.com/clean-water/watershed-implementation-plans>.

<sup>190</sup> For more information, please see

[https://www.chesapeakebay.net/channel\\_files/40996/deij\\_statement\\_final\\_all\\_signatures.pdf](https://www.chesapeakebay.net/channel_files/40996/deij_statement_final_all_signatures.pdf).

Additionally, EPA is working to integrate climate change in Bay restoration efforts. EPA is addressing climate change in three ways: 1) in 2025, predicting the impact of 2035 climate changes on water quality and adjusting pollution targets; 2) understanding adaptations needed in the watershed and coastal regions; and 3) maintaining or improving the watershed's resiliency to climate change. Work is underway to develop state-of-the-science models of the Chesapeake airshed, watershed, and tidal waters to refine the 2035 climate risk in the 2025 Chesapeake Bay Assessment. Also, EPA and the Bay Program partnership are actively investigating Best Management Practices to better protect the watershed and tidal Bay against the observed increased precipitation volumes and intensity brought about by climate change in urban/developed and agricultural regions.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$76.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,924.0) This program change increases support for projects to accelerate the restoration of the Chesapeake Bay focusing on a number of outcomes, including improving water quality and promoting climate resiliency.

**Statutory Authority:**

Clean Water Act, Section 117; Estuary Restoration Act of 2000; Chesapeake Bay Accountability and Recovery Act of 2014; Clean Air Act; Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Geographic Program: Gulf of Mexico**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$13,833.9</i></b>	<b><i>\$20,000.0</i></b>	<b><i>\$22,447.0</i></b>	<b><i>\$2,447.0</i></b>
Total Budget Authority	\$13,833.9	\$20,000.0	\$22,447.0	\$2,447.0
Total Workyears	14.2	14.7	14.7	0.0

**Program Project Description:**

The Gulf of Mexico is the ninth largest body of water in the world. The Mississippi River is the main river system which drains to the Gulf. The Mississippi River watershed captures drainage from 41 percent of the land area of the contiguous United States (parts of 31 states). This area equates to approximately 1,467,182 square miles. Through coordinated public collaboration, EPA works in partnership to restore the Gulf, and ultimately improve the health of the coastal area benefiting approximately 20 million Americans.

The mission of the EPA’s Gulf of Mexico Division (GMD) is to facilitate collaborative actions which protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the region. The GMD competitively funds projects and works through interagency agreements and strategic partnerships to accomplish its mission. All GMD projects and partnership work are linked to one or more performance measures: improve and/or restore water quality; protect, enhance, or restore coastal and upland habitats; promote and support environmental education and outreach to inhabitants of the Gulf watershed; and support the implementation of programs, projects, and tools which strengthen community resilience. The GMD provides significant leadership and coordination among state and local governments, the private sector, tribes, scientists, and citizens to align efforts that address the challenges facing the communities and ecosystems of the Gulf Coast.

The GMD is committed to voluntary, non-regulatory actions and solutions based on scientific data and technical information as informed by work efforts conducted with partners and the public.

**FY 2022 Activities and Performance Plan:**

In FY 2022, the Gulf of Mexico Division will continue to support specific actions and solutions designed to improve the environmental and economic health of the Gulf of Mexico region through cooperative efforts and partnerships. Specifically, the Gulf of Mexico Division will address nutrient reduction on agricultural lands with a targeted focus on minority farmers and ranchers. Additionally, GMD will center its focus on sustainable agriculture and resilience in the farming community. EPA will continue to expand Science, Technology, Engineering, and Mathematics (STEM) experiential and workforce development to communities beleaguered by environmental injustices. Through green infrastructure practices akin to artificial reefs, riparian buffers, prairies, and living shorelines, GMD will continue to aid climate change practices. The GMD projects are

competitively funded and coordinated with and complement ongoing Resource and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies (RESTORE) and Natural Resource Damages Assessment (NRDA) activities related to the Deepwater Horizon oil spill. The GMD continues to seek broad participation and input from the diverse stakeholders who live, work, and recreate in the Gulf Coast region. There is a strong sense of partnership due to the coordination with our partners who work together to improve decision-making based on the best available science.

The GMD directly supports the following activities:

#### Environmental Education and Outreach

Innovative measures are essential to improving water quality, restoring habits, and enhancing community resilience. In FY 2022, the GMD will continue to promote the use of best available science and healthy environmental practices by developing programs, establishing partnerships, and competitively funding projects that increase environmental literacy. The GMD will enhance experiential learning opportunities for Gulf residents and visitors alike. The GMD will ensure that practitioners of environmental education initiatives are validated by science and Gulf residents can share a commonality of interest to preserve the Gulf of Mexico.

To ensure that environmental education and outreach efforts extend to vulnerable populations, GMD will work with various sectors of government, community leaders, and academia on projects that improve conditions in communities beset by environmental injustices. Education and outreach are vital components and essential to accomplishing the Agency's mission to protect human health and the environment, to serve communities impacted by environmental injustices, and to meet the GMD specific goals of promoting healthy and resilient coastal communities. All Gulf residents deserve the best information as it directly relates to their health, the economic vitality of their communities, and their overall quality of life.

#### Strengthen Resilience

Coastal and inland communities continuously face various natural and man-made challenges of living along the Gulf of Mexico coastline. These challenges include storm risk, land and habitat loss, depletion of natural resources, compromised water quality, and economic fluctuations. In FY 2022, the GMD will continue the robust partnerships and extensive community interactions to strengthen coastal and near-shore community preparedness. Through actions, activities, partnerships, and projects, communities Gulf-wide will be more resilient, and thus better prepared for natural disasters or other situational emergencies.

#### Improve Water Quality

The Clean Water Act provides authority and resources critical to protecting and improving the water quality in the Gulf of Mexico and all waters of the United States. The GMD implements projects and works with its partners, such as the Hypoxia Task Force, to improve water and habitat quality throughout the Gulf of Mexico watershed. The GMD funds projects which improve water quality on a watershed basis.

## Enhance, Protect, or Restore Coastal Habitats

Managing critical ecosystems is widely recognized as a fundamental environmental challenge throughout the Gulf Coast region. The priority issues include, but are not limited to, sediment management, marsh/habitat loss due to subsidence, the continued reduction of freshwater in-flow, and climate change. For decades, the Gulf Coast has endured extensive natural and man-made damage to key habitats such as coastal wetlands, estuaries, barrier islands, upland habitats, seagrass vegetation, oyster reefs, coral reefs, and offshore habitats. In FY 2022, the GMD will continue working in close partnership to enhance coastal ecosystems, improve sediment movement/management, restore acreage where feasible and cost-effective, and reverse the effects of long-term habitat degradation.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$28.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,419.0) This program change increases resources to support projects that will accelerate the restoration of the Gulf of Mexico.

### **Statutory Authority:**

Clean Water Act, Consolidated Appropriations Act, 2021, Pub. L. 116-220.

**Geographic Program: Lake Champlain**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>Environmental Programs &amp; Management</i>	<i>\$13,387.0</i>	<i>\$15,000.0</i>	<i>\$20,000.0</i>	<i>\$5,000.0</i>
Total Budget Authority	\$13,387.0	\$15,000.0	\$20,000.0	\$5,000.0

**Program Project Description:**

Lake Champlain is a resource of national significance and supports the diverse interests of a basin that spans New York and Vermont. The Lake Champlain Basin comprises 8,234 square miles, 56 percent of which is in Vermont, 37 percent in New York, and seven percent in the Province of Quebec. The Basin is home to more than 600 thousand people, about 35 percent of whom depend on the lake for drinking water and draws millions of visitors annually. The Lake Champlain Basin Program works to support a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin. Through the Lake Champlain Program, EPA is addressing various threats to Lake Champlain’s water quality, including phosphorus loadings, invasive species, and toxic substances.<sup>191</sup>

The Program aims to achieve clean waters that will sustain diverse ecosystems, support vibrant communities and working landscapes, and provide safe recreational opportunities. These ecosystems should provide clean water for drinking and recreation and support a habitat that is resilient to extreme events and free of aquatic invasive species. In addition, the Program supports thriving communities, strong local economies, and an informed and involved public.

**FY 2022 Activities and Performance Plan:**

EPA and its partners will address high levels of phosphorus by implementing priority actions identified in the Opportunities for Action management plan to reduce phosphorus loads. The 2016 Vermont Total Maximum Daily Load (TMDL) for Phosphorus for Lake Champlain is central to the planning and implementation work within the Lake Champlain Basin to reduce phosphorus loads and meet the wasteload and load allocations specified in the TMDL. Phosphorus reductions from the New York portion of the Basin continue to be subject to the original TMDL approved in 2002. Although both New York and Vermont continue to make progress reducing phosphorus inputs to Lake Champlain, there is more work to be done to meet water quality standards. Vermont, which is responsible for 68 percent of the total phosphorus load to the lake, must reduce its current phosphorus load by 213 metric tons per year from the 2015 baseline load of 631 metric tons (or 34 percent). While Vermont’s January 2021 annual Clean Water Initiative Performance Report estimates that it has reduced its phosphorus load by 27.7 metric tons per year (or 13 percent of the required total phosphorus reduction), further reductions will require continued efforts. There will

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<sup>191</sup> For additional information see: <https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water>, <http://www.lcbp.org>, [beta.SAM.gov](http://beta.SAM.gov).

also be an increased effort to better understand how to address harmful algal blooms (HABs) and monitor and act to prevent invasive species. In FY 2022, EPA will focus on the following:

- Ninety-three percent of the total phosphorus load to the lake is from stormwater or nonpoint source runoff, and seven percent is from wastewater treatment plant sources in Vermont, New York, and Quebec. EPA and its partners will continue to reduce phosphorous pollution from wastewater treatment facilities, stormwater runoff, and nonpoint sources to meet reductions specified in the Vermont and New York Total Maximum Daily Loads (TMDLs). Specifically:
  - Ensuring that facilities' permits remain consistent with the Clean Water Act, necessary upgrades to treatment facilities are completed, and the treatment optimization efforts continue throughout the Basin.
  - Implementing stormwater planning, design, and construction of green stormwater infrastructure at Vermont public schools and state universities, and implementation of best management practices on rural roads in both Vermont and New York.
  - Addressing agricultural nonpoint sources including continued research to determine the efficiency of agricultural best management practices; evaluation of farm practices to identify where practices are needed; and decommissioning former agricultural lands better suited for habitat and floodplain restoration efforts. Results from this work will help direct resources to the most effective practices that reduce runoff and associated nutrient and sediment losses.
- The Lake Champlain Special Designation Act calls for the review and revision, as necessary, of the program management plan at least once every five years. The Lake Champlain Basin Program will work with the Steering Committee to update the plan in FY 2022.
- Increased funds in FY 2022 will support work on aquatic invasive species that are non-native species that harm the environment, economy, or human health, and include aquatic plants, animals, and pathogens. EPA will continue to work with partners to understand the impact of any potential spread and continue to monitor water chestnuts and reduce their density and distribution. Additionally, EPA and its partners will continue to implement the activities identified in the Great Lakes and Lake Champlain Invasive Species Program Report submitted to Congress under requirements of the Vessel Incidental Discharge Act.
- Increased funds in FY 2022 will continue to support the development of new ways to understand the high seasonal concentrations of Harmful Algal Blooms, report on their potential health impacts, and provide necessary information to the health departments of New York and Vermont to close beaches, protect drinking water intakes, or take other actions. In addition, the Lake Champlain Program will look into developing new approaches for urban and agricultural stormwater control.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.



**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$5,000.0) This increase of resources supports projects to accelerate the restoration of Lake Champlain through addressing various threats to Lake Champlain's water quality, including phosphorus loadings, invasive species, and toxic substances.

**Statutory Authority:**

Boundary Waters Treaty of 1909; Clean Water Act; Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Geographic Program: Long Island Sound**

Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$20,642.6</b>	<b>\$30,400.0</b>	<b>\$40,000.0</b>	<b>\$9,600.0</b>
Total Budget Authority	\$20,642.6	\$30,400.0	\$40,000.0	\$9,600.0
Total Workyears	0.3	2.0	2.0	0.0

**Program Project Description:**

The Long Island Sound Program protects one of the most densely populated areas of the United States, with nearly nine million people living in the watershed. In total, the Long Island Sound watershed comprises of more than 16,000 square miles, including virtually the entire state of Connecticut, and portions of New York, Rhode Island, Massachusetts, Vermont, and New Hampshire. Millions flock yearly to the Long Island Sound for recreation, and the Long Island Sound provides a critical transportation corridor for goods and people. The Long Island Sound continues to provide feeding, breeding, nesting, and nursery areas for diverse animal and plant life. The ability of the Long Island Sound to support these uses is dependent on the quality of its waters, habitats, and living resources. The Long Island Sound watershed’s natural capital provides between \$17 and \$37 billion in ecosystem goods and services every year.

Improving water quality and reducing nitrogen pollution are priorities of the Long Island Sound Program. By investing more than \$2.5 billion to improve wastewater treatment, the total nitrogen load to Long Island Sound in 2020 was 47 million pounds less than the 1990 annual baseline discharge, a 60 percent reduction, and is now attaining the wasteload allocation set in 2000.

The Program also is focused on habitat protection and restoration. The Program restored 350 acres of coastal habitat between 2015-2019 and by the end of 2020 achieved 45.6 percent of the long-term goal to restore one thousand acres of habitat by 2035.

**FY 2022 Activities and Performance Plan:**

EPA will continue to oversee implementation of the Long Island Sound Study (LISS) Comprehensive Conservation and Management Plan (CCMP) by coordinating the cleanup and restoration actions of the LISS Management Conference. The LISS CCMP is organized around four major themes: 1) Clean Waters and Healthy Watersheds; 2) Thriving Habitats and Abundant Wildlife; 3) Sustainable and Resilient Communities; and 4) Sound Science and Inclusive Management. Throughout the four themes, the CCMP incorporates key challenges and environmental priorities including resiliency to climate change, long-term sustainability, and environmental justice. The plan also set 20 quantitative ecosystem recovery targets to drive progress. In 2020, the LISS updated the CCMP with 136 implementation actions covering the period 2020-2024. In FY 2022, EPA will focus on the following:

- Continue to reduce nitrogen pollution through implementing the Nitrogen Reduction Strategy. EPA will work cooperatively with Connecticut and New York to expand modeling and monitoring to develop numeric nitrogen targets that are protective of designated uses and set local nitrogen reduction targets where necessary to meet them;
- Coordinate priority watershed protection programs such as increasing streamside buffer zones as natural filters of pollution;
- Support community sustainability and resiliency through the new LISS Sustainable and Resilient Communities Work Group to help communities plan for climate change impacts while strengthening ecological health and protecting local economies;
- Increase environmental justice considerations through the new LISS Environmental Justice Work Group;
- Expand tracking and reporting of implementation efforts;
- Continue coordinated water quality monitoring;
- Coordinate the protection and restoration of critical coastal habitats to improve the productivity of tidal wetlands, inter-tidal zones, and other key habitats that have been adversely affected by unplanned development, overuse, land use-related pollution effects, and climate change: e.g., sea level rise, warming temperatures, changes in salinity and other ecological effects;
- Provide technical and financial assistance through the Long Island Sound Futures Fund and
- Conduct focused scientific research into the causes and effects of pollution on the Sound's living marine resources, ecosystems, water quality, and human uses to assist managers and public decision-makers in developing policies and strategies to address environmental, social, and human health impacts.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$3.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,597.0) This program change increases resources to support projects to accelerate the restoration of Long Island Sound through coordinating cleanup and restoration actions.

**Statutory Authority:**

Clean Water Act § 119.

**Geographic Program: Other**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$9,863.9</i></b>	<b><i>\$10,400.0</i></b>	<b><i>\$11,234.0</i></b>	<b><i>\$834.0</i></b>
Total Budget Authority	\$9,863.9	\$10,400.0	\$11,234.0	\$834.0
Total Workyears	4.7	5.7	5.7	0.0

**Program Project Description:**

EPA targets efforts to protect and restore many of the unique communities and ecosystems across the United States through the geographic programs. In order to protect these diverse and treasured resources impacted by environmental problems, the Agency develops and implements approaches to mitigate sources of pollution and cumulative risk in order to protect ecosystems' water quality and the residents that rely on these water resources. While substantial progress has been made in all of these programs, more work is required to further reduce toxins, lower nutrient loads into watersheds and water bodies, increase ecologically and economically important species, restore habitats, and protect human health.

The Northwest Forest Program

The Northwest Forest Program addresses water quality impairments in forested watersheds and works to improve the quality and quantity of surface water so that beneficial uses and drinking water/source water protection goals are met. Climate change is increasing the demands on the program due to the increase of catastrophic wildfires and resulting impacts to water quality and municipal drinking water.

The Northwest Forest Program supports monitoring of watershed conditions across 72 million acres of forest and rangelands in the Northwest. Funding allows EPA to provide critical support to the Aquatic Riparian Effectiveness Monitoring Program and the Pacfish/Infish Biological Opinion Effectiveness Monitoring Program. These regional scale watershed monitoring Programs are essential to determining the effectiveness of riparian management in meeting aquatic/riparian habitat, ecosystem function, and water quality standards. The data also informs management of drinking water source areas in Oregon and Washington where 40 to 90 percent of the land area of individual national forests supply municipal drinking water to communities west of the Cascade Range crest.

The Northwest Forest Program also helps EPA respond to Tribal trust and treaty responsibilities. EPA staff are key to protection and restoration of watersheds and water quality important to tribes. EPA has tribal trust responsibilities in the Northwest related to tribes reliant on salmon and shellfish.

## The Lake Pontchartrain Basin Restoration Program

The Pontchartrain Basin, including headwaters of Lake Pontchartrain, is known for its slow-flowing rivers and bayous, tranquil swamps, and lush hardwood forests, and provides essential habitat for countless species of fish, birds, mammals, reptiles, and plants. The famous wetlands and marshes surrounding the Basin's waters provide a beautiful setting for wildlife and are the heart of the region's commercial and recreational fisheries. The Pontchartrain Basin also is the center of southeastern Louisiana's unique cultural heritage. With over two million<sup>192</sup> residents, including rural farming communities, metropolitan New Orleans, and the fishing, shrimping, crabbing, and oyster industries, the area is brimming with a diversity of people bound by a common interest: the desire for clean and healthy waters in the Pontchartrain Basin. The Basin comprises over 10 thousand square miles of land in 16 Louisiana parishes and four Mississippi counties. According to the Louisiana Agricultural Center Research and Extension, the combined total value in these parishes in 2018 for production of agriculture, forestry, fisheries, and wildlife is \$895,904,957.<sup>193</sup> Much of this production requires adequate quantity and quality of water. All of these lands drain into rivers and bayous, which empty into Lake Pontchartrain and its connecting sister lakes, Maurepas and Borgne.

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 16 parishes in the Basin. The Program continues to support the efforts of the Lake Pontchartrain Basin Foundation to restore and preserve the water quality, coast, and habitats of the entire Lake Pontchartrain Basin. The Lake Pontchartrain Basin Foundation (LPBF) conducts sampling of the lake and tributary water quality to support related scientific and public education projects.

## Southeast New England Program (SNEP)

Southeast New England (from Westerly, Rhode Island, to Pleasant Bay, Massachusetts) faces environmental challenges that are both unique and highly representative of critical national problems, especially in coastal areas. Typical problems include rivers hydrologically disconnected by dams and restrictions, lost wetland functions, urbanization, and centuries-old infrastructure – all compounded by the increasing impacts of excess nutrients from wastewater, stormwater runoff, and atmospheric deposition. Excess nutrients have contributed to severe water quality problems including algal blooms, low dissolved oxygen conditions, fish kills, impaired benthic communities, and habitat loss (sea grass and salt marsh) in estuaries and near-coastal waters of this region and worldwide. The impacts of climate change, especially the likelihood of extreme weather events and increased precipitation, will further stress these systems in coming years, not only environmentally but also socially and economically. The challenge is to link environmental quality to economic opportunity and jobs by delivering local solutions in a regional and watershed context. Taking up and successfully addressing these issues will enable the Program to serve as a model for other areas.

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<sup>192</sup> 2010 U.S. Census Bureau. <https://www.census.gov/topics/population.html>.

<sup>193</sup> For more information, please see: Louisiana Ag Center Research and Extension.

[https://www.lsuagcenter.com/~media/system/7/9/6/7/796773af58d4c3e610063c7a8f7985f1/pub2382%20ag%20summary%202018\\_fullpdf.pdf](https://www.lsuagcenter.com/~media/system/7/9/6/7/796773af58d4c3e610063c7a8f7985f1/pub2382%20ag%20summary%202018_fullpdf.pdf).

SNEP serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England, including the ecosystem services that will sustain the region's communities and environmental assets into the future. SNEP draws upon networks of stakeholders and experts to seek out and support innovations in practices, technology, and policies that will enable better and more effective watershed protection and restoration. The goal is to create a sustainable path for change and to lead the next generation of environmental management by:

- Developing and investing in innovative, cost-effective restoration and protection practices, as well as new regulatory, economic, and technology approaches;
- Providing technical assistance to municipalities, tribes, and local organizations;
- Supporting local restoration efforts;
- Integrating delivery of programs to the public by our fellow agencies and partners;
- Focusing on ecosystem services; and
- Improving technology transfer and delivery of restoration programs across the region.

### Columbia River Program

The Columbia River Basin (Basin) is one of North America's largest watersheds, covering approximately 260 thousand square miles, originating in British Columbia, Canada, with seven states including significant portions of Idaho, Montana, Oregon, and Washington. The Basin provides environmental, economic, cultural, and social benefits and is vital to many entities and industries in the Pacific Northwest, including tribal, recreational, and commercial fisheries; agriculture; forestry; recreation; and electric power generation.

Human activities have contributed to impaired water quality that impacts human health, and fish and wildlife species survival. Tribal fish consumers, other high fish consumers and subsistence fishers, are exposed to known toxic contaminants and increased human health risks. There are a number of endangered fish and wildlife species throughout the Basin with a major salmon restoration effort underway that has expended millions of dollars to restore salmon throughout the Basin. Beginning in 2004, EPA has made a priority commitment to reducing toxics in the Basin reflecting a responsibility to environmental justice for tribal people to protect human health and help restore and protect fish and wildlife populations.

Furthermore, the Clean Water Act (CWA) Section 123, the Columbia River Basin Restoration Act, directs EPA to lead a Basin-wide collaboration and competitive grant program to assess and reduce toxics in the Basin. The Columbia River Basin Restoration Act is a stand-alone legislation that amended the CWA in December 2016 to include Section 123, which directs EPA to: establish a Columbia River Basin Restoration Program (CRBRP) to assess trends in water quality; collect and assess data to identify possible causes of environmental problems; provide grants for projects for specific purposes; and, establish a voluntary Columbia River Basin Restoration Working Group.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, an \$834.0 thousand dollar increase will be allocated to accelerate the restoration of the geographic programs referenced and will emphasize initiatives such as environmental justice and climate change.

## Northwest Forest Program

In FY 2022, the Agency's request will support the following activities:

- Wildfires impact monitoring and assessment of water quality in watersheds impacted by the catastrophic 2020 Labor Day fires in Oregon. Participation on the Governor's Wildfire, Natural, Cultural, and Recreation Task Force and Post-Wildfire Research and Monitoring Team to develop a wildfire recovery strategy encompassing impacts to wildlife, natural and cultural resources, and recreation;
- Aquatic and Riparian Effectiveness Monitoring (AREMP) of the Northwest Forest Plan and Bureau of Land Management (BLM) Western Oregon Resource Management Plan in maintaining and restoring watershed condition across 24 million acres of federal lands in western Washington and Oregon, and northern California;
- PacFish/InFish Biological Opinion Effectiveness Monitoring (PIBO) to determine whether land management practices are maintaining or improving riparian and aquatic conditions at both the landscape and watershed scales on federal lands throughout the Upper Columbia River and Missouri River Basins, which encompass approximately 80 million acres of BLM and Forest Service lands;
- Water quality data from AREMP and PIBO will be uploaded to the Water Quality Data Exchange (WQX). These programs maintain over 500 year-round temperature monitoring stations to support state water quality and aquatic habitat reporting, including CWA Section 303(d) listings;
- The Drinking Water Providers Partnership – an annual public-private funding opportunity for water providers and watershed restoration practitioners in Oregon and Washington to implement riparian or in-stream restoration actions to restore and protect the health of watersheds and drinking water;
- Support Region 10 states' implementation of forestry non-point source programs and development of Total Maximum Daily Loads (TMDLs) and Best Management Practices for forestry;
- Continue developing Spatial Statistical Network models to evaluate impacts of forest practices and climate change on stream temperatures across entire watersheds. Further supporting watershed management and development and implementation of TMDLs;
- Engage with Idaho Department of Environmental Quality and Idaho Department of Lands during the rulemaking for forest practices on state and private lands. Ensure science-based management practices are being considered to improve water quality and meet water quality standards;
- Engage with Washington Department of Ecology and Washington Department of Natural Resources during the rulemaking for forest practices on state and private lands. Ensure science-based management practices are being considered to improve water quality and meet water quality standards;
- Continue to roll out the Geomorphic Roads Inventory and Assessment Package (GRAIP)-Light, a GIS-based tool to identify and prioritize sources of sediment within watersheds;
- Continue collaboration with partners and local water providers to address sediment and temperature impairments in forested watersheds and engage in collaborative efforts including the Oregon Watershed Enhancement Board. These collaborative efforts are at the forefront of efforts to conserve and restore water quality using alternatives to traditional regulatory and enforcement-related approaches;

- Work with land management agencies to inform management in key source water areas with the objective of ensuring production and delivery of clean and sustainable water while achieving economic efficiencies. Effective management of forest cover in source water areas can decrease drinking water treatment and chemical costs by twenty percent;<sup>3</sup> and
- Engage in an interagency forum at the executive and management levels for Washington, Oregon, and California and a similar forum for the interior Columbia Basin.<sup>4</sup> These two broad-scale collaborative efforts address policy, management, and technical natural resource issues that are key to water quality and drinking water protection.

### Lake Pontchartrain

In FY 2022, the Agency’s request will help restore the ecological health of the Lake Pontchartrain Basin by:

- Continuing the implementation of the Lake Pontchartrain Basin Program Comprehensive Management Plan<sup>194</sup> and Comprehensive Habitat Management Plan;
- Planning and design of consolidated wastewater treatment systems to support sustainable infrastructure;
- Conducting water quality monitoring outreach and public education projects; and
- Protecting and restoring critical habitats and encouraging sustainable growth by providing information and guidance on habitat protection and green development techniques.

### Southeast New England Program (SNEP)

In FY 2022, the Program request will support technical assistance, grants, interagency agreements, and contracts to spur investment in regionally significant and/or landscape-scale restoration opportunities, more fully integrate restoration actions, build local capacity, promote policy and technology innovation, encourage ecosystem (water quality and habitat) approaches, and enact the Southeast New England Program’s new Five-Year Strategic Plan.<sup>195</sup> Specific activities include:

- Investing in on-the-ground environmental restoration/protection projects through the SNEP Watershed Implementation Grants (SWIG) Program;
- Building capacity of municipalities and other organizations to actively participate in implementing restoration projects and effectively managing their environmental programs through the SNEP Network;
- Promoting the development of next-generation watershed management tools;
- Communicating with the public through webinars and workshops on priority issues, bi-monthly newsletters, and a biennial tech transfer symposium;
- Collaborating among the Narragansett Bay and Buzzards Bay National Estuary Programs, the states of Rhode Island and Massachusetts, the Cape Cod Commission and other Cape Cod organizations, municipalities, and key stakeholders to identify, test, promote, and implement approaches that can be replicated across Southeastern New England, with a focus on the nexus between habitat, nutrients, and stormwater and ecosystem and community resilience;

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<sup>194</sup> For more information please see: <https://scienceforourcoast.org/about-us/about-pc/management-plan/>.

<sup>195</sup> For more information visit: <https://www.epa.gov/snep/snep-strategic-plan>.



- Funding pilot projects and research to introduce innovations and practices that accelerate and guide ecosystem restoration and avoid or reduce nutrient impacts through interagency agreements with other federal agencies, including the U.S. Geological Survey and Department of Energy;
- Launching the SNEP Pilot Watershed Initiative which seeks to concentrate and quantitatively evaluate the effectiveness of coordinated environmental restoration projects at a sub-watershed scale. Leveraging for efficiency and effectiveness by coordinating operations, resources, and funding principles among restoration partners, including federal and state agencies;
- Finalizing a framework for a regional monitoring strategy that would ultimately provide data to inform a periodic report on the state of the SNEP region; and
- Incorporating assessment and adaptive management feedback and mechanisms to improve the next generation of projects.

### Columbia River Program

The EPA CRBRP's vision is to be a catalyst for broad toxics reduction work efforts and basin-wide collaboration to achieve a healthy ecosystem with significantly reduced toxic levels in fish, wildlife, and water to enable communities to access unimpaired watersheds with healthy fish and wildlife habitat.

### Key FY 2022 plans for EPA's CRBRP include:

- Continuing to manage the 14 FY 2019 and FY 2020 grants awarded to monitor and reduce toxics in the Basin;
- Competing the second round of CRBRP funding assistance utilizing FY 2021 and FY 2022 appropriations;
- Providing technical assistance and communication products for the Columbia River Basin Restoration Working Group and the general public including the creation of a CRBRP Story Map; and
- Continuing to update the EPA Columbia River Basin website which serves as a source of technical references and other information on understanding and reducing toxics in the Basin.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+\$823.0) This increase of resources supports projects to accelerate the restoration of the geographic programs listed under this program project and will emphasize initiatives such as environmental justice and climate change.

**Statutory Authority:**

Clean Water Act.

**Geographic Program: South Florida**  
 Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$2,739.6</i></b>	<b><i>\$6,000.0</i></b>	<b><i>\$7,155.0</i></b>	<b><i>\$1,155.0</i></b>
Total Budget Authority	\$2,739.6	\$6,000.0	\$7,155.0	\$1,155.0
Total Workyears	1.2	1.3	1.3	0.0

**Program Project Description:**

Rapidly growing South Florida and its nearly 10 million residents represent a multibillion-dollar economy fueled by outdoor recreational tourism (beaches, fishing, boating, and diving); commercial fishing; waterfront real estate development; and agriculture that depend on clean oceans, estuaries, rivers, lakes, and drinking water. EPA is committed to protecting and restoring the Everglades, Florida Keys National Marine Sanctuary (FKNMS), Biscayne Bay, Florida Bay, Caloosahatchee Estuary, Indian River Lagoon, and the other extraordinary natural ecosystems in South Florida.

EPA’s South Florida Program coordinates restoration activities in South Florida, including ongoing restoration efforts in the Everglades and the Florida Keys where water quality and habitat are directly affected by land-based sources of pollution. EPA implements, coordinates, and facilitates activities through a variety of programs including: the Clean Water Act (CWA) Section 404 Wetlands Program; the Everglades Water Quality Restoration Strategies Program; the Everglades Regional Environmental Monitoring and Assessment Program; the Florida Keys National Marine Sanctuary Water Quality Protection Program; the Florida Keys National Marine Sanctuary Water Quality Monitoring Program; the Coral Reef Environmental Monitoring Program; the Benthic Habitat Monitoring Program; the Southeast Florida Coral Reef Initiative, as directed by the U.S. Coral Reef Task Force; the Brownfields Program; and other programs.<sup>196,2</sup> The South Florida Program furthers Administration priorities of environmental justice as well as builds resiliency against climate events in the region.

**FY 2022 Activities and Performance Plan:**

The South Florida Program supports efforts to protect and restore various communities and ecosystems impacted by environmental problems. In FY 2022, EPA will focus on the Florida Keys Water Quality Protection Program, Florida Coral Reef Tract, Florida Keys Coral Reef Restoration, Everglades Restoration, harmful algal blooms, trash free waters, and CWA 404 implementation.

- The Florida Keys National Marine Sanctuary Protection Program conducts long-term monitoring projects of water quality and ecosystems. Data generated from these programs have

<sup>196</sup> For more information please see: <http://www.epa.gov/aboutepa/about-epa-region-4-southeast>.

<sup>2</sup> For more information please see: <https://www.epa.gov/everglades>.

documented periodic oceanographic events such as algal blooms, seagrass die-offs, and coral diseases, and have provided the foundational data for the development of nutrient numeric criteria. The long-term status and trend collected by the Coral Reef Environmental Monitoring Program is tracking the ongoing Stony Coral Tissue Loss Disease that continues to decimate over 20 reef building corals species of the Florida Reef Tract. To date, the South Florida Program has provided more than \$2.5 million to support coral research to hinder or halt the disease destroying corals reefs that are vital to Florida's eco-tourism industry and that serve as a natural mitigation barrier from storms and hurricanes.

- The Everglades Regional Environmental Monitoring and Assessment Program (REMAP) is an extensive assessment of the Everglades' health conducted by EPA Region 4 since 1993. Data are used by federal and state agencies, tribes, agriculture, the public, non-governmental organizations, and the National Academies of Sciences to understand water quality and ecological conditions and to assess restoration progress. The data also help to explain the effectiveness of control programs for phosphorus and mercury.
- Continued implementation of the Florida Keys Wastewater Master Plan to provide Advanced Wastewater Treatment or Best Available Technology services to all homes and businesses in the Florida Keys through the EPA and state co-chaired FKNMS Water Quality Protection Program. The goal is to remove from service all non-functioning septic tanks, cesspits, and non-compliant wastewater facilities. In 2020, greater than 90 percent of Florida Keys homes and business are on advanced wastewater treatment systems and more than 30 thousand septic tanks have been eliminated.
- Support of studies related to phosphorus enrichment and chlorophyll increases resulting in dying seagrass beds and increasing macro algae blooms in North Biscayne Bay. EPA specifically will fund the development of a sediment and water quality model for the Bay; expand the state's ecological and water monitoring network; and provide for a strategic outreach campaign to implement best management practices to address land-based sources of pollution.
- Enhancement of water quality and seagrass monitoring in the Caloosahatchee Estuary that has been heavily impacted by harmful algal blooms in recent years. EPA funding will be leveraged with a \$1 million grant from Florida to support the restoration of seagrass habitat in the upper Caloosahatchee River.
- Support of CWA Section 404 implementation, including wetlands conservation, permitting, dredge and fill, and mitigation banking strategies with U.S. Army Corps of Engineers.
- Continuation of work with the State of Florida on Everglades Water Quality Restoration Strategies to address phosphorus pollution. Part of this work will be tracking progress on the National Pollutant Discharge Elimination System permits and consent orders within the Everglades, including discharge limits for phosphorus and corrective actions that are consistent with state and federal law and federal court consent decree requirements

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,155.0) This program change increases resources supporting projects to accelerate the restoration of South Florida through focusing on the Florida Keys Water Quality Protection Program, Florida Coral Reef Tract, Florida Keys Coral Reef Restoration, Everglades Restoration, harmful algal blooms, trash free waters, and CWA Section 404 implementation.

**Statutory Authority:**

Florida Keys National Marine Sanctuary and Protection Act of 1990; National Marine Sanctuaries Program Amendments Act of 1992; Clean Water Act; Water Resources Development Act of 1996; Water Resources Development Act of 2000; National Environmental Policy Act.

**Geographic Program: San Francisco Bay**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$5,907.2</b>	<b>\$8,922.0</b>	<b>\$12,000.0</b>	<b>\$3,078.0</b>
Total Budget Authority	\$5,907.2	\$8,922.0	\$12,000.0	\$3,078.0
Total Workyears	1.6	1.8	1.8	0.0

**Program Project Description:**

The San Francisco Bay-Delta Estuary has long been recognized as an estuary of national importance by EPA, other federal agencies, state partners, and local stakeholders. The Bay Area, home to over 7 million people, is one of the densest urban areas in the nation. Historically, San Francisco Bay had about 200 thousand acres of mudflats and tidal marshes and has been significantly altered by mining, diking, and urbanization. San Francisco Bay supports 500 species of wildlife, more than a quarter of which are either threatened or endangered. Furthermore, investing in wetland restoration is pivotal in retaining the bay’s resiliency to rising sea levels and other hydrologic changes.

Since 2008, EPA has received an annual appropriation for a competitive grant program, the San Francisco Bay Water Quality Improvement Fund (SFBWQIF), to support projects that protect and restore San Francisco Bay and advance Blueprint/Comprehensive Conservation and Management Plan (CCMP) restoration goals. Funding for the SFBWQIF is specifically targeted for the watersheds and shoreline areas of the nine San Francisco Bay Area counties that drain into the Bay. Since 2008, the SFBWQIF has invested over \$63.5 million in 54 grant awards to restore over four thousand acres of wetlands around the Bay and minimize polluted runoff from entering the San Francisco Bay. SFBWQIF grants have leveraged \$174 million in funding from partners and represents a collaborative investment with local partners guided by the consensus-based Blueprint/CCMP. The FY 2022 request will support increased attention and action to address climate change impacts of the San Francisco Bay, including readiness and building resiliency. The Program will increase focus on environmental justice communities, through several program and planning efforts.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will focus on the following activities:

- Issue a Request for Applications soliciting proposals to restore wetlands, restore water quality, and implement green development practices that use natural hydrologic processes to treat polluted runoff around San Francisco Bay;

- Continue to administer the SF Bay Water Quality Improvement Fund, consistent with the San Francisco Estuary Partnership’s (SFEP) Comprehensive Conservation and Management Plan (CCMP);<sup>197</sup>
- Continue to build the resilience of San Francisco Bay ecosystems, shorelines and communities to climate change and sea level rise;
- Seek to leverage other sources of funding such as the Clean Water State Revolving Fund and Federal Emergency Management Agency’s pre-hazard mitigation funds in support of priority CCMP projects such as the San Francisco Estuary Partnership’s Hayward Shoreline horizontal levee pilot project and the related “next mile” project;
- Continue to increase the reuse of dredged material for wetlands restoration, which is critical in preparing and responding to sea level rise in San Francisco Bay; and
- Continue to partner with the organizations supporting the EPA-funded San Francisco Bay buoy array monitoring low-pH and low-oxygen events due to intrusion of upwelled water from the ocean and assessing its impacts.

The San Francisco Estuary restoration community is working rapidly to protect and restore wetlands that can provide flood protection, recreation, water quality improvement, and habitat for surrounding communities.

Key actions include partnering with state and federal agencies to implement and track fourteen TMDLs,<sup>198</sup> advance the implementation of the Delta Regional Monitoring Program (RMP),<sup>199</sup> and begin melding the monitoring of fish and aquatic life under the Interagency Ecological Program with the monitoring of water quality and habitat conditions under the Bay and Delta RMPs, and the regional Habitat Conservation Plans, respectively.<sup>200</sup>

**Performance Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$3,078.0) This program change increases resources to support projects that will accelerate the restoration of the San Francisco Bay such as restoring wetlands around the Bay and minimizing polluted runoff from entering San Francisco Bay.

**Statutory Authority:**

Clean Water Act, Consolidated Appropriations Act, 2021, Pub. L. 116-260.

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<sup>197</sup>Please see the SFEP Comprehensive Conservation and Management Plan (2016) at <https://www.sfestuary.org/wp-content/uploads/2017/08/CCMP-v26a-all-pages-web.pdf>.

<sup>198</sup> For more information, please see the SF Bay Delta TMDL Progress Assessment at <http://www2.epa.gov/sfbay-delta/sf-bay-delta-tmdl-progress-assessment>.

<sup>199</sup> For more information, please see the Delta Regional Monitoring Program – San Francisco Estuary Institute and Regional Water Control Board (Central Valley) at <https://www.sfei.org/DeltaRMP>.

<sup>200</sup> For more information, please see the Interagency Ecological Program at <https://iep.ca.gov/>.

**Geographic Program: Puget Sound**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$32,861.0</i></b>	<b><i>\$33,750.0</i></b>	<b><i>\$35,000.0</i></b>	<b><i>\$1,250.0</i></b>
Total Budget Authority	\$32,861.0	\$33,750.0	\$35,000.0	\$1,250.0
Total Workyears	5.3	7.0	7.0	0.0

**Program Project Description:**

Puget Sound is the southern portion of the international Salish Sea and is the largest estuary by water volume in the United States (U.S.). The Sound is an economic and cultural engine for the region’s more than 4.7 million people, including nineteen federally recognized tribes. Nearly 71 percent of all jobs and 77 percent of total income in Washington State are found in the Puget Sound Basin. By 2040, the population is projected to grow to seven million, the equivalent of adding approximately four cities the size of Seattle to the watershed.

Puget Sound’s beneficial uses are significant. In 2017, the value of Puget Sound commercial fishing (finfish and shellfish) was \$114 million and the Gross Domestic Product from Puget Sound-related tourism and recreation activities was \$4.7 billion. Puget Sound’s shellfish industry is considered the Nation’s most valuable and is an important source of family wage jobs in economically challenged rural communities.

Development and land use conversion have adversely impacted the beneficial uses of Puget Sound’s waters. For example, pollution and agricultural runoff reduce the safe harvest and consumption of shellfish across 143 thousand acres of shellfish beds, and cause the closure of popular swimming beaches and recreational sites annually. Southern resident killer whales and 59 populations of Chinook salmon, steelhead, and bull trout are listed under the Endangered Species Act. Tribal nations also are unable to sustain their culture and way of life.

A healthy and functioning Puget Sound benefits all who live, visit, or recreate there, or have a connection to the region. A properly functioning ecosystem provides residents with food, water, and raw materials; regulates and moderates harmful elements; and provides cultural, spiritual, and recreational experiences.

Federal support of Puget Sound recovery comes from many programs, most of which are administered by EPA, the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, U.S. Department of Interior, and the U.S. Army Corps of Engineers.

Since 2010, Congress has appropriated over \$350 million using Clean Water Act Section 320 authority for Puget Sound. Under Section 320, EPA has provided National Estuary Program and Geographic Program funding and support to help communities make on-the-



ground improvements for clean and safe water, protect and restore habitat, allow for thriving species and a vibrant quality of life for all, while supporting local jobs.

EPA's work with the Puget Sound Partnership, state agencies, tribes, and other partners has supported important gains in recovery. Examples include:

- Comprehensive regional plans to restore the Sound;
- More than \$1 billion leveraged for recovery;
- Partnerships with 19 federally recognized tribes;
- Transboundary collaboration with Canada;
- Scientific gains on toxic effects of urban stormwater;
- Since 2007, a net increase of harvestable shellfish beds;
- Over 41 thousand acres of habitat protected and/or restored (cumulative from 2006); and
- More than six thousand acres of shellfish harvest bed upgraded (cumulative from 2007).

### **FY 2022 Activities and Performance Plan:**

Key FY 2022 activities for EPA's Puget Sound Program include:

- Fund assistance agreements with the 19 federally recognized tribes in Puget Sound, three Tribal consortia, and the Northwest Indian Fisheries Commission;
- Co-chair the overall federal effort to address Tribal Treaty Rights at Risk.
- Build on 20 years of international cooperation with Canada by finalizing and implementing the Canada-U.S. Cooperation in the Salish Sea: 2021-2024 Action Plan.
- Fulfill National Estuary Program responsibilities, including the approval of a new Comprehensive Conservation and Management Plan (CCMP) for recovering Puget Sound (the Action Agenda);
- Integrate climate adaptation and environmental justice while supporting local jobs;
- Managing and awarding up to \$100 million in projects over the next five years consistent with the EPA's 2021 Strategic Initiative Lead Funding Model;
- Continue to fund and coordinate cutting-edge science in the Salish Sea;
- Continue to monitor and reduce unliquidated obligations; and
- Enhance Federal Task Force leadership, including the development of a new action plan for 2022-2026.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$18.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+\$1,232.0) This increase of resources supports federal, state, tribal, and local efforts to protect and restore the Puget Sound.

**Statutory Authority:**

Clean Water Act. Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Great Lakes Restoration**  
Program Area: Geographic Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$346,143.7</i></b>	<b><i>\$330,000.0</i></b>	<b><i>\$340,000.0</i></b>	<b><i>\$10,000.0</i></b>
Total Budget Authority	\$346,143.7	\$330,000.0	\$340,000.0	\$10,000.0
Total Workyears	66.7	68.5	68.5	0.0

**Program Project Description:**

The Great Lakes are the largest system of surface freshwater on Earth, containing twenty percent of the world’s surface freshwater and 95 percent of the United States’ surface freshwater. The watershed includes two nations, eight United States (U.S.) states, two Canadian provinces, and 35 tribes.

Through a coordinated interagency process led by EPA, the implementation of the Great Lakes Restoration Initiative (GLRI) is helping to restore the Great Lakes ecosystem. This restoration effort provides environmental and public health benefits to the region’s thirty million Americans who rely on the Great Lakes for drinking water, recreation, and fishing. The restoration and protection of the Great Lakes also fuels local and regional economies and community revitalization efforts across the basin.

This interagency collaboration accelerates progress, promotes leveraging, avoids potential duplication of effort, and saves money. In accordance with the Clean Water Act (CWA), EPA and its partners are accomplishing this restoration through the implementation of a five-year GLRI Action Plan. The implementation of the GLRI Action Plan III, covering FY 2020 through FY 2024, began in October 2019.

EPA and its partners have achieved significant results since the GLRI started in 2010<sup>201</sup>, including:

- Four Areas of Concerns (AOCs) delisted, including the Lower Menominee River AOC in FY 2020, and ten others that have had the cleanup and restoration actions necessary for delisting have been completed (prior to GLRI, only one Great Lakes AOC was delisted);
- 91 Beneficial Use Impairments (BUIs) at 27 AOCs in the eight Great Lakes states have been removed, more than nine times the total number of BUIs removed in the preceding 22 years;
- Over 4 million cubic yards of contaminated sediment have been remediated;
- Over 200 thousand acres on which invasive species control activities have been implemented;
- Self-sustaining populations of Silver and Bighead carp have been kept out of the Great Lakes;

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<sup>201</sup> For more information, please see <https://www.epa.gov/greatlakes>.

- Over 10 million pounds of Asian Carp have been removed from the Illinois River, reducing the potential for Asian Carp to invade the Great Lakes;
- Loadings of over 2 million pounds of phosphorus were reduced through implementation of conservation practices (phosphorus is a major driver of harmful algal blooms in Great Lakes priority watersheds);
- More than 460 thousand acres of habitat have been protected, restored, or enhanced; and
- Over 575 thousand youths have benefited from Great Lakes based education and stewardship projects.

Under the GLRI, funds are first appropriated to EPA. After annual evaluation and prioritization consistent with the GLRI Action Plan, EPA and its partner agencies collaboratively identify projects and programs that will best advance progress under GLRI. EPA then provides a substantial portion of those funds to its partner federal agencies to implement GLRI projects and programs in partnership with EPA, states, and tribes. EPA and its partner federal agencies will directly implement projects and fund projects performed by other entities such as states, tribes, municipalities, counties, universities, and nongovernmental organizations. GLRI funding can supplement each agency's base funding.

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 by the Vessel Incidental Discharge Act of 2018. To fulfill this statutory mandate, EPA is collaborating with the U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and the United States Coast Guard, and will collaborate with other applicable federal, state, local, and tribal agencies.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, the GLRI will continue to support programs and projects which target the most significant environmental problems in the Great Lakes. Emphasis will continue to be placed on: 1) cleaning up and delisting AOCs which has led to community revitalization, which is especially important in environmental justice communities and opportunity zones; 2) reducing phosphorus contributions that contribute to harmful algal blooms and other water quality impairments; and 3) invasive species prevention. GLRI Action Plan III targets GLRI restoration within the focus areas, objectives, and performance goals described below.

### **Toxic Substances and Areas of Concern Objectives:**

- **Remediate, restore, and delist AOCs.** EPA, USFWS, U.S. Army Corps of Engineers (USACE), USGS, NOAA, and other GLRI partners will continue accelerating the pace of U.S. BUI removals. EPA and its federal partners will work with and fund stakeholders to implement management actions necessary to remove the BUIs (indicators of poor environmental health) that will ultimately lead to the delisting of the remaining U.S. AOCs. Agencies target collective efforts under the GLRI to maximize removal of BUIs and delisting of AOCs. Agencies will support BUI removal through sediment remediation under the Great Lakes Legacy Act (part of the GLRI) and other restoration activities. FY 2022 targets are:

- One AOC (19 AOCs cumulative since 1987) where all management actions necessary for delisting have been implemented;
  - Eight BUIs (109 BUIs cumulative since 1987) removed in AOCs; and
  - Two AOCs (26 AOCs cumulative since 1987 – more than 80 percent of the 31 total AOCs) with complete and approved lists of management actions necessary for delisting.
- **Share information on the risks and benefits of consuming Great Lakes fish, wildlife, and harvested plant resources with the people who consume them.** Federal agencies and their state and tribal partners will continue to help the public make informed decisions about healthy options for safe fish consumption. Expansion of successful pilot programs will increase the availability and accessibility of safe fish consumption guidelines to vulnerable populations that consume Great Lakes fish. Additional emphasis will be placed on the safe consumption of wildlife and harvested plant resources.
  - **Increase knowledge about: 1) “Chemicals of Mutual Concern” identified pursuant to the Great Lakes Water Quality Agreement Annex 3; and 2) other priority chemicals that have negatively impacted, or have the potential to negatively impact, the ecological or public health of the Great Lakes.** Federal agencies will coordinate with appropriate state and tribal partners to begin to fill critical monitoring and data gaps for priority chemicals in the Great Lakes. Monitoring data from this process will provide information on the magnitude and extent of these chemicals in the Great Lakes and help in the evaluation of associated ecological, economic, and recreational consequences.

### **Invasive Species Objectives:**

- **Prevent introductions of new invasive species.** Federal agencies and their partners will continue to prevent new invasive species (including invasive carp) from establishing self-sustaining populations in the Great Lakes ecosystem. Federal agencies and their partners will work to increase the effectiveness of existing surveillance programs by increasing detection abilities. Federal agencies will continue to support state and tribal efforts to develop and implement Aquatic Nuisance Species Management Plans which will be used for annual “readiness exercises” and actual responses to new detections of invasive species. GLRI partners will be able to use risk assessments in combination with updated “least wanted” lists to focus prevention activities. Increasing the ability and frequency of Great Lakes states to quickly address new invasions or range expansion of existing invasive species will be a key GLRI strategy. FY 2022 target: Conduct eight rapid responses or exercises.
- **Control established invasive species.** Federal agencies and their partners will bring an enhanced focus to the quality of acreage to be restored as they restore sites degraded by aquatic, wetland, and terrestrial invasive species. Federal agencies will implement control projects in national forests, parks, and wildlife refuges, and will partner with states and neighboring communities to promote larger scale protection and restoration through applicable control programs. GLRI funding will help the Great Lakes Sea Lamprey Control Program to locate and address strategic barriers while also advancing new control technologies. FY 2022 target: Control invasive species on six thousand acres.

- **Develop invasive species control technologies and refine management techniques.** Federal agencies and their partners will continue to develop and enhance technologies to control non-native phragmites, sea lamprey, and red swamp crayfish so that on-the-ground land managers can field test these new approaches. Federal agencies also will develop and enhance invasive species “collaboratives” to support rapid responses and to communicate the latest control and management techniques for non-native species such as Hydrilla, Dreissenidae mussels, hemlock wooly adelgid, and emerald ash borer. Federal agencies and their partners will support a Great Lakes telemetry network to track aquatic invasive species movements (*e.g.*, grass carp) and refine rapid response actions.

### **Nonpoint Source Pollution Impacts on Nearshore Health Objectives:**

- **Reduce nutrient loads from agricultural watersheds.** EPA, federal agencies, and their partners will continue working on farms and in streams to reduce nutrient loads from agricultural watersheds, emphasizing utilization of conservation systems and work in priority watersheds, particularly the Lower Fox River (WI), Saginaw River (MI), Maumee River (OH), and Genesee River (NY). This work will reduce the most significant loadings from nutrient runoff. Federal agencies and their partners will improve the effectiveness of existing programs, encourage the adoption of technologies and performance-based approaches to reduce runoff and soil losses, expand demonstration farm networks to increase adoption of nutrient management practices, promote practices for slowing down and filtering stormwater runoff, and emphasize long-term and sustainable nutrient reductions. EPA and its federal partners will target resources and activities at locations that are the most significant cause of harmful algal blooms. FY 2022 targets:
  - Reduce 300 thousand pounds (2.2 million pounds cumulative since 2010) of phosphorus from conservation practice implementation throughout Great Lakes watersheds; and
  - 145 thousand acres (2.515 million acres cumulative since 2010) receiving technical or financial assistance on nutrient management in priority watersheds.
- **Reduce untreated stormwater runoff.** EPA and its federal partners will continue to accelerate implementation of green infrastructure projects to reduce the impacts of polluted urban runoff on nearshore water quality at beaches and in other coastal areas. These projects will capture or slow the flow of untreated runoff and filter out sediment, nutrients, toxic contaminants, pathogens, and other pollutants prior to entering Great Lakes tributaries and nearshore waters. Federal agencies and their partners will also continue to support watershed management projects that slow and intercept runoff, including installation of tributary buffers, restoration of coastal wetlands, and re-vegetation and re-forestation of areas near Great Lakes coasts and tributaries. FY 2022 targets:
  - Capture or treat 50 million gallons (450 million gallons cumulative since 2015) of untreated stormwater runoff captured or treated; and
  - Restore or protect seven miles (47 miles cumulative since 2015) of Great Lakes shoreline and riparian corridors restored or protected.
- **Improve effectiveness of nonpoint source control and refine management efforts.** EPA and its federal partners will continue to adaptively manage to maximize nonpoint source

control efforts. Strategies will include: conducting edge-of-field monitoring studies in agricultural priority watersheds to test the effectiveness of innovative practices such as bioreactors; application of previously supported tools and lessons learned to optimize project results; and development of new strategies such as nutrient recovery and manure transformation technologies. FY 2022 targets:

- Conduct 30 nutrient monitoring and assessment activities; and
- Develop or evaluate ten nutrient or stormwater runoff reduction practices or tools.

### **Habitats and Species Objectives:**

- **Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes.** EPA and its federal partners will implement protection, restoration, and enhancement projects focused on open water, nearshore, connecting channels, coastal wetland, and other habitats to protect and restore native species. They will build upon and shore-up past investments while advancing protection and restoration in new areas important to targeted species. Projects will be largely based on priorities in regional scale conservation strategies and will include:
  - Protecting, restoring, and enhancing coastal wetlands;
  - Removing dams and replacing culverts to create fish habitat and reconnect migratory species to Great Lakes tributaries;
  - Restoring habitat necessary to sustain populations of migratory native species; and
  - Protecting, restoring, and managing existing wetlands and high quality upland areas to sustain diverse, complex, and interconnected habitats for species reproduction, growth, and seasonal refuge.

EPA also will continue to implement projects that support community efforts to clean up trash on Great Lakes beaches and in harbors and river mouths. FY 2022 targets:

- Restore, protect, or enhance 12 thousand acres of coastal wetland, nearshore, and other habitats; and
  - 200 miles (6,100 miles cumulative since 2010) of connectivity between rivers, streams, and lakes providing passage for aquatic species.
- **Increase resiliency of species through comprehensive approaches that complement on-the-ground habitat restoration and protection.** EPA and its federal partners will maintain, restore, and enhance the habitats of native fish and wildlife species to increase the resiliency and overall health of these species. Agencies will maximize habitat improvements (coastal wetlands in particular) for aquatic and terrestrial species through collaborative conservation and monitoring at local and regional scales. Project benefits are expected to include avoiding species extinction, identification of key habitats and of limiting factors to species recovery and increasing or protecting population levels. GLRI agencies and their partners will continue to support protection of native species that have cultural, subsistence, and economic value. FY 2022 target: Complete actions to significantly protect or promote recovery of populations of two species (four species cumulative since 2018).

**GLRI Funding Allocations:** EPA leads the cooperative process to determine funding allocations for programs and projects of the GLRI agencies. Under the CWA Section 118, EPA provides the

appropriate authorizing and appropriating committees of the Senate and the House of Representatives a yearly detailed description of the progress of the GLRI and amounts transferred to participating federal departments and agencies.

**Summary of FY 2015 - 2022 Allocations by Focus Area**  
(Dollars in Thousands)

Focus Area Allocations								
Focus Area	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 <sup>[a]</sup>
Toxic Substances and AOC	\$120,200	\$106,600	\$107,500	\$107,500	\$107,500	\$115,900	\$125,700	\$132,913
Invasive Species	\$53,600	\$56,400	\$62,200	\$56,900	\$56,900	\$62,700	\$62,600	\$64,912
Nonpoint Source Pollution Impacts on Nearshore Health	\$51,000	\$51,700	\$47,900	\$51,000	\$51,700	\$52,600	\$52,100	\$52,662
Habitat and Species	\$49,000	\$54,200	\$49,500	\$50,000	\$50,200	\$54,200	\$56,600	\$53,750
Foundations for Future Restoration Actions	\$26,200	\$31,100	\$32,900	\$34,600	\$33,700	\$34,600	\$33,000	\$35,496
<b>TOTAL</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$320,000</b>	<b>\$330,000</b>	<b>\$339,733</b>

<sup>[a]</sup> Subject to approval by Regional Working Group agencies.

**Summary of FY 2015 - 2022 Allocations\* by Agency**  
(Dollars in Thousands)

Agency	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 <sup>(a)</sup>
DHS-USCG	\$2,006	\$1,274	\$1,580	\$500	\$1,661	\$1,250	\$1,320	\$1,200
DOC-NOAA	\$24,818	\$30,740	\$12,027	\$24,629	\$29,405	\$28,163	\$13,590	\$10,990
DOD-USACE	\$48,389	\$33,369	\$55,940	\$43,559	\$37,387	\$35,418	\$45,580	\$9,445
DOI-BIA	\$4,750	\$6,203	\$10,904	\$11,617	\$9,842	\$15,840	\$15,270	\$15,000
DOI-NPS	\$3,142	\$3,799	\$4,379	\$3,940	\$3,822	\$3,794	\$4,950	\$4,729
DOI-USFWS	\$41,393	\$48,118	\$41,794	\$52,902	\$47,272	\$51,901	\$50,200	\$28,766
DOI-USGS	\$23,433	\$22,960	\$26,817	\$25,724	\$21,603	\$19,780	\$17,480	\$7,000
DOT-MARAD	\$1,291	\$2,106	\$800	\$675	\$803	\$5,500	\$750	\$500
HHS-ATSDR/CDC	\$1,738	\$1,692	\$593	\$590	\$0	\$0	\$0	\$0
USDA-APHIS	\$1,246	\$1,089	\$1,262	\$1,176	\$1,312	\$1,378	\$1,460	\$1,772
USDA-NRCS	\$23,281	\$19,062	\$22,072	\$25,096	\$20,697	\$22,239	\$22,450	\$24,933
USDA-USFS	\$6,290	\$10,822	\$11,355	\$10,153	\$11,646	\$9,921	\$11,380	\$11,224
Multi-agency	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$87,535
<b>IA Totals:</b>	<b>\$181,776</b>	<b>\$181,234</b>	<b>\$189,522</b>	<b>\$200,560</b>	<b>\$185,448</b>	<b>\$195,185</b>	<b>\$189,430</b>	<b>\$203,094</b>
<b>EPA and Misc IAs</b>	<b>\$118,224</b>	<b>\$118,766</b>	<b>\$110,478</b>	<b>\$99,440</b>	<b>\$114,552</b>	<b>\$124,815</b>	<b>\$140,570</b>	<b>\$136,638</b>
<b>Totals:</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$320,000</b>	<b>\$330,000</b>	<b>\$339,733</b>

<sup>[a]</sup> Subject to approval by Regional Working Group agencies.

\* Final allocations for FY 2015 – FY 2019. Allocations for FY 2020 are as reported in the April 2021 GLRI Financial Management Updates. Allocations for FY 2021 are based on a budget approved by Regional Working Group agencies in August 2019. Allocations for FY 2022 are subject to approval by Regional Working Group agencies.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.



**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$268.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,732.0) This increase supports projects to accelerate the restoration of the Great Lakes through cleaning up and delisting AOCs; reducing phosphorus contributions that contribute to harmful algal blooms and other water quality impairments; and invasive species prevention.

**Statutory Authority:**

Clean Water Act Section 118.

## **Homeland Security**

**Homeland Security: Communication and Information**

Program Area: Homeland Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$4,935.3</i></b>	<b><i>\$4,145.0</i></b>	<b><i>\$4,557.0</i></b>	<b><i>\$412.0</i></b>
Total Budget Authority	\$4,935.3	\$4,145.0	\$4,557.0	\$412.0
Total Workyears	12.1	13.3	14.3	1.0

**Program Project Description:**

There has been an evolution of the term and mission of homeland and national security since 9/11. National security is now widely understood to include non-military dimensions, such as climate and environmental security, economic security, energy security, and cybersecurity. Systematic preparation is essential for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, climate change, pandemics, catastrophic natural disasters, and cyber-attacks. The Office of Homeland Security (OHS) supports EPA’s coordination and communication activities related to national security and homeland security. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in several areas, including critical water infrastructure protection and response to chemical, biological, radiological, and nuclear events, through a series of statutes, presidential directives, and national plans. OHS provides technical, policy, and intelligence advice to senior Agency leadership related to national and homeland security.

OHS coordinates the Agency’s intelligence activities including EPA’s engagement with the White House, National Security Council (NSC), and other federal departments and agencies on the development of new homeland and national security policy and requirements. OHS also ensures that the NSC and other lead federal entities understand the impacts of new homeland security initiatives and policies on existing EPA programs. OHS maintains intelligence operations and analyses capabilities focusing on EPA’s equities including the protection of critical infrastructure, specifically the water sector. OHS also focuses on coordination and integration of chemical, biological, and radiological preparedness and response programs as they relate to the protection of air and water quality and the prevention of land contamination through external engagement with federal departments and agencies and internal coordination with EPA program offices with Homeland Security responsibilities. OHS coordinates with regional, state, and local Fusion Centers and Joint Terrorism Task Forces to focus on integrating EPA regional offices with the information sharing environment and DHS intelligence sharing network. OHS also advances implementation of the following programs: EPA Insider Threat, Suspicious Activity Reporting, Operational Security, Counterintelligence, and Committee on Foreign Investment in the United States.

In addition, OHS works closely with EPA’s Water Program to coordinate and integrate water security efforts internally and externally with stakeholders regarding physical threats and contamination and cyber threats to operations. EPA serves as the Sector-Specific Agency (SSA)

and the Sector Risk Management Agency (SRMA) for the water sector. Cyber attacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both information technology (IT) and operational technology (OT) systems in the water sector. In 2020 and 2021, EPA has coordinated with NSC, DHS Cybersecurity and Infrastructure Security Agency (CISA), and the water sector on several occasions regarding cyber attacks on the water sector's IT systems, which has resulted in a renewed emphasis on notification and communication efforts with the utilities. The October 2020 DHS Homeland Threat Assessment indicated that cyber threats from nation states and non-nation states remain an acute growing problem threatening U.S. critical infrastructure.

National and homeland security information technology efforts are closely coordinated with the agencywide information security and infrastructure activities, which are managed in the Information Security and IT/Data Management programs. These IT support programs also enable contact among localities, EPA program and regional offices, and laboratories in emergency situations.

EPA's Security Operations Center provides a centralized, integrated, and coordinated cyber security incident response capability that defends against unauthorized activity within computer networks, by preventing, detecting, monitoring, analyzing, and responding to suspicious or malicious activity. It maintains communications with DHS Liaison Officers to respond to alerts that have potential national security impact.

#### **FY 2022 Activities and Performance Plan:**

With the resources requested in the FY 2022 President's Budget, this program will:

- Continue to promote a coordinated approach to EPA's homeland security activities and support the alignment of resources with government-wide national and homeland security priorities and requirements, including climate security and cybersecurity.
- Recruit and hire technical expertise in cybersecurity intelligence to provide a level of support that would enable EPA to better prepare for and respond timely to specific threats, mitigate attacks, assess evolving water sector cyber intelligence requirements, and assist in developing proposals to prevent/mitigate cyber incidents. With a new cybersecurity intelligence analyst position, the Agency will be able to increase research, analysis, and engagement with the water and wastewater sector and partner agencies who deal with cybersecurity (i.e., DHS CISA). This new position will help EPA fulfill the requirements in Section 9002 of the FY 2021 National Defense Authorization Act. All indicators suggest cybersecurity threats and requirements, particularly those associated with the critical infrastructure sector, will only increase in number, complexity, and potential consequences for the foreseeable future.
- Continue to develop new collaborative practices and methods with Intelligence Community agencies to meet the cybersecurity needs of the water and wastewater sector, along with other critical sectors, to address increasingly sophisticated and complex threat actor tactics and techniques.

- Directly engage with the watch floor at the CISA Operations Center. OHS has developed a new partnership with the National Security Agency office providing cybersecurity support to critical infrastructure agencies.
- Provide more comprehensive support to the expanding collaborations with DOE, CISA, and other programs on cyber threat response.
- Promote a coordinated approach to communicating classified and sensitive information to EPA programs, laboratories, and regional offices via secure communications systems to support timely intelligence and information sharing to enable safe and effective operational preparedness and response.
- Support federal, state, tribal, and local efforts to prevent, protect, mitigate, respond to, and recover from the impacts of natural disasters, acts of terrorism, and other emergencies by providing leadership and coordination across EPA's program offices and regions.
- Ensure appropriate Agency representation in various White House and other federal national security and homeland security policy activities. These efforts include serving as EPA's representative for homeland security, national disaster response, and mitigation and recovery policy in monthly meetings of the Homeland Critical Infrastructure Resilience Interagency Policy Committee, chaired by the National Security Council, and in weekly meetings for other national security policy committees. In addition, OHS serves as EPA's representative in monthly meetings of the Recovery Support Function Leaders Group, chaired by the Federal Emergency Management Agency (FEMA), and the Mitigation Framework Leadership Group, also chaired by FEMA, and on other interagency workgroups.
- Focus on filling critical policy, knowledge, and technology gaps that may be essential for an effective EPA response, including working with our interagency partners to define collective capabilities and resources that may contribute to closing common homeland security gaps, including emerging chemical threats and cybersecurity concerns for critical water infrastructure.
- Provide EPA end-users with relevant, accurate, reliable, objective, and timely intelligence bearing on matters of environmental policy and regulation and domestic threats and counterintelligence, where EPA functions to preserve or assist in the restoration of human health and the environment.
- Continue phased implementation of Executive Order 13587<sup>202</sup> to meet the main pillars of classified information protection with a focus on the implementation of an Insider Threat Program to address and mitigate threats to national security.

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<sup>202</sup> For more information, please see: <https://obamawhitehouse.archives.gov/the-press-office/2011/10/07/executive-order-13587-structural-reforms-improve-security-classified-net>.

- Track emerging national and 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 2022 resources support national cybersecurity efforts through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious activity/software from EPA's computer and data networks. EPA will continue to enhance internal Computer Security Incident Response Capability to ensure rapid identification and reporting of suspicious activity and will increase training and awareness of cybersecurity threats. EPA personnel are active participants in the United States Computer Emergency Readiness Team, a DHS-led group of experts from incident response and security response teams. Indicators and warnings are shared between EPA incident responders and their cleared counterparts in other agencies and with the Intelligence Community.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$35.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$377.0 / +1.0 FTE) This increase in program resources and FTE supports the addition of a cybersecurity intelligence analyst position and provides additional resources to address emerging threats. This also includes \$197.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

Resource Conservation and Recovery Act §§ 1001, 2001, 3001, 3005; Safe Drinking Water Act; Clean Water Act §§ 101, 102, 103, 104, 105, 107; Clean Air Act §§ 102, 103, 104, 108; Toxic Substances Control Act §§ 201, 301, 401; Federal Insecticide, Fungicide, and Rodenticide Act §§ 136a-136y; Bio Terrorism Act of 2002 §§ 303, 305, 306, 307; Homeland Security Act of 2002; Post-Katrina Emergency Management Reform Act; Defense Against Weapons of Mass Destruction Act; Food Safety Modernization Act § 208.

**Homeland Security: Critical Infrastructure Protection**  
 Program Area: Homeland Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$990.3</i></b>	<b><i>\$909.0</i></b>	<b><i>\$1,008.0</i></b>	<b><i>\$99.0</i></b>
Science & Technology	\$12,926.2	\$10,380.0	\$14,342.0	\$3,962.0
Total Budget Authority	\$13,916.5	\$11,289.0	\$15,350.0	\$4,061.0
Total Workyears	22.2	26.6	32.6	6.0

**Program Project Description:**

The Critical Infrastructure Protection Program supports EPA’s efforts to coordinate and provide technical expertise to enhance the protection of the Nation’s critical water infrastructure from terrorist threats and all-hazard events through effective information sharing and dissemination. This program provides water systems with current information on methods and strategies to build preparedness for natural and man-made threats.

**FY 2022 Activities and Performance Plan:**

In FY 2022, 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 (including cybersecurity), preparedness, and resiliency of the water sector; and

- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level or about regional and national trends in certain types of water-related incidents. For example, should there be types of specific, water-related threats or incidents that are recurring, EPA, in coordination with the Department of Homeland Security and other appropriate agencies, needs to alert the utilities of the increasing multiple occurrences or trends of these incidents.

Effective information sharing protocols allow the water sector to improve its understanding of the latest water security and resiliency protocols and threats. They also reduce risk by enhancing the water sector's ability to prepare for an emergency.

**Performance Measure Targets:**

Work under this program supports Safe Drinking Water Act implementation and compliance and performance results in the Drinking Water Programs, under the EPM appropriation, to support safe drinking water for the nation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$4.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$95.0) This program change supports the protection of critical water infrastructure.

**Statutory Authority:**

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



## Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$4,175.9</i></b>	<b><i>\$4,959.0</i></b>	<b><i>\$5,139.0</i></b>	<b><i>\$180.0</i></b>
Science & Technology	\$443.0	\$501.0	\$501.0	\$0.0
Building and Facilities	\$14,325.7	\$6,676.0	\$6,676.0	\$0.0
Hazardous Substance Superfund	\$994.6	\$1,030.0	\$1,030.0	\$0.0
Total Budget Authority	\$19,939.2	\$13,166.0	\$13,346.0	\$180.0
Total Workyears	7.7	9.2	9.2	0.0

Total workyears in FY 2022 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

### **Program Project Description:**

Environmental Programs and Management resources for the Homeland Security: Protection of EPA Personnel and Infrastructure Program ensure that EPA maintains a robust physical security and preparedness infrastructure, ensuring that its numerous facilities are secured and protected in line with the federally mandated Interagency Security Committee standards.

In order to secure and protect EPA’s personnel and physical infrastructure, the Agency operates a USAccess Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive-12 (HSPD-12).<sup>203</sup> 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’s National Security Information (NSI) program manages and safeguards EPA’s classified information for its federal workforce and contractors. Through the NSI program, EPA initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified National Security Information, maintains personnel security records for all federal and non-federal employees, and conducts federally mandated training and NSI inspections.

### **FY 2022 Activities and Performance 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 2022, EPA will continue to partner with GSA on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency’s modernization of its security infrastructure in

<sup>203</sup> For additional information, please see: <https://www.dhs.gov/homeland-security-presidential-directive-12>.

compliance with HSPD-12 and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks. In addition, the Agency will continue to utilize GSA's Managed Service Office program, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a GSA managed, shared services solution that 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 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:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$180.0) This program change supports the protection of EPA personnel and infrastructure. These funds will support ePACS and the Agency's modernization of its security infrastructure efforts to control access into all EPA-controlled physical space and networks.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$2,680.4</i></b>	<b><i>\$3,136.0</i></b>	<b><i>\$3,167.0</i></b>	<b><i>\$31.0</i></b>
Science & Technology	\$39.9	\$157.0	\$157.0	\$0.0
Total Budget Authority	\$2,720.3	\$3,293.0	\$3,324.0	\$31.0
Total Workyears	8.5	9.0	9.0	0.0

**Program Project Description:**

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions 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 to states, industry, and the public, advises the public of steps they can take to reduce exposure, and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year<sup>204</sup>. The EPA’s non-regulatory Indoor Air: Radon Program promotes actions to reduce the public’s health risk from indoor radon. EPA and the Surgeon General recommend that people do a simple home radon test and, if levels above the EPA’s guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many homes are still in need of mitigation. This voluntary program promotes partnerships among national organizations, the private sector, and more than 50 state, local, and tribal governmental programs to reduce radon risk.

**FY 2022 Activities and Performance Plan:**

EPA will continue to lead the federal government’s response to radon and to implement the Agency’s own multi-pronged radon program. EPA will drive action at the national level to reduce radon risk in homes and schools through the National Radon Action Plan, partnerships with the private sector and public health groups, technical assistance to states and industry, public outreach, and education activities. The Agency will encourage radon risk reduction as a normal part of doing business in the real estate marketplace, will promote local and state adoption of radon prevention standards in building codes, and will participate in the development of national voluntary

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<sup>204</sup> <https://www.epa.gov/radon>.

standards (e.g., mitigation and construction protocols) for adoption by states and the radon industry. EPA will update the framework that ensures a quality, credentialed radon workforce.

**Performance Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$19.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$12.0) This program change increases resources supporting efforts to build back EPA's staff expertise, analysis, and capacity in the indoor air radon program and begin to reverse reductions in the account in recent years, in order to better lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program.

**Statutory Authority:**

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

**Radiation: Protection**

Program Area: Indoor Air and Radiation

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$8,912.4</i></b>	<b><i>\$7,661.0</i></b>	<b><i>\$10,342.0</i></b>	<b><i>\$2,681.0</i></b>
Science & Technology	\$1,795.6	\$1,735.0	\$2,340.0	\$605.0
Hazardous Substance Superfund	\$2,323.3	\$1,985.0	\$2,612.0	\$627.0
Total Budget Authority	\$13,031.3	\$11,381.0	\$15,294.0	\$3,913.0
Total Workyears	56.4	53.8	66.7	12.9

**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. EPA’s Radiation Protection Program carries out these responsibilities through its federal guidance and standard-setting activities, including: regulatory oversight and implementation of radioactive waste disposal standards at the Department of Energy’s (DOE) Waste Isolation Pilot Plant (WIPP); the regulation of airborne radioactive emissions; general disposal standards for nuclear waste repositories; and the development and determination of appropriate methods to measure and to model radioactive releases and exposures under Section 112 of the Clean Air Act. The Radiation Protection Program also supports EPA, state, local and tribal authorities by providing radiation protection scientific analyses and recommendations needed to inform risk management policies, and the necessary radiation risk communications expertise to support local community engagement on issues related to legacy contamination and environmental justice needs.

**FY 2022 Activities and Performance Plan:**

EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for DOE activities at the WIPP facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. In FY 2022, EPA anticipates receiving and starting review of a DOE request for expanding the WIPP repository to address needs for more waste disposal area as a result of a 2014 radiological incident and DOE’s intended plan for disposal of surplus plutonium. EPA also will review and update regulations or guidance, as necessary, and provide technical and policy analysis supporting scientific goals for space exploration.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$117.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,564.0 / +8.3 FTE) This increase in resources supports efforts to build back EPA's staff expertise, analysis, and capacity in the radiation protection program in order to provide radiation protection, scientific analyses, and recommendations needed to inform risk management policies, and the necessary radiation risk communications expertise to support local community engagement on issues related to legacy contamination and environmental justice needs. This investment includes \$1,437.0 in payroll costs.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$2,616.2</b>	<b>\$2,404.0</b>	<b>\$2,908.0</b>	<b>\$504.0</b>
Science & Technology	\$3,402.1	\$3,096.0	\$4,039.0	\$943.0
Total Budget Authority	\$6,018.3	\$5,500.0	\$6,947.0	\$1,447.0
Total Workyears	34.9	33.3	41.4	8.1

**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 Department of Homeland Security/Federal Emergency Management Agency Federal Radiological Preparedness Coordinating Committee (FRPCC) and the Federal Advisory Team for Environment, Food and Health (the “A-Team”). The A-Team includes radiation protection experts from EPA, the Centers for Disease Control and Prevention, the Food and Drug Administration and the Department of Agriculture, and their function is to advise federal, state, local and tribal authorities during radiological/nuclear emergencies on public safety issues including evacuation, sheltering, and contamination concerns for food, drinking water and other resources. 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 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to streamline activities and will fill gaps in expertise that is critical for essential preparedness work and will restore critical capacity to carry out EPA’s core mission. The RERT will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will participate in interagency training and exercises to maintain readiness levels needed to fulfill EPA’s responsibilities.

Evaluation of Response Plans

In FY 2022, EPA will continue to work with interagency partners, including those under the FRPCC as well as those at the state, local and tribal levels to examine and, as needed, revise radiation emergency response plans, protocols, and standards. Under the NRF, EPA is the coordinating agency for responding to foreign nuclear incidents, such as the Fukushima accident. In FY 2022, EPA will identify and fill key gaps in staffing, which are critical to meeting the needs of the American public during such incidents.



### Coordinating Preparedness Efforts

EPA will continue essential planning and will participate in interagency table-top and field exercises, including radiological anti-terrorism activities with the Nuclear Regulatory Commission, the Department of Energy, the Department of Defense, and the Department of Homeland Security. The Agency also will provide technical support on priority issues to federal, state, local and tribal radiation, emergency management, solid waste and health programs responsible for implementing radiological emergency response and preparedness programs. The Agency will continue to train and advise on the Protective Action Guidance<sup>205</sup> and use lessons learned from incidents and exercises to ensure the effective delivery of EPA support in coordination with other federal, state, local and tribal authorities.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (-\$41.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$545.0 / +3.1 FTE) This net increase in resources supports efforts to build back EPA's staff expertise, analysis, and capacity in the radiation response program in order to examine and, as needed, revise radiation emergency response plans, protocols, and standards and continue essential planning for preparedness efforts.

### **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).

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<sup>205</sup> 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](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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$10,934.8</i></b>	<b><i>\$11,750.0</i></b>	<b><i>\$13,837.0</i></b>	<b><i>\$2,087.0</i></b>
Science & Technology	\$235.5	\$161.0	\$168.0	\$7.0
Total Budget Authority	\$11,170.3	\$11,911.0	\$14,005.0	\$2,094.0
Total Workyears	35.2	37.2	47.2	10.0

**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. Poor indoor air quality represents one of the largest risks in EPA’s portfolio<sup>206</sup>. EPA utilizes a range of strategies, including partnerships with non-governmental, professional, federal, state and local organizations, to provide information, guidance and technical assistance to reduce health risks from poor indoor air quality in homes, schools, and other buildings. These tools help equip industry, the health care community, the residential, school and commercial building sectors, and the general public to take action. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President’s priorities to tackle the climate crisis, advance environmental justice, and expand the capacity of EPA by advancing improvements in the design, operation, and maintenance of buildings, including homes and schools, to promote healthier indoor air and protect public health. In FY 2022, the Indoor Air Program will include efforts targeted to children, disadvantaged communities and other vulnerable populations, with a particular focus on new demands for improvements in ventilation, filtration and other protective indoor air practices, including those created by the COVID-19 pandemic. EPA will collaborate with public and private sector organizations to provide clear and verifiable protocols and specifications for promoting good indoor air quality and support adoption of these protocols and specifications into existing energy efficiency, green building, and health-related programs and initiatives to promote healthy buildings for a changing climate. In FY 2022, EPA will equip the affordable housing sector with guidance to promote the adoption of these best practices with the aim of creating healthier, more energy efficient homes for low income families, and will equip school leaders to make science-based decisions for healthy school environments. EPA will build

<sup>206</sup> For more information, please see: <https://www.epa.gov/indoor-air-quality-iaq>.

the capacity of community-based organizations to provide comprehensive asthma care that integrates management of indoor environmental asthma triggers and health care services, with a particular focus on low-income, minority, and Tribal communities. Internationally, EPA will renew support of the household energy sector, providing technical assistance and promoting the adoption of voluntary international stove standards, to accelerate adoption of clean cookstoves and fuels to reduce the climate, health, and equity impacts of rudimentary stove use in developing nations.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$46.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,041.0 / +10.0 FTE) This increase in resources supports efforts to build back EPA's staff expertise, analysis, and capacity in the reduce risks from indoor air program. Funds also support new demands for information on ventilation, filtration, and other protective indoor air practices, including those created by the COVID-19 pandemic. This investment includes \$1,762.0 in payroll costs.

**Statutory Authority:**

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

## **Information Exchange**

## Children and Other Sensitive Populations: Agency Coordination

Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$6,209.9</i></b>	<b><i>\$6,173.0</i></b>	<b><i>\$6,247.0</i></b>	<b><i>\$74.0</i></b>
Total Budget Authority	\$6,209.9	\$6,173.0	\$6,247.0	\$74.0
Total Workyears	16.7	18.4	18.4	0.0

### Program Project Description:

The Children’s Health Program coordinates and advances the protection of children’s environmental health across the EPA by assisting with developing regulations, improving risk assessment and science policy, implementing community-level outreach and education programs, and tracking indicators of progress on children’s health. The Children’s Health Program is directed by the *Policy on Evaluating Health Risks to Children*,<sup>207</sup> Executive Order (EO) 13045 *Protection of Children’s Health from Environmental Health Risks and Safety Risks*,<sup>208</sup> statutory authorities addressing children’s environmental health, and other existing guidance.<sup>209</sup>

In FY 2020, the Children’s Health Program supported Pediatric Environmental Health Specialty Units,<sup>210</sup> updated training for EPA staff on children’s environmental health, updated indicators in *America’s Children and the Environment*,<sup>211</sup> developed new content and outreach on children’s environmental health to reach approximately 400,000 middle school teachers and their students across the United States,<sup>212</sup> and partnered with the Family, Career and Community Leaders of America (FCCLA) to establish a high school leadership program to reach up to 182,000 high school students in 46 states, Puerto Rico and the Virgin Islands with a Students Taking Action with Recognition (STAR) leadership challenge focused on children’s environmental health.

The Children’s Health Program has a successful track record of collaboration with non-governmental organizations, state, local and tribal governments, and other federal agencies. The Program led the steering committee of the President’s Task Force on Environmental Health Risks and Safety Risks to Children to advance development of a new subcommittee to focus on children’s environmental health and disasters, and to rejuvenate subcommittees on climate change, lead, and asthma disparities. Within EPA, the Office of Children’s Health Protection collaborates closely with EPA’s national program managers and regional offices, as well as EPA’s Office of Environmental Justice, and the Office of Policy to develop effective tools and messages in support of children in underserved communities who disproportionately suffer from adverse environmental exposures, and to advance information and messaging to address health risks to children from climate change.

<sup>207</sup> For more information, please see: <https://www.epa.gov/children/history-childrens-environmental-health-protection-epa>.

<sup>208</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/FR-1997-04-23/pdf/97-10695.pdf>.

<sup>209</sup> For more information, please see: <https://www.epa.gov/children/history-childrens-environmental-health-protection-epa>.

<sup>210</sup> For more information, please see: <https://www.pehsu.net/>.

<sup>211</sup> For more information, please see: <https://www.epa.gov/americaschildrenenvironment>.

<sup>212</sup> For more information, please see: <https://www-qa.scholastic.com/waterpollution/index.html>.

In FY 2020, the Children’s Health Program contributed to the development of approximately 100 regulations, scientific assessments and/or policies, including actions for the first 10 high priority chemicals under the Toxic Substances Control Act (TSCA), and additional actions under the Safe Drinking Water Act, Food Quality Protection Act, Clean Water Act, and the Clean Air Act, among others, awarded two grants to provide technical assistance to improve school and childcare facilities,<sup>213</sup> coordinated two plenary meetings of the Children’s Health Protection Advisory Committee,<sup>214</sup> and launched the review of two sets of charge questions to improve the Agency’s risk work to protect children’s health in childcare and school settings and to establish priorities for action under TSCA. Additionally, in FY 2020, the Program partnered with the Department of Health and Human Services to support the Lead Exposure and Prevention Advisory Committee, reached stakeholders through nearly 135,000 web impressions, and instituted approaches to better coordinate headquarters and regional children’s environmental health activities.

### **FY 2022 Activities and Performance Plan:**

Children disproportionately suffer from environmental exposures, and children in underserved communities are particularly vulnerable due to social disparities of health. In FY 2022, the Children’s Health Program will focus on reinvigorating EPA and the Nation’s work to protect children’s environmental health, particularly for children in underserved communities. Recognizing the 25th anniversary of EO 13045, the Program will support the Administrator to convene the President’s Task Force on Environmental Health Risks and Safety Risks to Children, launching work to protect children from adverse consequences of climate change and disasters, and renewing attention to reduce childhood lead poisoning to reduce disparities in childhood health effects. The Program will rejuvenate partnerships with key stakeholders with a focus on preventing risks due to climate change, particularly for children in underserved communities. The Program will leverage resources and work for durable, nationally relevant improvements in children’s health protection.

The Program will host a variety of activities to mark Children’s Health Month in October to educate parents, caregivers, teachers and others on how to better protect children from adverse environmental exposure, hold listening sessions with state, local, and tribal governments and other stakeholders for next steps in effective public engagement, and obtain input from the National Academies of Science, Engineering, and Medicine to identify the highest priorities to advance children’s health for the next quarter century. In FY 2022, the Program will coordinate two in-person plenary meetings of the Children’s Health Protection Advisory Committee, with delivery of an expert review of EPA’s Consideration of Legally Working Children in Pesticide Exposure Assessment.

### **Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

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<sup>213</sup> For more information, please see: <https://www.epa.gov/newsreleases/epa-announces-selection-organizations-receive-funding-healthy-learning-environments>.

<sup>214</sup> For more information, please see: <https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$24.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$50.0) This program change is an increase to provide additional support for existing programs and workforce in the Children’s Health Program. This includes updating and expanding indicators and trends in *America’s Children and the Environment* by gathering evidence to better represent impacts of environmental exposures on children in underserved communities and by making improvements in the accessibility and presentation of the underlying data.

**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); and Food Quality Protection Act (FQPA).

## Environmental Education

Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$6,388.7</i></b>	<b><i>\$8,580.0</i></b>	<b><i>\$8,615.0</i></b>	<b><i>\$35.0</i></b>
Total Budget Authority	\$6,388.7	\$8,580.0	\$8,615.0	\$35.0
Total Workyears	9.6	9.2	9.2	0.0

### Program Project Description:

In 1990, the National Environmental Education Act (NEEA) was established with the objective of improving the public's understanding and knowledge of the natural and built environment, enabling people to effectively solve environmental problems. NEEA states that “there is growing evidence of international environmental problems, such as global warming...that pose serious threats to human health and the environment.”<sup>215</sup> The Office of Environmental Education (OEE) has been tasked with implementing environmental education (EE) programming that helps EPA address these issues from the local community to national and international levels.

OEE addresses issues that impact climate change on frontline communities, by empowering these underserved communities through education, a commitment to equity, and stakeholder engagement with grants authorized by the NEEA and through the National Environmental Education Advisory Council (the Council). OEE also supports the Agency’s environmental and public health protection goals by expanding access to quality environmental and climate education and engaging stakeholders through the National Environmental Education and Training Program (teacher training program), the Presidential Environmental Youth Award (PEYA) Program and the Presidential Innovation Award for Environmental Educators (PIAEE) Program. These programs promote civic action to reduce the impacts of climate change and promote environmental and climate equity through an educational lens.

In FY 2020, OEE’s teacher training program—a cooperative agreement with the North American Association for Environmental Education and partners—provided training and skills development to more than 169,000 formal and nonformal educators. The cooperative agreement trained more than 3,500 educators directly and more than 300,000 educators indirectly through virtual programming. Additionally, the program supported more than 22 webinars on a variety of topics that reached over 6,000 educators and awarded over 26 small grants to more than 23 state environmental education organizations to strengthen EE at the state and local levels.

In FY 2020, OEE’s regional grant program awarded 35 grants totaling \$3.2 million to support EE programs and activities in local communities. Additionally, OEE recognized seven teacher winners and three honorable mentions from across the country with the PIAEE, and 35 students who either worked as a team or individually on 13 projects received the PEYA.

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<sup>215</sup> For more information, please see: <https://www.epa.gov/sites/production/files/documents/needa.pdf>.



## **FY 2022 Activities and Performance Plan:**

OEE will implement the teacher training program and regional grant program with a focus on fighting climate change and protecting public health through EE and improved engagement with frontline communities that are pollution-burdened and underserved.

In FY 2022, OEE will:

- Support career development through education by funding innovative EE grant projects in frontline communities that can lead to inclusive, just, and pollution-free communities and an economy that supports high-quality jobs.
- Create an OEE's grant website tool for the public that provides detailed and valuable information on all OEE regional grants, including information on audience, project format and duration, environmental topic, and the environmental and educational impacts achieved.
- Ensure formal and nonformal educators have the knowledge and teaching skills necessary to help advance environmental and climate literacy in America through the National Environmental Education and Training Program.
- Build strategic partnerships that include underserved and overburdened communities to increase the conversation around using EE as a tool to achieve environmental protection goals while achieving environmental justice (EJ), climate equity, and economic prosperity.
- Task the National Environmental Education Council (NEEAC) with providing national recommendations for how frontline and underserved communities can use EE to prosper and become resilient to the effects of climate change.
- Create public and private partnerships through the National Environmental Education Foundation (NEEF) to develop programs and initiatives that can empower frontline communities to address environmental threats, advance equity, and increase economic prosperity for all.
- Create a full federal government approach to environmental and climate education that promotes environmental stewardship and prioritizes equity, inclusion, EJ and an improved economy. For example, partner with the US Department of Energy to prepare students in frontline communities for clean energy careers and jobs.
- Utilize an information management system that will track outputs and outcomes for each grant to ensure program effectiveness, improve program efficiency and improve OEE's overall customer service. The information tracking system also will be used for the PEYA and PIAEE programs.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$19.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$16.0) This program change is an increase to support building public awareness and knowledge through EE on issues such as climate change and environmental justice.

**Statutory Authority:**

National Environmental Education Act (NEEA); Clean Air Act (CAA), § 103; Clean Water Act (CWA), § 104; Solid Waste Disposal Act (SWDA), § 8001; Safe Drinking Water Act (SDWA), § 1442; Toxic Substances Control Act (TSCA), § 10; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), § 20.

**Exchange Network**

Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$14,906.1</i></b>	<b><i>\$14,084.0</i></b>	<b><i>\$14,226.0</i></b>	<b><i>\$142.0</i></b>
Hazardous Substance Superfund	\$1,341.2	\$1,328.0	\$1,328.0	\$0.0
Total Budget Authority	\$16,247.3	\$15,412.0	\$15,554.0	\$142.0
Total Workyears	30.7	30.2	30.2	0.0

**Program Project Description:**

EPA’s Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA’s Digital 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)<sup>216</sup> is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA’s System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes including environmental justice. EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA’s Digital Strategy that supports business process change agencywide. Under this strategy, and the 21<sup>st</sup> Century Act,<sup>217</sup> 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. EPA also is responsible for managing EN technical governance groups

<sup>216</sup> For more information on the Central Data Exchange, please see: <http://www.epa.gov/cdx/>.

<sup>217</sup> For more information on the 21<sup>st</sup> Century Integrated Digital Experience Act, please refer to: <https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf>.

and administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secured approach for EPA and its state, tribal, and territorial partners to more effectively and efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency has provisioned Virtual Exchange Services (VES) or virtual nodes to facilitate more than 110 large-scale data transactions supporting states and tribal partners, with another 20 anticipated by the end of FY 2022. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. The shared electronic identity proofing and signature services for CROMERR support 31 partner regulatory reporting programs to date and over 15 states, tribes, and EPA partners will be added in FY 2022. EPA estimates that partners adopting shared CROMERR services save \$120 thousand in development and at least \$30 thousand in operations each year, which results in a cost avoidance of greater than \$2.5 million for EN partners.

In FY 2022, EPA will continue to improve the functionality and use of the System of Registries.<sup>218</sup> In addition to streamlining the Registries, EPA will launch a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services. Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example is the Agency's effort to promote the adoption of tribal identification services (TRIBES) across EPA systems. This progress is tracked by EPA's Chief Information Officer, who has issued a memorandum calling on all applicable systems to incorporate this shared data service. In FY 2020, EPA increased the number of EPA systems using TRIBES services by more than 26 percent, from 19 to 24 systems, with many other systems currently integrating TRIBES.

In FY 2022, EPA will continue implementing a solution related to shared facility identification information. In FY 2020, EPA began to re-baseline the existing centralized facility registry, as managing facility identification centrally reduces the requirement by programs to manage that information locally. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Similar to facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks the number of registry webpages users and web service hits as one measure of usage. For example, the SRS website is visited by approximately 50 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform, so they are cloud-ready.

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<sup>218</sup> For more information, please see: [https://ofmpub.epa.gov/sor\\_internet/registry/sysofreg/about/about.jsp](https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp).

By 2022, EPA will have moved TRIBES, SRS, and the Registry of EPA Applications, Models and Data Warehouses (READ) into a cloud-based open-source platform. EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

Using the information available in the registries, EPA created RegFinder to help industry discover potentially applicable regulations. In FY 2022, EPA will continue to improve the functionality and information in RegFinder and to improve outreach with regulated industry to ensure the tool meets customer needs. RegFinder builds on services from four EPA data catalogs: 1) SRS; 2) EPA Enterprise Vocabulary; 3) a catalog of federal statutes and regulations (Laws and Regulations Services); and 4) North American Industrial Classification System to enable a user to search for laws and regulations by substance, keyword, or industrial processes.

In FY 2022, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to 1) facilitate the import and export of legitimate goods; and 2) leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 20 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (e.g., due in large part to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high-value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

#### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$135.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$7.0) This program change increases support for environmental data sharing among EPA, state, tribes, and territories.

#### **Statutory Authority:**

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

**Executive Management and Operations**

Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$50,346.8</i></b>	<b><i>\$46,836.0</i></b>	<b><i>\$54,792.0</i></b>	<b><i>\$7,956.0</i></b>
Total Budget Authority	\$50,346.8	\$46,836.0	\$54,792.0	\$7,956.0
Total Workyears	285.2	272.1	296.1	24.0

Total workyears in FY 2022 include 6.2 FTE to support Executive Management and Operations working capital fund (WCF) services.

**Program Project Description:**

The Executive Management and Operations Program supports various offices that provide direct executive and logistical support to EPA’s Administrator. In addition to the Administrator’s Immediate Office (IO), the Program supports the Office of Congressional and Intergovernmental Relations (OCIR), Office of Administrative and Executive Services (OAES), Office of the Executive Secretariat (OEX), the Office of Public Affairs (OPA), and the Office of Public Engagement and Environmental Education (OPEEE).

The Program also supports EPA’s 10 regions. The Program’s management, coordination, and policy activities link the Agency’s engagement with outside entities, including: Congress, state and local governments, nongovernmental organizations, national and community associations, and the public.

Within the Program, key functions include responding to congressional requests for information; coordinating and providing outreach to state and local governments and rural communities; and supporting press and other communications activities. The Program also supports administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, and information technology management services.

**FY 2022 Activities and Performance Plan:**

In FY 2022, Office of Congressional Affairs (OCA) will continue to 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.

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 Office of Intergovernmental Relations (OIR). OCA facilitates all legislative activity and interactions with Congress. OIR manages interactions with state and local governments and serves as the liaison for the agency with national associations for state and local officials.

OIR will continue to inform and consult with state and local governments on regulations and other EPA activities. Additionally, OIR will continue to lead the Agency's efforts to support and build partnerships with the states, local governments, and tribes on environmental priorities through regular engagements with intergovernmental associations and state and local officials as well as through the National Environmental Performance Partnership System and the increased use of Performance Partnership Agreements and Grants with a focus on addressing climate change and ensuring underserved communities are considered throughout the process. OIR also will continue to operate its Local Government Advisory Committee and Small Communities Advisory Subcommittee, which provide critical advice to the Administrator.

In FY 2022, OCIR will: continue to regularly review and evaluate its processes for responding to congressional and intergovernmental correspondence and FOIA requests; prepare for hearings or briefings; provide technical assistance; and coordinate with EPA's program offices, regional offices, states, local officials, and associations. In addition, the Agency requests resources in support of EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018. OCIR's activities will include conducting reviews of select agency grant programs to learn if the commitments established and met are achieving the intended environmental results and provide recommendations, as appropriate, to inform future grants management.

OPA facilitates the exchange of information between EPA and the public, media, Congress, and state and local governments; broadly communicates EPA's mission; assists in public awareness of environmental issues; and informs EPA employees of important issues that affect them. Annually, OPA issues nearly 1,500 press releases; responds to approximately 8,000 media inquiries; and oversees more than 150 audio-visual productions, 500 graphic productions, 2,700 event photographs, and 40 portraits. In addition, in terms of digital media, OPA receives over 160 million impressions on the internet, including [www.epa.gov](http://www.epa.gov) and EPA social media accounts, and posts nearly 100 unique EPA homepage internet news banners. Also, to facilitate communications with EPA employees nationwide, OPA annually posts over 200 intranet banners; issues 48 issues of a weekly e-newsletter - *This Week @ EPA* - with a total of 240 articles; and sends more than 100 agencywide employee Mass Mailers from EPA's Administrator and other senior leaders. In FY 2022, OPA will continue to inform the media of agency initiatives and deliver timely, accurate information. The Office will continue to update the Agency's internet site to provide stakeholders with transparent, accurate, and comprehensive information on EPA's activities and policies. OPA will continue using social media, multimedia, and new media tools to provide stakeholders with information. The Office also will work with EPA's programs and regional offices to improve employee communication; external communication on relevant environmental and human health risks; collaboration and engagement with internal and external stakeholders; updates to the Agency's intranet site; and the use of other communication tools.

OPA also is responsible for ensuring that EPA carries out effective risk communication by sharing critical information on how we are addressing human health and environmental risks with the American public, communities, public officials, and other stakeholders in a way that it is tailored to their needs, reaching a wide audience, and provides meaningful actions they can take to reduce risk. This is integral to most of the work done across the Agency's offices and regions and is essential to carrying out EPA's mission of protecting human health and the environment.

Currently, risk communicators at the Agency are not always connected to best practices from the field, high quality training opportunities, or agencywide efforts underway to improve risk communication. Further, EPA regularly faces intractable risk communication issues that often need sustained focus by highly trained staff who can apply evidence-based practices. Addressing these issues and meeting the challenges of the future will require creating sustained culture change, building agency knowledge and a robust community of practice, and developing strong relationships with the academic community and our federal, state, and tribal partners.

In FY 2022, the Agency requests resources to strengthen EPA's ability to carry out effective and consistent risk communication and position the Agency to meet the risk communication challenges of the future by:

- (1) Significantly expanding training across the Agency and with its partners, to create a community of practice and increase staff knowledge in a meaningful and sustainable way. This will increase the number of staff at the Agency and among partners who are using the same best practices in their risk communication efforts while at the same time building a network of staff located across all regions and offices who are well-positioned to share their risk communication expertise.
- (2) Launching an internal risk communication fellowship program to increase EPA's progress on the most difficult risk communication issues. The fellowship program will be open to EPA employees and will provide 10 weeks of intensive risk communication study and training followed by 10 to 13 weeks of applying the knowledge gained to an intractable risk communication problem facing the home office or region.
- (3) Developing academic partnerships to study EPA's risk communication challenges and improve the Agency's reliance on evidence-based practices. This includes increasing research partnerships to develop a research portfolio with the explicit goal of studying EPA-relevant risk communication questions, and then translating findings into usable tools, applications, and best practices for use across the Agency.

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 2022, OAES will continue to conduct the following activities: human resources management, budget and financial management, information technology and security, outsourcing, facilities management, and audit management.

In FY 2022, OEX will continue to provide critical administrative support to the Administrator, Deputy Administrator, senior agency officials, and staff to comply with the statutory and regulatory requirements under the Federal Records Act, FOIA, and related statutes and regulations. OEX will continue to manage the AO's correspondence, records management, Privacy Act implementation, and FOIA activities. Responsibilities include: processing correspondence for the Administrator and Deputy Administrator, reviewing and preparing documents for their signature, and operating the Correspondence Management System, which provides paperless workflow, tracking and records management capabilities to more than 3,000 EPA employees; managing the



Administrator's primary email account; serving as custodian of the Administrator's, Deputy Administrator's, and IO's records and overseeing the records management program for all AO staff offices; and reviewing and issuing ethics determinations for gifts received by the Administrator and Deputy Administrator. The Office also manages the privacy program for the AO and monitors, reviews, and audits AO systems of records. Finally, OEX manages FOIA-related operations for the AO. OEX closed 809 FOIA requests in FY 2020, exceeding its FY 2019 total of 731 closures. OEX began the fiscal year with a backlog of 1,212 open requests and currently has a backlog of 811 requests, a net reduction of 401. The pace of incoming requests remains high, exceeding 500 requests per year with many requests that are complex and seek significant volumes of records.

In FY 2022, OPEEE will continue providing advice to the Administrator and senior staff on activities surrounding different stakeholder groups, including generating and distributing outreach plans for most regulatory actions. Such plans often include: meeting regularly with stakeholder groups to communicate the Administration's agenda at the 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.

Released in December 2018, the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*<sup>219</sup> plan is a blueprint for reducing lead exposure and associated harms through collaboration among federal agencies with a range of stakeholders, including states, tribes and local communities, along with businesses, property owners, and parents. Since its implementation, EPA has made substantial progress to date; however, there is an opportunity to improve EPA's lead communication and enhance training of healthcare providers in underserved communities by enhancing the environmental education provided to medical professionals to identify causes and impacts of childhood lead exposure. EPA will work with healthcare providers and families to address this problem directly in an effort to prevent and reduce exposure to lead. To further support the Administration's Lead Exposure Reduction Initiative, and in coordination with EPA's program and regional offices, in FY 2022, the Agency requests resources to continue to lead ongoing efforts to: (1) strengthen EPA's communications with the public on the risks of lead exposure by working with external leaders in the field to build upon the way the Agency conducts its outreach; and (2) leverage EPA's existing relationship with Pediatric Environmental Health Specialty Units (PEHSUs)<sup>220</sup> to enhance and support training of healthcare providers in underserved communities to prevent and reduce children's exposure to lead.

There are several unique risk communication challenges regarding lead, but also unique assets for the Agency to deploy to reduce risk to the American public—especially to children. Lead exposure to children can result from multiple sources and can cause irreversible and life-long health effects. There is no level of lead exposure which is safe. This means that anything the Agency can do to reduce exposure and lower children's blood lead levels will lead to significant improvements in

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<sup>219</sup> For more information, please see: <https://ptfceph.niehs.nih.gov/features/featured-resource/page859413.htm>.

<sup>220</sup> Pediatric Environmental Health Specialty Units (<https://www.pehsu.net/>) provide expert information, training and consultation for health care professionals and the public on evidence-based prevention, diagnosis, management and treatment of children's environmental health conditions. The PEHSU Program increases the ability of the general public to take simple steps to reduce harmful exposures by raising awareness among parents, school officials and community leaders.

public health and brighter, more productive futures for America's children. In FY 2022, lead communication activities will include: assess which risk communication outreach tactics and platforms work best to reduce risk of lead exposure either through individual (parents, caregivers, children) or partner (schools, water systems, local government) behavioral change with a directed effort to include promising new practices; conduct a pilot of an outreach initiative which leverages key partnerships to amplify EPA's messages across these proven platforms and tactics; evaluate the effort and integration of lessons learned into the broader risk communication efforts across the Agency with an eye toward making sure that effective platforms and tactics can be easily adopted for other uses on other contaminants, if relevant.

Activities related to enhancing training of healthcare providers in underserved communities will include: expand ongoing PEHSU activities with an increased focus on enhancing the education provided to medical professionals on how to identify causes and impacts of childhood lead exposure; and work with health care providers and families to address this problem directly in an effort to prevent and reduce exposure to lead.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,553.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,376.0 / +20.0 FTE) This program change is an increase in resources to support engagement with state and local partners, enhanced training of healthcare providers in underserved communities on the prevention, diagnosis, management, and treatment of children's exposure to lead, and increased funding to implement and strengthen the Agency's ability to carry out effective risk communication. This investment includes \$3,486.0 thousand in payroll.
- (+\$1,027.0 / +4.0 FTE) This program increase supports evidence building activities in support of the Foundations for Evidence-Based Policymaking Act of 2018. This investment includes \$697.0 thousand in payroll.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$2,145.2</i></b>	<b><i>\$1,778.0</i></b>	<b><i>\$1,929.0</i></b>	<b><i>\$151.0</i></b>
Total Budget Authority	\$2,145.2	\$1,778.0	\$1,929.0	\$151.0
Total Workyears	7.0	4.6	4.6	0.0

**Program Project Description:**

The Small Business Ombudsman Program includes the Asbestos and Small Business Ombudsman (ASBO),<sup>221</sup> housed within the Office of Small and Disadvantaged Business Utilization (OSDBU), 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.<sup>222</sup> The Program provides a comprehensive suite of resources, networks, engagement opportunities for training, 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 2021, the ASBO provided monthly newsletters and worked with state partners to coordinate virtual environmental compliance and training.

The ASBO operates in the dual roles of Asbestos Ombudsman and Small Business Ombudsman. The Asbestos Ombudsman role services a toll-free liaison hotline for asbestos-related questions and concerns. The Small Business Ombudsman role provides small business compliance assistance. The role also functions as the small business advocate for early engagement and consideration of small business impacts in the rulemaking process. The ASBO partners with a variety of internal and external stakeholders, including EPA Programs and Regional Offices, State Small Business Environmental Assistance Programs (SBEAPs),<sup>223</sup> the U.S. Small Business Administration’s Office of Advocacy, and Office of the National Ombudsman, as well as numerous local and national small business trade associations. These partnerships serve as a conduit of information and offer distinct perspectives to help EPA and ASBO stakeholders achieve their environmental goals.

Overall, the core functions of the 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 asbestos liaison hotline and outreach resources to support internal and external small business activities. The Program helps small businesses learn about new actions and developments within EPA, while also helping the Agency learn more about the concerns and perspectives of small businesses. Based on the Agency’s overall small business regulatory and environmental compliance assistance efforts, EPA has earned a grade of “A” in the last 14 Small

<sup>221</sup> For more information, please see: <https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman>.

<sup>222</sup> For more information, please see: <https://www.epa.gov/aboutepa/about-office-policy-op#ORPM>.

<sup>223</sup> For more information, please see: <https://nationalsbeap.org/>.

### **FY 2022 Activities and Performance Plan:**

Consistent with EPA's priorities for community-driven environmental solutions and equity, in FY 2022, the Program will:

- Improve access to environmental compliance assistance and stakeholder collaboration through small business outreach, engagement and activities designed to assist overburdened and marginalized communities and related public interest organizations. The ASBO will continue to strengthen partnerships through the development and dissemination of ASBO communication materials, including brochures, fact sheets, newsletters, and online resources. The ASBO's outreach and communication efforts help improve stakeholder engagement and increase partnerships with underserved communities.
- Foster stronger state partnerships with the EPA regional offices in the area of small business environmental compliance and assistance through a newly created Regional Air Small Business Liaison (RASBL) function. The RASBLs are regional staff who serve as regional points of contacts on air-related/climate change programs to help reduce greenhouse gas emissions and support engagement activities to those that are often underserved in their communities. The ASBO will provide the RASBLs outreach and engagement support in planning and hosting various engagement activities and events for the small and disadvantaged business communities.
- Enhance underserved community engagement through the ASBO's newly expanded cooperative agreement for the National Small Business Environmental Assistance Program, which facilitates state and national collaboration on small businesses environmental assistance services. This ASBO-funded cooperative agreement will support the expansion of the National SBEAP website<sup>225</sup> and other collaboration tools, including a new compliance assistance web-resource, dedicated to non-English speaking small businesses to ensure that environmental assistance resources are available and understood by those traditionally underserved. Additionally, the cooperative agreement will allow for financial support in hosting and managing compliance assistance training events to better collaborate with the states.
- Implement a new ombudsman monitoring and reporting process to comply with both the Asbestos Ombudsman and Small Business Ombudsman's statutory requirements. A new, less burdensome, and more agile data collection mechanism will be deployed to help monitor and periodically report on the effectiveness of the asbestos hotline services and the small business environmental assistance programs under the 1990 Clean Air Act Amendments.

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<sup>224</sup> For more information, please see: [https://www.sba.gov/sites/default/files/2021-01/SBA\\_Annual\\_Report\\_2019-508.pdf](https://www.sba.gov/sites/default/files/2021-01/SBA_Annual_Report_2019-508.pdf)

<sup>225</sup> For more information, please see: [www.nationalsbeap.org](http://www.nationalsbeap.org).

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$139.0) This program change increases support for core program work.

**Statutory Authority:**

Asbestos Hazard Emergency Response Act (AHERA), 1986 (adding Title II to the Toxic Substances Control Act (TSCA)) (15 U.S.C. §2641-2656), Clean Air Act, Title 5, Section 507, Small Business Stationary Source Technical and Environmental Compliance Assistance Program (42 U.S.C. §7661f), Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. 104-121, as amended by Pub. L. 110-28; Small Business Paperwork Relief Act, 44 U.S.C. 35; 42 U.S.C. § 7661f; and 15 U.S.C. §§ 2641-2656.

**Small Minority Business Assistance**  
Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$1,363.2</i></b>	<b><i>\$1,680.0</i></b>	<b><i>\$1,884.0</i></b>	<b><i>\$204.0</i></b>
Total Budget Authority	\$1,363.2	\$1,680.0	\$1,884.0	\$204.0
Total Workyears	5.6	7.6	7.6	0.0

**Program Project Description:**

EPA’s Office of Small and Disadvantaged Business Utilization (OSDBU) manages the Agency’s Small Business Contracting Program mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). As prescribed under that section, the Program provides expertise in ensuring small business prime and subcontracting opportunities to expand EPA’s competitive supplier base in furthering the Agency’s mission. Under the Program, OSDBU provides EPA’s contracting community statutorily required counseling and training on all aspects of governing small business requirements throughout the federal acquisition cycle. It also engages in statutorily mandated advocacy on behalf of the various categories of small businesses, including disadvantaged businesses; certified small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses. In accordance with Section 15(k), OSDBU further hosts and participates in an average of one small business outreach and training conference each month, providing needed technical assistance to hundreds of small and disadvantaged businesses across the country.

In implementing the statutory responsibilities required under Section 15(k), OSDBU reviews acquisition strategies to maximize small business prime and subcontracting opportunities; provides expertise in conducting market research for EPA acquisitions; performs contract bundling reviews to avoid unnecessary or unjustified limitations on small business utilization; reviews purchase card transactions within the statutory threshold; and evaluates large prime contractor subcontracting plans. In addition, OSDBU reviews unsolicited proposals for agency acquisitions and assists small businesses in resolving payment issues under EPA acquisitions. It further provides a broad range of training, outreach, and technical assistance to new and prospective small business awardees. Historically, data reported in the Federal Procurement Data Systems (FPDS) indicates that EPA awards an average of 40 percent of total acquisition dollars to small businesses annually – far exceeding the government-wide goal of 23 percent. Based on the Agency’s record of excellence in affording small business contracting opportunities, EPA has earned an “A” on the last 11 Small Business Procurement Scorecards administered by the U.S. Small Business Administration (SBA).<sup>226</sup>

<sup>226</sup> For more information, please see: <https://www.sba.gov/sites/default/files/2020-08/EPA.pdf>.

## **FY 2022 Activities and Performance Plan:**

Consistent with EPA priorities for community-driven environmental solutions and equity, in FY 2022, the Program will:

- Strengthen the EPA Regional Small Business Coordinator statutory function to ensure that small and disadvantaged businesses have equal access to EPA contracting opportunities on the prime and subcontracting level. Under Section 15(k)(8) of the Small Business Act, 15 U.S.C. § 644(k)(8), EPA is required to assign a fulltime employee to each of its regional procurement activities to promote and support the utilization of small and disadvantaged businesses in the activity's acquisitions. This function is critical to the efforts of EPA's regional acquisition community to identify small and disadvantaged business solutions to meet each region's mission needs, and to structure acquisitions to maximize small business contracting opportunities. The function also is critical to providing outreach and technical assistance to small and socioeconomically disadvantaged vendors interested in doing business with EPA. Unlike large businesses, small and disadvantaged businesses often lack the dedicate resources to master the myriad of complex federal procurement requirements to capitalize on agency contracting opportunities. These challenges are particularly acute for those small businesses located in the regions and in various marginalized communities. Strengthening the effectiveness of Regional Small Business Coordinator engagement with these businesses will help level the playing field and avail the businesses of resources to enhance their competitiveness to receive EPA contract awards.
- Fully deploy a commercial web-based solution that will provide greater tools to assist in data-driven acquisition planning and inform market research strategies. In FY 2021, OSDBU worked on completing the integration and ensuring the operability of the new web solution. In FY 2022, OSDBU will officially launch the fully deployed solution that will enable small businesses to voluntarily register their business information into the system. OSDBU will use the information as a repository for identifying available small business solutions for the EPA prime contracting opportunities. Large businesses also will have access to the system as a resource for identifying small business sources for their subcontracting opportunities with EPA. The system will further allow OSDBU to disseminate information, obtain feedback, access additional vendor-posted information on other sites, and otherwise interface with registered small businesses electronically. By leveraging this database, EPA would be able to reduce the potential barriers for underserved communities and businesses and provide the opportunity for full and equal participation in agency procurements.
- Expand EPA's electronic mechanism for tracking the Agency's progress in achieving its established small and disadvantaged business procurement goals. In FY 2018, OSDBU launched a Small Business Contracting Dashboard, providing the dollar value and percentage of contract awards to the five statutory categories of small businesses. OSDBU manually obtains the Dashboard data from the EPA Acquisition System (EAS) and the government-wide spending database [www.beta.sam.gov](http://www.beta.sam.gov), and uploads the information to the Dashboard through an Excel spreadsheet. In FY 2022, OSDBU will deploy an enhanced Small Business Contracting Dashboard that will provide more comprehensive data, greater

automation, and additional data analytics to drive more accurate and complete data-based acquisition decision-making to optimize small and socioeconomic business contracting opportunities.

- Strengthen EPA's Small Business Subcontracting Program to include OSDBU's affirmative verification of small and disadvantaged business participation in EPA's procurements on the subcontracting level. Small business subcontracting is an important mechanism for all categories of small businesses to gain experience, capacity and familiarity in doing business with the federal government. Although Section 8(d) of the Small Business Act, 15 U.S.C. § 637(d), requires that large federal vendors submit small business subcontracting plans for their prime awards above a certain threshold, additional OSDBU monitoring of large business good faith compliance with those requirements will help further the achievement of small business subcontracting opportunities and goals.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$148.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$56.0) This program change increases resources for program work that advances environmental justice through small minority business assistance.

**Statutory Authority:**

15 U.S.C § 644(k).



**State and Local Prevention and Preparedness**  
Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$13,660.5</i></b>	<b><i>\$13,736.0</i></b>	<b><i>\$14,003.0</i></b>	<b><i>\$267.0</i></b>
Total Budget Authority	\$13,660.5	\$13,736.0	\$14,003.0	\$267.0
Total Workyears	57.3	63.1	63.1	0.0

**Program Project Description:**

The State and Local Prevention and Preparedness Program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, facility workers, the environment, and property from chemical accident risks through accident prevention and emergency response programs, community and facility engagement, and improved safety systems. This framework provides the foundation for community and facility chemical hazard response planning, and reduction of risk posed from chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act (CAA) Amendments, chemical facilities that store more than a certain amount of listed extremely hazardous substances are required to implement a Risk Management Plan (RMP) program. These facilities, known as RMP facilities, take preventive measures; report data; mitigate and/or respond to chemical releases; and work with communities, response, and planning groups to increase understanding of risks.<sup>227</sup>

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.<sup>228</sup>

**FY 2022 Activities and Performance Plan:**

In FY 2022, the State and Local Prevention and Preparedness Program will perform the following activities:

- Inspect RMP and EPCRA facilities to ensure compliance with accident prevention and preparedness regulations, and work with chemical facilities to reduce chemical risks and improve safety. There are approximately 12,000 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,800 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and

<sup>227</sup> For additional information, please refer to: <https://www.epa.gov/rmp>.

<sup>228</sup> For additional information, please refer to: <https://www.epa.gov/epcra>.

proximity to large residential populations.<sup>229</sup> EPA prioritizes inspections at high-risk facilities.

- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.
- Maintain the RMP national database, which is the Nation's premier source of information on chemical process risks and contains hazard information on all RMP facilities. Industry electronically submits updated RMPs to this secure database.
- Develop limited updates to the Computer-Aided Management of Emergency Operations (CAMEO) software suite (*i.e.*, the CAMEO Chemicals, CAMEO $fm$ , Areal Locations of Hazardous Atmospheres and Mapping Application for Response, Planning, and Local Operational Tasks applications), which provides free and publicly available information for firefighting, first aid, emergency planning, and spill response activities.
- In accordance with the direction in Executive Order 13990, conduct a review of the final RMP Reconsideration rule (84 FR 69834) and, as appropriate, develop a proposed rule to rescind or revise the action to address Administration priorities on environmental justice and climate change.
- Conduct outreach to regulated industry concerning changes or updates to RMP and EPCRA regulations and interpretive guidance.

#### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$165.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$102.0) This program change supports partnerships with state and local entities to prevent and prepare for environmental emergencies and disasters.

#### **Statutory Authority:**

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r).

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<sup>229</sup> Located in the EPA RMP database.

**TRI / Right to Know**

Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$12,225.3</i></b>	<b><i>\$13,206.0</i></b>	<b><i>\$13,450.0</i></b>	<b><i>\$244.0</i></b>
Total Budget Authority	\$12,225.3	\$13,206.0	\$13,450.0	\$244.0
Total Workyears	31.3	37.0	37.0	0.0

**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<sup>230</sup> supports EPA’s mission by annually collecting and publishing for the public: release, other waste management (e.g., recycling), and pollution prevention data on TRI-listed chemicals and chemical categories, including per- and polyfluoroalkyl substances (PFAS).<sup>231</sup> Approximately 21,000 industrial and federal facilities report to TRI annually. The TRI Program is a premiere source of cross-media toxic chemical release information for communities, non-governmental organizations, industrial facilities, academia, and government agencies at the local, state, tribal, federal, and international levels. Using technological advances, the TRI Program has developed several public analytical tools that enable easy access, mapping, and analysis of information on TRI chemicals released or otherwise managed as waste at facilities in communities across the United States. Some of these tools incorporate demographic indicators such as low income, people of color, education level, linguistically isolated households, and young and elderly populations, as well as risk indicators.

The Program collaborates with other EPA programs on sector analyses to describe relevant trends in toxic chemical releases and waste management and pollution prevention practices, and to support innovative approaches by industry and other partners to reduce pollution. As a robust, community-focused, annual, cross-media data set on toxic chemical information, the TRI lends itself to comparative analyses with other program-specific data managed by the Agency, providing insights that may not be apparent when viewing the data sets independently. Such insights are especially valuable when it comes to identifying opportunities based on TRI-reported, location-specific release trends to reduce toxic chemical releases in communities of concern in accordance with the Administration’s environmental justice priorities, and promoting TRI-reported pollution prevention practices that reduce the release of TRI-listed toxic chemicals and also reduce emissions of greenhouse gases (GHGs). The TRI serves as a central component of EPA’s strategy to increasing access to environmental pollution information and enabling communities, scientists, policy-makers and other stakeholders to apply the information in their decisions and engagements

<sup>230</sup> For additional information, please visit: <http://www.epa.gov/tri/>.

<sup>231</sup> Many per- and polyfluoroalkyl substances (PFAS) were added to the TRI chemical list as a component of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) when the Act was signed into law on December 20, 2019. The first year of TRI reporting these PFAS is calendar year 2020.

to address impacts and deter adverse burdens, particularly to low-income and marginalized communities.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to enhance the regulatory foundation of TRI to ensure that communities have access to timely and meaningful data on toxic chemical releases and other waste management and pollution prevention activities at facilities. As part of this effort, the TRI Program will continue to clarify toxic chemical reporting requirements, pursue chemical listings, expand the scope of industry coverage, respond to petitions, improve the reporting experience, explore opportunities to use this valuable information and share and promote pollution prevention approaches with industry, take steps to optimize the quality of TRI data, and identify opportunities to reduce toxic chemical releases in support of the Administration's environmental justice priorities as well as identifying instances where TRI-reported pollution prevention practices reduce releases of both TRI-listed toxic chemicals and GHGs which aligns with the Administration's climate priorities. The TRI Program will play an enhanced role conducting analyses to support EPA's goals for environmental justice (EJ) and EJ communities.

EPA also 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).<sup>232</sup> CDX manages access and authentication services for TRI; specifically, it provides identity proofing for reporting facilities. 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).<sup>233</sup> EPA will continue to maintain the TDX throughout FY 2022. The Agency also will continue to support the TRI Processing System (TRIPS) database, which is the repository for TRI data. As a key element of its data quality assurance strategy, in FY 2022, the Program will continue to conduct at least 600 data quality checks annually to help optimize the accuracy and completeness of the reported data and thereby improve the Program's analyses of chemical waste released or otherwise managed. In FY 2022, EPA also will continue to improve its systems, processes, and products based on feedback from users (i.e., communities, academia, industry, states, and tribes).

The Program also will continue to publish English and Spanish versions of the annual *TRI National Analysis*,<sup>234</sup> which describes relevant trends in toxic chemical releases and trends in other waste management practices, and highlights innovative approaches by industry to reduce pollution. The Analysis will include industry sector profiles, parent company analyses, and TRI information reported from facilities in specific urban communities, large aquatic ecosystems, Indian Country, and Alaska Native Villages. The TRI Program also will continue to make the data available to the public within weeks after the July 1 reporting deadline. The data will be available as downloadable data files (via the TRI website and Data.gov) and through online analytical tools such as *Envirofacts*.<sup>235</sup> The Program will continue to provide support to EPA's Enforcement and Compliance Assurance programs by supplying facility target lists developed through the

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<sup>232</sup> To access the CDX, please visit: <https://cdx.epa.gov/>.

<sup>233</sup> For additional information, please visit: <https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-exchange>.

<sup>234</sup> To access the *TRI National Analysis*, please visit: <https://www.epa.gov/trinationalanalysis>. EPA publishes each National Analysis approximately six months after that year's data are reported.

<sup>235</sup> *EnviroFacts* may be accessed at: <https://enviro.epa.gov/>.

comparison of TRI reporting with facility reporting to other EPA programs (e.g., air permits required by the Clean Air Act). The TRI Program will continue to foster stakeholder discussions and collaborations in analyzing and using the TRI data with stakeholders such as industry, government, academia, non-governmental organizations, and the public. Engagement will include conducting TRI National Conferences (potentially in virtual format) and the TRI University Challenge.

As part of the Toxic Substances Control Act (TSCA) implementation, EPA is working to evaluate the health and environmental risks of 20 high-priority chemicals designated in December 2019 and other chemicals pursuant to manufacturer requests. TSCA requires that additional chemicals be selected for evaluation in the future, maintaining 20 EPA-initiated evaluations on an on-going basis. In FY 2022, the TRI Program will support those risk evaluations by providing EPA risk assessors with information from the TRI database that can be used to identify conditions of use and evaluate and estimate occupational, general population, and subpopulation exposures for those chemicals undergoing risk evaluation and that are included on the TRI chemical list. The TRI Program also will support work under TSCA to identify candidate chemicals for future risk evaluations. The TRI Program will pursue chemical listings, including TSCA Work Plan and other high-priority substances as well as respond to petitions that address the TRI chemical list.

Further, Section 7321 of the NDAA requires EPA to assess certain PFAS to determine whether they meet Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 chemical listing criteria. During FY 2022, EPA also will continue to assess these chemicals and develop associated hazard assessments to support any chemical listing activities. Similarly, to support future evaluations of health and environmental risks under TSCA, additional chemicals may be assessed for TRI listing suitability and associated listing actions, and as required by EPCRA, the Agency will respond to EPCRA chemical petitions regarding TRI within 180 days after receipt.<sup>236</sup> Petitions may request the addition or deletion of chemicals. Petitions also may address industry sector coverage. The quantity and complexity of petitions are unknown until submitted to EPA.

Because electronic systems that collect and disseminate TRI data largely have been developed, the focus in FY 2022 will be on operations and maintenance of *TRI-MEweb*, TRIPS, and processes that contribute to quality control in the development of the annual *TRI National Analysis*. By leveraging agency cloud services, the TRI systems will improve system performance, reliability, efficiencies, portability, and administrative services (security, upgrades, patches, etc.). This also will improve integration/consistency with other cloud-based systems and applications and will provide quicker data processing and enhance TRI's analytical capabilities by using applications such as *Qlik*.<sup>237</sup>

In FY 2022, the TRI Program will analyze and identify facilities and sectors releasing TRI reportable substances proximal to EJ communities (using tools from EPA's *EJScreen*). The program also will develop maps and other products to help facilitate an understanding of the EJ impacts of TRI releases to the surrounding communities including those communities that might

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<sup>236</sup> Additional information on current petitions may be found at: <https://www.epa.gov/toxics-release-inventory-tri-program/toxics-release-inventory-laws-and-regulatory-activities>.

<sup>237</sup> For additional information, please visit: <https://www.qlik.com/us/>.

be more susceptible to climate change impacts (i.e., sea level rise). TRI will initiate this work for at least two EPA regions, and will provide outreach and training in how to use and interpret the information within those locations.

Additionally, TRI reporting includes information on institutional/firm environmental stewardship, pollution prevention (P2), source reduction, and other sustainability practices and activities (e.g., climate protection-oriented work, environmental stewardship, voluntary consensus standard work, etc.) undertaken by facilities during the reporting year. TRI's P2 reporting data include thousands of instances of pollution prevention implementation by facilities, source reduction, and other sustainability activities, which often reflect economic benefits coupled with improved environmental performance. TRI's P2 data tools have a wide range of capabilities to help identify and amplify improved environmental practices. For example, users can identify and compare facilities within an industry sector and/or geographic area to explore the extent of adoption/deployment of P2 practices. TRI will continue to conduct analyses of these P2 practices and develop profiles of these environmental improvements, which can be useful for P2 practitioners including those seeking to advance sustainability and strengthen the resilience of facilities near EJ communities.

#### **Performance Measure Targets:**

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$217.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$27.0) This program change is an increase in contract resources to support IT analytical tools that allow stakeholders to view and analyze the data reported to TRI in support of environmental justice initiatives and other initiatives.

#### **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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$13,639.3</i></b>	<b><i>\$12,902.0</i></b>	<b><i>\$15,971.0</i></b>	<b><i>\$3,069.0</i></b>
Total Budget Authority	\$13,639.3	\$12,902.0	\$15,971.0	\$3,069.0
Total Workyears	75.1	75.6	87.9	12.3

**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,<sup>238</sup> 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,” and therefore, EPA assists tribes in developing the programs to make such decisions. In the absence of a program delegation to a tribe, the Agency directly implements the program. This program also supports the Categorical Grant: Tribal General Assistance Grants Program.

EPA’s American Indian Environmental Office leads the agencywide effort to ensure environmental protection in Indian country. Please see <http://www.epa.gov/tribal> for more information.

**FY 2022 Activities and Performance 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 2022. In addition, the Agency continues the direct implementation assessment effort to better understand EPA’s direct implementation responsibilities and activities on a program-by-program basis in Indian country.

**Capacity Building:** EPA will continue to provide assistance and to support mechanisms for tribes to pursue developing and implementing federal environmental programs, including the “treatment in a manner similar to a state” (TAS) process and the use of the Direct Implementation Tribal Cooperative Agreement (DITCA) authority. The Agency will continue to provide technical and 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

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<sup>238</sup> 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>.

approved 95 TAS regulatory program delegations to tribes, including 20 approvals for compliance and enforcement authority. EPA had 15 DITCAs with tribes in place in FY 2021.

**Indian Environmental General Assistance Program Capacity Building Support:** General Assistance Program (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*.<sup>239</sup> In FY 2022, EPA will continue to administer GAP financial assistance to build tribal capacity and address environmental issues in Indian country. EPA's work in FY 2022 also will continue to enhance EPA-Tribal partnerships through development and implementation of EPA-Tribal Environmental Plans (ETEPs) with a continued focus on tracking and reporting measurable results of GAP-funded activities. GAP funding also continues to support EPA Performance Partnership Grant (PPG) goals.

**GAP Performance Measurement:** In FY 2020, EPA completed an evaluation of the program implementation under the 2013 GAP guidance and anticipates developing revised guidance for tribal consultation. EPA will adjust the performance management application to align with the revised guidance, after it is finalized in FY 2022, and begin compiling and analyzing data. The information technology-based performance application will provide a data-driven basis for supporting funding decisions, funding priorities, and contribute to program accountability.

**Tribal Consultation:** In working with the tribes, EPA follows its *Policy on Consultation and Coordination with Indian Tribes*.<sup>240</sup> The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear agency standards for a consultation process promoting consistency and coordination. From FY 2011 through FY 2021, EPA is expected to complete over 770 Tribal Consultations, an important agency milestone under the EPA Tribal Consultation Policy. EPA anticipates completing 70 tribal consultations in FY 2021. In FY 2022, 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 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$829.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

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<sup>239</sup> Please refer to <https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal> for further information.

<sup>240</sup> Please refer to: <https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes>.



- (+\$2,240.0 / +12.3 FTE) This program change is an increase in resources and FTE to support core work in the capacity building program with an emphasis on addressing environmental justice. This investment includes \$2,113.0 thousand in payroll costs.

**Statutory Authority:**

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

## **International Programs**

**International Sources of Pollution**  
Program Area: International Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$6,240.6</i></b>	<b><i>\$6,746.0</i></b>	<b><i>\$8,006.0</i></b>	<b><i>\$1,260.0</i></b>
Total Budget Authority	\$6,240.6	\$6,746.0	\$8,006.0	\$1,260.0
Total Workyears	32.9	32.4	39.4	7.0

**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, land, the oceans, food crops and food chains, and can accumulate in foods such as fish. Healthy environments, ecosystems, and communities provide the foundation for economic development, food security, and sustainable growth.

EPA’s work with international partners and organizations is essential to addressing transboundary pollution adversely impacting the United States. Strengthening environmental protection abroad so that it is on par with practices in the U.S. helps build a level playing field for industry and promotes opportunities for technologies and innovation. EPA’s international programs also play an important role in fulfilling national security and foreign policy objectives.

An important example of this work is EPA’s engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings which negotiate outcomes on key EPA issues such as food waste, marine litter, resource efficiency, and air quality. In addition, EPA’s engagement with international financial institutions, United Nations (UN) entities, and the Organization for Economic Cooperation (OECD) 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. Additionally, EPA’s participation to the North American Commission for Environmental Cooperation (CEC) provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth.

**FY 2022 Activities and Performance Plan:**

In FY 2022, 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 and UN institutions to address air pollution that contributes significant pollution to the domestic and international environment. For example, a number of Asian countries are implementing national air quality monitoring, planning,

and control strategies with advice and lessons learned from the United States. Environmental policies adopted and implemented overseas will improve competitiveness for U.S. businesses, drive demand for U.S. emissions control technologies, and expand exports of U.S. environmental goods and services which will create green jobs at home and improve air quality conditions in the United States.

EPA will provide technical assistance through the transfer of tools to address climate change with partner countries, thus leveling the playing field, facilitating the equitable treatment of disparate communities, and helping to ensure that all countries make meaningful progress in implementing their nationally determined contributions under the Paris Agreement. This helps fulfill EPA's commitment to the Executive Order on *Tackling the Climate Crisis at Home and Abroad*.

Also, as part of EPA's work to mitigate pollution in the arctic, the Agency continues to work in the Arctic Council to provide in-kind expertise and help to identify external resources to screen sources of black carbon that may impact local health conditions, with the potential of expanding across a wider range of Alaskan Native Villages (ANVs). In addition, EPA will continue to work with the Arctic Council to further develop a joint project proposal on per- and polyfluoroalkyl substances (PFAS). This effort will focus on aqueous film-forming fire-fighting foams (AFFF) in arctic airports through in-kind technical expertise.

### *Marine Litter*

EPA will continue to engage multilaterally and bilaterally to prevent and reduce marine litter, including plastics, an increasingly prominent global issue that can negatively impact domestic water quality, tourism, industry, and public health in the United States. Further, calls for the development of a new binding international arrangement of marine plastic litter are mounting, and EPA, working with other federal departments, will continue to provide leadership and expertise on how to best address land-based sources of marine litter, including plastics. Since 80 percent of plastic marine litter comes from land-based sources of waste,<sup>241</sup> countries with inadequate waste management contribute to the pollution in our shared oceans. EPA will build on groundbreaking efforts in the G7, the G20, and the United Nations Environment Assembly (UNEA) to support and advance comprehensive approaches including technology innovation, sharing of best practices, and promoting the more efficient use of resources to reduce marine litter. EPA will continue to work with partner countries and other federal agencies to advance sound policy approaches for global action on marine litter.

In FY 2022, EPA will share tools and technical assistance related to expanding Trash Free Waters to key contributing countries in Asia and build on past projects in Latin America and the Caribbean. Technical support may include developing national, regional, and local action plans to reduce leakage of trash to the environment; identifying steps to implement relevant and applicable waste collection/management systems; and modest implementation projects where possible. EPA will continue to collaborate with leaders in innovation in the domestic stakeholder community to identify ways to leverage efforts to tackle this pressing global problem. EPA will continue to strengthen actions with a regional focus on major source countries in Southeast Asia and key

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<sup>241</sup> J. R. Jambeck, R. Geyer, C. Wilcox, T. R. Siegler, M. Perryman, A. Andrady, R. Narayan, and K. L. Law, "Plastic waste inputs from land into the ocean," *Science*, 2015, Volume 347, Number 622.

partners in Latin America and the Caribbean, and by partnering with the United Nations Environment Program (UNEP) leaders in implementing and disseminating governance measures, policies, and technology to prevent marine litter.

EPA will continue to examine and contribute to the interagency technical efforts on proposed regulations on plastics and microplastic, such as the European Commission's proposed restrictions on intentionally-added microplastics range of products in accordance with the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation, EC No. 1907/2006.

### *Food Waste*

In FY 2022, EPA will continue to build cooperation with the United Nations and the Office of Management and Budget to ensure that methodologies used to track international progress on reducing food waste accurately reflect U.S. progress and to better understand the climate benefits of reducing food waste. Approximately eight to ten percent of global greenhouse gas emissions are from food loss<sup>242</sup> in the agricultural supply chain and consumer food waste. The Agency will continue to advance food waste efforts, which is an increasing portion of landfill waste in rapidly urbanizing cities in developing countries. The problems of food insecurity, in particular for the most vulnerable, have been exacerbated by COVID-19, thus underscoring the need for greater attention to reducing food waste. For example, EPA will bring together experts from the U.S. and partner country governments, non-governmental organizations (NGOs), academia, the private sector, and the UN to promote programs, best practices, and technologies related to food loss and waste.

### *Chemicals*

EPA also will maintain efforts to reduce environmental threats to U.S. citizens from global contaminants impacting air, water, and land. EPA will continue technical and policy assistance for global, regional, and bilateral 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,<sup>243</sup> 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.

With respect to mercury, EPA's measures show that partner countries are on track to develop National Action Plans (NAPs) that demonstrate how they will reduce or eliminate the use of mercury in the Artisanal and Small-Scale Gold Mining (ASGM) sector. ASGM is the largest source of global mercury releases<sup>244</sup> and the development of NAPs called for by the Minamata

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<sup>242</sup> Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change and Land, Chapter 5 Food Security, pg 440, [https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08\\_Chapter-5\\_3.pdf](https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08_Chapter-5_3.pdf).

<sup>243</sup> For more information, please see: <https://www.epa.gov/international-cooperation/minamata-convention-mercury> and [www.mercuryconvention.org](http://www.mercuryconvention.org).

<sup>244</sup> [Global mercury assessment | UNEP - UN Environment Programme.](#)

Convention on Mercury is a critical first step to help major emitters reduce the use and release of mercury into the environment.

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 consistently meets objectives for reviewing the development of laws in other countries to control their levels of lead in paint, in a manner consistent with U.S. regulations. In doing so, these countries will not only reduce the exposure of their children to lead and prevent the subsequent health effects of this potent developmental neurotoxin, but also will reduce the amount of lead-based paint on products in international commerce that often reach U.S. markets.

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$77.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,183.0 / +7.0 FTE) This net program change is an increase to address international sources of pollution that impact the Nation's air, water, land, oceans, food crops, food chains, and climate change through coordination with international partners.

**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; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

**Trade and Governance**

Program Area: International Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$5,608.4</i></b>	<b><i>\$5,292.0</i></b>	<b><i>\$6,080.0</i></b>	<b><i>\$788.0</i></b>
Total Budget Authority	\$5,608.4	\$5,292.0	\$6,080.0	\$788.0
Total Workyears	13.7	15.3	18.0	2.7

**Program Project Description:**

Since the 1972 Trade Act mandated the U.S. Trade Representative to 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, the Trade Policy Review Group and relevant subcommittees – 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. EPA offers technical assistance and environmental governance capacity building for trade partners to support implementation of environmental commitments made in Free Trade Agreements. EPA also provides technical expertise on environmental governance and policy for international financial institutions, including environmental policy reviews and project-level environmental guidance.

**FY 2022 Activities and Performance Plan:**

*Free Trade Agreements and United States-Mexico-Canada Agreement (USMCA)*

In FY 2022, EPA will continue its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America. EPA also will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. EPA activities will include monitoring and verifying provisions pertaining to global and national environmental requirements in the agreement and providing subject matter expertise. EPA will continue active participation in the United States Trade Representative (USTR) led Interagency Environment Committee for Monitoring and Environment (IECME) established to promote Mexican and Canadian compliance with their environmental obligations.

In addition, EPA will continue to play an active role in Free Trade Agreements (FTAs) and in the development of new FTAs and in the delivery of technical assistance to support implementation of environmental commitments within them. At present, EPA is working on the development of two new FTAs, with the governments of the United Kingdom and Kenya, through the USTR-led

interagency process. Further, given the emphasis on achieving climate change objectives in a manner that does not disproportionately impact disadvantaged communities, including possibly through trade measures, EPA will provide technical advice and input on the implications of various tools such as carbon border adjustments and environmental goods agreements.

In FY 2022, EPA will continue to work with partners (including the Treasury Department, State Department, U.S. Agency for International Development, and the U.S. International Development Finance Corporation), to improve environmental governance of U.S. funded international development projects. EPA will support the environmental performance of international financial institutions such as the development of environmental safeguards, including climate performance.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$183.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$605.0/ +2.7 FTE) This program change is an increase in resources and FTE to provide support and capacity building for the regional and international Trade and Governance Program addressing climate change. This investment includes \$486.0 thousand in payroll costs.

### **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; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.



**US Mexico Border**

Program Area: International Programs

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$2,955.4</b>	<b>\$2,837.0</b>	<b>\$3,192.0</b>	<b>\$355.0</b>
Total Budget Authority	\$2,955.4	\$2,837.0	\$3,192.0	\$355.0
Total Workyears	12.9	12.4	14.4	2.0

**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 10 poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the country.<sup>245</sup> In addition, over 430 thousand of the 14 million people in the region live in 1,200 colonias,<sup>246</sup> which are unincorporated communities characterized by substandard housing and unsafe drinking water or wastewater systems. The adoption of the Border Programs has gone a long way to protect and improve the health and environmental conditions along a border that extends from the Gulf of Mexico to the Pacific Ocean.

The Border 2025 program, like its predecessors, will continue to emphasize local priority-setting, focuses on measurable environmental results, and encourages broad public participation. Specifically, Border 2025 builds on earlier program<sup>247</sup> work, which includes removing more than 13 million scrap tires from the border, establishing drinking water connections for more than 54,000 homes and adequate wastewater connections for over half a million homes; in addition to highlighting regional areas where environmental improvements are most needed, establishing thematic goals supporting the implementation of projects, considering new fundamental strategies, and encouraging the achievements of more ambitious environmental and public health goals.

The Border 2025 program identifies five long-term goals to address the serious environmental and environmentally related public health challenges, including the impact of transboundary transport of pollutants in the border region. These goals include: develop the capacity to prevent waste and improve the collection and recycling of e-waste, plastics, and trash; increase markets to prevent scrap tire piles; develop institutional capacity to clean up border contaminated sites, and implement the consultative mechanism in coordination with border states to disseminate information on treatment, storage, and disposal facilities along the border, specially to underserved communities.

<sup>245</sup> For additional information, please see: [http://www.nriir.org/drupal/sites/default/files/unm\\_the\\_us\\_mexico\\_border\\_region\\_at\\_a\\_glance.pdf](http://www.nriir.org/drupal/sites/default/files/unm_the_us_mexico_border_region_at_a_glance.pdf).

<sup>246</sup> Ibid

<sup>247</sup> For additional information, please see: [http://www2.epa.gov/sites/production/files/documents/b2012closeout\\_eng.pdf](http://www2.epa.gov/sites/production/files/documents/b2012closeout_eng.pdf).

EPA and the Secretariat of Environment and Natural Resources (SEMARNAT) will continue to closely collaborate with the 10 border states (four U.S./six International), 26 U.S. federally-recognized Indian tribes, and local communities in prioritizing and implementing projects that address their particular needs.

Note: The border water and wastewater infrastructure programs are described in the State and Tribal Assistance Grants (STAG) appropriation, Infrastructure Assistance: Mexico Border Program.

### **FY 2022 Activities and Performance Plan:**

#### *Air Pollution:*

In FY 2022, EPA will continue to focus on air pollution reductions in binational airsheds, work on reducing emissions through energy efficiency and alternatives or renewable energy projects to maintaining effective air quality monitoring networks and timely access to air quality data along the border region. This effort to meet health-based air quality standards, especially for particulate matter and/or ozone, is expected to mitigate negative effects on public health, including higher incidence rates for asthma and increased health-related school absences for children and vulnerable populations.

EPA and SEMARNAT will continue to build on the successful air quality efforts conducted thus far in the Border 2020 program, which has resulted in complete greenhouse gas emissions inventories for each Mexico border state; mandatory vehicle-smog checks in Baja, California, and improved public health, especially in underserved communities. In addition, building upon over 20 years of binational air quality success within the New Mexico, Texas, and Chihuahua shared air basin, local coordinated efforts will advance work to address intensive mobile sources at two designated Border cities.

EPA will assist in providing training on, and in the purchase of, emissions testing equipment and help determine whether imported vehicles already meet U.S. emission standards. The benefit in cooperation with Mexican border cities has a high positive impact to Texas' largest populated border city of El Paso in protecting U.S. citizens and vulnerable populations, as Juarez and El Paso make up a metropolitan area that shares and breathes the same air. Along the U.S. border, California, Arizona, and New Mexico have completed Climate Change Action Plans.

#### *Water Management:*

In FY 2022, the Agency will continue to address border water management in the Tijuana River Watershed. The United States-Mexico-Canada Trade Agreement (USMCA) authorizes and directs EPA to coordinate with specific federal, state, and local entities to plan and implement high priority infrastructure projects that address transboundary pollution affecting San Diego County. EPA will advance implementation of projects to prevent and reduce the levels of trash and sediment from entering high priority binational watersheds. Other projects that prevent/reduce marine litter should primarily focus on preventing waste at the source through improvements to solid waste management systems, education campaigns, and monitoring as well as reducing trash from

entering the aquatic environment through the capture of litter using river booms in known watershed litter hot spots.

*Sustainable Materials Management:*

In FY 2022, EPA will continue to collaborate and partner on sustainable materials management demonstration projects to prevent waste and improve the recovery of materials, such as plastic, e-waste, and scrap tires, through public-private partnership programs and infrastructure investments in the border region to mitigate public health and environmental impacts and avoid costly cleanup efforts. Each region of the northern border has different economic, social, and cultural situations, with different capacities to mitigate the generation and management of waste and secondary materials.

*Planning:*

EPA will continue to work to increase institutional capabilities in planning and technical assistance, enabling the development of programs, projects, or actions, which take into account the life cycle analysis on natural resource economics, manufacturing, transport, and other market factors to more effectively harvest and use materials and avoid them from being lost to landfills.

Additionally, the United States and Mexico will work together to enhance joint preparedness for environmental response and facilitate easier transboundary movement of emergency response equipment and personnel by activities such as: updating Sister City Plans with preparedness and prevention, and providing training to emergency responders on preparedness and prevention related activities. As part of the efforts for binational emergency preparedness and response, work will continue updating of the Mexico-U.S. Joint Contingency Plan in both Spanish and English. In addition, both countries will coordinate efforts in binational border wide.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$57.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$298.0 / +2.0 FTE) This net program change is an increase to support efforts addressing climate change and pollution related activities along the United States-Mexico border. Due to the uniqueness of the needs in the region and in support of the Border 2025 program priorities, this effort also focuses on smaller-scale sustainability and capacity building projects designed to improve the environment and protect the health of the nearly 14 million people living along the border.

**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); U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

**IT/ Data Management/ Security**

**Information Security**

Program Area: IT / Data Management / Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$6,190.4</i></b>	<b><i>\$8,285.0</i></b>	<b><i>\$14,116.0</i></b>	<b><i>\$5,831.0</i></b>
Hazardous Substance Superfund	\$927.6	\$659.0	\$5,659.0	\$5,000.0
Total Budget Authority	\$7,118.0	\$8,944.0	\$19,775.0	\$10,831.0
Total Workyears	12.1	13.1	13.1	0.0

**Program Project Description:**

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program’s mission is to protect the confidentiality, availability, and integrity of EPA’s information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

**FY 2022 Activities and Performance 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. To respond, the Agency maintains a robust, dynamic approach to cybersecurity risk management, governance, and oversight. In FY 2022, EPA requests an increase of \$5.8 million to strengthen capacity of the Information Security Program in the EPM Appropriation. The Agency will continue improving its security posture, partnering with public and private sector entities to promote the adoption of cybersecurity best practices, and reporting to the White House and Congress on the status of these initiatives.

EPA will continue implementing the Strengthening and Enhancing Cyber-capabilities by Utilizing Risk Exposure Technology Act (SECURE Technology Act) and Section 889 of the FY 2019 National Defense Authorization Act to mitigate supply chain risks in the procurement of information technology (IT). EPA’s Senior Procurement Official, in consultation with the Chief Information Security Officer, issued agencywide policy implementing the requirements of Section 889 (a)(1)(B), conducted training for the acquisition community, and made all required actions (amendments, modifications, etc.) on existing contracts to fully implement Section 889. The policy also will guide future contracts to fully comply with the Section 889 requirements.

**Risk Management, Oversight, and Training:**

In FY 2022, EPA will continue to include cybersecurity and privacy components in ongoing senior leadership program reviews. These reviews enhance Chief Information Officer (CIO) oversight by enabling better risk area determination and targeted improvement direction to system and mission program managers. While EPA programs and regions maintain responsibility for improving their

performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvement. In FY 2020, this review process led to an 87 percent agencywide reduction in system level vulnerabilities.

In FY 2022, the Agency will continue to collect Federal Information Security Modernization Act (FISMA)<sup>248</sup> metrics and evaluate related processes, tools, and personnel to identify areas of weakness and opportunities for improvement. EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer will continue to monitor and report on these metrics, in line with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements*.<sup>249</sup>

Further, EPA also deploys Agency-specific role-based training to ensure personnel in key cybersecurity roles have the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

### **Network Management and Protection:**

In accordance with OMB Memorandum M-19-17 *Enabling Mission Delivery through Improved Identity, Credential, and Access Management*, EPA will continue to review and improve identity management capabilities through authentication infrastructure and system configurations.

In FY 2022, EPA will strengthen cloud security through cloud access security broker and cloud platform management services, which enables remote workers to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC).<sup>250</sup> The Agency also will implement tools to improve web content filtering capabilities to prevent malicious and unauthorized web content from impacting EPA systems and users. The Agency will continue to build an Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments,<sup>251</sup> and to monitor and report on EPA networks and systems.

The Agency is working to address shortfalls in current Office of Management and Budget risk posture assessments. These investments include Limiting Privilege Users to Trusted Websites, developing an automated mechanism preventing the use of untrusted removable media from workstations and servers, as well as segmenting High Vulnerability Assets across the information environment to improve security and compliance.

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<sup>248</sup> Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

<sup>249</sup> For more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf>.

<sup>250</sup> For more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf>.

<sup>251</sup> These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: [https://www.epa.gov/sites/production/files/2017-10/documents/epa\\_oig\\_20171030-18-p-0031.pdf](https://www.epa.gov/sites/production/files/2017-10/documents/epa_oig_20171030-18-p-0031.pdf).

## **Incident Management:**

Cyber-attacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. Continuous monitoring capabilities, which serve to identify and address incidents quickly, are vital to ensure that EPA's information environment remains safe. In FY 2022, this investment will support the on-going implementation of capabilities for data labeling and data loss prevention, and remote computer imaging and forensics, all of which will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. In accordance with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements*,<sup>252</sup> in FY 2022, EPA will continue to mature the Microsoft Cloud Access Service, which will provide a monitoring capability to improve incident detection and response capabilities. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis, forensics, and containment and eradication activities.

Additionally, the Agency practices Coordinated Vulnerability Disclosure (CVD). By working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered, CVD decreases the harm or time an adversary can use to deny or disrupt services to the networks.

EPA continues to leverage capabilities through the Continuous Diagnostics and Mitigation (CDM) Program, which addresses agencies' cybersecurity protection gaps and allows EPA to efficiently identify and respond to federal-wide cybersecurity threats and incidents. In FY 2022, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will focus on closing remaining gaps in privileged access to EPA's network and continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities, and integrate mobile device discovery to expand program capabilities. In FY 2022, EPA estimates a \$12.6 million budget for the CDM Program across the EPM and Superfund accounts.

## **Supply Chain Risk Management:**

In FY 2022, EPA will work on developing a strategy for how the Agency will implement Supply Chain Risk Management Security Controls to comply with the Government Accountability Office

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<sup>252</sup> For more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf>.



(GAO) findings<sup>253</sup> and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.<sup>254</sup> This initial work will include coordinating across the Agency with professionals from Information Technology, Information Security, and Acquisitions to update the policy and obtain the necessary tools to address these critical security requirements which were a vulnerability in the SOLAR WINDS FY 2021 intrusion.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$29.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,802.0) This program change reflects a necessary increase to continue support for the implementation of the critical CDM Program and other IT security requirements. This investment will be used to close existing gaps by improving audit capability, ensuring accountability, and adding protections directly associated with the information.

**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).

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<sup>253</sup> Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.

<sup>254</sup> For more information, please see: <https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final>.

**IT / Data Management**

Program Area: IT / Data Management / Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$86,699.8</i></b>	<b><i>\$82,715.0</i></b>	<b><i>\$86,744.0</i></b>	<b><i>\$4,029.0</i></b>
Science & Technology	\$3,473.7	\$3,072.0	\$3,121.0	\$49.0
Hazardous Substance Superfund	\$15,168.6	\$13,826.0	\$15,202.0	\$1,376.0
Total Budget Authority	\$105,342.1	\$99,613.0	\$105,067.0	\$5,454.0
Total Workyears	442.3	482.4	486.4	4.0

Total workyears in FY 2022 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

**Program Project Description:**

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

This program supports the maintenance of EPA’s IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

To date, throughout the COVID-19 pandemic, EPA has continued to maintain continuity of operations with most of the Agency in a maximum telework posture. Specifically, the IT/DM Program has doubled the Virtual Private Network infrastructure, provisioned over 1,449 new users with EPA laptops enabling day one productivity from telework locations, and deployed Microsoft Teams and Teams Live Events, allowing EPA offices to conduct virtual video-based meetings for up to 10 thousand participants

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will further strengthen its IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2020, EPA scored an overall B+, the second highest rating among CFO Act agencies.

The Agency requests an increase of 4 FTE and \$4.0 million for the IT/DM Program in the EPM Appropriation. EPA will continue implementing OMB/NARA Memoranda M-19-21, which directs agencies to manage all permanent records electronically to the fullest extent possible with appropriate metadata and all temporary records in an electronic format or store them in commercial records storage facilities by December 31, 2022. To accomplish this, EPA will continue to make the Agency aware of this Directive and encourage the transfer of inactive permanent and temporary paper records to the Federal Records Centers before the OMB/NARA's target date. EPA will look to apply artificial intelligence and machine learning for content tagging in the records digitization process to improve the access and quality of EPA's digitized permanent records. Further, in FY 2022, EPA will complete buildout of two digitization centers and continue the development and deployment of Records Management Technologies, including: Content Ingestion Services into the National Computer Center Amazon Web Services environment, deployment of a Paper Asset Tracking Tool, and the buildout of a new, cloud-hosted, Record Management Technology application focused on improving search capabilities.

In FY 2022, EPA will bolster its agencywide support for annual operations and maintenance of IT infrastructure, including eDiscovery (supporting the Agency's FOIA Program), Local Area Network Switches and Regional Laptop Refreshes. These services are crucial for EPA's operations, and consistent resources are necessary for operations and the Agency's ability to carry out its mission. This investment will enable EPA to establish a rolling four-year refresh of laptops without any delays for funding, a critical IT infrastructure requirement as EPA adapts to the future of work in a post-COVID environment.

EPA also will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program, which develops training for different stakeholder communities and assesses documentation for all public-facing EPA systems/applications. EPA's Controlled Unclassified Information Program will standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556 – *Controlled Unclassified Information*.<sup>255</sup>

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public. The Program focuses on collaborations such as the E-Enterprise Initiative, which facilitates conversations among EPA, states, and tribal leaders about opportunities to improve customer services across the environmental enterprise. In FY 2022, the CX Program will continue to promote IT modernization, accountability, and transparency, and to improve how it supports and manages the lifecycle of information and information products.

Under the leadership of the Agency's Chief Technology Officer and Chief Architect, EPA will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA also will identify and prioritize the interoperability of data within EPA and across federal agencies that

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<sup>255</sup> For more information, please refer to Executive Order: <https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information>.

benefits internal and public-facing services. Finally, EPA will continually monitor and develop staff proficiencies in the understanding and use of data.

The Agency also 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. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Application.

EPA's One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure, ensuring that it meets current statutory and evolving security requirements.

#### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$653.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,376.0/ +4.0 FTE) This program change is an increase for EPA to continue its progress towards upgrading the Agency's enterprise-wide records management system and enhancing the digitization of paper records. Centralizing, managing, and digitizing the Agency's records will decrease onsite storage costs, improve records management, and position EPA to comply with statutory requirements under the Federal Records Act.

#### **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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$4,524.5</i></b>	<b><i>\$4,975.0</i></b>	<b><i>\$5,704.0</i></b>	<b><i>\$729.0</i></b>
Total Budget Authority	\$4,524.5	\$4,975.0	\$5,704.0	\$729.0
Total Workyears	20.8	23.8	25.8	2.0

**Program Project Description:**

This program supports EPA’s Administrative Law Judges (ALJ) and the Environmental Appeals Board (EAB).

*Administrative Law Judges*

The ALJ presides 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 issues orders and decisions under the authority of the Administrative Procedure Act (APA) and the various environmental, civil rights, and anti-fraud statutes that establish administrative enforcement authority and implement the Constitution’s guarantee of due process. The right of affected persons to appeal those decisions is conferred by various statutes, regulations, and constitutional due process rights. The ALJ also offers an opportunity for alternative dispute resolution.

*Environmental Appeals Board*

The Environmental Appeals Board (EAB) is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue 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 furthers the Agency’s mission to advance environmental justice and tackle the climate crisis by ensuring the integrity of federal decision-making and fairness in its adjudication of administrative appeals.

Since the 1994 Executive Order on Environmental Justice was issued, the EAB has played a pioneering role in ensuring that the Agency meets its obligation with respect to environmental justice and, for example, in the context of permitting, has remanded several permit cases where the record did not support a finding that the permit authority reasonably considered the contested environmental justice issues in their permit decision making process.

To promote access to justice, parties appearing before the Board are not required to be represented by counsel or pay a filing fee. Additionally, the Board promotes public participation in the appeals

process through remote oral arguments and maintains an extensive website, accessible to the public, containing all final Board decisions and case filings. Among others, parties participating before the Board include local and national community groups, tribal nations, private parties, and state and local governments.

The EAB decides petitions for reimbursement under the Comprehensive Environmental Response, Compensation, and Liability Act Section 106(b); hears appeals of pesticide licensing and cancellation proceedings under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and serves as the final approving body for proposed settlements of enforcement actions initiated at EPA. The EAB issues decisions in a fair and timely manner consistent with the Administrative Procedure Act (APA) and the applicable environmental statutes, and under the authority delegated by the Administrator and pursuant to regulation, ensuring consistency in the application of legal requirements. In 90 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 2022 Activities and Performance Plan:**

In FY 2022, the ALJ will continue to convene formal hearings in the location of the alleged violator or violation, as required by statute. In FY 2022, the EAB will continue to efficiently and fairly adjudicate permit and enforcement appeals under all statutes, and petitions for reimbursement under CERCLA, expediting appeals such as Clean Air Act New Source Review cases and FIFRA licensing proceedings that are time-sensitive. The EAB and ALJ also anticipate addressing a potential increase in environmental justice and climate related issues and in new work assuring access to justice, including for tribal nations and parties impacted by environmental justice.<sup>256</sup>

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$14.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$715.0 / +2.0 FTE) This program increase advances environmental justice through the Administrative Law Program. This investment includes \$417.0 thousand in payroll.

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<sup>256</sup> For additional information on the Administration's priority on "Tackling the Climate Crisis at Home and Abroad," please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$800.2</i></b>	<b><i>\$864.0</i></b>	<b><i>\$1,141.0</i></b>	<b><i>\$277.0</i></b>
Hazardous Substance Superfund	\$1,014.2	\$832.0	\$857.0	\$25.0
Total Budget Authority	\$1,814.4	\$1,696.0	\$1,998.0	\$302.0
Total Workyears	3.5	5.9	6.9	1.0

**Program Project Description:**

EPA’s Alternate Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on environmental matters and some workplace conflicts prior to engaging in formal litigation. The Program provides legal counsel, facilitation, mediation, public involvement, training, consensus building advice and support, and organizational development support to external stakeholders and to all EPA programs.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to provide conflict prevention and ADR services to all EPA programs and external stakeholders on environmental matters. Specifically, ADR will:

- Continue to administer it’s five-year, \$53 million Conflict Prevention and Resolution Services contract. The contract supports the ADR Program by providing the above services to more than 100 active projects and is expected to take on an additional 20-30 projects in FY 2022. The Program expects a growth in the areas of environmental justice and Title VI.
- Directly provide the above services through the conflict resolution specialists on staff. The ADR Program expects to directly support agency programs and stakeholders by providing facilitation, mediation, or other consensus building support on 2-4 projects.
- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program offers this training through its cadre of eight interactively designed courses to all national program offices and regions. Adapting to a virtual environment in FY 2021 has allowed the ADR Program to reach many more programs throughout the Agency and expects that to increase in FY 2022.

The following are examples of FY 2020 accomplishments:

- Successfully transitioned to a five-year, \$53 million Conflict Prevention and Resolution Services contract and administered 203 contract actions over 51 active task orders valued at \$10.1 million in the first year.
- Supported 91 environmental collaboration and conflict resolution (ECCR) cases nationwide, including several Administrator priority projects; such as, a US-Mexico-Canada trade

agreement project in the Tijuana River; the National Water Reuse Action Plan; the Trash Free Waters Program; and an international symposium on marine litter.

- Trained more than 178 EPA staff in conflict resolution skills through eight classes, including two “train-the-trainer” webinars to EPA ECCR Specialists to increase capacity across the Agency and organized an Introduction to Systemic Racism training for EPA’s Office of General Counsel managers.

**Performance Measures Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$265.0.0 / +1.0 FTE) This program change is an increase to support core capacity for the ADR Program and the development of efficient solutions to conflicts.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$9,468.4</i></b>	<b><i>\$9,205.0</i></b>	<b><i>\$13,946.0</i></b>	<b><i>\$4,741.0</i></b>
Total Budget Authority	\$9,468.4	\$9,205.0	\$13,946.0	\$4,741.0
Total Workyears	47.4	54.4	71.9	17.5

**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. There are two offices within the Agency’s Civil Rights Program, the Office of Civil Rights (OCR) and the External Civil Rights Compliance Office (ECRCO). OCR has responsibility for the internal enforcement of several civil rights laws related to equal employment opportunity (EEO) and ECRCO carries out the external enforcement of several civil rights laws that prohibit discrimination in programs or activities that receive federal financial assistance from the EPA.

OCR, within EPA’s Office of the Administrator, provides leadership, direction, and guidance in carrying out the Agency’s EEO Program. OCR is responsible for advising senior leadership and Agency managers in carrying out their EEO responsibilities. OCR also conducts workforce analysis to identify and eliminate barriers to employment and advancement. Additionally, OCR counsel employees, promotes alternative dispute resolution mechanisms to resolve EEO dispute, investigates EEO complaints, and issues EEO decisions. Further, OCR assists managers in processing reasonable accommodation requests made by persons with disabilities.

ECRCO, within the Office of General Counsel, investigates and resolves external complaints, develops policy guidance, conducts affirmative compliance reviews, and provides technical assistance to recipients of federal funds and outreach to communities. In FY 2021, ECRCO committed to strengthening civil rights enforcement to address health and environmental disparities, eliminate discriminatory barriers to clean air, water, and land, and ensure the protection of human health and the environment for all persons in the United States. This commitment includes the following: initiating proactive civil rights compliance activities, including targeted compliance reviews in pollution-burdened and underserved communities; taking concrete steps to ensure the integration of civil rights obligations in programmatic actions across EPA; integrating environmental justice (EJ) principles into civil rights enforcement and collaboration across the Agency to incorporate analyses of disproportionate and cumulative impacts in decision-making; coordinating, communicating and engaging with pollution-burdened and underserved communities; and leading interagency collaboration across the federal government to enforce federal civil rights laws.

In FY 2021, ECRCO launched strategic planning efforts to update and develop an ECRCO Strategic Plan, in light of Executive Order 13985 *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. An updated Strategic Plan is expected during the second quarter of FY 2022. ECRCO is initiating a compliance review in the third quarter of FY 2021, to be completed during the first quarter of FY 2022. In addition, ECRCO is issuing Foundational Nondiscrimination Program Guidance for Recipients in the last quarter of FY 2021.

In FY 2021, ECRCO continued to improve its process for and support of complaint docket management through investigations, informal resolution agreements and mediation consistent with EPA's nondiscrimination regulation and its revised Case Resolution Manual, issued in the second quarter of 2021.<sup>257</sup> In FY 2021, ECRCO continued to meet its internal performance measures to ensure the timely resolution of discrimination complaints. Where applicable, ECRCO issued preliminary findings within 180 days of acceptance of the complaint, as required by EPA's regulation. In addition, ECRCO continued to implement internal performance measures to ensure that all complaints resolved through Informal Resolution Agreements receive those resolutions in a timely fashion. ECRCO also continued to implement a contract to provide language assistance services to customers with limited-English proficiency throughout EPA.

## **FY 2022 Activities and Performance Plan:**

### **Office of Civil Rights**

In FY 2022, OCR will implement the first year of its internal 2022-2025 Strategic Plan. The Strategic Plan will guide OCR's work and measure progress towards accomplishing internal goals and regulatory requirements through 2025. OCR's work in FY 2022 will include addressing potential barriers to employment and advancement, enhancing training and service delivery, and assessing organizational EEO efforts during Technical Assistant Visits (TAVs) with the programs and regions. Additionally, OCR supports the Administration's priorities relative to equity and workforce engagement.

### **Employee Complaints and Resolution (ECR)**

In FY 2022, EPA will dedicate a large portion of its financial resources to the processing of discrimination complaints, EEO related training for management and staff, and building the Alternative Dispute Resolution (ADR) Program. ECR expected to engage in the following activities:

- Review and refine processes to meet responsibility for issuing Final Agency Decisions (FADs), which is 60 days. At the end of FY 2020, the OCR averaged 86 days to issue FADs.
- Evaluate the trends of the growing number of formal complaints and develop a targeted strategy for addressing trends to include anti-harassment and advanced EEO training.

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<sup>257</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2017-01/documents/final\\_epa\\_ogc\\_ecrco\\_crm\\_january\\_11\\_2017.pdf](https://www.epa.gov/sites/production/files/2017-01/documents/final_epa_ogc_ecrco_crm_january_11_2017.pdf).

- Develop ADR training (for management and staff), a program manual, and other ADR marketing materials to strengthen participant’s knowledge, to increase offers and participation in the ADR process.
- Expand technical assistance visits of Regional and Program Offices, which were two in 2020 and four in 2021, to eight in 2022.

### **Affirmative Employment, Analysis, and Accountability (AEAA)**

In FY 2022, AEAA will continue to focus on identifying and eliminating barriers to employment and advancement at the Agency. This will include implementing new methodologies for workforce analysis and engagement with management, employees, and the Special Emphasis Programs (SEPs). In FY 2022, AEAA expects to engage in the following activities:

- Evaluate the effectiveness of measures implemented from the Increased Use of the Schedule A Hiring Authority barrier analysis.
- Continue the Upward Mobility of Hispanics from GS-13 to the SES barrier analysis.
- Begin additional barrier analysis based on areas identified for priority in FY 2022.
- Continue to address the EPA MD-715<sup>258</sup> priority regarding collecting applicant flow data on Career Development Opportunities.
- Evaluate the significant underrepresentation of demographics groups from the FY 2020 MD-715 report, which were Hispanic men, Hispanic women, Black men, and persons with disabilities.
- Monitor and assist the Administrator’s Office, and Regional and Program offices with implementation of EEO Actions Plans completed in March 2021.
- Enhance the effectiveness of the Agency’s SEPs to further develop their ability to contribute meaningfully to OCR’s programmatic work (EPA filled 95 percent of its SEP Management) positions in FY 2021.
- Implement enhanced analysis methodologies and tools for the development of the MD-715 to ensure more efficient and accurate analysis of data (to include trigger and barrier analysis).
- Conduct assistance visits for a total of eight regional and program offices.
- Provide effective training and tools for managers to carry out their responsibilities under MD-715 and the Diversity and Inclusion Strategic Plan.

### **Reasonable Accommodations (RA) Program**

In FY 2022, the RA Program will work to enhance the effectiveness of services through training, policy development, and improving the support functions of the Local Reasonable Accommodation Coordinators (LORACs). In FY 2022, RA expects to engage in the following activities:

- Evaluate the procedures for providing Personal Assistant Services (PAS) to determine their effectiveness; and, as necessary revise procedures.

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<sup>258</sup> For additional information regarding Management Directive 715, please see: <https://www.epa.gov/ocr/fy-2020-management-directive-715-md-715-report-submitted-epa-equal-employment-opportunity>.

- Coordinate the Agency’s efforts to improve accessibility for persons with disabilities through engagement with senior leadership and subject matters experts.
- Deliver more advanced RA training for employees and management, including incorporating aspects of PAS.
- Complete deployment of the Reasonable Accommodations Management System (RAMS) moving to an electronic processing of all RA requests (includes LORAC utilization of RAMS).
- Conduct assistance visits for a total of eight EPA regional and program offices.

### **External Civil Rights Compliance Office, including Title VI**

In FY 2022, EPA will work to overhaul and refocus the office to bring justice to frontline communities that experience the worst impacts of environmental pollution. ECRCO is committed to strengthening its program and vigorously enforcing compliance with federal civil rights laws by recipients of EPA financial assistance through complaint investigations and affirmative compliance reviews, while providing technical assistance to recipients, engaging with communities, developing strategic policy guidance, and prioritizing ECRCO’s workforce planning and training. ECRCO will issue investigative guidance to clarify and strengthen legal standards for addressing disparate impact and disparate treatment claims, including those related to permitting and cumulative impacts. In addition, ECRCO and EJ Programs are engaging in strategic action planning designed to achieve lasting and positive change in response to community priorities and concerns, including EJ concerns that have been raised through civil rights complaints and vice versa. In FY 2022, ECRCO is dedicated to deepening the alignment and collaboration between it and EPA’s EJ Program, recognizing the need to go beyond the general procedural level relationship that was discussed in the EJ 2020 Action Agenda.

FY 2022 will see ECRCO continue to track internal performance measures to ensure ECRCO timely resolution of discrimination complaints and affirmative compliance reviews, and that Informal Resolution Agreements are fully implemented within the agreed-upon timeframes. Also, in FY 2022, the Program will implement and refine the Case Resolution Manual that was reissued in FY 2021.

In addition, in FY 2022, ECRCO is building upon the Foundational Nondiscrimination Program Guidance for Recipients issued at the end of FY 2021, by releasing a public facing training video, and a revised, more robust review process for the pre-award Form 4700-4. In FY 2022 ECRCO is completing the work started in FY 2021 to provide technical assistance to States in Regions 5 and 7 to strengthen their nondiscrimination programs and provide additional support to states in Region 1 to do the same. In FY 2022 ECRCO is implementing the process for prioritizing compliance reviews through a yearly Affirmative Compliance Review Docket planning process launched at the end of FY 2021. Specifically, the Program will:

- Implement the FY 2022 Affirmative Compliance Review Docket Plan developed in FY 2021 and launch additional affirmative compliance reviews in pollution-burdened and underserved communities;
- Develop an Affirmative Compliance Review Docket Plan for FY 2023;

- Finalize and issue the guidance, started in FY 2021, to clarify expectations with regard to civil rights investigative and legal standards, including permitting and cumulative impacts;
- Begin to develop guidance for recipients regarding their utilization of civil rights compliance data for purposes of decision making in recipient programs and activities.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$772.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,969.0 / +17.5 FTE) This program change is an increase for EPA's External Civil Rights Compliance Office to overhaul and refocus the office to bring justice to frontline communities that experience the worst impacts of environmental pollution. This investment includes \$3,113.0 thousand for payroll.

**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; and Genetic Information Nondiscrimination Act (GINA).

**Integrated Environmental Strategies**

Program Area: Legal / Science / Regulatory / Economic Review

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$11,398.1</i></b>	<b><i>\$9,475.0</i></b>	<b><i>\$17,719.0</i></b>	<b><i>\$8,244.0</i></b>
Total Budget Authority	\$11,398.1	\$9,475.0	\$17,719.0	\$8,244.0
Total Workyears	45.4	48.5	58.5	10.0

**Program Project Description:**

The Integrated Environmental Strategies (IES) Program advances the Agency’s mission of protecting human health and the environment while promoting economic growth from the national level to the community level and advancing environmental justice (EJ). The IES Program provides tools and resources to transform EPA into a more effective organization. Nationally, IES is focused on: 1) streamlining and oversight of environmental permitting; 2) working with industrial sectors to identify and develop sensible approaches to better protect the environment and public health; 3) collaborating with federal, state, municipal partners, communities, businesses, and other stakeholders to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training; and (4) partnering with other federal agencies, states, tribes, local governments, and businesses to increase the resilience of the Nation to the impacts of climate change.

**FY 2022 Activities and Performance Plan:**

This program demonstrates new approaches to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. In FY 2022, the Program will focus on permitting strategies, sector strategies, climate adaptation, and community-driven environmental protection.

In FY 2022, EPA requests an additional \$7.3 million and 10.0 FTE for the Integrated Environmental Strategies (IES) Program. This investment includes:

- \$1 million and 2.0 FTE for enhanced efficiencies, oversight, and coordination for anticipated major infrastructure projects through our statutory role conducting NEPA reviews.
- \$500 thousand and 2.0 FTE for an augmented and enriched platform for the Agency to collaborate with industry to develop innovative approaches and collaborations to protect the environment and public health through the Sectors program.
- \$1.5 million and 2.0 FTE for the expanded deployment of tools and technical assistance to strengthen EPA’s efforts in economically distressed communities and communities impacted by the energy economy transition away from fossil fuels, and while delivering training, tools, technical support, data, and information the Agency’s partners need to adapt and increase resilience to climate change. This investment also will support



initiatives for community-based organizations, indigenous organizations, states, tribes, local governments, and territorial governments.

- \$2 million and 4.0 FTE for the integration of climate adaptation into EPA's programs, regulations, and policies to ensure they are effective in the face of changing climate. This also will support training of management and staff on climate literacy and their ability to mainstream adaptation planning into decision-making processes.

### *Permitting Strategies*

One way that EPA implements its statutory authority is through various permitting programs. The Agency will continue to focus on working across EPA program offices and with state and tribal co-regulators to streamline EPA's permitting processes to accelerate permitting-related decisions to reduce the backlog of new permit applications. In FY 2022, the Agency will focus on supporting permit streamlining and coordination on major infrastructure projects including those for carbon capture/utilization/sequestration and for renewable energy projects. EPA will analyze the issues impeding progress and identify opportunities to address permitting delays and backlogs. EPA will continue to address cross-cutting permitting and policy issues (e.g., Endangered Species Act (ESA), National Historic Preservation Act (NHPA) coordination, permit automation, EJ, and climate adaptation), and in partnership with other federal agencies, state and tribal permitting offices, continue to streamline and gain efficiencies in the review of all permits.

The Program will continue to facilitate and support the sharing and implementation of permitting best practices and approaches of environmental co-regulators to achieve efficient and effective permitting. In support of Executive Order 14008 *Tackling the Climate Crisis at Home and Abroad*,<sup>259</sup> the Program will support and partner with EPA's permitting programs to integrate EJ and climate change analysis into permit development by establishing policy and guidance for consistency and building permit writers' proficiencies in EJ and climate resilience/adaptation/mitigation. This will be achieved through developing an EJ and climate change analysis framework with permitting programs and EJ coordinators; establishing a Community of Practice for each program to share and learn from experiences; developing and delivering a training/workshop series providing a primer on the basics of EJ and climate resilience/adaptation/mitigation for permit writers, and tools to facilitate quantitative EJ and climate analyses in permitting; best practices on conducting enhanced outreach to include discussion of legal authorities; identifying approaches to incorporate data into decision-making and permit conditions; and engaging and supporting states to integrate EJ and climate change analysis into state-developed permits.

In FY 2022, EPA will continue to coordinate with lead agencies on Title 41 of the Fixing America's Surface Transportation Act (FAST-41) and One Federal Decision infrastructure project permit streamlining, and work with the Council on Environmental Quality on additional interagency coordination. In so doing, EPA will work to enhance efficiencies, oversight, and coordination among appropriate permitting authorities. These efforts will help facilitate permits for anticipated major infrastructure projects and will ensure integration of EJ and climate change into federal permits and decision-making.

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<sup>259</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

### *Smart Sectors*

EPA's Smart Sectors Program (SSP) provides a platform for the Agency to collaborate with industry to develop innovative approaches to protect the environment and public health. SSP serves as a hub for understanding and addressing sector-specific environmental challenges/opportunities, facilitating dialogue with industry stakeholders at the national and regional levels, and managing a network of SSPs in all 10 EPA regions. The Program will continue serving a liaison function to connect, convene and facilitate discussions between agency experts and sector representatives to solve discrete policy, guidance, and implementation issues unique to each sector.

In FY 2022, SSP will focus activities in three areas: broad multi-stakeholder engagement, cross-agency coordination, and policy and program initiatives as they relate to industry sectors. Multi-stakeholder engagements will provide a platform for working with industry sectors and leading companies, as well as other stakeholders on key issues such as climate change and EJ. Other stakeholders that SSP will work with include non-governmental organizations, organized labor, the academic community, state/local governments, and communities with EJ concerns, as appropriate. The Program will coordinate and lead cross-agency activities and projects to address climate change, infrastructure, and other Administrator priorities, as they relate to industry sectors. Finally, SSP will develop and implement policy and program initiatives that draw on its understanding of industry sectors to advance the Agency's regulatory and non-regulatory activities.

### *Community-Driven Environmental Protection*

The IES Program delivers technical assistance, training, and tools to economically distressed communities and coordinates the Agency's work with communities to increase efficiency, effectiveness, and accountability. In FY 2020, the Program delivered direct technical assistance to more than 40 communities. In FY 2021, the Program is developing new technical assistance approaches specifically focused on helping communities disproportionately impacted by the COVID related economic downturn by attracting private investment and supporting communities' efforts to rebuild in a way that also improves environmental and human health outcomes. In FY 2022, EPA will deploy the tools, expertise, and technical assistance piloted and deployed in FY 2021. This investment will continue to strengthen EPA's efforts in economically distressed communities and communities impacted by the energy economy transition away from fossil fuels to leverage public and private sector investments to support improved economic development and environmental outcomes. In FY 2022, additional FTE will serve EPA's regional offices to advance community driven outcomes through technical assistance for revitalization projects in economically distressed communities by: 1) assessing actions EPA can take to prioritize federal investment in these areas; 2) working to minimize regulatory and administrative burdens that discourage investment; 3) helping local applicants identify and apply for EPA and other federal resources; 4) coordinating EPA's regional efforts; and 5) measuring results. The additional FY 2022 resources will allow EPA to increase its capacity to hold community workshops and trainings to assist states in adopting policies and programs that support community revitalization, with an emphasis on strategies that also reduce greenhouse gas (GHG) emissions and make places more resilient and more equitable. EPA efforts will emphasize support of economically distressed

communities, working directly with up to 70 communities to help them leverage a range of public and private sector resources to support revitalization.

In FY 2022, the Program will continue to lead, along with the Office of Environmental Justice, the application of community-driven solutions to local environmental challenges, focusing on the Administration's priorities, such as leveraging private investment and aligning federal investments to maximize benefits to vulnerable and underserved communities. Technical assistance and training are the cornerstone of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. In FY 2022, EPA will continue to prioritize technical assistance and training, with the objective of helping tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, and using public and private sector investments and other resources more efficiently. Where appropriate, EPA will partner with other agencies to help achieve locally led, community-driven approaches to protecting air, land, and water, while at the same time supporting economic revitalization.

In FY 2022, the Program will continue analyses on emerging trends, innovative practices, and tools that support clean air, land, and water outcomes. EPA will continue to develop tools to help interested communities incorporate innovative approaches to infrastructure and land development policies. This assistance helps deliver on multiple economic, community, and human health goals embedded in EPA's core mission, including managing stormwater, reducing combined sewer overflows, improving local air and water quality, cleaning up and reusing previously developed sites, and supporting revitalization and redevelopment in economically distressed communities.

### *Climate Adaptation Program*

EPA is committed to identifying and responding to the challenges that a changing climate pose to human health and the environment. The goal of the Climate Adaptation Program is to ensure the Agency continues to fulfill its mission of protecting human health and the environment even as the climate changes.

In FY 2022, the Program will focus on integrating climate adaptation into EPA's programs and regions, policies, rules, and operations to ensure they are effective even as the climate changes, while the Agency also works to reduce GHG emissions. Management and staff will be trained to enhance climate literacy and their ability to mainstream adaptation planning into decision-making processes. Decision-support tools and technical assistance will be developed and provided to enable EPA staff to integrate climate adaptation planning into programs and to identify strategies that will yield co-benefits in the form of GHG reductions.

The Program also will focus on building and strengthening the adaptive capacity of states, Tribes, communities, and businesses to increase their resilience to the impacts of climate change, with a strong focus on advancing EJ. The Agency's partners share responsibility for protecting human health and the environment, and partnerships with EPA are at the heart of the nation's environmental-protection system. In FY 2022, the Program will produce and deliver training, tools, technical support, data, and information the Agency's partners need to adapt and increase resilience to climate change. Financial incentives will be provided through Agency grant programs

to support climate-resilient investments in communities across the nation. The Program will place special emphasis on, and work in partnership with, overburdened and vulnerable populations. Certain parts of the population, such as communities of color, low-income communities, children, the elderly, Tribes and indigenous people, and small rural communities can be especially vulnerable to the impacts of climate change. The Program will engage the most overburdened and vulnerable communities to improve their capacity to prepare for, minimize, and recover from climate change impacts. The long-term goal is to empower all 40,000 communities across the nation and all 574 Tribes to adapt to the risks of climate change in ways that are critical to attaining the Agency’s mission.

**Performance Measure Targets:**

<b>(PM PE2) Number of new permit applications in backlog.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	24	

<b>(PM PE3) Number of existing permit applications in backlog.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	256	

EPA is currently evaluating its suite of measures and indicators related to environmental justice and climate change, including available data and programs where improved data sets are needed to develop useful performance measures for the Environmental Justice and Climate Change Programs. Measures are under development in this Program to address environmental justice and climate change.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$933.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$7,311.0 / +10.0 FTE) This program change increases support for core program work to advance climate adaptation, community revitalization, stakeholder collaborations, and streamlining and oversight of environmental permitting. This investment includes \$1,758.0 in payroll.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$49,878.3</i></b>	<b><i>\$49,595.0</i></b>	<b><i>\$71,895.0</i></b>	<b><i>\$22,300.0</i></b>
Hazardous Substance Superfund	\$628.3	\$443.0	\$450.0	\$7.0
Total Budget Authority	\$50,506.6	\$50,038.0	\$72,345.0	\$22,307.0
Total Workyears	250.4	263.9	301.5	37.6

Total workyears in FY 2022 include 8.8 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

**Program Project Description:**

The Legal Advice: Environmental Program provides legal representational services, legal counseling, and legal support for all the Agency’s environmental activities. The legal support provided by this program is essential to the Agency’s core mission. The personnel assigned to this program represent essential expertise in 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.

The Program provides legal 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 rule and guidance development under EPA’s environmental authorities. The Program also 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, the 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, the Program in coordination with the Department of Justice, defends it.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA is requesting an increase of an additional 37.6 FTE and \$22.3 million. These additional resources are essential to assist the Agency’s environmental programs in tackling the climate crisis, advancing environmental justice, and in protecting human health and the environment. These funds are critically needed to address a significant constriction of funds over the last 5 years. During that time EPA’s Office of General Counsel’s (OGC) budget has remained flat, while the caseload funded by this program has increased more than 150 percent. The Ethics program within OGC also has significantly expanded as recommended by the Office of Government Ethics. In addition, this investment will allow the Program to address vital new Administration priorities on pending regulatory changes, climate, and environmental justice. The Program provides legal representation in more than 725 defensive judicial cases each year. It is projected that the number of cases in FY 2022 will exceed this number. The Program will continue to provide legal representation in judicial and administrative litigation for core agency environmental programs and for agency priorities. The Program also will provide counseling

outside of the litigation context in the highest priority issues arising under all the environmental statutes administered by EPA.

In FY 2022, 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 (RCRA), Leaking Underground Storage Tanks (LUST), Clean Air Act (CAA), Clean Water Act (CWA), 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, including clean air, water, and land, and safe chemicals and pesticides.

Legal counseling resources also continue to be in high demand to support the Agency's response to states seeking assistance developing or implementing environmental programs, industrial facilities seeking permits requiring them to undertake new economic activity, and citizens seeking actions to protect local environmental quality, among other things. The Program will prioritize resources after supporting judicial and administrative litigation to counsel Agency clients on these matters.

The following examples of recent accomplishments and work being completed illustrate this program's role in implementing the Agency's core mission:

- EPA's Water Law Office has played a critical role in advising Agency decisionmakers during the Agency's reconsideration of the 2020 Clean Water Act "Navigable Waters Protection Rule" or "NWPR," a rule the White House expressly called out in its list of regulations to be reviewed under Executive Order 13990. The NWPR redefined the foundational CWA term "waters of the United States" and substantially altered the geographic scope of federal jurisdiction under the Clean Water Act. Our attorneys are not only advising on the legal issues associated with defining "waters of the U.S.," a complex area of the law involving decades of agency interpretation and judicial decisions, but also have worked successfully with the Department of Justice to seek and obtain stays where necessary in the 21 active district court cases they are defending across the country challenging the Agency's actions in defining "waters of the U.S."
- EPA's Pesticides and Toxic Substances Law Office (PTSLO) is providing the legal advice and support critical to the Agency's Office of Chemical Safety and Pollution Prevention (OCSPP) review of actions taken on the initial TSCA risk evaluations, and advising on the implementation of any changes to EPA programmatic approaches associated with risk evaluation of existing hazardous substances under TSCA. Significantly, these actions are governed by statutory provisions which require an increased number of risk evaluations to be conducted and challenging statutory deadlines under TSCA. Beginning this year, PTSLO also will be advising on the initiation of risk management rulemaking required by TSCA following the determination of unreasonable risk of a chemical substance during a risk evaluation conducted under TSCA. Finally, a number of previous actions taken by EPA implementing the new requirements under the amendments to TSCA are now in litigation and place tremendous demands on PTSLO staff as the subject matter leads working with the Department of Justice staff in the defense of EPA in these matters. PTSLO also provides critical legal advice in support of OCSPP's actions taken or

mandated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Most notably for FY 2020 and continuing into the present, PTSLO counsels OCSPP on numerous antimicrobial disinfectant issues that have arisen in response to COVID-19 emergency conditions. Under incredible pressure and in short timeframes, PTSLO attorneys are prominent players in support of OCSPP's efforts to both ensure all Americans have ready access to effective disinfection products to use against the virus and to provide numerous flexibilities to industry and other interested stakeholders in the face of the unique challenges they encounter as a result of the pandemic.

- EPA's Air and Radiation Law Office (ARLO) is providing critical legal assistance on numerous top Administration priorities. Executive Order 13990 specifically directs EPA to revise and address as appropriate actions related to methane emissions from the oil and gas sector, the regulation of greenhouse gases from power plants under section 111 and emissions standards for greenhouse gases from light duty vehicles. ARLO also provided essential legal support for the Agency's recent proposed rule to implement the American Innovation and Manufacturing Act. This Act was passed late last year and requires a phasedown of Hydrofluorocarbons (HFCs), an extremely potent greenhouse gas. In addition to this work on climate change, ARLO is providing counsel on many other Agency priorities, including review of the ozone and particulate matter ambient air quality standards, the regulation of power plants under section 112 and review of the Agency's benefit-cost rule. These are significant undertakings that require considerable resources to develop the necessary supporting legal analysis. As a result, ARLO has seen an increase in its workload.
- EPA's Solid Waste and Emergency Response Law Office (SWERLO) will be providing key legal support to the EPA Council on PFAS, recently created by Administrator Regan and charged with building on the Agency's ongoing work to better understand and ultimately reduce the potential risks caused by PFAS. Part of the Council's work will include a review of all ongoing actions (with an eye towards proposing any necessary modifications), and identification of new strategies and priorities. As the Council develops any recommendations, SWERLO will advise on any strategies to address PFAS through CERCLA or RCRA, informed by an aim of significantly advancing environmental justice for communities across the country impacted by PFAS.
- EPA's Cross-Cutting Issues Law Office (CCIO) is providing critical legal advice in the Agency's response to the President's Executive Orders on Environmental Justice. It is supporting the creation of the White House Environmental Advisory Council, as well as the White House Environmental Justice Interagency Council, called for in E.O. 14008, and has been counseling on the inclusion of Environmental Justice across EPA programs, including in climate mitigation issues and climate change adaptation policy.

### **Performance Measure Targets<sup>260</sup>:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

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<sup>260</sup> The following long-term performance goal is deleted: By September 30, 2022, meet 100% of legal deadlines imposed on EPA.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$10,493.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$11,807.0 / +37.6 FTE) This program change addresses a need for increased defensive litigation work as well as the large increase in pesticides and toxics work and the need to address emerging issues like PFAS. This investment provides additional funding for essential core workforce support costs and includes approximately \$8.6 million in payroll. These additional resources also will assist EPA in tackling the climate crisis and securing environmental justice.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$14,475.0</i></b>	<b><i>\$15,865.0</i></b>	<b><i>\$18,315.0</i></b>	<b><i>\$2,450.0</i></b>
Total Budget Authority	\$14,475.0	\$15,865.0	\$18,315.0	\$2,450.0
Total Workyears	74.6	89.2	89.2	0.0

Total workyears in FY 2022 include 5.6 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. The Program provides legal counsel and support on a wide variety of issues and plays an important role in meeting and addressing legal support for work under the Civil Rights Statutes, employment law, and Freedom of Information Act (FOIA) requirements and provides critical counseling on a range of Information Law, Employment and Labor Law, Intellectual Property Law, and National Security Law matters. This program supports EPA's National FOIA Office. With enhanced FOIA implementation, community consultations and other public participation opportunities, the beneficiaries of environmental protection – the American people including environmental justice communities – will be able to more meaningfully engage through their communities, local governments, and state and tribal governments.

For example, if an EPA program office needs guidance on how to respond to a FOIA request, whether it may spend money on a certain activity, or what to do when a tort claim is filed with the Agency, this program provides answers, options, and legal advice. Additionally, the Program provides comprehensive advice on civil rights issues including equal protection. The Program provides counsel and advice for settlement on Equal Employment Opportunity mediations and counsels on a range of sensitive and complex national security law matters. The Program also supports EPA in maintaining high professional standards and in complying with all laws and policies that govern the Agency’s operations.

**FY 2022 Activities and Performance Plan:**

In FY 2022, 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.

This program increase is critical to maintain basic legal services for EPA. The Legal Advice Support Program has had level funding in this area for the last 5 years and has seen its caseload in this area increase by a factor of five. Defending these lawsuits on matters ranging from FOIA to torts to contracts to employment law is vital to ensure the Agency continues to be responsive to

the public. The Agency's focus on responding to our significant FOIA workload and increasing our responsiveness to requesters has correspondingly increased the work of the FOIA attorneys. Our Federal Tort Claim Act portfolio also has increased with incredibly complex, billion-dollar cases such as Flint and Gold King Mine, which require significant resources. Further, the Civil Rights lawyers have a critical role to play in "Affirmatively advancing equity, civil rights, racial justice, and equal opportunity", pursuant to Executive Order 13985 (January 21, 2021).<sup>261</sup> EPA's External Civil Rights Compliance Office is committed to vigorously enforcing compliance with civil rights laws through complaint investigations and affirmative compliance reviews, as well as through technical assistance and engaging with communities. The civil rights attorneys funded in this program are a vital part of that effort, ensuring that enforcement complies with civil rights laws. At the same time the Program is working closely with our Civil Rights Program to ensure the legality of our efforts to advance equity across EPA and have a robust and engaged Equal Employment Opportunity program.

The following are examples of FY 2020 accomplishments:

- Coordinated with DOJ and provided legal counsel on appropriations and assistance law leading to a settlement agreement resolving the State of Utah's \$1.3 billion claim for damages in connection with the Gold King Mine release in exchange for \$3 million in grants and about \$200 thousand in mine assessment work. EPA continues to work with DOJ on this enormous case with other plaintiffs.
- Provided extensive legal support to the Agency related to managing the impact of COVID-19. The Program assisted in the development of guidance to agency programs in providing administrative relief to financial assistance recipients impacted by COVID-19; assisted the Agency in a process to launch virtual public hearings and meetings in compliance with its obligation to make information accessible to individuals with limited English proficiency and individuals with disabilities; advised on personal liability, supplemental appropriations, paying contractor idle labor under the CARES Act, and ideas for building economic relief into existing programs (such as debt suspension); and counseled on myriad legal issues regarding the impact of COVID-19 on agency procurements. The Program also provided critical employment law advice and assistance in navigating many novel issues associated with the Agency's COVID-19 response.
- Reformed the Agency's Employee Salary Overpayment Waiver Request Process: worked collaboratively with OMS and OCFO to educate and train offices on standards and requirements for granting salary overpayment waivers arising from agency error. This effort, triggered in part by an OIG investigation, resulted in significant updates to streamline agency procedures and marked communication improvements that have translated into clear and measurable efficiency gains.
- Significantly furthered the Agency's duties under the Toxic Substances Control Act by completing almost 1,000 Confidential Business Information (CBI) determinations on claims submitted pursuant to the Toxic Substances Control Act so far in FY 2021.

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<sup>261</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

- Virtually eliminated the FOIA appeals backlog, with only one appeal remaining at the end of the fiscal year, processed 240 appeals; and reduced median processing time from 107 to 18 days.

**Performance Measure Targets:**

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	75.00	100.00

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2,025.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$425.0) This program change is an increase to support Legal Advice: Support Program projects, with a priority for work related to defending the increase in litigation, addressing civil rights issues including External Civil Rights and equal protection, advising on FOIA requests, and ensuring the agencies work in contracts, grants, and appropriations is handled in accordance with the 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

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$1,060.5</i></b>	<b><i>\$638.0</i></b>	<b><i>\$1,174.0</i></b>	<b><i>\$536.0</i></b>
Total Budget Authority	\$1,060.5	\$638.0	\$1,174.0	\$536.0
Total Workyears	1.9	1.7	1.7	0.0

### Program Project Description:

The Regional Science and Technology (RS&T) Program provides direct support to multiple programs for the Agency including 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 supports the Agency’s goals by performing laboratory analysis and sample collection to provide credible scientific data on environmental pollutants and conditions to Agency decision makers. The RS&T Program also assists state environmental agencies by providing specialized technical assistance and helping build Tribal capacity for environmental monitoring and assessment.

The RS&T Program provides essential expertise and scientific data for a wide array of environmental media, including ambient air; surface, drinking and ground water; soil and sediment; solid and hazardous waste; and biological tissue. The Program continuously seeks to realize efficiencies in analysis and data collection. A strategic strength of the Regional Laboratory network is in its ability to respond to events requiring surge capacity. In the event of an emergency or large-scale project, Regional Laboratories work together to leverage the strengths and capacities of individual lab facilities.

The RS&T Program provides expertise in areas such as environmental biology, microbiology, chemistry, field sampling, enforcement, and criminal investigations. The Program’s applied science expertise is often used to develop, modify, and improve analytical methods for specialized science, such as emerging chemicals of concern, and to provide scientific consultation to Agency, state, and tribal partners. The Program supports special or non-routine analytical requests that EPA cannot readily obtain from other sources thereby supporting the Agency’s need to meet short-term timeframes. Funding for scientific equipment is essential to the Program’s operations. New and improved technology strengthens science-based decision-making for regulatory efforts, environmental assessment of contaminants, and development of critical and timely environmental data in response to accidents and natural or man-made disasters. As technology improves, the sensitivity of equipment advances to detect lower levels of contaminants. Newer advanced instrumentation has improved environmental data collection and laboratory analytical capability.

## **FY 2022 Activities and Performance Plan:**

In FY 2022, resources will continue to support regional implementation of the Agency's statutory mandates through laboratory operations for environmental sampling and monitoring. Resources also will provide direct laboratory and monitoring support at the local level and improve timely decision-making in regional program management and implementation. Taking this approach enables the Agency to address environmental issues specific to geographic areas (e.g., energy extraction, mining, wood treating operations, specialty manufacturing), natural disasters (e.g. Winter Storm Uri), or homeland security threats.

Regional laboratories provide increased levels of service and meet the analytical needs of the Agency's programs by coordinating efforts and optimizing network expertise and assistance. In FY 2022, regional laboratories will continue to coordinate within the Regional Laboratory Network (RLN) to provide needed scientific services. The regional laboratories have the capability to analyze a full suite of contaminants using an array of established methods, including regulatory or guidance methods such as the Resource Conservation Recovery Act and Clean Water and Safe Drinking Water Act methods. Laboratories also utilize new and modified methods based on immediate needs or circumstances. For example, some regional laboratories have analytical expertise unique to a regional office and when requested, can quickly modify established methods to address specific or unique needs.

In FY 2022, the RS&T Program also will support the risk identification and assessment associated with pesticides, organic chemicals, and other high-risk chemicals, as well as support the Agency's science priorities. The Agency's mission to protect human health and the environment often requires the availability of scientific data at lower detection levels, which requires specialized equipment. Almost all scientific instrumentation is computer-controlled or interfaced. As computer technology improves, instrument efficiencies and sensitivity also improve – these advances in technology leading to lower detection levels of contaminants are essential. For example, for some compounds, health-based risk levels are decreasing (e.g., hexavalent chromium). When measuring for these compounds, the instrument detection levels need to be as low as technically feasible, requiring laboratories to modify an existing method, modify existing equipment, or purchase newer instrumentation.

Some examples of necessary equipment for both fixed and mobile laboratory functions include sample concentrators; autosamplers; gas and liquid chromatography/mass spectrometry systems; direct mercury analyzers; inductively coupled plasma (metals) analyzers; air toxics sampling equipment; high-resolution equipment; hand-held equipment for screening of high-hazard samples; and various soil and water analyzers.

In FY 2022, resources for the regional laboratories will:

- Enhance agencywide enforcement efforts and enable regional laboratories to perform forensic analysis on a wide variety of samples collected as part of criminal investigations and enforcement actions. These analyses require cutting-edge, high-quality, and defensible laboratory data.

- Support agencywide science priorities by facilitating the abilities of regional laboratories to explore the impacts of emerging contaminants (e.g., pharmaceuticals, PFAS and PFOA, endocrine disrupting chemicals) and support method development and applied science.
- Support agencywide exploration of Next Generation monitoring techniques (e.g., water monitoring remote sensors, remote sensing buoy passive samplers for air monitoring) and technologies to improve environmental data collection and the resultant outcomes. These new techniques will capture real-time results from mobile analytical techniques supporting all programs. The regional laboratories can provide a practical application and perspective, as well as assist with new policies regarding this technology.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$3.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$533.0) This program change increases funding to support the replacement of aging capital equipment by regional laboratories to continue providing analytical support to Program Office priorities. Regional laboratory analyses provide the science-based foundation for short-term decision making across the Agency in support of clean air, water, land, and environmental justice programs.

**Statutory Authorities:**

Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Pollution Prevention Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

**Regulatory/Economic-Management and Analysis**

Program Area: Legal / Science / Regulatory / Economic Review

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$12,643.4</i></b>	<b><i>\$12,421.0</i></b>	<b><i>\$13,463.0</i></b>	<b><i>\$1,042.0</i></b>
Total Budget Authority	\$12,643.4	\$12,421.0	\$13,463.0	\$1,042.0
Total Workyears	60.1	72.5	74.0	1.5

**Program Project Description:**

The Regulatory/Economic, Management, and Analysis Program is responsible for reviewing the Agency’s regulations to ensure that they are developed in accordance with the governing statutes, executive orders, and agency commitments and are based on sound technical, economic, and policy assumptions. Further, the Program ensures consistent and appropriate economic analysis of regulatory actions, conducts analyses of regulatory and non-regulatory approaches, and considers interactions between regulations across different environmental media. The Program provides all technical support to the Interagency Working Group on the Social Cost of Greenhouse Gases (GHGs) to develop final SC-CO<sub>2</sub>, SC-N<sub>2</sub>O and SC-CH<sub>4</sub> values required under Executive Order (EO) 13990.<sup>262</sup> The Program helps to implement the President’s Memorandum on *Modernizing Regulatory Review*<sup>263</sup> and EO 13985 *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*<sup>264</sup> by prioritizing the appropriate analysis and consideration of environmental justice (EJ) concerns in regulatory actions. The Program ensures the Agency’s regulations comply with statutory and EO requirements, including the Congressional Review Act<sup>265</sup>, the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act)<sup>266</sup>, and EOs 12866<sup>267</sup> and 13563<sup>268</sup> regarding the Office of Management and Budget regulatory review. The Program manages the development and deployment of EPA’s economy-wide model for analyzing the economic impacts of environmental regulations. The Program also includes the Agency’s Chief Statistical Official charged with implementing major elements of the *Foundations for Evidence Based Policy Act*.<sup>269</sup>

<sup>262</sup> For more information on EO 13990, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>.

<sup>263</sup> For more information on the Memorandum Modernizing Regulatory Review, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/>.

<sup>264</sup> For more information on EO 13985, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

<sup>265</sup> For more information on the Congressional Review Act, please see: <https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf>.

<sup>266</sup> For more information on the Regulatory Flexibility act, please see: <https://www.govinfo.gov/content/pkg/STATUTE-94/pdf/STATUTE-94-Pg1164.pdf>, and as amended by the Small Business Regulatory Enforcement and Fairness Act, please see: <https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf>.

<sup>267</sup> For more information on EO 12866 *Regulatory Planning and Review*, please see: <https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf>.

<sup>268</sup> For more information on EO 13563 *Improving Regulation and Regulatory Review*, please see: <https://obamawhitehouse.archives.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review>.

<sup>269</sup> For more information, please see: <https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf>.

## **FY 2022 Activities and Performance Plan:**

The Program assists the Administrator and other senior agency leaders in implementing regulatory policy priorities, including those established in EO 13990 (*Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*),<sup>270</sup> EO 13992 (*Revocation of Certain Executive Orders Concerning Federal Regulation*),<sup>271</sup> and EO 14008 (*Tackling the Climate Crisis at Home and Abroad*).<sup>272</sup>

In FY 2022, EPA will continue its efforts to assess and review the costs and benefits to businesses, jobs, communities, government entities, and the broader economy associated with each economically significant regulatory action to maximize the net benefits of policies protecting human health and the environment. EPA will conduct and integrate analysis of EJ concerns in the rulemaking process to address the Administration's priorities. EPA will collect data and build models to assess regulatory proposals and their impacts on costs, benefits, economic performance, and EJ. Planned key program activities in FY 2022 include:

- Represent EPA on, and prepare information and analyses for, the Interagency Working Group on the Social Cost of GHGs, engage the public, stakeholders and experts to provide recommendations for reviewing, and, as appropriate, updating, the social cost of carbon (SC-CO<sub>2</sub>), social cost of nitrous oxide (SC-N<sub>2</sub>O), and social cost of methane (SC-CH<sub>4</sub>) to ensure that these costs are based on the best available economics and science.
- Represent EPA on recommending improvements to modernize the regulatory review process to promote policies that reflect new developments in scientific and economic understanding, fully accounts for regulatory benefits that are difficult or impossible to quantify, and does not have harmful anti-regulatory or deregulatory effects. Develop proposed procedures that take into account the distributional consequences of regulations, including as part of any quantitative or qualitative analysis of the costs and benefits of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden disadvantaged, vulnerable, or marginalized communities.
- Support EPA's Chief Statistical Official, who will provide technical support for projects under EPA's interim learning agenda, evaluation plan, and capacity assessment; design statistically-sound policy analyses and evaluations; assist in the development of the full learning agenda; and promote a culture of evidence-based decision making.
- Develop and offer a series of EJ training sessions for agency rule writers, analysts, and economists who conduct rulemaking analyses, including information on current technical guidance and tools as well as illustrative case studies. Plan and host internal workshops on analytic challenges and opportunities for assessing EJ for rulemakings.

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<sup>270</sup> For more information, please see: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.

<sup>271</sup> For more information on EO 13992, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-revocation-of-certain-executive-orders-concerning-federal-regulation/>.

<sup>272</sup> For more information on EO 14008, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.



- Expand analytic capabilities for conducting EJ analyses for rulemaking through development of flexible analytic tools and novel datasets.
- Develop a targeted update of EPA’s EJ Technical Guidance, with a new section addressing how the EJ analysis can be used to inform policy options to address EJ implications of rulemaking. In addition, add a section on expanded tools and data as well as discussion of newer techniques and approaches to conducting EJ analyses.
- Release an updated version of EPA’s Guidelines for Preparing Economic Analyses, revised to incorporate recommendations from Science Advisory Board’s peer review. The updated guidelines will help ensure that EPA’s economic analyses provide a complete accounting of the economic benefits, costs and impacts of regulatory actions, including distributional consequences. The guidelines also will help ensure that evidence-based economic analysis will be done consistently across EPA programs and in accordance with the best economic practices and methods.
- Deploy a model of the U.S. economy so that EPA routinely assesses how regulations affect the economy, including distributional impacts, costs, and broader macro-economic performance. EPA will update the model consistent with recommendations from EPA’s Science Advisory Board and begin its deployment in regulatory analyses, where appropriate. This model will provide critical evidence-based analyses to inform decision making.
- Conduct training for EPA economists and regulatory analysts on the updated Guidelines for Preparing Economic Analyses, ensuring that EPA analysts have a strong understanding of the Guidelines to improve the consistency, transparency, and quality of EPA’s economic analyses.
- Continue to manage EPA’s response to recently issued EOs, particularly with an eye toward identifying previous regulatory actions that are not consistent with current policies and working to develop new actions that constructively advance current policy positions.
- Review economic analyses prepared by EPA to ensure compliance with statutory and other related requirements. Provide the Administrator and the public with high-quality analyses of the costs, benefits, and impacts on jobs, businesses, and communities of major regulatory proposals to better inform decision-making and ensure transparency about the consequences of regulation.<sup>273</sup>
- Apply the best modeling tools to assess the economic effects of approaches that reduce climate pollution in every sector of the economy, deliver EJ, and spur well-paying union jobs and economic growth, including methods designed to examine how alternative regulatory options affect employment. Continue development of open source data and

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<sup>273</sup> For more information, please see: <https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses>.

economic models, including sector-specific cost models, to support these efforts in a manner that maximizes the transparency of these EPA analyses.

- Continue development of a modeling platform capable of assessing the benefits of national regulations that affect water quality. This effort will provide important evidence-based data and analyses, consistent with economic science best practices, to inform decision making.
- Strengthen available data and methods to estimate the monetized benefits of health outcomes of chemical exposures, water pollution, and air pollution for use in EPA's benefit cost analyses.
- Continue to develop EPA's semiannual unified Regulatory Agenda.
- Manage EPA's internal Action Development Process and expand and upgrade regulatory planning and tracking tools to facilitate timely decisions and coordination across programs.
- Serve as EPA's liaison with the Office of Information and Regulatory Affairs within OMB.
- Serve as EPA's liaison with the Office of the Federal Register by reviewing, editing, and submitting documents for publication so that the public, states, other agencies, and Congress are informed about EPA's regulatory activities in a timely manner.

#### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$414.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$628.0 / +1.5 FTE) This program change supports cross-agency coordination, analysis, and review of regulatory activity across statutory programs. A particular emphasis is to be placed on pending climate regulations. This investment includes \$264.0 thousand in payroll.

#### **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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$3,903.2</b>	<b>\$3,205.0</b>	<b>\$3,475.0</b>	<b>\$270.0</b>
Total Budget Authority	\$3,903.2	\$3,205.0	\$3,475.0	\$270.0
Total Workyears	17.5	18.7	18.7	0.0

**Program Project Description:**

EPA’s Science Advisory Board Staff Office (SABSO) manages two Federal Advisory Committees. Congress established the Agency’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 under the Clean Air Act Amendments of 1977 to provide independent advice to the EPA Administrator on the technical bases for EPA’s National Ambient Air Quality Standards (NAAQS). The SAB and the CASAC, both statutorily mandated chartered Federal Advisory Committees, draw from a balanced range of non-EPA scientists and technical specialists from academia, states, independent research institutions, and industry. The Program provides management and technical support to these advisory committees. The Committees provide EPA’s Administrator independent advice and objective scientific peer review on the technical aspects of environmental issues as well as the science used to establish criteria, standards, regulations, and research planning, as requested.<sup>274</sup>

In FY 2020, the SAB produced nine scientific peer reviews and the CASAC produced two scientific peer reviews. The SAB also completed two consultations at the request of the Administrator. The topics reviewed by the SAB include the All Ages Lead Model, the Computable General Equilibrium (or SAGE Model), COVID-19 research, and the Science Transparency Rule. In FY 2020, the SAB also completed consultations on Human Toxicity Standards and the Lead and Copper Rule. The CASAC completed reviews of the Particulate Matter (PM) Integrated Science Assessment (ISA), the PM Policy Assessment, the Ozone Policy Assessment, and the ISAs of Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and PM.

In FY 2020, the Science Advisory Board Staff Office (SABSO) piloted cross-cutting actions which reduced the time to complete a peer review, increase transparency, and enhance public participation. The focus on efficiency was a program management tool that provided a seamless transition during the COVID-19 pandemic transition and working from home. Since SABSO provides an in-house resource for EPA peer reviews, the Program is able to keep costs low for the Agency as compared to external peer review conducted by groups like the National Academy of

<sup>274</sup> For more information, please see: <http://www.epa.gov/sab/> and <http://www.epa.gov/casac/>.

Sciences (NAS). Furthermore, Agency costs have been significantly lower for virtual meetings when compared to face to face meetings.

**FY 2022 Activities and Performance Plan:**

In FY 2022, the Program will review the CASAC policy assessment and Integrated Science Assessment for PM.<sup>275</sup> The Program will accommodate additional requests as made by EPA's Administrator or program offices.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$125.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$145.0) This program change is an increase to assist in the review of the CASAC policy assessment and Integrated Science Assessment for PM.

**Statutory Authority:**

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); and Clean Air Act (CAA).

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<sup>275</sup> For additional information on PM, please see: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>.

## **Operations and Administration**

**Acquisition Management**

Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$27,433.0</i></b>	<b><i>\$32,247.0</i></b>	<b><i>\$34,121.0</i></b>	<b><i>\$1,874.0</i></b>
Leaking Underground Storage Tanks	\$155.9	\$132.0	\$132.0	\$0.0
Hazardous Substance Superfund	\$24,356.1	\$23,800.0	\$30,519.0	\$6,719.0
Total Budget Authority	\$51,945.0	\$56,179.0	\$64,772.0	\$8,593.0
Total Workyears	266.3	285.7	325.7	40.0

**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.

In response to the COVID-19 pandemic, EPA will continue providing regular guidance and flexibilities to the Agency’s acquisition community and contractors, including increasing the micro-purchase threshold and providing an Emergency Acquisition Toolkit of best practices and templates. EPA also implemented Section 3610 of the Coronavirus Aid, Response, and Economic Security (CARES) Act, which authorized federal agencies to reimburse contractors for paid leave.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an increase of 10 FTE and nearly \$1.9 million to strengthen the Acquisition Management Program in the EPM Appropriation. These resources will assist the Agency to continue its efforts to process and award contract actions in a timely manner and in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP). Timely procurement processing is crucial to efficient operations. In FY 2020, EPA completed 91 percent of all contract actions within procurement action lead times (PALT), exceeding its target of 90 percent. The Agency is on track to meet the FY 2021 target of 95 percent. In FY 2022, EPA will continue exploring opportunities for improving PALT.

This investment also supports the implementation of supply chain risk requirements of Section 889 of the 2019 National Defense Authorization Act and the “Made in America Laws” referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's*

*Workers*<sup>276</sup> while furthering Category Management implementation requirements. In FY 2022, EPA will focus on establishing a comprehensive architecture for the Agency’s supply chain as well as mechanisms to identify and mitigate risk within the supply chain. The Agency will support efforts to ensure there is diversity, and thereby strength, of the supply chain by monitoring and ensuring small business utilization and “Buy American” implementation from a supply chain management and account management lens.

EPA also will work to ensure that its procurement activity aligns with Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.<sup>277</sup> In FY 2022, EPA will aim to eliminate any barriers to full and equal participation in agency procurement and contracting opportunities and will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services.

EPA is fully committed to leveraging category management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2022, EPA will continue to leverage data provided by the General Service Administration, and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of Federal Strategic Sourcing vehicles, and BIC acquisition solutions.

- The OMB Category Management focuses on total acquisition spend transitioned from contract vehicles that are unaligned with category management principles to the SUM Program. EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions* to mandate the use of enterprise-wide contract vehicles, in addition to BIC contract solutions and other OMB-designated contract solutions. Based on this policy change, EPA anticipates that 58 percent of total addressable spend will have been transitioned into the SUM Program by the end of FY 2022, relative to the FY 2020 result to date of 43.2 percent.
- In FY 2022, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts as part of the Agency’s effort to utilize more mature, market-proven acquisition vehicles.<sup>278</sup> Through SUM Tier 2 and 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. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool,

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<sup>276</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/>.

<sup>277</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

<sup>278</sup> 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*.

which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

- In FY 2022, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP is transforming the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In FY 2020, EPA realized \$5.9 million cost avoidance by using data analysis tools to monitor specific, measurable data related to print services, cellular services, shipping, Microsoft software, voice services, office supplies, lab supplies, PCs, and furniture. Since the beginning of the Strategic Sourcing Program in FY 2013 through the second quarter of FY 2021, EPA has achieved cost avoidance of \$26.2 million. In FY 2022, EPA anticipates approximately \$4.3 million in additional savings.

In FY 2022, EPA will continue to evaluate options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system, in line with government-wide mandates to increase the use of shared services.<sup>279,280</sup> The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2022, EPA will implement a new Government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration (GSA) and OMB requirements. EPA also will continue implementing the Financial Information Technology Acquisition Reform Act (FITARA) by competing contracts with multiple vendors or confining the scope of the contract to a limited task, thereby avoiding vendor lock-in, and developing acquisition vehicles that support the Agency in FITARA compliance and implementation.

**Performance Measure Targets:**

<b>(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	95	97

<sup>279</sup> OMB-17-22 “Comprehensive Plan for Reforming the Federal Government, for more information, please visit: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-22.pdf>.

<sup>280</sup> OMB-19-16 “Centralized Mission Support Capabilities for the Federal Government, for more information, please refer to: <https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf>.



Work under this program supports performance results in the Central Planning, Budgeting and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$361.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,513.0 / +10.0 FTE) This net program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner. It also will support the Agency's efforts to "Buy American". This investment includes \$1,670.0 thousand in payroll.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$70,751.8</i></b>	<b><i>\$76,718.0</i></b>	<b><i>\$81,563.0</i></b>	<b><i>\$4,845.0</i></b>
Leaking Underground Storage Tanks	\$354.8	\$416.0	\$434.0	\$18.0
Hazardous Waste Electronic Manifest System Fund	\$114.5	\$0.0	\$0.0	\$0.0
Hazardous Substance Superfund	\$24,772.5	\$26,561.0	\$27,720.0	\$1,159.0
Total Budget Authority	\$95,993.6	\$103,695.0	\$109,717.0	\$6,022.0
Total Workyears	422.0	462.0	465.0	3.0

Total workyears in FY 2022 include 2.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.

Total workyears in FY 2022 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

**Program Project Description:**

Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, risk assessments and reporting, and financial systems to ensure effective stewardship of resources. This includes managing and supporting the Agency’s financial management systems. Functions include financial payment and support services for EPA; general and specialized fiscal and accounting services for many of EPA’s programs; strategic planning and accountability for environmental, fiscal, and managerial results; executing an Enterprise Risk Management program to support effective and efficient mission delivery and decision-making; providing policy, systems, training, reports, and oversight essential for EPA’s financial operations; managing the agencywide Working Capital Fund (WCF); and managing the Agency's annual budget process. This program supports agency activities to meet requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010;<sup>281</sup> the Digital Accountability and Transparency (DATA) Act of 2014;<sup>282</sup> the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;<sup>283</sup> the Federal Management Financial Integrity Act (FMFIA);<sup>284</sup> the Inspector General Act of 1978, as Amended;<sup>285</sup> and the Foundations for Evidence-Based Policymaking Act of 2018.<sup>286</sup>

**FY 2022 Activities and Performance 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,

<sup>281</sup> For more information, please see: <https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf>.

<sup>282</sup> For more information, please see: <https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf>.

<sup>283</sup> FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), <https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf>.

<sup>284</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf>.

<sup>285</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg1101.pdf>.

<sup>286</sup> For more information, please see: <https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf>.

budgeting, performance measurement, and financial management activities. EPA will ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System which includes a Performance Module, and related financial reporting systems. The Agency is modernizing its financial systems to gain greater efficiencies through leveraging the accounting system and eliminating legacy systems, as well as providing accessible tools to manage resources and track performance. For example, the Agency has implemented the credit management module in the financial management system to improve and standardize Water Infrastructure Finance and Innovation Act accounting and is working to improve accounting for e-Manifest through closer integration. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

EPA will standardize and streamline internal business processes, reduce the number of administrative systems, and adopt federal shared services when supported by business case analysis. For example, EPA has implemented Treasury's Invoice Payment Processing System (IPP) for reviewing invoices and paying commercial vendors. As of April 2021, more than 80 percent of contract invoices are being handled through this service. When fully implemented in FY 2022, the full range of payment types will be processed in the system, greatly reducing manual effort, and allowing the elimination of two legacy administrative systems.

Also, during FY 2022, EPA will focus on implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a government-wide effort to standardize and improve financial management of interagency agreements. The goal of G-Invoicing is to align EPA's business processes to deliver the new, more streamlined approach for the end-to-end delivery of financial transactions for interagency agreements. This will involve implementing a new version of EPA's accounting systems software in FY 2022. Extensive testing and training will be needed.

Over the next several years, other federal shared services that will impact financial transactions are likely to be offered. EPA will further standardize processes to prepare for adoption of a potential new federal contracts writing system and new federal payroll or time and attendance systems. Equally important is the ability to adapt systems to meet increased transparency needs, such as those prescribed in the DATA Act, as well as compliance with government-wide data elements such as the unique entity identifier (UEI). In FY 2020, the Coronavirus Aid, Relief, and Economic Security Act<sup>287</sup> increased DATA Act reporting to monthly, and in FY 2022, submissions will include a monthly certification requirement.

In FY 2022, EPA will continue to advance the goals of the Foundations for Evidence-Based Policymaking Act of 2018, using a distributed model. The Agency's Evaluation Officer in OCFO will collaborate with the Agency's Statistical Official and Chief Data Officer to strengthen EPA's capacity to assess and make strategic investments in data, data quality, evaluation, and other evidence-building activities at an enterprise level, as well as in targeted programs throughout the Agency. Key responsibilities include developing the Agency's learning agenda and evaluation plans that enhance strategic and annual planning. The Evaluation Officer will support agency program evaluations and other evidence-building activities. EPA will systematically identify the

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<sup>287</sup> For more information, please see: <https://www.congress.gov/116/plaws/publ136/PLAW-116publ136.pdf>.

most important evidence the Agency needs to gather and generate to advance its goals and ensure use of high-quality data, evaluation results, and other information to inform EPA's policy and decision-making.

In FY 2022, the Program will continue to focus on core responsibilities in the areas of strategic planning; performance measurement, assessment, and reporting; enterprise risk management; budget preparation; financial reporting; and transaction processing. As the Agency lead in designing and implementing performance measurement and risk management strategies that inform agency decision-making and advance mission results, the Program will focus on driving progress toward the Administrator's priorities by regularly assessing performance results against ambitious targets, monitoring and mitigating risks, and adjusting strategies as needed. This includes convening regular Performance Reviews to assess progress; promoting an increased use of data analytics and evidence-based decision-making practices; working collaboratively with agency programs to assess and analyze performance and risk data; and providing technical assistance on agencywide measures of governance to enhance data quality. EPA also will continue to use the performance data and other evidence to answer fundamental business questions and identify opportunities for service improvements.

During FY 2022, EPA will continue to use Lean and visual management principles, practices, and tools, to promote continuous improvement. Paired with routine monitoring, measurement, and engagement, these practices support EPA employees in identifying and solving problems and sustaining improvement. As of March 2021, EPA has deployed the Lean management system to 11,666 EPA staff and implemented 758 process improvements, well exceeding its target. A process is considered improved when it achieves a 25 percent improvement over the baseline. For example, EPA improved the Superfund Cost Recovery process by decreasing the number of days to complete a cost recovery request from thirty days to five days, an 83 percent improvement.

The Agency expects to achieve 500 additional process improvements in FY 2021 and 540 more in FY 2022. EPA also expects to support interested states and tribes in adopting its Lean management system to improve processes related to authorized or delegated federal programs, such as permits. To date, environmental quality departments in Maryland, Connecticut, New Hampshire, Texas, and Oklahoma have adopted and deployed EPA's Lean management system, and D.C. is in the process of adopting and deploying.

The Program will continue to ensure the Agency accurately implements OMB Circular A-123 guidance, conducts internal control program reviews, and uses the results and recommendations from the Office of Inspector General to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Program will collect key operational statistics for its financial management program to further evaluate its operations and for management decision-making. For example, in FY 2019, EPA observed a trend that agency corrective actions were increasingly being implemented beyond the agreed upon resolution date reaching a peak in FY 2020 of 31 outstanding late corrective actions. Through a process of meeting regularly with offices and establishing timelines to effectively closeout corrective actions, by the middle of FY 2021, EPA was able to cut the number of late corrective actions in half. In addition, EPA is dedicated to reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of

2002,<sup>288</sup> EPA has continually reviewed, sampled, and monitored its payments to protect against erroneous payments and complied with reporting requirements, with very low rates of erroneous payments (below the 1.5 percent threshold for each payment stream), well below government averages.

The Program will continue to support FITARA requirements in accordance with EPA’s Implementation Plan.<sup>289</sup> The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology (IT) needs are properly planned and resourced in accordance with FITARA. In addition, the Program will support work to implement the OMB-mandated framework under Technology Business Management (TBM) to create transparency under IT resource management and facilitate data-driven decision-making and communication between IT and finance. In addition, the Program is in the early stages of planning a modest reorganization to incorporate updated activities and workflows.

**Performance Measure Targets:**

<b>(PM CF1) Number of administrative shared services.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	9	10

<b>(PM CF2) Number of Agency administrative subsystems.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	19	17

<b>(PM OP1) Number of operational processes improved.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	500	540

**FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$4,336.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$509.0 / +3.0 FTE) This program change supports implementation of the Foundations for Evidence-Based Policymaking Act of 2018 in the regional offices and includes associated payroll.

**Statutory Authority:**

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

<sup>288</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/PLAW-107publ300/pdf/PLAW-107publ300.pdf>.

<sup>289</sup> For more information, please see: <http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan>.



**Facilities Infrastructure and Operations**  
Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$285,437.3</i></b>	<b><i>\$285,441.0</i></b>	<b><i>\$297,748.0</i></b>	<b><i>\$12,307.0</i></b>
Science & Technology	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
Building and Facilities	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
Leaking Underground Storage Tanks	\$1,066.0	\$836.0	\$837.0	\$1.0
Inland Oil Spill Programs	\$640.2	\$682.0	\$683.0	\$1.0
Hazardous Substance Superfund	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Total Budget Authority	\$470,906.5	\$450,262.0	\$496,678.0	\$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

**Program Project Description:**

Environmental Programs and Management (EPM) resources in the Facilities Infrastructure and Operations Program fund the Agency’s rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

In response to the COVID-19 pandemic, EPA will continue ensuring the safety of EPA facilities and personnel by following the EPA Workplace Safety Plan in accordance with CDC guidelines. This includes adherence to requirements for mask-wearing, occupancy limits, procuring disinfecting and cleaning supplies, hand sanitizer for use by facility personnel and EPA staff, promoting physical distancing through signage, and procuring safety shields for personnel with increased contact with other people (e.g., security guards, badging office personnel, and administrative staff).

This program also includes the Agency’s Protection Services Detail (PSD) that provides physical protection for the Administrator through security for daily activities and events. The PSD coordinates all personnel and logistical requirements including scheduling, local support, travel arrangements, and the management of special equipment.

## **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465,<sup>290</sup> the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will aim to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.

EPA's long-term consolidation plan for FY 2018 – FY 2022 has the potential to provide a cumulative annual rent avoidance of approximately \$28 million across all appropriations by releasing 850,641 square feet. This will help offset EPA's escalating rent and security costs. In FY 2020, EPA released 116,425 square feet of unused office and warehouse space and is planning to release an additional 26,017 square feet in FY 2021. Planned consolidations and space releases in FY 2022 will allow EPA to release an expected 467,345 square feet of space. For FY 2022, the Agency is requesting \$166.94 million for rent, \$8.67 million for utilities, and \$25.66 million for security in the EPM appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>291</sup> EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space 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 funding to achieve long-term cost avoidance and sustainability goals.

EPA will continue to manage lease agreements with the General Services Administration (GSA) and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. In line with Executive Orders 14008<sup>292</sup> and 13990,<sup>293</sup> EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, LEED Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment will support EPA facilities infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC), which is necessary to meet federal sustainability goals. Additionally, in FY 2022, EPA will direct \$1.4 million to the purchase of electric vehicles, or lease through GSA electric vehicles, and consider electric vehicles in all

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<sup>290</sup> For additional information, please refer to: <https://www.congress.gov/bill/114th-congress/house-bill/4465>, *Federal Assets Sale and Transfer Act of 2016*.

<sup>291</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>292</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>293</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.



future fleet procurements, where economically feasible. This allows EPA to prioritize energy efficiency and climate resilience in the rehabilitation of United States Government fleet vehicles and combat the climate crisis.

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 FY 2022, the Agency will continue to partner with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

**Performance Measure Targets:**

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	26,017	467,345

Work under this program supports performance results in the Central Planning, Budgeting and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,247.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$11,307.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.
- (-\$247.0) This net program change is an increase of \$6.4 million in support of EPA’s growing workforce to ensure an optimal footprint and increase the sustainability and resiliency of EPA facilities. It also reflects an increase of \$1.4 million for agency electric vehicle fleet purchases and leases with GSA’s fleet and, if necessary, related charging infrastructure to support the Administration’s goal of electrifying the federal motor vehicle fleet. These investments are offset by a decrease in resources for moves and space reconfiguration as EPA will have completed funding moves in Philadelphia and Annapolis.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$26,319.8</b>	<b>\$25,430.0</b>	<b>\$28,730.0</b>	<b>\$3,300.0</b>
Hazardous Substance Superfund	\$3,561.3	\$3,210.0	\$3,390.0	\$180.0
Total Budget Authority	\$29,881.1	\$28,640.0	\$32,120.0	\$3,480.0
Total Workyears	135.8	139.5	159.5	20.0

**Program Project Description:**

Environmental Program and Management (EPM) resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs, and suspension and debarment activities. Grants and IAs comprise approximately 60 percent of EPA’s annual appropriations. Resources in this program ensure that EPA’s management of grants and IAs meet the highest fiduciary standards, produce measurable results for environmental programs and agency priorities, and that EPA’s Suspension and Debarment Program effectively protects the government’s business interests from fraud and mismanagement.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an increase of 20 FTE and \$3.3 million to strengthen and expand capacity for the Financial Assistance Grants and IA Management Program in the EPM Appropriation. EPA will work to ensure that its financial assistance activity supports Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.<sup>294</sup> In FY 2022, the Agency will continue to implement activities to achieve efficiencies while enhancing quality and accountability to ensure that opportunities for competitive grants are made publicly available, so all eligible applicants have an opportunity to compete for them. EPA also will explore methods to use the grant competition and grant-making processes to promote the objectives of the Executive Order.

EPA also will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS), which the Agency deployed in FY 2021, in conjunction with the retirement of an outdated legacy grants management system. NGGS has the capability to improve capacity and align with the requirements of the Grant Reporting Efficiency and Agreements Transparency (*GREAT*) Act, applicable Office of Management and Budget (OMB) Quality Service Management Offices (QSMO) standards, and the Federal Integrated Business Framework for grants (e.g., required

<sup>294</sup> For more information on the Executive Order, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

standard data elements for grants reporting). In FY 2022, EPA will deliver a national solution for electronic grants record management that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards, and will implement a new Government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementation of the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, and ensuring effective grant oversight and accountability. The Agency also will continue to explore opportunities to improve efficiencies within the grants management processes.

In FY 2022, EPA expects to complete activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions, by October 1, 2022, in line with Department of the Treasury requirements.

The Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal programs. In FY 2022, EPA will continue to focus suspension and debarment resources on protecting the integrity of federal procurement and assistance programs. 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 federal assistance awards (e.g., grants, cooperative agreements, loans, and loan guarantees). Several federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs to protect the public interest.

### **Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$101.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,199.0 / +20.0 FTE) This net program change will improve capacity for oversight and tracking of new and increased grant investments and the timely processing of financial assistance agreements. This investment includes \$3,312.0 thousand in payroll and also reflects a slight adjustment in non-payroll 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); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

**Human Resources Management**  
Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$47,042.8</i></b>	<b><i>\$46,229.0</i></b>	<b><i>\$53,254.0</i></b>	<b><i>\$7,025.0</i></b>
Hazardous Substance Superfund	\$6,094.4	\$6,202.0	\$6,842.0	\$640.0
Total Budget Authority	\$53,137.2	\$52,431.0	\$60,096.0	\$7,665.0
Total Workyears	223.2	229.9	252.4	22.5

Total workyears in FY 2022 include 0.2 FTE to support Human Resources Management working capital fund (WCF) services.

**Program Project Description:**

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. EPM resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency’s Human Capital Operating Plan.

In response to the COVID-19 pandemic, EPA has provided workplace flexibilities to employees with dependent care situations, including expanding work hours and schedule requirements. EPA seamlessly implemented a virtual onboarding process during the COVID-19 pandemic, hiring over 1,449 employees since the Agency began remote work status on March 24, 2020.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an additional 21.7 FTE and \$7.0 million to strengthen and expand capacity for the HR Management Program in the EPM Appropriation. Effective workforce management is critical to EPA’s ability to accomplish its mission. EPA’s efforts in HR functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure employees have the right skills to successfully achieve the Agency’s core mission today and in the future.

The Agency is actively involved with OPM’s Chief Human Capital Officer Council and the President’s Management Council Agenda to address the challenges of the 21<sup>st</sup> Century federal workforce. In line with Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>295</sup> EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education

<sup>295</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>, *Executive Order on Tackling the Climate Crisis at Home and Abroad*.

activities into the management of EPA's procurement, real property, public lands and waters, and financial programs.

In FY 2022, EPA will support evidence-building activities as part of its implementation of the Evidence Act and the activities will be designed to ensure that the workforce strategy is guided by data-driven decisions. This work includes revalidation of EPA's agency-specific Mission Critical Occupations (MCOs), enhancement of EPA's competency assessment tool, skills gap analysis among Agency-specific MCOs, and knowledge transfer strategies to support succession planning.

In FY 2022, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends. Approximately 25 percent of EPA's workforce is retirement eligible and another 19 percent of the current workforce will become retirement eligible over the next five years.

EPA has increased efforts to improve Diversity and Inclusion, hosting virtual outreach events targeting diverse networks such as veterans, Historically Black Colleges and Universities (HBCUs), and Returned Peace Corps Volunteers. The Agency reviews applicant flow data analysis on diversity every 6 months. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities and recruitment incentives. In FY 2022, EPA will work with STEM-focused institutions to bring on college students to experience working at the Agency, the Society of Hispanic Professional Engineers for promoting a diverse workforce, and participate in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees.

In FY 2022, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate FedTalent, a one-stop-shop talent management system provided through the Department of Interior's Interior Business Center. FedTalent serves as a valuable tool to assist with developing, delivering, and tracking high-impact training. Additionally, EPA will maintain and operate USA Performance, provided through the U.S. Office of Personnel Management, enabling the Agency to automate the performance appraisal process throughout the entire performance rating cycle.

EPA also will work to support the efficient recruitment and onboarding of new employees to build the EPA workforce. EPA's Human Resources Shared Service Centers (HRSSC) leverage data analytics to improve performance across the Agency's Human Resources Management Program, reducing EPA's Time-to-Hire average from 95 days in FY 2018 to 83 days in FY 2020. In FY 2022, EPA will coordinate and deliver a comprehensive Human Resources Management Program,

including: outreach/recruitment; employee relations and advisory services; training and employee orientation; and management guidance on workforce planning and personnel policies.

The Agency continues to strengthen and improve its HR Accountability Program through internal assessments with OPM's HRStat framework. With a focus on efficient, effective, and accountable systems, EPA is meeting all regulatory requirements and looks for opportunities for continuous improvement. EPA also will maintain 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.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*,<sup>296</sup> issued on January 22, 2021. EPA reviewed its unions' agreements to identify and eliminate provisions influenced by four revoked EOs and will increase the focus on pre-decisional involvement and interest-based bargaining (IBB). In FY 2022, EPA will continue working to reset and repair a damaged relationship and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

Finally, EPA's advisory committees, operating as catalysts 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. In line with President Biden's *Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking*,<sup>297</sup> EPA remains committed to ensuring that highly qualified external experts serve on agency committees and that those members and future nominees of EPA advisory committees reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

### **Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

### **FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,022.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$3,448.0) This net change to fixed and other costs is a decrease for sign language services and fees for the federal shared human resource systems and services provided by

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<sup>296</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/>.

<sup>297</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>.

Department of Interior's Interior Business Center and is offset with an increase for workers compensation, childcare subsidy, and core HR management operations.

- (+\$8,390.0 / +18.5 FTE) This program change strengthens agencywide capacity to quickly increase staff levels in key offices and programs (i.e., environmental justice, climate, infrastructure programs, etc.). This investment includes \$3,082.0 thousand in payroll.
- (+\$1,061.0 / +3.2 FTE) This program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes \$533.0 thousand in payroll.

**Statutory Authority:**

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



## **Pesticides Licensing**

**Science Policy and Biotechnology**  
Program Area: Pesticides Licensing

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$1,887.3</i></b>	<b><i>\$1,546.0</i></b>	<b><i>\$1,546.0</i></b>	<b><i>\$0.0</i></b>
Total Budget Authority	\$1,887.3	\$1,546.0	\$1,546.0	\$0.0
Total Workyears	7.2	4.6	4.6	0.0

**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. Many offices within EPA regularly address cutting-edge scientific issues including endocrine disruptors and biotechnology products. Coordination among affected EPA programs including Air, Pesticides, Toxic Substances, Water, Research and Development allows for coherent and consistent scientific policy from a broad agency perspective. In addition, the Science Policy and Biotechnology Program provides for independent, external scientific peer review, primarily through two federal advisory committees: the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (FIFRA SAP), and the Toxic Substances Control Act (TSCA) Science Advisory Committee on Chemicals (TSCA SACC).

**FY 2022 Activities and Performance Plan:**

In FY 2022, the Science Policy and Biotechnology Program continues its peer review role, as needed, to evaluate the scientific and technical issues associated with chemical safety and biotechnology, including plant incorporated protectants (PIPs). In addition, other biotechnology issues will be supported by the Program when decisions require expert scientific advice from an independent scientific peer review panel.

FIFRA Scientific Advisory Panel

The FIFRA SAP, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA’s pesticide programs. As the Nation’s primary pesticide regulatory agency, EPA makes decisions that require EPA to review scientific data on pesticide risks to wildlife, farm workers, pesticide applicators, sensitive populations, and the general public. The scientific data involved in these decisions are complex, and a critical component of EPA’s use of the best available science to address such issues is seeking technical advice and scientific peer review from the FIFRA SAP.

The FIFRA SAP conducts reviews each year on a variety of scientific topics. In FY 2020, EPA convened two FIFRA SAP scientific reviews. Specific topics to be placed on the SAP agenda are

usually confirmed in advance of each session and include difficult, new, or controversial scientific issues identified in the course of EPA's Pesticide program activities.

### TSCA Science Advisory Committee on Chemicals

The TSCA SACC, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's chemical programs. EPA makes decisions that require the Agency to review scientific data on risks that chemicals pose to a variety of populations including women, children, and other potentially exposed or susceptible subpopulations. The scientific data, assessments, methodologies, and measures involved in these decisions are complex. Many of EPA's tools and models for examining exposures to industrial chemicals rely on inputs that are sensitive to climate data. The SACC provides independent, expert scientific advice and recommendations to EPA on the scientific basis for risk assessments, methodologies, and pollution prevention measures and approaches for chemicals regulated under the TSCA and also is a critical component of EPA's best available science.

The TSCA SACC conducts reviews each year on a variety of scientific topics. In FY 2020, OCSPP convened six TSCA SACC scientific reviews. Similar to the FIFRA SAP, specific topics to be placed on the SACC agenda include difficult, new, or controversial scientific issues identified in the course of EPA's industrial chemicals program activities.

### Planned Committee Meetings

As noted in the current committee charters,<sup>298</sup> the FIFRA SAP and TSCA SACC anticipate holding a total of nine to 11 meetings in FY 2022. These meetings will focus on the impact of pesticides and industrial chemicals on health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

### **Performance Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$106.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$106.0) This change reflects the result of savings realized by the program's increased reliance on virtual meetings.

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<sup>298</sup> For additional information, please visit: <https://www.epa.gov/sap/fifra-scientific-advisory-panel-charter> and <https://www.epa.gov/tsca-peer-review/science-advisory-committee-chemicals-charter>.

**Statutory Authority:**

Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA), §408; Toxic Substances Control Act (TSCA); Federal Advisory Committee Act (FACA).

**Pesticides: Protect Human Health from Pesticide Risk**

Program Area: Pesticides Licensing

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$60,580.8</i></b>	<b><i>\$60,181.0</i></b>	<b><i>\$60,929.0</i></b>	<b><i>\$748.0</i></b>
Science & Technology	\$3,109.5	\$2,803.0	\$2,840.0	\$37.0
Total Budget Authority	\$63,690.3	\$62,984.0	\$63,769.0	\$785.0
Total Workyears	393.7	385.6	385.6	0.0

Total program work years in FY 2022 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

**Program Project Description:**

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)<sup>299</sup> and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Extension Act of 2018 (PRIA),<sup>300</sup> 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 U.S. Registration is based on the review of scientific data sufficient to demonstrate that the product can perform its intended function without unreasonable adverse effects on people or the environment. This program emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides.

Under FFDCA, if a pesticide is to be used in a manner that may result in pesticide residues in food or animal feed, EPA must establish a tolerance, or maximum legal residue level or exemption from the requirement of a tolerance, before it can be registered. To establish a tolerance, EPA must find that the residues are “safe,” which, under FFDCA, means that there is a reasonable certainty of no harm to human health from aggregate exposure to the pesticide residue in food and from all other exposure except occupational exposure.<sup>301</sup> EPA must periodically review the registration and tolerances that the Agency issues to ensure that the public health is adequately protected.

<sup>299</sup> For additional information on FIFRA, please visit: <https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act>.

<sup>300</sup> On Friday, March 8, 2019, Pesticide Registration Improvement Extension Act of 2018 (PRIA 4) was signed into law, which reauthorizes PRIA for 5 years through fiscal year 2023, and updates the fee collection provisions of the Federal Insecticide, Fungicide, and Rodenticide Act.

<sup>301</sup> 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 2022 Activities and Performance Plan:**

### Pesticide Review and Registration

In FY 2022, 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 also will process these registration requests with special consideration for susceptible populations, especially children. Under the FQPA, EPA is statutorily required to ensure that its regulatory decisions are protective of children's health and other vulnerable subpopulations. EPA also will continue to emphasize the registration of reduced risk pesticides, including biopesticides, to provide farmers and other pesticide users with new, safer alternatives. The Agency, in collaboration with the U.S. Department of Agriculture (USDA), also 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 also 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 2022, EPA also will continue to review the registrations of existing pesticides with a focus on assessing and ensuring that pesticides can continue to be used safely, without unreasonable adverse effects to human health and the environment. The goal of the registration review process, as mandated by statute, is to review pesticide registrations every 15 years to determine whether it continues to meet the FIFRA standard for registration.<sup>302</sup> For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. The original total of such cases was 725, which EPA has completed opening dockets for all. In March 2020, an additional case was identified bringing the total case count to 726. For each case, the steps in this process include, in this order: opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. EPA is focusing its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. A cumulative total of 646 draft risk assessments and 481 final or interim decisions were completed through FY 2020, which results in 80 draft risk assessments and 245 final or interim decisions remaining to be completed to meet the FY 2022 statutory deadline.

EPA fell short of the FY 2020 target of 110 decisions completed through pesticides registration review, completing 98 decisions for the fiscal year. The target was missed in part due to requests from stakeholders to extend the comment period for proposed decisions in previous quarters and because EPA was awaiting data and/or registrant input before finalizing the registration review decision. In addition, there was a year-long lapse in the Information Collection Request (ICR) needed to issue Data Call Ins (DCIs), which further delayed submittal of data necessary to complete draft risk assessments. Further ongoing challenges to meet the October 2022 deadline include registrant submittal of additional data after EPA's draft risk assessments have been completed, coordination across EPA programs on high profile cases (i.e., ethylene oxide, formaldehyde), and resource limitations in prior fiscal years. For example, over 100 staff from

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<sup>302</sup> *See*, the EPA Pesticide Registration Internet site, found at: <https://www.epa.gov/pesticide-registration>.

across the program were diverted to provide varying levels of support to EPA's COVID-19 response efforts.

In FY 2022, EPA will continue enhancements to the Pesticide Registration Information System (PRISM). Expanding the capabilities of PRISM via further inclusion of electronic processes will reduce paperwork burden and maximize efficiency, in accordance with the President's Management Agenda (PMA), by converting paper-based processes into electronic processes and corresponding workflows for the Pesticide Program's regulated entities. In addition, PRISM will create an iterative/inclusive, streamlined electronic workflow to support pesticide product registration, chemical reviews, and assessments, and will be used as a centralized data repository to electronically store associated data as they relate to regulatory decisions and scientific information. Overall, the Agency projects that by expanding PRISM and related projects, over 150 existing business process workflows supporting the implementation of PRIA will be improved.

### Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides

In FY 2022, 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).<sup>303</sup> 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 2022, 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 pesticide handlers and agricultural workers from potential effects of pesticides is an important role of the Pesticide Program. Pesticide handlers in a number of sectors 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 Agricultural Worker Protection Standard (WPS)<sup>304</sup> and the Certification of Pesticide Applicators (CPA) revised rules (finalized in FY 2015 and FY 2017, respectively) are key elements of EPA's strategy for reducing occupational exposure to pesticides. In FY 2022, EPA will continue to support the implementation of the regulations through education and outreach, guidance development, and grant programs. Efforts to implement the WPS include addressing environmental justice issues in rural communities and especially consider farmworkers and their families. Programs include National Farmworker Pesticide Safety Training and development of pesticide educational resources and training targeted toward agricultural workers and pesticide

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<sup>303</sup> See, the EPA Overview of Risk Assessment in the Pesticide Program Internet site, found at: <https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program>. See also, EPA's IPM website, found at: [https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles#for\\_more\\_information](https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles#for_more_information).

<sup>304</sup> For additional information, please visit: <https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps>.

handlers. Through this worker protection program, EPA also will continue outreach and training to healthcare providers in the recognition and management of pesticide-related illnesses. Outreach will focus on training health care providers serving the migrant and seasonal farmworker community, further improving the treatment of agricultural workers and rural communities potentially exposed to pesticides.

Implementation of the CPA includes continued support of state Pesticide Safety Education Programs, which play a crucial role in training and certifying pesticide handlers in proper pesticide use, protecting themselves and other workers, as well as the public and the environment. In addition, EPA will support the development of resources, training, and educational forums for applicators, including the development of a virtual pesticide training for certification of private applicators in Indian Country covered under the EPA-administered plan to meet the requirements of using restricted use pesticides in agriculture.

### 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.<sup>305</sup>

EPA's Antimicrobial Testing Program (ATP) has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is currently in the process of developing a new risk-based testing strategy in response to EPA Office of the Inspector General recommendations made in FY 2016.<sup>306</sup> Consistent with OIG recommendations, EPA suspended the ATP in November 2017 and released a draft risk-based strategy, renamed the Antimicrobial Performance Evaluation Program (APEP), in October 2019 for public comment and will continue to seek public input prior to implementation in FY 2022.

### COVID Response

In FY 2020, EPA activated its Emerging Viral Pathogens Guidance for Antimicrobial Pesticides. EPA initiated and implemented an expedited process to review and approve registrant submissions for disinfectant products that are effective against the SARS-CoV-2 virus, the cause of COVID-19, including the development, implementation, and ongoing weekly maintenance of EPA's List N: Disinfectants for Use Against SARS-CoV-2. As of May 2021, List N reached 549 EPA-registered disinfectant products that are effective for use against the SARS-CoV-2 virus, a 600 percent increase from 90 products in March 2020. EPA also launched a web-based app to help consumers rapidly identify disinfectant products best suited for use against COVID-19.

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<sup>305</sup> See, FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).

<sup>306</sup> For additional information, please visit: <https://www.epa.gov/pesticide-registration/antimicrobial-testing-program>.



In response to supply chain disruptions by pesticide registrants who manufacture disinfectant products on List N, EPA developed and issued three separate times, over the course of 6 weeks, limited temporary amendments to Pesticide Registration Notice (PRN) 98-10 which is a PRN describing the type of changes that may be made to existing pesticide registrations by notification, non-notification, and minor formulation amendments. These temporary amendments helped to ensure that disinfectant products remain available as the country responds to the COVID-19 public health emergency. EPA also developed and posted guidance for registrants for expedited review of requests to add electrostatic spray directions to currently registered products and new products that would qualify for EPA's Disinfectant List N for use against SARS-CoV-2.

In FY 2021, EPA released draft guidance for companies seeking to demonstrate that their products have "long lasting" or "residual" effectiveness on surfaces against SARS-CoV-2. EPA released an updated draft testing protocol for evaluating a copper surface's ability to kill bacteria and a draft protocol for evaluating the residual efficacy of antimicrobial surface coatings for public comment. EPA also announced registration of the first product, Group 1 copper alloys, with residual claims against viruses like SARS-CoV-2 for use nationwide.

Noting information from the Centers for Disease Control and Prevention (CDC) that the risk of being infected with COVID-19 by touching contaminated surfaces is considered low, EPA announced in April 2021 that it will no longer prioritize Public Health Emergency requests for new products that address surface transmission of SARS-CoV-2. In light of the hundreds of EPA-registered products available on List N, EPA will no longer expedite new product registrations, emerging viral pathogen claims, SARS-CoV-2 claims, and electrostatic spraying directions for products intended to kill SARS-CoV-2 on surfaces. EPA will continue to review registration requests for new surface disinfectants for SARS-CoV-2 via the standard registration process and associated deadlines required by FIFRA and update List N.

In addition, EPA addressed impacts from the public health emergency to the worker protection and certification programs. In FY 2020, EPA issued guidance to inform agricultural and handler employers of flexibilities available under the Agricultural Worker Protection Standard (WPS) to allow continued protection for employees and agricultural production. EPA issued temporary guidance that outlines approaches to address the limited availability of required respiratory protection and respiratory fit testing for agricultural pesticide handlers, in response to supply chain challenges and service disruptions as a result of the public health emergency. In FY 2021, the need for temporary guidance is being gauged in order to make edits or to extend or terminate the options on an as-needed basis; monitoring the continued need of the temporary guidance will continue through FY 2022. Also, some state, tribal, and federal certifying authorities needed to make temporary changes to their existing pesticide applicator certification programs in response to the COVID-19 public health emergency. As a result, EPA issued temporary guidance to provide flexibilities through FY 2022 that meet both the needs of applicators and the requirements of the Certification of Pesticide Applicators rule.

### Outreach and Education

It is essential for people using pesticides to be well informed and to understand the importance of reading and following label directions and proper disposal. They also need to understand how to

protect themselves from pests that can transmit disease. In FY 2022, the Pesticide Program also will continue environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general. Giving priority to reduced risk and Integrated Pest Management- (IPM-) friendly pesticides are two steps toward protecting human health. Also, the Pesticide Safety Education Programs support provides education through training and is key component to the implementation of applicator certification programs across the Nation and helps ensure pesticides are used in a manner to protect human health and the environment. In addition, EPA will continue to make information to the public and pesticide users easily accessible, up-to-date safety information on pesticides, support the National Pesticide Information Center that provides a bilingual hotline for pesticide information, and develop outreach materials for the public and incident reporting, including reports on incidents in youth.

### Reducing Animal Testing

In FY 2022, the Agency will continue to utilize its guiding principles on data needs<sup>307</sup> to ensure that the Agency has enough information to support strong regulatory decisions to protect human health, while reducing, and eliminating in some cases, unnecessary animal testing. EPA's Hazard and Science Policy Council (HASPOC) plays an important role in the implementation of the vision of the 2007 National Academy of Sciences (NAS) report on toxicity testing in the 21<sup>st</sup> Century – moving toward smarter testing strategies by waiving human health toxicity studies that do not provide useful information. Since its inception, HASPOC has waived hundreds of studies resulting in the saving of tens of thousands of animals and tens of millions of dollars in the cost of conducting the studies. In addition, the Agency has continued to develop and implement 21<sup>st</sup> Century toxicology and exposure methods, including additional retrospective analyses of the utility of various toxicity studies and 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

EPA will continue to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these types of applications. In FY 2022, EPA also will gather additional evidence, building on continuous efforts to map the process, use data visualization techniques, engage in enhanced collaboration activities, and identify and address bottlenecks. The Agency expects to reduce decision timeframes for new active ingredient applications, improve on-time percentages, and leverage those improvements for other related processes (e.g., new uses).

In FY 2020, EPA completed reviews of 2,385 PRIA registration actions, with 98.1 percent of those actions being completed on or before PRIA negotiated due dates; registered 16 new pesticide active ingredients; published 100 pesticide draft risk assessments and 98 final/interim decisions for existing pesticides. The average PRIA new active ingredients decision timeframe turnaround for FY 2020 was 876 days, which fell short of the FY 2020 target of 619 days. The average number of days exceeding the PRIA decision timeframes result through June 2020 was 353 days. EPA experienced delays due to an adjustment to science review committee schedules in FY 2019,

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<sup>307</sup> Additional information on reducing animal testing may be found at: <https://www.epa.gov/pesticides/new-epa-guidance-testing-pesticides-will-reduce-animal-testing>.

deficient applications, and the need for additional information to make regulatory determination (mitigation required).

**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 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$611.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$137.0) This program change reflects a rebalancing of resources among the Pesticides programs to increase outreach to EJ communities.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b>\$37,650.6</b>	<b>\$39,543.0</b>	<b>\$39,952.0</b>	<b>\$409.0</b>
Science & Technology	\$1,757.7	\$2,207.0	\$2,230.0	\$23.0
Total Budget Authority	\$39,408.3	\$41,750.0	\$42,182.0	\$432.0
Total Workyears	297.8	249.6	249.6	0.0

Total program work years in FY 2022 include 53.2 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).<sup>308</sup> These obligations include ensuring that pesticide regulatory decisions also will not destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) (jointly, “the Services”).

**FY 2022 Activities and Performance Plan:**

Assessing the Risks Pesticides Pose to the Environment

To accomplish the goals set out in the FIFRA and ESA statutes, in FY 2022, EPA will continue to conduct ecological risk assessments<sup>309</sup> 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 statutory 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

<sup>308</sup> For additional information, please visit: <https://www.epa.gov/endangered-species>.

<sup>309</sup> For additional information, please visit: <https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/factsheet-ecological-risk-assessment-pesticides>.

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.<sup>310</sup>

In FY 2022, EPA also will continue to examine all toxicity and environmental fate data submitted with each new pesticide registration application to determine what risks the new active ingredient may pose to the environment. When complex scientific issues arise, the Agency consults the FIFRA Scientific Advisory Panel<sup>311</sup> for independent scientific advice.

### Risk Mitigation

To ensure unreasonable risks are avoided, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may subsequently require monitoring of environmental conditions, such as effects on water sources, or the development and submission of additional laboratory or field study data by the pesticide registrant.

### Ensuring Proper Pesticide Use through Labeling

Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions. In FY 2022, 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 2022, EPA's activities will involve increased efforts on comprehensive risk assessments to protect the environment. For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. The original total of such cases was 725, which EPA has completed opening dockets for all. In March 2020, an additional case was identified bringing the total case count to 726. For each case, the steps in this process include, in this order: opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. EPA is focusing its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. A cumulative total of 646 draft risk assessments and 481 final or interim decisions were completed through FY 2020,

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<sup>310</sup> Additional information may be found at: <https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program>.

<sup>311</sup> For additional information, please visit: <http://www.epa.gov/scipoly/sap>.

which results in 80 draft risk assessments and 245 final or interim decisions remaining to be completed to meet the FY 2022 statutory deadline.

EPA fell short of the FY 2020 target of 110 decisions completed through pesticides registration review, completing 98 decisions for the fiscal year. The target was missed in part due to requests from stakeholders to extend the comment period for proposed decisions in previous quarters and because EPA was awaiting data and/or registrant input before finalizing the registration review decision. In addition, there was a year-long lapse in the Information Collection Request (ICR) needed to issue Data Call Ins (DCIs), which further delayed submittal of data necessary to complete draft risk assessments. Further ongoing challenges to meet October 2022 deadline include registrant submittal of additional data after EPA's draft risk assessments have been completed, coordination across EPA programs on high profile cases (i.e., ethylene oxide, formaldehyde), and resource limitations in prior fiscal years. For example, over 100 staff from across the program were diverted to support EPA's COVID-19 response efforts.

### 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.<sup>312</sup> Consequently, the success of the Registration Program in ensuring the availability of reduced risk pesticides plays a significant role in meeting the environmental outcome of improved ecosystem protection. EPA has promoted reduced risk pesticides since 1993 by giving registration priority to pesticides that have lower toxicity to people and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).<sup>313</sup> Biological pesticides and biotechnology often represent lower risk solutions to pest problems. In FY 2022, EPA also will continue to assist pesticide users in learning about new, safer products as well as safer methods for using existing products. The Agency also will continue encouraging the use of IPM tools.

### Reducing Animal Testing

In FY 2022, 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 also will reach out to non-governmental organizations to collaborate on projects (e.g., to retrospectively analyze the results of ecological hazard testing). Based on the results of those projects, EPA will then develop and disseminate guidance materials for companies to clarify ecotoxicology testing requirements/needs.

In FY 2022, EPA will continue its efforts for using alternative methods to whole animal toxicity testing for characterizing the effects of pesticide active ingredients on terrestrial and aquatic

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<sup>312</sup> For additional information on pesticide risk, please visit: <https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program>.

<sup>313</sup> For additional information on IPM, please visit: <https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles>.

vertebrates. EPA also will continue the current partnership with the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM). A focus will be the use of Collaborative Acute Toxicity Modeling Suite (CATMoS) estimates of acute oral toxicity to replace mammal testing in ecological risk assessment. EPA also will complete a study of the feasibility for reducing the number of tested species of fish used to characterize acute effects for the taxa. The effort is expected to coincide with EPA's collaboration with other federal agencies to collect, describe, and develop performance-based evaluations for a suite of *in-silico* and *in-vitro* methods for estimating acute lethal endpoints in fish. By addressing both the endpoint needs and the available estimation tools concurrently, EPA expects to increase the efficiency of performance evaluation and narrow the scope of needed estimation methods for consideration, thereby speeding up the acceptance process.

With the successful completion of methods development for acute mammal and fish toxicity estimation efforts as well as the FY 2020 completion of subacute dietary study waiver guidance, EPA also will be embarking on projects to evaluate the feasibility of reducing the number of avian reproduction study species (currently the routing data requirement is testing for two species) and fish life cycle tests (currently testing for freshwater and estuarine species is a frequent occurrence). The goal would be to reduce the number of tested species, yet still provide for appropriately protective terrestrial and aquatic organism risk assessments.

#### Minimizing Environmental Impacts through Outreach and Education

Through public outreach, the Agency will continue to encourage the use of IPM and other practices to maximize the benefits pesticides can yield while minimizing the impacts on the environment. The Agency also will develop and disseminate brochures, provide education on potential benefits of IPM, and promote outreach on the success of IPM to encourage its use.<sup>314</sup> To encourage responsible pesticide use that does not endanger the environment, EPA also will reach out to the public through the Internet, and to workers and professional pesticide applicators through worker training programs. The Pesticide Safety Education Programs provides education to professional pesticide applicators through training and is a key component to the implementation of applicator certification programs across the Nation and helps ensure pesticides are used in a manner to protect human health and the environment.

#### Protection of Endangered Species

EPA is responsible for complying with the Endangered Species Act (ESA). This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 pesticide products – many of which have multiple uses – and over 1,600 listed endangered species in the U.S. with diverse biological attributes, habitat requirements, and geographic ranges.<sup>315</sup> In FY 2022, 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 in a manner described in reports

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<sup>314</sup> For additional information, please visit: <https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles>.

<sup>315</sup> For additional information, please visit: <https://ecos.fws.gov/ecp0/reports/box-score-report>.

to Congress.<sup>316</sup> Where risks are identified in a biological evaluation, EPA also will work with the Services in a consultation<sup>317</sup> process to ensure these new or existing pesticide registrations also will meet the ESA standard.<sup>318</sup>

During registration review, EPA also will support obtaining risk mitigation earlier in the process by encouraging registrants to agree to changes in uses and applications of a pesticide that are beneficial to the protection of endangered species prior to completion of EPA's consultations with the Services. In FY 2022, pesticide registration reviews are expected to contain environmental assessments. Selected assessments also will evaluate 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.

Integrating ESA-based decisions into FIFRA registrations is challenging due to the complexities and associated resources involved in performing a spatially explicit evaluation for a large number of species and their designated critical habitats. An ESA evaluation includes consideration of each species' unique biological and habitat characteristics as well as their location relative to potential use sites. In FY 2022, in cooperation with the Services and the U.S. Department of Agriculture (USDA), the Agency will continue to work on implementing the ESA. EPA also will continue to use the new methodologies for ESA assessment developed by five federal agencies and released in March 2020, pursuant to the Agricultural Improvement Act of 2018 (2018 Farm Bill). During FY 2022, EPA also will continue to improve the Biological Evaluations methodology and will apply the revised approaches to selected pesticide risk assessments.

In January 2018, EPA, the U.S. Department of the Interior, and the U.S. Department of Commerce signed a Memorandum of Agreement (MOA) creating a Working Group charged with reviewing statutory requirements, regulations and cases, and making recommendations to improve scientific and policy approaches. The Working Group was formalized in the 2018 Farm Bill and included USDA and the Council for Environmental Quality (CEQ). The Farm Bill also transferred leadership of the Working Group from CEQ to EPA. Regular process reports also are required. The first report released in December 2019 outlines the recommendations and plans for implementation of those recommendations. A second report was released in June 2020 summarizing the progress made on implementing those recommendations.<sup>319</sup>

The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2022, EPA also 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 also will provide improved support to the risk

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<sup>316</sup> For additional information, please visit: <https://www.epa.gov/endangered-species/reports-congress-improving-consultation-process-under-endangered-species-act>.

<sup>317</sup> For additional information, please visit: <https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act>.

<sup>318</sup> Additional information on how EPA protects endangered species from pesticides can be found at: <https://www.epa.gov/endangered-species>.

<sup>319</sup> For additional information, please visit: <https://www.epa.gov/endangered-species/reports-congress-improving-consultation-process-under-endangered-species-act>.



assessment process during registration review by allowing risk assessors to analyze complex scenarios more easily to endangered species.

### Pollinator Protection

Bees and other pollinators play a critical role in ensuring the production of food. USDA is leading the federal government's effort to understand the causes of declining pollinator health and identify actions that will improve pollinator health. EPA is part of this effort and is focusing on the potential role of pesticides. EPA's emphasis is to ensure that the pesticides used represent acceptable risks to pollinators and that products are available for commercial beekeepers to manage pests that impact pollinator health.

EPA continues to carefully evaluate potential effects that pesticides may have on bees through the registration of new active ingredients and registration review, in cooperation with the Government of Canada and the California Department of Pesticide Regulation. EPA is continuing to work with USDA to identify and address factors associated with declines in pollinator health. EPA also has been working with a wide range of stakeholders in the government and private sections, both domestically and internationally, to develop and implement strategies to address factors associated with pollinator declines and to ensure that the best available science serves as a foundation for regulatory decisions. In FY 2020, EPA held pollinator webinars for the public, renewed partnership with pollinator non-governmental organizations, and participated in a USDA hosted pollinator workshop. In FY 2022, EPA also will continue to apply the best available science and risk management methods for sustaining pollinators.<sup>320</sup>

### Protection of Water Resources

Reduced concentration of pesticides in water sources is an indication of the effectiveness of EPA's risk assessment, management, mitigation, and communication activities. In FY 2022, the Agency also will continue to work to develop sampling plans and refine program goals. Water quality is a critical endpoint for measuring exposure and risk to the environment and a measure of EPA's ability to reduce exposure from these key pesticides of concern.<sup>321</sup>

### Evidence and Evaluation

EPA will continue to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these types of applications. In FY 2022, EPA also will gather additional evidence, building on continuous efforts to map the process, use data visualization techniques, engage in enhanced collaboration activities, and identify and address bottlenecks. The Agency expects to reduce decision timeframes for new active ingredient applications, improve on-time percentages, and leverage those improvements for other related processes (e.g., new uses).

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<sup>320</sup> Additional actions EPA is taking to protect pollinators from pesticides can be found at: <https://www.epa.gov/pollinator-protection>.

<sup>321</sup> The most sensitive aquatic benchmarks for the chemicals are posted on the website: <http://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/aquatic-life-benchmarks-pesticide-registration>.

In FY 2020, EPA completed reviews of 2,385 PRIA registration actions, with 98.1 percent of those actions being completed on or before PRIA negotiated due dates. The Agency also registered 16 new pesticide active ingredients and published 100 pesticide draft risk assessments and 98 final/interim decisions for existing pesticides. The average PRIA new active ingredients decision timeframe turnaround for FY 2020 was 876 days, which fell short of the FY 2020 target of 619 days. The average number of days exceeding the PRIA decision timeframes result through June 2020 was 353 days. EPA experienced delays due to an adjustment to science review committee schedules in FY 2019, deficient applications, and the need for additional information to make regulatory determination (mitigation required).

**Performance Measure Targets:**

<b>(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	110	122

<b>(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	60	20

<b>(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	607	595

<b>(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where the original PRIA due date was not met.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	263	256

<b>(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	99	99

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$576.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$167.0) This program change reflects a rebalancing of resources among the Pesticides programs to increase EJ communities’ outreach under the Pesticides: Protect Human Health Program.

**Statutory Authority:**

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

**Pesticides: Realize the Value of Pesticide Availability**

Program Area: Pesticides Licensing

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$6,173.0</i></b>	<b><i>\$7,730.0</i></b>	<b><i>\$7,792.0</i></b>	<b><i>\$62.0</i></b>
Science & Technology	\$379.9	\$876.0	\$970.0	\$94.0
Total Budget Authority	\$6,552.9	\$8,606.0	\$8,762.0	\$156.0
Total Workyears	30.7	35.8	35.8	0.0

**Program Project Description:**

The primary federal law that governs how EPA oversees pesticide manufacture, distribution, and use in the United States is the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Originally enacted in 1947, FIFRA has been significantly amended several times, including by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2018 (PRIA). FIFRA requires that EPA register pesticides based on a finding that they will not cause unreasonable adverse effects to people and the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide.

This program seeks to realize the value of pesticides that can be used safely to yield many benefits, such as killing viruses and bacteria in America’s hospitals. These benefits also include guarding the Nation’s abundant food supply, protecting the public from disease-carrying pests, and protecting the environment from the introduction of invasive species from other parts of the world. In fulfilling its mission, the Program manages the following types of pesticide registrations and regulatory actions under FIFRA:

- Special Local Needs under FIFRA section 24(c);
- Federal registrations at the national level under FIFRA section 3;
- Experimental Use Permit section 5;
- Emergency, Quarantine, and Crisis Exemption section 8; and
- Periodic review of existing chemicals under the Registration Review Program.<sup>322</sup>

**FY 2022 Activities and Performance 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

<sup>322</sup> Additional information may be found here: <https://www.epa.gov/pesticide-registration/types-registrations-under-fifra>.

for contamination of valued, environmental resources, or (4) broadens adoption of Integrated Pest Management (IPM)<sup>323</sup> or makes it more effective.” In FY 2022, EPA will continue to support and develop procedures and guidelines for expedited review of applications for registration or amendments for a reduced risk pesticide.

### Registration of Generic Pesticides

FIFRA authorizes EPA to register products that are identical to or substantially similar to already registered products (also known as “me too products”). Applicants for these products may rely on, or cite data already submitted by another registrant. The entry of these new products into the market can cause price reductions resulting from new competition and broader access to products, benefitting farmers and consumers. The Agency will continue to prioritize and review generic registrations consistent with the statutory decision-making schedule. Application submissions for these actions can generally be reviewed in four months. For example, the Agency completed 188 registrations for the primary PRIA category (R-300) that involves “me too” conventional chemical registration requests in FY 2020. The Agency expects to complete a similar volume of registrations in FY 2022.

### Outreach and Education

In FY 2022, the Agency will continue to encourage IPM, which emphasizes minimizing the use of broad-spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application. EPA regions are committed to partnering with states, tribes, and territories to carry out IPM projects that inform pesticide users about the pest control options and how to best use them. It is not enough to have pesticide products registered to control pest infestations. Pesticide users need to know which pesticides to use, how to use them, and how to maintain the site so pests do not return. The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general.

### Review and Registration

During FY 2022, EPA will continue to review and register new pesticides, new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and Federal Food, Drug, and Cosmetic Act standards, as well as PRIA timeframes. Many of these actions will be for reduced-risk pesticides, which, once registered and used by consumers, will increase societal benefits. Working together with the affected communities, through IPM and related activities, the Agency plans to accelerate the adoption of lower-risk products. EPA also will continue to support implementation of other IPM-related activities. The Agency also will partner in the development of tools and informational brochures to promote IPM efforts and provide guidance to schools, farmers, other partners, and stakeholders.

Similarly, the Agency also will continue work-sharing efforts with international partners. Through these collaborative activities and resulting international registrations, international trade barriers will be reduced. When nations with whom the U.S. trades accept imported crops treated with newer, lower-risk pesticides, domestic users can more readily adopt these newer pesticides into

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<sup>323</sup> For additional information, please visit: <https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles>.

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 2022, EPA will continue to prioritize emergency exemptions under FIFRA Section 18, which authorizes EPA to allow an unregistered use of a pesticide for a limited time in the event of an emergency, such as a severe pest infestation, public health emergency, or invasive pest species quarantine. The economic benefit of the Section 18 Program to growers is the avoidance of losses incurred in the absence of pesticides exempted under FIFRA's emergency exemption provisions. In addition, exemptions serve as important public health controls to avert pests that may cause significant risk to human health. In FY 2020, the Agency processed just under 70 requests for emergency uses and expects to process a similar level in FY 2022.

### Evidence and Evaluation

The Program will continue to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these applications. In FY 2022, EPA also will gather additional evidence to assist the Agency with: streamlining the process; mapping the process; using data visualization techniques; engaging in enhanced team collaborations; and identifying and addressing bottlenecks. The review process also will be streamlined by incorporating special antimicrobial sections and further monitoring the use of unregistered pesticides under Section 18. By identifying efficiencies in the process, the Agency expects to: reduce decision timeframes for new active ingredient applications; improve on-time percentages; and leverage those improvements for other related processes (e.g., new uses).

In FY 2020, EPA completed reviews of 2,385 PRIA registration actions, with 98.1 percent of those actions being completed on or before PRIA negotiated due dates; registered 16 new pesticide active ingredients; published 100 pesticide draft risk assessments and 98 final/interim decisions for existing pesticides. The average PRIA new active ingredients decision timeframe turnaround for FY 2020 was 876 days, which fell short of the FY 2020 target of 619 days. The average number of days exceeding the PRIA decision timeframes result through June 2020 was 353 days. EPA experienced delays due to an adjustment to science review committee schedules in FY 2019, deficient applications, and the need for additional information to make regulatory determination (mitigation required).

### Biotechnology

EPA has a critical role in the successful implementation of the Executive Order (EO) 13874: *Modernizing the Regulatory Framework for Agricultural Biotechnology Products*. EPA has been evaluating the current regulatory framework to determine if there are opportunities for streamlining current approaches to enable these important technologies to get to market efficiently. The Agency is working on exemptions for plant incorporated protectants (PIPs) engineered using biotechnology that are indistinguishable from PIPs made using natural plant breeding. EPA's proposed rule is under review and expected to be issued in Fall 2020. Additionally, in January 2020, EPA, the United States Department of Agriculture, and the Food and Drug Administration

launched a unified website that provides a one-stop-shop for information about the actions the federal government is taking to oversee the development of agricultural biotechnology products.<sup>324</sup>

**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 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$114.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$52.0) This program change reflects a rebalancing of resources among the Pesticides programs to increase EJ communities' outreach under the Pesticides: Protect Human Health Program.

**Statutory Authority:**

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

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<sup>324</sup> For additional information, please visit: <https://usbiotechnologyregulation.mrp.usda.gov/biotechnologygov/home/>.

## **Resource Conservation and Recovery Act (RCRA)**



**RCRA: Corrective Action**

Program Area: Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$35,671.5</i></b>	<b><i>\$38,453.0</i></b>	<b><i>\$38,836.0</i></b>	<b><i>\$383.0</i></b>
Total Budget Authority	\$35,671.5	\$38,453.0	\$38,836.0	\$383.0
Total Workyears	164.9	174.4	174.4	0.0

**Program Project Description:**

To reduce risks from exposure to hazardous wastes, EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Program ensures that contaminated facilities subject to RCRA requirements are cleaned up by the responsible party, returns contaminated property to productive use, and keeps costs from being transferred to the taxpayer-funded portion of the Superfund Program. Pursuant to EPA promulgated regulations and administrative orders under RCRA, EPA and authorized states will continue to oversee cleanups conducted by facility owner/operators to ensure that the facilities meet their cleanup obligations and to protect taxpayers from having to pay the bill. Approximately 113 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population),<sup>325</sup> and the total area covered by these corrective action sites is approximately 18 million acres.<sup>326</sup>

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action Program<sup>327</sup> 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.

**FY 2022 Activities and Performance Plan:**

In FY 2022, the Corrective Action Program will focus its resources on continuing cleanup of approximately 3,924 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites, and on assessing others to determine whether cleanups are necessary. As of the end of FY 2020, only 40 percent of these

<sup>325</sup> U.S. EPA, Office of Land and Emergency Management Estimate 2020. Data collected includes: (1) site information as of the end of FY 2019 from RCRAInfo; and (2) population data from the 2015-2018 American Community Survey.

<sup>326</sup> Compiled RCRAInfo data.

<sup>327</sup> State implementation of the Corrective Action Program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

facilities have completed final and permanent cleanups, leaving approximately 2,300 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. In FY 2020, EPA approved 169 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,640. In addition, 95 percent of the 2020 Baseline priority corrective action facilities achieved protection of human health while 91 percent achieved control of contaminated groundwater migration.<sup>328</sup> The Program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the Corrective Action Progress Track facilities, and identify, assess, and clean up additional priority facilities.

In FY 2022, EPA will:

- Continue to make RCRA corrective action sites RAU, ensuring that where possible properties are returned to productive use and human health and the environment are protected into the future.
- Reassess its universe of cleanup facilities, priorities, and measures to ensure that resources are focused on addressing those facilities that present risk to human health and the environment by implementing actions to end or reduce these threats.
- Provide technical assistance to authorized states in the areas of site characterization, sampling, remedy selection, reaching final cleanup goals, and long-term stewardship for cleanups with contamination remaining in place in order to support communities at risk from multiple health stressors and/or climate change impacts.
- Prioritize and focus the Program on completing site investigations to identify the most significant threats, establish interim remedies to reduce or eliminate exposure, and select and construct safe, effective long-term remedies that also maintain the economic viability of the operating facility.
- For high priority facilities, perform cleanup work under work-sharing agreements to assist with facilities that have complex issues<sup>329</sup> or special tasks (e.g. ecological risk assessments).
- Continue to improve cleanup approaches and share best practices and cleanup innovations<sup>330</sup> to speed up and improve cleanups.
- 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. The last biennial report in 2019 showed there were 26,284 generators of over 33 million tons of hazardous waste. RCRAInfo provides

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<sup>328</sup> For more information, please refer to <https://www.epa.gov/hw/lists-facilities-resource-conservation-and-recovery-act-rcra-2020-corrective-action-baseline>.

<sup>329</sup> For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.

<sup>330</sup> For more information, please visit: <https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy>.

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.

- Contribute to efforts ensuring the proper management, disposal, and cleanup of PFAS. The PFAS Destruction and Disposal Interim Guidance, required by the National Defense Authorization Act for FY 2020, identifies a number of information gaps in our understanding of how to destroy or dispose of PFAS and its byproducts while protecting human health and the environment. It also identifies a significant amount of ongoing and planned research on PFAS technologies.

**Performance Measure Targets:**

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	133	140

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	73	49

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$355.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$28.0) This program change supports RCRA Corrective Action activities including cleanups.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3004, 3005, 8001.

**RCRA: Waste Management**

Program Area: Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$64,884.9</i></b>	<b><i>\$70,465.0</i></b>	<b><i>\$71,082.0</i></b>	<b><i>\$617.0</i></b>
Hazardous Waste Electronic Manifest System Fund	\$20,317.5	\$0.0	\$0.0	\$0.0
Total Budget Authority	\$85,202.4	\$70,465.0	\$71,082.0	\$617.0
Total Workyears	273.6	296.8	296.8	0.0

Total workyears in FY 2022 include 11.0 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 solid and hazardous wastes and provides federal agencies, state, tribal, and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation. Approximately 60,000 facilities generate and safely manage hazardous waste in the United States.<sup>331</sup> Eighty percent of the U.S. population live within three miles of one of these facilities, making national standards and procedures for managing hazardous wastes a necessity.<sup>332</sup>

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.

The RCRA permitting programs serve to protect the millions of people in surrounding communities by facilitating clean closure where applicable and managing permits and other controls to protect human health and the environment for 20,000 hazardous waste units at 6,600 facilities.<sup>333</sup> 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.

EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the remaining states and territories authorized to implement the permitting program. Additionally, the Toxic Substances Control Act (TSCA) polychlorinated biphenyls

<sup>331</sup> Memorandum, February 18, 2014, from Industrial Economics to 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.

<sup>332</sup> 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.

<sup>333</sup> As compiled by RCRAInfo.

(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.

Maintaining updated permits and controls ensures that facilities: 1) have consistent and protective standards to prevent release; 2) have proper standards for waste management to protect human health, prevent land contamination/degradation; and 3) avoid future cleanups and associated substantial costs. In FY 2020, EPA and the states implemented the Generator Improvement Rule which updated and modernized the regulations for hazardous waste generators to bring them into the 21<sup>st</sup> Century.

There continues to be increased public and congressional attention to issues around post-consumer materials management, including plastics, in the environment and EPA's role in addressing them (*e.g.*, ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). Marine litter is an increasingly prominent global issue that can negatively affect domestic water quality, tourism, industry, and public health. Some of this marine debris comes from human activity at sea, and it makes its way into our waterways from land, creating a direct link between waste management practices and ocean pollution.<sup>334</sup> The Save Our Seas 2.0 Act,<sup>335</sup> enacted in December 2020, demonstrates bipartisan congressional interest and provides EPA with authority to further act on post-consumer materials management.

The Program also plays a central role in establishing and updating standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment. This work provides the foundation that underlies waste management approaches and ensures that method standards evolve with technology for conducting these analyses.

In addition to overseeing the management of hazardous waste under RCRA subtitle C, EPA also plays a role in solid waste management under Subtitle D. While much of this area is delegated to the states, EPA is actively working on aspects of coal combustion residuals (CCR) under this area of the law, including the establishment and refinement of appropriate regulations and, as directed by the 2016 Water Infrastructure Improvements for the Nation Act (WIIN Act), developing a new federal permitting program for CCR surface impoundments and landfills.

While the majority of the work is focused on domestic issues, the Program also is responsible for issues related to international movement of wastes. EPA oversees the tracking and management of hazardous waste imports and exports. Most of these movements are for recycling and, thus, are critical to resource conservation. In coordination with other agencies and departments, EPA

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<sup>334</sup> U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, "Ten Things you should Know about Marine Debris," <https://oceanservice.noaa.gov/news/marinedebris/ten-things.html>.

<sup>335</sup> For additional information, please see: <https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf>.

represents the U.S. Government in numerous international forums concerned with waste issues. This representation is vital to protecting U.S. interests and furthering U.S. policy goals.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, the RCRA Waste Management Program will:

- Provide technical assistance to regions, states, and tribes regarding the development and implementation of solid waste programs (e.g., the RCRA hazardous waste generator, transporter, treatment, storage, and disposal regulations and implementing guidance; the RCRA non-hazardous waste program; the TSCA PCB disposal and cleanup program; and the hazardous waste import/export program).
- Provide technical and implementation assistance, oversight, and support to facilities that generate, treat, store, recycle, and dispose of hazardous waste.
- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. Issuing PCB approvals is a federal responsibility, non-delegable to states.
- Manage and monitor the RCRA permitting program and ensure the issuance of permit efficiently to achieve program goals. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner for the approximately 20,000 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 6,600 treatment, storage, and disposal facilities.
- Manage the hazardous waste import/export notice and consent process. EPA will continue to implement and modernize the process and data system (the Waste Import Export Tracking System- WEITS) including integrating the system into RCRAInfo in order to make shipping hazardous waste across borders more efficient. Managing hazardous waste imports and exports is a federal responsibility, non-delegable to states.
- Provide technical hazardous waste management assistance to tribes to encourage sustainable practices and reduce exposure to toxins from hazardous waste.
- Directly implement the RCRA Program in unauthorized states, on tribal lands, and other unauthorized portions of state RCRA programs. Issue and update permits, including continuing to improve permitting processes.
- Establish and update standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment.
- Take action as necessary regarding regulations to ensure protective management of 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 WIIN Act, which enables states to submit state CCR permit programs for EPA approval. 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.
- As part of an EPA effort to reduce ocean pollution and plastics, the Program will provide technical expertise and funding to support development and implementation of solid waste management systems and infrastructure to help ensure that trash is appropriately collected, recycled, reused, or properly disposed of to prevent litter from entering waterways from land.

**Performance Measure Targets:**

(PM HW5) Number of permit renewals issued at hazardous waste facilities.	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	100	90

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$516.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$101.0) This program change increases efforts to ensure proper management of hazardous and non-hazardous solid wastes.

**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)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$9,051.3</i></b>	<b><i>\$9,982.0</i></b>	<b><i>\$10,202.0</i></b>	<b><i>\$220.0</i></b>
Total Budget Authority	\$9,051.3	\$9,982.0	\$10,202.0	\$220.0
Total Workyears	37.7	43.4	43.4	0.0

**Program Project Description:**

The RCRA Waste Minimization and Recycling Program supports the sustainable management of resources, including managing materials that sustainably promote economic growth and reduces environmental impacts.

The U.S. recycling industry provides approximately 680,000 jobs and \$5.5 billion annually in tax revenues and there is opportunity for greater contribution to the economy and environmental protection, as recent data indicate materials worth as much as \$9 billion are thrown away each year.<sup>336</sup> Recycling is an important part of a circular economy, which refers to a system of activities that is restorative to the environment, enables resources to maintain their highest values, and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas emissions, as natural resource extraction and processing make up approximately 50 percent of total global greenhouse gas (GHG) emissions.<sup>337</sup>

Further, living near waste and waste-related facilities can place burdens on communities when waste is not properly managed, which can lead to higher levels of chronic health issues. Communities whose residents are predominantly persons of color, Indigenous, or low-income continue to be disproportionately impacted by high pollution levels, resulting adverse health and environmental impacts. It is critical to implement materials management strategies that are inclusive of communities with environmental justice concerns as well as pursue innovations that offer the benefits of cleaner processing of materials to all. Recycling is not enough to achieve a circular economy, but it is an important part of addressing climate change, creating jobs, and reducing environmental and social impacts.

As directed by Congress, EPA developed a draft National Recycling Strategy in 2020 to begin to address the challenges facing the recycling system to accelerate the move towards a circular economy both domestically and internationally. In FY 2021, the RCRA Waste Minimization and Recycling Program will finalize the National Recycling Strategy. EPA also established a National Recycling Goal to increase the recycling rate from a rate of 32.1 percent in 2018 to 50 percent by 2030.<sup>338</sup> Congressional and public interest continues to grow regarding plastics in the environment

<sup>336</sup> For more information, please refer to: <https://www.epa.gov/smm/recycling-economic-information-rei-report>.

<sup>337</sup> U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8.

<sup>338</sup> In 2018, in the United States, approximately 292 million tons of municipal solid waste (MSW) were generated. Of the MSW generated, approximately 94 million tons were recycled or composted, equivalent to a 32.1 percent recycling and composting rate. [https://www.epa.gov/sites/production/files/2021-01/documents/2018\\_ff\\_fact\\_sheet\\_dec\\_2020\\_fnl\\_508.pdf](https://www.epa.gov/sites/production/files/2021-01/documents/2018_ff_fact_sheet_dec_2020_fnl_508.pdf).



and EPA's role in addressing them (e.g. ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). The Save Our Seas 2.0 Act,<sup>339</sup> enacted in December 2020, demonstrates bipartisan congressional interest and provided EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and increased federal coordination.

The RCRA Waste Minimization and Recycling Program also promotes the efficient management of food as a resource. Reducing food loss and waste means more food for communities, fewer greenhouse gas emissions and climate impacts, and increased economic growth. EPA works to meet the national goal of reducing food loss and waste by 50 percent by 2030, by providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste; working collaboratively with the U.S. Department of Agriculture, and U.S. Food and Drug Administration to reduce food waste; and providing funding to demonstrate anaerobic digester applications.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will focus on efforts to strengthen the U.S. recycling system, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste. The Program will conduct the following activities:

- Provide national leadership and direction on approaches to reduce environmental impacts and increase the safe and effective reuse/recycling of materials, with a special focus on reducing plastic waste and reducing food waste.
- Expand efforts to gather and provide high-quality scientific information and comprehensive data.
- Continue coordinating with federal agencies to reduce food waste in their facilities, working with industry to reduce food loss and waste in the supply chain, and connecting stakeholders with food waste reduction technologies like anaerobic digestion.
- Finalize a financial needs assessment of the investment required to modernize waste management infrastructure to achieve consistent collection across the Nation to maximize the efficient delivery of materials to the circular economy.
- Develop estimates for the amounts of investment needed to provide all citizens with access to recycling services on par with access to disposal.
- Work with stakeholders (industry, governments, non-profits, communities, and others) to implement actions identified in the National Recycling Strategy and identify additional actions needed to support a circular economy.

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<sup>339</sup> For more information, please refer to: <https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf>.

- Contribute towards global climate change efforts and demonstrate U.S. leadership internationally through participation in resource efficiency dialogues.
- Continue recycling education and outreach efforts and track progress toward the national recycling goal.
- Conduct various studies as required by Save Our Seas 2.0 Act to address post-consumer materials management, including plastic waste.
- Administer a grant program for state and local governments to build or enhance recycling capacity and infrastructure around the country. The grant program will support pilots and infrastructure in communities seeking to enhance their capacity to recover and recycle materials.
- Implement targeted, incentive-based programs to encourage participants to modify business practices to increase recycling and prevent/reduce food waste/loss, enabling industries to efficiently conserve resources, save money, and increase competitiveness.

**Performance Measure Targets:**

<b>(PM RFW) Number of stakeholder actions taken to increase recycling and reduce food loss and waste.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	9,750	10,733

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$57.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$163.0) This program change increases programmatic activities including the reduction of waste generation at the source.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA).  
Save our Seas 2.0 Act, 2020, Pub. L. 116-224.

## **Toxics Risk Review and Prevention**

## Endocrine Disruptors

### Program Area: Toxics Risk Review and Prevention

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Environmental Programs &amp; Management</b>	<b>\$11,030.3</b>	<b>\$7,533.0</b>	<b>\$7,565.0</b>	<b>\$32.0</b>
Total Budget Authority	\$11,030.3	\$7,533.0	\$7,565.0	\$32.0
Total Workyears	8.0	7.6	7.6	0.0

#### Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Food Quality Protection Act (FQPA) and the Safe Drinking Water Act (SDWA) amendments. The EDSP is transitioning to the use of high throughput (HT) screening and computational toxicology (*CompTox*)<sup>340</sup> tools to: screen thousands of chemicals for endocrine activity; establish policies and procedures for screening and testing; and evaluate data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals. Implementing EDSP work into the Agency's risk assessment and risk management functions supports EPA's environmental justice (EJ) priorities, both by targeting substances based on effects to sensitive life stages and deploying rapid methods for assessing disparate chemical exposures to vulnerable communities.

With EDSP support, EPA has run thousands of chemicals through additional HT assays. To further support the evaluation and validation of HT approaches, the EDSP has completed some limited targeted *in vivo* Tier 1 & 2 assays and is conducting systematic reviews of relevant *in vivo* data meeting EPA guidelines. EDSP also supports the Toxic Substances Control Act (TSCA) risk evaluation and scoping process for chemicals with EDSP-relevant information, implementation of Alternative Test Methods using EDSP experience, and development of information technology to facilitate identification of EDSP-relevant information.

The Agency continues to engage the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) in the scientific peer review of HT tools including *ToxCast*<sup>341</sup> to evaluate their use in chemical screening as alternatives to Tier 1 assays. Embedded into the EDSP approach is a focus on sensitive life stages during the tiered testing and assessment processes. As this data is fed into conceptual risk assessment models, it can specifically inform decisions on vulnerable subpopulations. Further, as EDSP prioritizes future chemical assessments, HT tools such as *ExpoCast*<sup>342</sup> will assist in the identification of priority chemical targets with vulnerable subpopulations and environmental justice concerns for further investigation.

<sup>340</sup> For additional information, please visit: <https://www.epa.gov/endocrine-disruption/use-high-throughput-assays-and-computational-tools-endocrine-disruptor>.

<sup>341</sup> For additional information, please visit: <https://www.epa.gov/chemical-research/toxicity-forecasting>.

<sup>342</sup> For additional information, please visit: <https://www.epa.gov/chemical-research/rapid-chemical-exposure-and-dose-research>.

## **FY 2022 Activities and Performance Plan:**

As envisaged by the current tiered framework, imposing the EDSP Tier 1 battery for all 10,000+ substances in the EDSP Universe of Chemicals would cost the regulated community more than \$10.0 billion in addition to EPA resources for staff to manage the regulatory infrastructure to order and review the tests. Given the current national and international laboratory testing capacity necessary to accomplish this, it would take many years to complete, and involve the sacrifice of many millions of animals. To address these issues, in FY 2022, with the requested funding for the EDSP, the Agency will:

- Continue collaborations with EPA's research programs in order to increase scientific confidence in HT approaches which will support a more refined, integrated endocrine activity exposure-based approach to EDSP chemical screening.
- Develop and begin execution of a multi-year plan for implementation of the EDSP for pesticide active ingredients and inerts; and,
- In collaboration with EPA's research programs, initiate HT screening on pesticide substances that were not part of the *ToxCast* chemical sets.

In FY 2022, these efforts will address several key milestones including: (1) work towards finalizing the EDSP List 1, Tier 1 decisions including potential initiation of Tier 2 assays; and (2) developing a plan for implementation and begin several case study EDSP evaluations of pesticide active ingredients to support pesticide registration and registration review, in line with Administration priorities on The EDSP battery explicitly includes evaluations on vulnerable subpopulations such as differences among lifestages such as pregnancy, infants, and early childhood. Moreover, the EDSP battery considers effects on reproduction, a key indicator for EJ.

To date, the EDSP has not been incorporated into the regulatory programs for which it was intended. Further, no program has systematically incorporated HT and *CompTox* tools and results into their regulatory decision-making. A refined, multi-year estimate beyond the baseline testing and review costs cannot be established until the program has gained more experience with actual decisions.

The EDSP will continue to collaborate with international partners, including through the Organisation for Economic Co-operation and Development (OECD) and the international initiative known as Accelerating the Pace of Chemical Risk Assessment (APCRA),<sup>343</sup> to maximize the efficiency of EPA's resources and promote adoption of internationally-harmonized test methods for evaluating the potential endocrine effects of chemicals. EPA represents the U.S. as either the lead or a participant in OECD and APCRA projects involving the improvement of assay systems, including the development of non-animal screening and testing methods.

## **Performance Targets:**

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful

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<sup>343</sup> For additional information, please visit: <https://www.epa.gov/chemical-research/accelerating-pace-chemical-risk-assessment-apcra>.

performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$17.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$15.0) This program change increases contractual support for pesticide evaluations under the EDSP.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$11,475.6</i></b>	<b><i>\$12,558.0</i></b>	<b><i>\$12,588.0</i></b>	<b><i>\$30.0</i></b>
Total Budget Authority	\$11,475.6	\$12,558.0	\$12,588.0	\$30.0
Total Workyears	42.0	49.2	49.2	0.0

**Program Project Description:**

The Pollution Prevention (P2) Program is one of EPA’s primary tools for advancing environmental stewardship and sustainability by federal, state, and tribal governments, businesses, communities, and individuals. The Program also is the primary implementation mechanism for the Pollution Prevention Act (PPA) of 1990. The P2 Program seeks to alleviate environmental problems by leveraging business-relevant approaches to achieve significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials, which also advances EPA’s chemical risk reduction and management goals under the Toxic Substances Control Act (TSCA); reductions in the generation of greenhouse gases; and reductions in the use of water. As a result of these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities. The P2 Program’s efforts advance the Agency’s priorities to pursue sustainability, take action on climate change, make a visible difference in communities – including environmental justice (EJ) communities, and ensure chemical safety.<sup>344</sup> The P2 Program is augmented by a counterpart P2 Categorical Grants Program in the State and Tribal Assistance Grants (STAG) account. For more information about the EPA’s P2 Program, please see <http://www.epa.gov/p2/>.

**FY 2022 Activities and Performance Plan:**

Safer Choice Program

EPA certifies and allows use of the Safer Choice label<sup>345</sup> on products containing ingredients that meet stringent health and environmental criteria and undergo annual audits to confirm the products are manufactured to the Safer Choice Standard’s rigorous health and environmental requirements. With 400+ partner companies and approximately 2,000 certified products in the marketplace, companies have invested heavily in this EPA partnership, and consumer and industry interest in Safer Choice – and safer chemical products – continues to grow across chemical product value chains. This program gives industry a real incentive to develop and use safer chemicals, and consumers the ability to identify safer chemical products. Further, consumers, retailers, and institutional purchasers are important drivers of demand for products labeled under the Program. In FY 2022, the Program will begin work to update and strengthen its standards. Safer Choice also will conduct coordinated outreach with partners to better communicate the health and

<sup>344</sup> For additional information about the EPA’s P2 Program, please visit: <http://www.epa.gov/p2/>.

<sup>345</sup> For additional information about the Safer Choice Program, please visit: <https://www.epa.gov/saferchoice>.

environmental benefits of these products to consumers; federal, state, tribal, and local government procurement officials; and institutional and industrial purchasers. The Safer Choice Program will expand into additional product categories and seek to increase consumer and commercial recognition of Safer Choice products. EPA also will continue in FY 2022 its Partner of the Year Awards Program, which awards organizations and companies for their leadership in formulating, and making available to communities, products made with safer ingredients.

New for the remainder of FY 2021 and into FY 2022, Safer Choice outreach and partnership activities will add a specific focus on bringing Safer Choice-certified products to people of color and low-income communities – two common characteristics of EJ communities. This action is aligned with Executive Order (EO) 14008: *Tackling the Climate Crisis at Home and Abroad* at section 219, which directs agencies to develop “...programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities...” Safer Choice will work with retailers and product manufacturers to help them develop even more products containing safer chemical ingredients that are easily identified and purchased. Safer Choice will begin partnerships with organizations that serve communities with EJ concerns to help custodial staff and house cleaning companies fight conditions such as asthma<sup>346</sup> and gain access to Safer Choice-certified products. Safer Choice will, through its Partner of the Year Awards and other activities, encourage companies to fight climate change, reduce use of hazardous materials, and improve water quality as they formulate products with safer ingredients.

To enhance transparency and to facilitate expansion of safer chemical choices and products, EPA has included on the Program’s website a list of non-confidential chemicals that meet the Safer Choice Program criteria and that are allowed in the Program’s labeled products. In FY 2020, this Safer Chemical Ingredients List contained almost 1,000 safer chemicals, and EPA will continue to update this list in FY 2021 and FY 2022 as the program evaluates additional chemical ingredients and chemical categories and approves products for the use of the Safer Choice label.

## P2 Technical Assistance Grants

The P2 Source Reduction Assistance Grant Program<sup>347</sup> assists businesses, particularly small- and medium-sized firms, to identify, evaluate, and adopt environmental stewardship, P2, and sustainability solutions that make good business sense and improve multi-media environmental conditions, including reduction in hazardous materials and pollutants, including greenhouse gases. Through competitive grants to technical assistance centers operated by states, tribes, and non-profit organizations, U.S. businesses are able to access a range of P2 enabling tools and support programs. In FY 2021, EPA has 11 active two-year source reduction assistance grants to states, tribes, and several non-profit organizations. Additionally, EPA invests in analyses, tool development, training, outreach, and partnerships, leveraging the success of EPA grantees and client businesses in a particular sector/location by amplifying/replicating environmental

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<sup>346</sup> Please see: [https://journals.lww.com/joem/Fulltext/2003/05000/Cleaning\\_Products\\_and\\_Work\\_Related\\_Asthma.17.aspx](https://journals.lww.com/joem/Fulltext/2003/05000/Cleaning_Products_and_Work_Related_Asthma.17.aspx).

<sup>347</sup> For additional information, please visit: <https://www.epa.gov/p2/grant-programs-pollution-prevention>. These EPM grants serve as laboratories of innovation, and are complementary to the P2 Categorical Grants issued only to states and tribes. In FY 2021, there are 11 active P2 Source Reduction Grants and 42 active P2 Categorical Grants, for a total of 53 grants.



stewardship, P2, and sustainability successes to similar businesses in other locales. Such economies of scale for P2 are central to maximizing the effectiveness of the Program.

One of the approaches EPA takes to pursue program efficiencies and economies of scale is through sector-focused P2 National Emphasis Areas. For P2 grants awarded in FY 2022, grant applicants from states, tribes, and other grantees will continue to be required to focus on one or more industry areas, which were selected based on an analysis of data to identify industry sectors that had high environmental impact, high economic importance, and substantial environmental stewardship, P2, and sustainability opportunity.<sup>348</sup> Documenting best practices and developing case studies and training materials will be foundational assets for amplifying/replicating successes resulting from the grant programs. The collective potential of EPA's P2 grant programs in addressing climate is enormous. From 2011-2018, EPA's P2 grants contributed to the elimination of 15.2 million metric tons of greenhouse gases. In our upcoming grant solicitation for FY 2022 and FY 2023, the P2 Program will further emphasize using P2 approaches to address climate impacts.

To further advance EJ in the remainder of FY 2021 and in FY 2022, EPA will use analyses of toxic chemical releases from facilities and industrial proximal to EJ communities (from Toxics Release Inventory [TRI] reporting and Chemical Data Reporting [CDR], where available), and use sector-specific P2 cases studies and best practices – combined with outreach and training – to facilitate adoption of P2 practices in those industries, and in the EJ communities themselves. Additionally, EPA will advance P2 technical assistance objectives in FY 2022 through customizing, developing, and delivering training to identify and deploy green chemistry and engineering solutions through a range of incentive and related approaches in these same communities.

#### Environmentally Preferable Purchasing Program (EPP)

The Environmentally Preferable Purchasing Program (EPP)<sup>349</sup> implements the direction provided to EPA in the Pollution Prevention Act, the National Technology Transfer and Advancement Act, Federal Acquisition Regulations, and Executive Orders which mandate sustainable federal procurement, including through the development and use of sustainability standards, specifications, and ecolabels. From FY 2015 through FY 2020, the EPP Program issued and updated EPA Recommendations of Specifications, Standards, and Ecolabels for Federal Procurement, for more than 20 products and services. These recommendations help federal procurement officials determine which private sector standards and ecolabels, among sometimes dozens within a single purchase category, are appropriate and effective in meeting Federal procurement goals and mandates. EPA also coordinates federal procurement programs that integrate environmental performance into procurement, working with agencies such as the General Services Administration, and the Departments of Energy and Defense.

EPA will continue its leadership role in FY 2022 working toward the final implementation of the EPA guidelines intended to provide a transparent, fair, and consistent approach to evaluating the environmental sustainability of product standards and eco-labels for federal purchasing. These

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<sup>348</sup> P2 National Emphasis Areas include: automobile manufacturing and maintenance, aerospace manufacturing and maintenance, chemical manufacturing and processing, metal manufacturing and fabrication, and food and beverage manufacturing or processing.

<sup>349</sup> For additional information, please visit: <http://www.epa.gov/greenerproducts/buying-green-federal-purchasers>.

guidelines will help EPA explore expanding EPA Recommendations in product categories that have high climate impacts in support of EO 14008. This EO directs federal agencies to align management of federal procurement to support climate action by providing an immediate, clear, and stable source of product demand, increased transparency and data, and robust standards for the market.

To further support EPA’s goals for equity and EJ, the EPP Program will develop and implement training and outreach for disproportionately affected communities, as well as state, tribal, and local governments, to assist in facilitating product and service procurement choices that are environmentally sound and promote human and environmental health.

Green Chemistry

The Green Chemistry Program<sup>350</sup> fosters the sustainable design of chemical products and processes. The Program also analyzes green chemistry innovations and works with partners and external stakeholders to facilitate market adoption and penetration of new commercially successful chemistries and technologies. Its Green Chemistry Challenge Awards (GCCA) serve a critical role in raising the profile, importance, and credibility of innovative green and sustainable chemistry technologies. During the Program’s 25+ years, EPA has received more than 1,800 nominations and presented awards to 123 technologies, demonstrating the interest among stakeholders to be recognized at the national level for developing market-ready and/or market-mature green chemistry solutions. The contribution of greener chemistries to addressing climate change is very clear. Winning technologies are estimated to eliminate 7.8 billion pounds of carbon dioxide equivalents released to air – the equivalent of taking 770,000 cars off the road each year.<sup>351</sup> In FY 2022, EPA will develop training materials to help state, tribal, local, and industry stakeholders acquire information and understanding of the benefits from these innovations.

The Green Chemistry Program also analyzes green chemistry innovations and works with federal partners and external stakeholders to facilitate market adoption and penetration of new commercially successful chemistries and technologies. In FY 2022, the Program also will work with awardees and nominees to pursue the goal of market-oriented environmental and economic progress through increased adoption of these innovations.

**Performance Targets:**

<b>(PM P2mtc) Reductions in metric tons of carbon dioxide equivalent (MTCO2e) released.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	No Target Established	TBD

<b>(PM SC1) Number of new products certified by the Safer Choice program.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	200	200

<sup>350</sup> For additional information, please visit: <http://www.epa.gov/greenchemistry/index.html>.

<sup>351</sup> For additional information, please visit: <https://www.epa.gov/greenchemistry/information-about-green-chemistry-challenge>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$130.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$100.0) This program change reflects savings obtained from greater efficiencies due to the Program's use of more virtual meetings with stakeholders.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$67,369.7</i></b>	<b><i>\$60,280.0</i></b>	<b><i>\$75,519.0</i></b>	<b><i>\$15,239.0</i></b>
Total Budget Authority	\$67,369.7	\$60,280.0	\$75,519.0	\$15,239.0
Total Workyears	274.3	331.7	419.3	87.6

Total program work years in FY 2022 include 51.6 FTE funded by TSCA fees. FY 2020 Actuals include obligations of TSCA Service Fees and the advance on appropriations for those fees. TSCA Service Fees are not included in FY 2021 Enacted or FY 2022 President’s Budget levels, but EPA anticipates collecting approximately \$33.85 million of such fees in FY 2021 and \$6.85 million in FY 2022, subject to potential changes in fee levels in response to statutory requirement for TSCA User Fee Rule to be updated every three years.

**Program Project Description:**

EPA has significant responsibilities under the Toxic Substances Control Act (TSCA) for ensuring the safety of chemicals in or entering commerce and addressing 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<sup>352</sup> by collecting chemical data, conducting risk evaluations, and developing and implementing risk management actions, where appropriate, to prevent any unreasonable risk posed by their manufacture, use and/or disposal; and
- New chemicals, by reviewing new chemical submissions from manufacturers and processors and taking action, as appropriate, to mitigate potential unreasonable risks to health or the environment before those chemicals can enter the marketplace.

The CRRR Program – particularly the assessment and management of chemical risks to health and the environment, including risks to vulnerable subpopulations – will play an important role in achieving the Biden-Harris Administration’s goals to enhance environmental justice and tackle the climate crisis as set forth in Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* and EO 14008: *Tackling the Climate Crisis at Home and Abroad*.

TSCA authorizes EPA to collect fees from chemical manufacturers and processors to defray 25 percent of the costs for administering certain sections<sup>353</sup> of TSCA.<sup>354</sup> Fee levels are set by regulation and may be adjusted on a three-year basis for inflation and to ensure that fees defray approximately 25 percent of relevant costs. The TSCA Fee rule became effective on October 1,

<sup>352</sup> “Existing Chemicals” are those already in use when TSCA was first enacted in 1976 and those which have since gone through review by the TSCA New Chemicals Program. These include certain prevalent, high-risk chemicals known generally as “legacy chemicals” (e.g., PCBs, mercury), which were previously covered in a separate Chemical Risk Management (CRM) budget justification. The CRM program area was combined with Chemical Risk Review and Reduction effective FY 2015.

<sup>353</sup> The costs of implementing TSCA Sections 4 - 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.

<sup>354</sup> 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.

2018.<sup>355</sup> CRRR Program fees collected or projected to be collected in FY 2019 – FY 2021 under this rule equated to approximately 14 percent of associated expenditures for those three FYs. EPA proposed revisions to the rule in December 2020, but plans to re-propose in light of public comments, as such, now expects to finalize an amended fee rule in FY 2022. EPA expects the amended rule to defray up to 25 percent of relevant costs, as statutorily allowed.<sup>356</sup>

### **FY 2022 Activities and Performance Plan:**

The 2016 amendments to TSCA imposed significantly increased responsibilities for the CRRR Program, including, for example, a requirement to systematically prioritize and comprehensively evaluate at least 20 chemicals at a time (and evaluate additional chemicals at manufacturers' request), and to manage identified unreasonable risks, all under strict statutory deadlines. The Program resources, however, have not increased commensurate to the workload related to these new statutory requirements. In FY 2022, the Agency is requesting an additional 87.6 FTE (35 percent increase from the FY 2021 Enacted Budget level) to continue implementation of TSCA. Emphasis will be placed on integrity of scientific products, adherence to statutory intent and requirements, and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, data development and information collection, the review of Confidential Business Information (CBI) claims, and other statutory requirements.

The increased resources are essential for EPA to address the increased workload, including:

- Revising some of the first 10 risk evaluations issued in FY 2020 and FY 2021 to address overlooked and/or inadequately assessed exposure pathways (including those affecting underserved/disproportionately-burdened communities);
- Ensuring the risk evaluations support legally defensible risk management actions;
- Developing risk management actions in response to the unreasonable human health and environmental risks identified in risk evaluations;
- Developing draft risk evaluations for the 20 High-Priority Chemicals initiated by EPA in December 2019;
- Identifying and collecting the robust data needed to support those risk evaluations; and
- Initiating or continuing risk evaluations in response to requests by manufacturers.

At the same time, the Agency also will continue to review Section 5 new chemicals submissions under TSCA's enhanced safety determination requirements, continue to review CBI claims to ensure that the public has access to the maximum amount of chemical safety information allowed by law, and carry out other required TSCA CRRR activities as described below.

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<sup>355</sup> The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and, in limited instances, processors who: are required to submit information (Section 4); submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (Section 5); manufacture, (including import) a chemical substance that is subject to an EPA-initiated risk evaluation (Section 6); or request that EPA conduct risk evaluation on an existing chemical (Section 6), subject to the Agency's approval of the request.

<sup>356</sup> This rule may not go into effect until FY 2023.

## Primary TSCA Implementation Activities Supported in Part by User Fees

*Section 4: Testing of Chemical Substances and Mixtures.* TSCA Section 4 authorizes EPA to require testing of a chemical substance. The Agency exercised for the first time new statutory authority in its issuance of the first TSCA Test Order in March 2020 for critical data associated with Pigment Violet 29. In January 2021 the Agency issued Test Orders for nine additional chemicals currently undergoing TSCA risk evaluation. In FY 2022, increased resources will enable the Agency to: review test protocols and test data submitted in response the recently-issued Test Orders and previously issued Test Rules and Enforceable Consent Agreements (ECAs); issue additional Test Orders, Test Rules, and/or ECAs to support chemical prioritization and risk evaluation activities.

*Section 5: New Chemicals.* Under TSCA Section 5, EPA is responsible for reviewing all new chemical submissions to determine whether the chemicals may pose unreasonable risks to human health or the environment. In FY 2022, the Agency expects to: conduct risk assessments for more than 500 new chemical notice and exemption submissions;<sup>357</sup> make affirmative determinations on whether unreasonable risks are posed under their conditions of use; manage identified risks associated with these chemicals through the issuance of Orders, publish Significant New Use Rules (SNURs); and to require the development of additional data where information is insufficient to conduct a reasoned evaluation.<sup>358</sup>

The new chemicals program plays an important gatekeeper role in ensuring the safety of new chemicals before they enter commerce. In previous FYs, however, the Agency's implementation of TSCA Section 5 placed a significant emphasis on concluding reviews within 90 days by, for example, limiting those reviews to only the submitter's intended uses of the chemical. In March 2021, the Agency announced several policy changes for this program to ensure a more fulsome consideration of a chemical's conditions of use and potential exposures to workers. These changes restore the approach taken immediately following enactment of the 2016 amendments and aim to align implementation of the Program more closely with the law's requirements. The requested resources in FY 2022 are essential for EPA to implement the new chemicals program in accordance with statutory mandates and to address the backlog of older submissions. The additional FTE also are critical to ensuring that the Agency can conduct robust risk assessments using best available science and data within the statutory timelines, identified risks to human health or the environment from new chemicals are appropriately mitigated prior to their entry in commerce, and the Program continues to foster chemical innovation and advances in technologies.

*Section 6: Existing Chemicals.* Under TSCA, as amended, EPA has gained significant responsibility for evaluating the risks of existing chemicals to human health and the environment. Where unreasonable risk is found, the Agency also will commence risk management (regulatory) action under TSCA Section 6 to address those risks. The increased resources requested in FY 2022

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<sup>357</sup> e.g., Pre-Manufacture Notices (PMNs), significant new use notifications (SNUNs), microbial commercial activity notices (MCANs), low volume exemptions (LVEs), low releases and low exposures exemptions (LoREX), test marketing exemption (TME), TSCA experimental release application (TERA) and Tier 1 and 2 exemptions.

<sup>358</sup> For PMNs, MCANs and SNUNs, as required by law, the Agency must generally complete these review, determination and associated risk management activities within 90-days of receiving the submission, subject to extensions or suspension under certain circumstances.

are critical for the Agency to continue implementing these additional requirements to address the risks of existing chemicals, including:

- **Prioritization:** Prioritization is the initial step in the process of evaluating existing chemicals under TSCA and is codified in a final Chemical Prioritization Process rule.<sup>359</sup> The purpose of prioritization is to designate a chemical substance as either High-Priority for further risk evaluation, or Low-Priority for which risk evaluation is not warranted at the time. TSCA required that EPA designate by December 2019 at least 20 chemical substances as High-Priority for risk evaluation, and also at least 20 chemical substances as Low-Priority. On December 20, 2019, EPA finalized the designation of 20 chemical substances as High-Priority for upcoming risk evaluations.<sup>360</sup> On February 20, 2020, EPA finalized the designation of 20 chemical substances as Low-Priority.<sup>361</sup> TSCA requires that upon completion of a risk evaluation for a High-Priority chemical, EPA must designate at least one additional High-Priority chemical to take its place, thus ensuring that at least 20 EPA-initiated risk evaluations are underway at all times. In FY 2022, EPA will begin working to identify additional High-Priority chemicals.
- **Risk Evaluation:** EPA initiated risk evaluations for the first 10 chemicals in December 2016. The Agency missed the 3.5-year statutory deadline for completing TSCA risk evaluations for nine of the chemicals. Only one evaluation was completed on time (June 2020). The last were not completed until January 2021. Furthermore, the Agency is now facing the need to reexamine many of the risk evaluations for those chemicals to address overlooked and/or inadequately assessed exposure pathways (including those affecting underserved or disproportionately burdened communities), adding additional performance requirements for FY 2021 and FY 2022.

EPA initiated risk evaluations for the first set of 20 High-Priority chemicals in December 2019.<sup>362</sup> On September 4, 2020, EPA released final scoping documents for these chemicals<sup>363</sup> with the 20 evaluations required to be completed by December 2022, or June 2023 if statutorily authorized extensions are required to be exercised. However, the Agency will need to revisit many of those scoping documents under its renewed commitment to scientific integrity and to ensure that exposure pathways affecting under-served/disproportionately-burdened communities are properly evaluated in accordance with the law, which will likely expand the focus of those evaluations. Specifically, it is expected that the Agency will include expanded consideration of potentially exposed and susceptible subpopulations, including environmental justice considerations. It is expected EPA also will include the assessment of specific exposure pathways, such as air and water, that were excluded in the 2020 scoping documents due to policy decisions made previously. In addition, the Agency has already experienced delays in obtaining responses from TSCA Section 4 Test Orders and Section 8 data gathering rules

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<sup>359</sup> For additional information, please visit: <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0636-0074>.

<sup>360</sup> For additional information, please visit: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high>.

<sup>361</sup> For additional information, please visit: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/low-priority-substances-under-tsca>.

<sup>362</sup> For additional information, please visit: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high>.

<sup>363</sup> For additional information, please visit: <https://www.epa.gov/chemicals-under-tsca/epa-releases-final-scope-documents-and-list-businesses-subject-fees-next-20>.

intended to provide information critical to the completion of the evaluations. Increased resources in FY 2022 will support the TSCA Program's efforts to meet statutory mandates and other requirements while maintaining the Agency's commitment to make evidence-based decisions guided by the best available science and data, consistent with the President's January 27 2021 Memo on Scientific Integrity.

Manufacturers may submit requests to EPA to evaluate specific additional chemicals. The first two Manufacturer Requested Risk Evaluations (MRREs) were commenced in FY 2020; a third was commenced in FY 2021 and a fourth request is currently being considered. Those initial MRREs will be underway throughout FY 2022 and are for chemicals that were on the TSCA Work Plan, enabling the Agency to collect user fees amounting to only 50 percent of its associated actual costs. Increased resources in FY 2022 will ensure that all MRREs are completed on time and in accordance with statutory requirements.

- **Risk Management:** When unreasonable risks are identified in the final risk evaluation, EPA must promulgate risk management action rulemakings under TSCA Section 6(a) to address the unreasonable risk within two years, or up to four years if an extension is utilized.<sup>364</sup> EPA commenced development of risk management actions in FYs 2020 and 2021 after determining that each of the first 10 chemicals evaluated under Section 6 presented unreasonable risk of injury to health or the environment under the assessed conditions of use, and sees the potential for expanding/augmenting some of those actions as the risk evaluations for the first ten chemicals are reevaluated. EPA will continue development of these rulemaking actions in FY 2022, including issuance of proposed rules for certain chemicals. EPA is in the process of reconsidering the risk evaluations, which may impact risk management actions under development. As a result, proposed rulemakings will not be published for public comment until the review and any update of the risk evaluations are complete. However, EPA will continue to engage stakeholders in dialogue regarding these risk management actions to ensure the Agency has the benefit of input from interested parties.

TSCA also mandated that EPA promulgate Section 6 risk management rules for certain Persistent, Bioaccumulative, and Toxic (PBT) chemicals on the 2014 TSCA Work Plan without undertaking further risk evaluation.<sup>365</sup> EPA issued five final rules in January 2021. However, in March 2021, EPA announced a 60-day public comment period to collect additional input on these final rules. Additionally, EPA issued a temporary 180-day "No Action Assurance" indicating that the Agency will exercise its enforcement discretion regarding the prohibitions on processing and distribution of one of these PBTs, Phenol, isopropylated phosphate (PIP)<sup>366</sup> It is possible that as a result of this information and comments received during the public comment period, one or more of the five rules will require revision.

*Section 14: Confidential Business Information.* EPA is required under TSCA Section 14 to review and make determinations on CBI claims contained in TSCA submissions; process requests for and

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<sup>364</sup> TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act, Section 6(c)(1)(B) and (C)

<sup>365</sup> TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act, Section 6(h) (1) and (2)

<sup>366</sup> For additional information, please visit: [https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under#:~:text=Contact%20Us-.Persistent%2C%20Bioaccumulative%2C%20and%20Toxic%20\(PBT\)%20Chemicals,under%20TSCA%20Section%206\(h\)&text=Lautenberg%20Chemical%20Safety%20for%20the,bioaccumulative%20and%20toxic%20\(PBT\).](https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under#:~:text=Contact%20Us-.Persistent%2C%20Bioaccumulative%2C%20and%20Toxic%20(PBT)%20Chemicals,under%20TSCA%20Section%206(h)&text=Lautenberg%20Chemical%20Safety%20for%20the,bioaccumulative%20and%20toxic%20(PBT).)



make certain CBI information available to states, tribes, health and medical professionals, first responders, under defined circumstances; and, assign and publish unique identifiers for each chemical substance for which a confidentiality claim for specific chemical identity is approved. EPA is updating policies, regulations, and guidance to implement the amendments. In FY 2022, EPA will assign unique identifiers to chemicals where CBI claims for chemical identity are approved and expects to complete CBI claim reviews for more than 2,000 new cases, and approximately 1,500 chemical identity claims.

### Other TSCA Sections, Mandates and Activities

#### *Section 8:*

- **Chemical Data Reporting (CDR) Rule.** Section 8(a) of TSCA requires manufacturers (including importers) to provide EPA with information on the production and use of chemicals in commerce.<sup>367</sup> In March 2020, EPA amended the Chemical Data Reporting (CDR) rule to reduce burden for certain CDR reporters, improve data quality and align reporting requirements with amended TSCA. The recent CY 2020 CDR Reporting Cycle, which occurs every four years and covers CY 2016-2019, commenced on June 1, 2020, and concluded on January 29, 2021.<sup>368</sup>
- **Other Section 8 Activities.** In FY 2022, EPA will: publish a proposed section 8(a)(7) rule for Per- and Polyfluoroalkyl Substances (PFAS); issue an 8(d) rule requiring health and safety data reporting for certain chemicals; analyze 300 Substantial Risk (Section 8(e)) Notifications submitted by industry;<sup>369</sup> implement a rule that will establish a plan for reviewing claims to protect confidential chemical identities within one year of compiling the initial Inventory with active and inactive designations;<sup>370,371</sup> and continue issuing other Section 8 data gathering rules to obtain data needed to support Section 6 prioritization and risk evaluations.

#### *Work Addressing Mercury.* In FY 2022, EPA will:

- Maintain the Mercury Electronic Reporting Application<sup>372</sup> and conduct outreach to stakeholders on reporting requirements.
- Continue work under the Mercury Export Ban Act, and related Lautenberg amendments related to the prohibition of export of certain mercury compounds, to support compliance with the Minamata Convention on Mercury, to which the United States is a party.
- Collect and prepare information for publication in the CY 2023 update to the national mercury inventory and consider recommending actions to further reduce mercury use.

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<sup>367</sup> For additional information on CDR, please visit: <https://www.epa.gov/chemical-data-reporting>.

<sup>368</sup> For additional information, please visit: <https://www.epa.gov/newsreleases/epa-continues-deliver-commitments-under-amended-tsca>.

<sup>369</sup> TSCA Section 8(e) Notifications require EPA be notified immediately when a company learns that a substance or mixture presents a substantial risk of injury to health or the environment.

<sup>370</sup> These are chemical identities reported in retrospective commercial activity notices (the review plan rule was finalized in February 2020).

<sup>371</sup> CBI claims made by manufacturers or processors for chemical identities in retrospective activity notices must be reviewed and determinations made no later than five years after the rule is final (compiling the initial Inventory). The current Inventory has approximately 7,750 chemicals on the confidential portion that have been reported as being active in commerce in the last 10 years.

<sup>372</sup> The Mercury Electronic Reporting application is an electronic reporting interface and database within the Central Data Exchange (CDX).

*TSCA Citizen Petitions.* In FY 2022, EPA will continue to meet the requirements of Section 21 of TSCA which authorizes citizen petitions for the issuance, amendment, or repeal of certain actions (rules and orders) promulgated under specific components of TSCA sections 4, 5, 6, and 8. The Agency must grant or deny a Section 21 petition within 90 days. If EPA grants a petition, the requested action must be initiated in a timely fashion.

*Formaldehyde Standards for Composite Wood Products.* In FY 2022, 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.<sup>373</sup> This includes updating new revised voluntary consensus standards incorporated by reference in the rule, as required under the National Technology Transfer and Advancement Act (NTTAA).

*TSCA User Fees.* Section 26 of TSCA authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA Sections 4, 5, 6, and 14.<sup>374</sup> EPA promulgated the TSCA User Fee Rule in October 2019<sup>375</sup> and collected \$2.7 million in fee revenue in FY 2019 from Section 5 submissions. In FY 2020, \$3 million in fee revenue was collected from Section 5 submissions as well as \$2.5 million from two Section 6 MRREs for chemicals on the TSCA Work Plan (diisodecyl phthalate [DIDP] and diisononyl phthalate [DINP]). In FY 2021, fee collections are expected to be \$30.0 million (\$3 million from Section 5, \$25.65 million from 19 of the 20 Section 6 EPA-Initiated Risk Evaluations, \$1.25 million from one Section 6 MRRE for a TSCA Work Plan chemical (D4), and less than \$0.1 million from Section 4 Test Orders). However, nearly \$17 million of the collections for the 19 Section 6 Risk Evaluations is not due to be paid until September 2, 2021, rendering the funds un-usable by EPA until early FY 2022. In FY 2022, EPA anticipates collecting similar amounts for Sections 4 and 5 (\$3.1 million) and \$2.5 million for an assumed two Section 6 MRREs for TSCA Work Plan Chemicals, subject to potential fee level changes (see below). EPA will apportion FY 2021 Section 6 collections over the risk evaluation lifecycle (3-3.5 years). TSCA requires EPA to update the fees every three years.<sup>376</sup> Fees collected/projected to be collected in FY 2019 – FY 2021 equated to approximately 14 percent of associated expenditures for those three FYs, well below the 25 percent target. EPA proposed revisions to the fee rule in December 2020 but plans to re-propose in light of public comments; as such, EPA now expects to finalize an amended fee rule in FY 2022.

### Information Technology (IT) in Support of TSCA Implementation

IT systems development and maintenance will continue in FY 2022 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 to reduce manual handling of data and increase internal EPA access to data relevant to chemical assessments and expedite review of chemicals.

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<sup>373</sup> For additional information, please visit: <http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products>.

<sup>374</sup> TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act, Section 26(b) (1) and (4).

<sup>375</sup> For additional information, please visit: <https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act>.

<sup>376</sup> For additional information, please visit: <https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act>.

- Continuing integration of TSCA information management, e-Reporting, and public access systems with the Agency’s E-Enterprise business strategy.
- Initiating development of new tools for hazard and exposure identification, assessment, and characterization, while improving existing tools to better assess chemical risks.
- Maintaining the functionality of *ChemView*<sup>377</sup> and plan for 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.
- Completing the TSCA CBI LAN assessment in preparation for network modernization.

### Continuous Improvement of TSCA Implementation

In FY 2022, the Agency will continue monitor and evaluate its progress on key metrics related to core responsibilities under TSCA, such as completing all EPA-initiated risk evaluations and associated risk management actions for existing chemicals within statutory timelines. In addition, EPA plans to further reduce review times and reduce the number of cases under review for more than 90 days for Section 5 new chemicals (PMNs, MCANs, and SNUNs).

EPA also will undertake other forms of assessment and evidence gathering in FY 2022. The Agency’s ongoing risk evaluation processes for existing chemicals utilize scientific evidence obtained from data gathered pursuant to TSCA authorities and systematic review of literature sources in making the risk determination required under amended TSCA. Based on experience and peer review feedback, EPA is further refining its methods for conducting systematic review and plans to peer review its TSCA Systematic Review Protocol in FY 2022. EPA is working aggressively to gather evidence in support of risk evaluations, accelerating the systemic review work to identify data gaps and filling those data gaps through Section 4 Test Orders and Section 8(a) and (d) data gathering rules. The Agency is collaborating extensively with other agencies in this effort, including with the Interagency Testing Committee (ITC) to add 50 substances to the TSCA section 8(d) “model” Health and Safety Data Reporting rule. These additions to the 8(d) rule will require all manufacturers (including importers) that propose to manufacture, or have manufactured within 10 years preceding the effective date of the listing, to submit copies and lists of unpublished health and safety studies to EPA. EPA also will incorporate information reported in response to the 8(d) rule amendments into the risk evaluations for the 20 High-Priority chemicals, subject to the results of systematic review of obtained information, to enhance the risk evaluations and EPA’s ability to determine potential risk. Additional information will be obtained by completing an annual programmatic risk assessment exercise and a statutorily required EPA Office of the Inspector General audit of TSCA user fees to determine whether fee levels are appropriate.

### **Performance Measure Targets:**

<b>(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>

<sup>377</sup> For additional information, please visit: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/introduction-chemview>.

<b>(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	1	0

<b>(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.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	80	100

<b>(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.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	100	100

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$840.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$14,976.0 / +87.6 FTE) This program change provides increased capacity to reflect the workload associated with chemical risk evaluations and risk management actions. Additional FTE will support the TSCA program’s efforts to meet statutory mandates for chemical risk review. This includes \$14,976.0 thousand for payroll.
- (-\$577.0) This net program change reflects the funding shift of some contractual support for risk evaluation activities to TSCA fees from appropriations.

**Statutory Authority:**

Toxic Substances Control Act (TSCA).

**Toxic Substances: Lead Risk Reduction Program**  
 Program Area: Toxics Risk Review and Prevention

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$11,859.6</i></b>	<b><i>\$13,129.0</i></b>	<b><i>\$13,385.0</i></b>	<b><i>\$256.0</i></b>
Total Budget Authority	\$11,859.6	\$13,129.0	\$13,385.0	\$256.0
Total Workyears	56.2	62.9	62.9	0.0

**Program Project Description:**

EPA’s Lead Risk Reduction Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain racial, and low-income communities.<sup>378</sup> This program will thereby play an important role in achieving the Biden-Harris Administration’s goals to enhance environmental justice and equity as set forth in Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* and EO 14008: *Tackling the Climate Crisis at Home and Abroad* by:

- Establishing standards governing lead hazard identification and abatement practices;
- Establishing and maintaining a national pool of certified firms and individuals who are trained to carry out lead hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and
- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead hazards in their homes.

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention, no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected.<sup>379,380</sup> Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 37.1 million homes in the U.S. have LBP, and 23.2 million homes have significant LBP hazards.<sup>381</sup> Children living at or below the poverty line who live in older housing are at greatest risk. Additionally, children of some racial and ethnic groups and those living in older housing are

<sup>378</sup> Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See, America’s Children and the Environment* (EPA, 2019), found at: <https://www.epa.gov/americaschildrenenvironment>.

<sup>379</sup> Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: <http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm>.

<sup>380</sup> *America’s Children and the Environment* (EPA, 2019), found at: <https://www.epa.gov/americaschildrenenvironment>.

<sup>381</sup> *See, American Healthy Homes Survey, Lead and Arsenic Findings* (HUD, 2011), found at: [https://www.hud.gov/sites/documents/AHHS\\_REPORT.PDF](https://www.hud.gov/sites/documents/AHHS_REPORT.PDF).

disproportionately affected by LBP.<sup>382</sup> Because of historic and persistent disproportional vulnerabilities of certain racial, and low-income communities, the Lead Risk Reduction Program has the potential to create significant environmental justice (EJ) gains and provides strategic opportunities to advance EPA's EJ goals in support of the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Orders 13985 and 14008.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will conduct technical analyses and rulemaking efforts to address issues related to preventing childhood lead poisoning, including reviewing the definition of LBP, revising the dust-lead hazard standard (DLHS) for lead in soil (SLHS), and addressing any LBP hazards identified in public and commercial buildings. The DLHS, the definition of LBP, and the dust-lead clearance levels (DLCL) regulations have been identified by the Administration as rules to reconsider. FY 2022 funding will enable EPA to address the rulemaking activities necessary to revisit the DLHS, definition of LBP, and DLCL under expeditious timeframes. In addition, EPA must continue work to evaluate whether hazards are created from renovations of public and commercial buildings (P&CBs). Reconsideration and development of these rulemakings will help ensure the most protective approaches are taken to reduce lead exposure in homes and child-occupied facilities, with benefits for communities where disproportionate impacts occur from LBP in support of the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Orders 13985 and 14008.

### **Renovation, Repair and Painting Program**

In FY 2022, EPA will continue to implement the Renovation, Repair and Painting (RRP) Rule to address lead hazards created by renovation, repair, and painting activities in homes and child-occupied facilities<sup>383</sup> and to advance EPA's EJ goals in support of the Biden-Harris Administration's goals under Executive Orders 13985 and 14008. Fourteen states and one tribe have been authorized to administer this program and rule. In the remaining non-authorized states, tribes, and territories, EPA will continue to accredit training providers, track training class notifications, and certify renovation firms. EPA also will assist in the development and review of state and tribal applications for authorization to administer training and certification programs, provide information to renovators and homeowners, provide oversight and guidance to all authorized programs, and disseminate model training courses for lead-safe work practices. As of March 2021, there were 317 accredited RRP training providers and more than 57,000 certified renovation firms.

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<sup>382</sup> Among children ages 1 to 5 years in families with incomes below poverty level, the 95<sup>th</sup> percentile blood lead level (BLL) was 3.0 µg/dL, and among those in families at or above the poverty level, it was 2.1 µg/dL, a difference that was statistically significant. The 95<sup>th</sup> percentile BLL among all children ages 1 to 5 years was 2.5 µg/dL. The 95<sup>th</sup> percentile BLL in Black non-Hispanic children ages 1 to 5 years was 3.0 µg/dL, compared with 2.4 µg/dL for White non-Hispanic children, 1.8 µg/dL for Mexican-American children, and 2.7 µg/dL for children of "All Other Races/Ethnicities." The differences in 95<sup>th</sup> percentile BLL between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. *See, America's Children and the Environment* (EPA, 2019), found at: <https://www.epa.gov/americaschildrenenvironment>.

<sup>383</sup> For additional information, please visit: <https://www.epa.gov/lead/lead-renovation-repair-and-painting-program>.

### DLHS, Definition of LBP, DLCL, and Public and Commercial Buildings (P&CBs)

In FY 2022, EPA will review the DLHS/LBP and DLCL rules and continue analytical work to support the P&CB rule. These regulations, which reduce lead exposure, can aid in addressing historic and persistent disproportional vulnerabilities of certain racial and low-income communities, and can play an important role toward achieving the Biden-Harris Administration's goals to enhance environmental justice and equity as set forth in Executive Orders 13985 and 14008. The DLHS defines hazardous levels of lead in residential paint, dust, and soil, and post abatement clearance levels for lead in interior house dust. On August 10, 2009, EPA received a petition requesting the Agency to lower DLHS and to modify the definition of LBP in its regulations. EPA responded to the petition on October 22, 2009, agreeing to revisit the current DLHS and to work with the U.S. Department of Housing and Urban Development (HUD) to reconsider the definition of LBP.<sup>384</sup> The petition also requested lower DLCL, but EPA's response did not specifically address this issue. A 2009 settlement agreement also established a timeline for action on P&CB renovations unless EPA determined that these activities do not create lead-based paint hazards.

In FY 2019, EPA revised the DLHS<sup>385</sup>. EPA also finalized its 2018 proposal to make no change to the definition of LBP. The FY 2019 DLHS/LBP rule was challenged through litigation and the rule has been identified by the Administration for reconsideration. In the challenge of the update to the DLHS, the lack of revision of soil lead hazard standards (SLHS) also was challenged. This challenge is pending in the Ninth Circuit Court of Appeals.

On January 7, 2021, the final DLCL rule reduced the amount of lead that can remain in dust on floors and windowsills after lead removal activities to better protect children from the harmful effects of lead exposure from 40 to 10  $\mu\text{g}/\text{ft}^2$  on floors, and 250 to 100  $\mu\text{g}/\text{ft}^2$  on windowsills. This rule also was challenged, and it also has been identified by the Administration as a rule to reconsider. In FY 2022, EPA will continue to evaluate whether hazards are created from P&CB renovations and to develop any necessary work practice and training requirements.

### Lead-Based Paint (LBP) Activities

In FY 2022, EPA will continue to implement the LBP Activities (Abatement, Risk Assessment, and Inspection) Rule by administering the federal program to review and certify firms and individuals and to accredit training providers. Ensuring that those who undertake LBP Activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and work towards addressing the historic and persistent disproportional vulnerabilities of certain racial, and low-income communities in support of the Biden-Harris Administration's goals under Executive Orders 13985 and 14008. Additionally, the Agency will continue to review and process requests by states, territories, and tribes for authorization to administer the lead abatement program in lieu of the federal program. Thirty-nine states, four tribes, the District of Columbia, and Puerto Rico have been authorized to run the lead-based paint abatement program.

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<sup>384</sup> The petition and response may be found at: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-21-petition-requesting-epa-lower-lead-dust>.

<sup>385</sup> For details on the revised rule, please visit: <https://www.federalregister.gov/documents/2021/01/07/2020-28565/review-of-dust-lead-post-abatement-clearance-levels>.

## Education and Outreach

In FY 2022, the Agency will continue to provide education and outreach to the public on the hazards of LBP, emphasizing compliance assistance and outreach to support implementation of the RRP rule and to increase public awareness about preventing childhood lead poisoning. The program will continue to focus on reducing harm in communities disproportionately affected by lead exposure, including a focus on low income and tribal communities, and providing community leaders a means to educate their own communities about lead hazards and the importance of lead poisoning prevention. Finally, EPA will continue to provide support to the National Lead Information Center (NLIC) to disseminate information to the public.

### **Performance Measure Targets:**

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$256.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

### **Statutory Authority:**

Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 *et seq.* – Sections 401-412.



## **Underground Storage Tanks (LUST/UST)**

**LUST / UST**

## Program Area: Underground Storage Tanks (LUST / UST)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$10,841.7</i></b>	<b><i>\$11,250.0</i></b>	<b><i>\$11,443.0</i></b>	<b><i>\$193.0</i></b>
Leaking Underground Storage Tanks	\$9,942.8	\$9,470.0	\$9,603.0	\$133.0
Total Budget Authority	\$20,784.5	\$20,720.0	\$21,046.0	\$326.0
Total Workyears	87.7	91.6	91.6	0.0

**Program Project Description:**

Environmental Program Management (EPM) resources fund EPA’s work in the Leaking Underground Storage Tank (LUST)/UST Program to help prevent releases of petroleum through activities such as inspection and compliance assistance support. The EPM LUST/UST Program provides states<sup>386</sup> and tribes with technical assistance and guidance, and by directly funding projects that assist states and tribes in their program implementation, such as the Tribal Underground Storage Tanks Database (TrUSTD). EPA is the primary implementer of the UST Program in Indian Country. With few exceptions, tribes do not have independent UST program resources.

This program supports the Administration’s priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality. As of September 2020, approximately 53 million people lived within a quarter mile of an active UST facility, representing 16 percent of the total U.S population. These communities tend to be more minority and lower income than the U.S. population as a whole.<sup>387</sup>

In 2005, Congress passed the Energy Policy Act (EPAct) which, along with other release prevention measures, requires states to inspect facilities at least once every three years. EPA has been supporting states in these efforts. Between 2008 and 2020, the number of annual confirmed releases has decreased by 33 percent (from 7,364 to 4,944).<sup>388</sup>

A recent EPA study suggests that increased UST compliance is a result of increasing inspection frequency. EPA’s statistical analysis, using the State of Louisiana’s and Arkansas’s UST data, showed a positive and statistically significant effect of increased inspection frequency on facility

<sup>386</sup> 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.

<sup>387</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data used includes: (1) UST/LUST information as of late-2018 to mid-2019 depending on state from the UST Finder (<https://www.epa.gov/ust/ust-finder>) and (2) 2015-2018 American Community Survey (ACS) census data.

<sup>388</sup> For more information, please refer to <https://www.epa.gov/sites/production/files/2020-06/documents/ca-20-12.pdf>.

compliance.<sup>389</sup> This evidence supports the data trends the Agency witnessed: compliance rates rose notably after fully implementing the three-year inspection requirement.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will engage in the following activities:

- Support enhanced inspections and evaluations for UST owners/operators to ensure that UST systems meet current regulations. This will include expanded development and use of a facility specific compliance assistance application for use in Indian Country.
- Develop tools and resources to assist states in adapting to the impacts of climate change and extreme weather events. This includes developing tools and resources to assist states in identifying facilities that are more prone to flooding or wildfires and helping these facilities prepare for these events before they occur.
- Provide oversight for state LUST prevention grants and provide compatibility compliance assistance for tribal facilities.
- Provide technical assistance to states and the regulated community regarding compatibility of UST systems with ethanol 15 percent blends (E15) and conduct inspections in Indian Country to ensure compatibility. Work in this area is important given the national growth in biofuels and other emerging fuels.<sup>390</sup>
- Continue research studies that identify the compatibility of new fuel formulations with current tank systems.
- Continue to coordinate with state UST prevention programs.
- Provide technical assistance, compliance help, and expert consultation to state, tribal, and stakeholders on both policy and technical matters. This support strives to strengthen the 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.
- 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.<sup>391</sup>

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<sup>389</sup> Sullivan, K. A.; Kafle, A (2020). *The Energy Policy Act of 2005: Increased Inspection Frequency and Compliance at Underground Storage Tank Facilities*. OCPA Working Paper No. 2020-01.

<sup>390</sup> Please see the following EPA website: [www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-2](http://www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-2).

<sup>391</sup> Please see the following EPA website: [www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3](http://www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3).

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 evaluate the effectiveness of its 2015 regulations, which are designed to ensure existing UST equipment continues to function properly.

**Performance Measure Targets:**

Work under this program supports performance results in the LUST Cooperative Agreements Program under the LUST appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$52.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$141.0) This program change supports enhanced inspections and evaluations to ensure that underground storage tanks meet current regulations.

**Statutory Authority:**

Resource Conservation and Recovery Act §§ 8001, 9001-9011.

## **Water Ecosystems**

**National Estuary Program / Coastal Waterways**

Program Area: Water: Ecosystems

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$30,863.9</i></b>	<b><i>\$31,822.0</i></b>	<b><i>\$31,963.0</i></b>	<b><i>\$141.0</i></b>
Total Budget Authority	\$30,863.9	\$31,822.0	\$31,963.0	\$141.0
Total Workyears	35.5	36.9	36.9	0.0

**Program Project Description:**

The National Estuary Program (NEP)/Coastal Waterways Programs works to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds by protecting and restoring water quality, habitat, and living resources.<sup>392</sup>

The water quality and ecological integrity of estuarine and coastal areas is critical to the economic vitality of the United States (U.S.). While the estuarine regions of the U.S. comprise just 12.6 percent of U.S. land area, they contain 43 percent of the U.S. population and provide 49 percent of all U.S. economic output.<sup>393</sup> The economic value of coastal recreation in the United States – for beach going, angling, bird watching, and snorkeling/diving – has been conservatively estimated by the National Oceanic and Atmospheric Administration to be in the order of \$20 billion to \$60 billion annually.<sup>394</sup> When natural resources such as fisheries are adversely impacted by upstream and coastal development, so too are the livelihoods of those who live and work in estuarine watersheds.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will provide \$19.6 million in Clean Water Act Section 320 grants for 28 National Estuary Programs (NEPs) (\$700 thousand per NEP). This funding continues EPA’s support for implementation of the NEP Comprehensive Conservation and Management Plans, addresses findings from regular program evaluations of individual NEPs, supports priorities such as nutrient management, habitat protection and restoration, and green infrastructure, as well as performing oversight of the NEPs. Funding also will support the NEPs in developing the skills and capacity to integrate diversity, equity, and inclusion; water equity; and environmental and climate justice into their guiding documents and daily operations.

The FY 2022 request includes resources and FTE to strengthen the capacity of coastal communities to adapt to the impacts of climate change and increase their resilience through locally-driven NEP partnerships and reinvigorating the Climate Ready Estuaries (CRE) program.<sup>395</sup> NEPs assess

<sup>392</sup> For more information, visit <https://www.epa.gov/nep>.

<sup>393</sup> A 2007 Restore America’s Estuaries study, “The Economic and Market Value of Coasts and Estuaries

<sup>394</sup> Pendleton, Lindwood. The Economic and market Value of Coasts and Estuaries: What’s at Stake. Available at: <https://estuaries.org/resource-library/the-economic-and-market-value-of-coasts-and-estuaries-whats-at-stake/>.

<sup>395</sup> For more information, visit <https://www.epa.gov/cre>.

climate change vulnerabilities, develop and implement adaptation and resiliency strategies, engage and educate stakeholders, and implement collaborative projects with regional, state, and local partners. CRE provides technical support to NEPs and other coastal community leaders and advises on climate resiliency nationally. EPA will continue to work with other federal agencies, states, and tribes to assess ocean and coastal acidification and identify opportunities to implement actions to mitigate the effects of acidification.

EPA continues to work with states, tribes, trust territories, NEPs, and other Federal agencies to implement the National Aquatic Resource Survey (NARS) in coastal/estuarine waters. In FY 2022, the NARS coastal survey will complete processing of samples collected during FY 2021 and provide validated sample results to partners. Analysis and interpretation of the sample results will be used for the next National Coastal Condition Report.

EPA, as the federal chair of the Gulf Hypoxia Task Force, will work with other task force member federal agencies and twelve member states to continue implementation of the 2008 Gulf Hypoxia Action Plan. This activity complements other coordination and implementation resources in the Geographic Program: Gulf of Mexico and Surface Water Protection Program. A key goal of the Gulf Hypoxia Action Plan is to improve water quality in the Mississippi River Basin and reduce the size of the hypoxic zone in the Gulf of Mexico by implementing existing and innovative approaches to reduce nitrogen and phosphorus pollution into the Basin and to the Gulf. Hypoxia Task Force member states are implementing their nutrient reduction strategies, partnering with land grant universities, reporting on measures to track progress, and identifying a need for adaptive management, while the Task Force is developing basin-wide metrics. Excessive nutrients can have both ecological and human health effects – high nitrate levels in drinking water have been linked to serious illness.<sup>396</sup> In addition to the public health risks, the economic costs from impaired drinking water are considerable. State support for effective nutrient reduction in the Gulf will be coordinated with other Hypoxia Task Force federal member agencies, such as the U.S. Department of Agriculture and U.S. Geological Survey, in high-priority watersheds.

### **Performance Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

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<sup>396</sup> For more information, please visit:

<https://nepis.epa.gov/Exec/ZyNET.exe/P100U1TD.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000039%5CP100U1TD.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$75.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$66.0) This program change increases support for the restoration of the water quality and ecological integrity of estuaries of national significance. This reflects EPA's increased national support to assist estuary and coastal communities to prepare for the effects of climate change.

**Statutory Authority:**

2021 Protect and Restore America's Estuaries Act; 1990 Great Lakes Critical Programs Act of the Clean Water Act; Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act Section 320; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act; Water Resources Development Act; 2012 Great Lakes Water Quality Agreement; 1987 Montreal Protocol on Ozone Depleting Substances; 1909 Boundary Waters Treaty.



## Wetlands

Program Area: Water: Ecosystems

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$20,212.0</i></b>	<b><i>\$19,300.0</i></b>	<b><i>\$24,899.0</i></b>	<b><i>\$5,599.0</i></b>
Total Budget Authority	\$20,212.0	\$19,300.0	\$24,899.0	\$5,599.0
Total Workyears	112.1	116.4	138.0	21.6

### **Program Project Description:**

EPA's Wetlands Protection Program has two primary components: 1) the Clean Water Act (CWA) Section 404 regulatory program and 2) the state and tribal development program. Major activities of the Wetlands Protection Program include timely and efficient review of CWA Section 404 permit applications submitted to the U.S. Army Corps of Engineers (USACE) or authorized states; engaging and partnering with USACE, states, and other stakeholders to develop stream and wetland assessment tools, and improving compensatory mitigation effectiveness and availability of credits; assisting in the development of state and tribal wetlands protection programs under CWA; and providing technical assistance to the public on wetland management and legal requirements.

### **FY 2022 Activities and Performance Plan:**

Working with federal, state, tribal, and local partners, EPA will help to ensure an effective, consistent approach to wetlands protection and permitting. This is done through both the Agency's collaborative relationship with USACE in the CWA Section 404 permitting program and continuing work with states and tribes to build their wetlands programs.

#### CWA Section 404

Section 404 of CWA is an established program to regulate the discharge of dredged or fill material into water of the United States, including wetlands. USACE is responsible for managing the day-to-day permit processes nationwide under CWA Section 404.<sup>397</sup> EPA engages in the CWA 404 permit process to ensure compliance with the CWA Section 404(b)(1) guidelines as the permitting authority formulates their proposed permits. In FY 2022, EPA will support the development of stream and wetland assessment methods, trainings for regulators, and regional crediting protocols to improve the efficiency of federal and state agency review, the transparency and predictability of decision making for the public, and the environmental outcomes of the program. In addition, EPA and USACE will continue to work together 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, including assessing

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<sup>397</sup> Currently two states, Michigan and New Jersey have assumed the CWA Section 404 permit program. CWA Section 404(g) gives states and tribes the option of assuming, or taking over, the permitting responsibility and administration of CWA Section 404 permit program for certain waters.

climate impacts and impacts to disadvantaged communities; and ensure permit decisions are legally defensible.

EPA and USACE have initiated a rulemaking to propose amendments to the Mitigation Rule to establish standards and criteria for the use of all types of compensatory mitigation, including on-site and off-site permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation to offset unavoidable impacts to waters of the United States.

EPA also will continue carrying out its responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act, and as a Natural Resource Damage Assessment (NRDA) Trustee for the Deepwater Horizon oil spill under the Oil Pollution Act (OPA). Under CWA Section 404, the RESTORE Act, and OPA, EPA's responsibilities include timely, environmentally sound, and compliant implementation of National Environmental Policy Act (NEPA) review and associated permitting. Under NRDA, EPA is a cooperating or lead federal agency for NEPA on all Trustee Implementation Group restoration plans and ensures the appropriate level of NEPA analysis is integrated into those referenced restoration plans. EPA's RESTORE responsibilities include NEPA analysis for projects that the Council assigns to EPA. As a NRDA Trustee, EPA undertakes mandatory independent third-party financial audits every three years to ensure accountability regarding the use of funds provided under a 2016 consent decree.<sup>398</sup> The first independent third-party financial audit was initiated in FY 2018 and concluded in FY 2019 and the second audit is scheduled to start in FY 2021.

### 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 the flexibility they need to best address their priorities. This includes providing continued assistance to states and tribes interested in assuming administration of the CWA Section 404 program. EPA will propose a rule in FY 2022 to update the existing assumption regulations and provide greater clarity to state and tribes on what waters may be assumed and anticipates taking final action in FY 2023. EPA also will continue to administer Wetlands Program Development Grants in support of state and tribal wetlands programs, with a focus on working more efficiently with states and tribes to achieve specific program development outcomes including protecting and restoring wetlands to address climate impacts and supporting state and tribal assumption of the CWA Section 404 program.<sup>399</sup>

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

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<sup>398</sup> For more information, please see: <https://www.epa.gov/sites/production/files/2016-02/documents/deepwaterhorizon-cd.pdf>.

<sup>399</sup> For more information, please see: <https://www.epa.gov/wetlands>.

**FY 2022 Change from FY 2021 Enacted Budget (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 annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,357.0 / +21.6 FTE) This increase of program resources and FTE supports the implementation of the CWA to protect and restore wetlands. Resources will support EPA's implementation of CWA responsibilities under Section 404, including increasing the quality and quantity of wetlands via timely technical review of Section 404 permits and support for state and tribal efforts to establish and implement effective wetland restoration and protection programs. This investment includes \$3,453.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

CWA § 404.

## **Water: Human Health Protection**

**Beach / Fish Programs**

Program Area: Water: Human Health Protection

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$1,337.2</i></b>	<b><i>\$1,584.0</i></b>	<b><i>\$1,804.0</i></b>	<b><i>\$220.0</i></b>
Total Budget Authority	\$1,337.2	\$1,584.0	\$1,804.0	\$220.0
Total Workyears	1.7	3.2	3.8	0.6

**Program Project Description:**

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 recreational water contact and eating locally caught fish with contaminants at levels of concern.

The Agency implements the following activities under this program:

- Develop and disseminate methodologies and guidance that states and tribes use to sample, analyze, and assess fish tissue in support of waterbody specific or regional consumption advisories.
- Develop and disseminate guidance that states and tribes can use to conduct local fish consumption surveys.
- Develop and disseminate guidance that states and tribes can use to communicate the risks of consuming chemically contaminated fish.
- Gather, analyze, and disseminate information to the public and health professionals that informs decisions on when and where to fish, and how to prepare fish caught for recreation and subsistence.
- Provide best practices on public notification of beach closures and advisories.
- Develop tools such as the sanitary survey app, predictive modeling and improved analytical methods.
- Maintain the E-Beaches IT system to collect data required by the BEACH Act.

These programs are part of EPA’s ongoing effort to increase public awareness of the risks to human health associated with the consumption of fish contaminated with mercury and providing technical support to states and tribes on beach monitoring and data reporting. These efforts are directly linked to the Agency’s mission to protect human health.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to:

- Update science and public policy to assess and manage the risks and benefits of fish consumption;

- Provide analytical tools and collect data associated with beach monitoring; and
- Provide technical support to states in the operation of their fish advisory and beach monitoring programs.
- Build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews.

**Performance Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$209.0 / +0.6 FTE) This increase of resources and FTE builds program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment includes \$111.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

Clean Water Act, § 101, 104, and 303.

## **Drinking Water Programs**

Program Area: Water: Human Health Protection

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$101,007.3</i></b>	<b><i>\$106,903.0</i></b>	<b><i>\$118,265.0</i></b>	<b><i>\$11,362.0</i></b>
Science & Technology	\$4,265.0	\$4,364.0	\$6,444.0	\$2,080.0
Total Budget Authority	\$105,272.3	\$111,267.0	\$124,709.0	\$13,442.0
Total Workyears	472.2	475.2	531.0	55.8

### **Program Project Description:**

Safe drinking water is critical for protecting human health and the economic vitality of the Nation. Approximately 320 million Americans rely on the safety of tap water provided by public water systems that are subject to national drinking water standards.<sup>400</sup> EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach to protect public health from contaminants in drinking water.<sup>401</sup> EPA protects public health through:

- Source water assessment and protection;
- Promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs);
- Training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water;
- Underground injection control (UIC) programs;
- Support for implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and
- Resources and tools for states and tribes to support the financing of water infrastructure improvements, while addressing climate change challenges and creating more resilient infrastructure, including cybersecurity.<sup>402</sup>

Recent events including the detection of lead and per- and polyfluoroalkyl substances (PFAS) in drinking water highlight the importance of safeguards to public health and local economies, and in particular, the need to prioritize threats and protect drinking water sources. The detection of lead and PFAS, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS) and Gen-X chemicals, exemplifies the increased demand for risk communication and other tools that can help communities across the country protect public health and address these chemicals.

<sup>400</sup> For more information on the U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), please see: <http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm>.

<sup>401</sup> For more information, please see: [https://www.epa.gov/sites/production/files/2015-10/documents/guide\\_swppocket\\_2002\\_updated.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/guide_swppocket_2002_updated.pdf).

<sup>402</sup> For more information, please see: <https://www.epa.gov/ground-water-and-drinking-water>.

## **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA is requesting an increase of over \$11.3 million and 51 FTE to support regulatory analysis, development and training, technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This increase also supports development and implementation of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule.

The Agency will continue to improve the effectiveness and efficiency of regulatory programs for states and tribes, including work to implement the Justice40 initiative and advance racial equity and environmental justice for communities who too often have been left behind, including rural and tribal communities. The Drinking Water Program supports this effort by assisting and training state drinking water programs, tribal drinking water officials, and technical assistance providers on achieving and maintaining compliance at drinking water systems, developing best practices, strengthening state and tribal program capacity, and certifying drinking water operators.

Work in this program also supports evidence-building activities as part of EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act).

EPA is enhancing its oversight of state drinking water programs by completing the annual public water system supervision program review for each primacy agency as required under the Safe Drinking Water Act (SDWA). Information gained during these reviews includes an analysis of the completion of sanitary surveys by the primacy agency and an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA. The annual program review directly supports the work of the states and the Agency to reduce the number of community water systems still in noncompliance with health-based standards. As of March 2021, approximately 2,756 of the original 3,508 systems with long-term health-based violations on September 30, 2017 have been returned to compliance.

### Water Infrastructure

Infrastructure investment is essential as the Nation's aging infrastructure poses a significant challenge for the drinking water and wastewater sectors to protect public health and the environment. In FY 2022, EPA will continue to support funding of the Nation's drinking water infrastructure, including infrastructure needs and assistance for disadvantaged and tribal communities and focusing efforts to leverage and encourage public and private collaborative efforts and investments. EPA will continue to work on the seventh Drinking Water Infrastructure Needs Survey. This survey provides a 20-year capital investment need for public water systems that are eligible to receive funding from state Drinking Water State Revolving Fund (DWSRF) programs and inform the DWSRF allocation formula as required under SDWA.

In FY 2022, EPA will continue to support financing and construction of drinking water infrastructure projects by doing the following, in addition to supporting the DWSRF Program:

- Advise states on maintaining their capacity development and operator certification programs to support compliance by public water systems with SDWA;



- Provide grant funding for lead reduction efforts, cybersecurity, and resiliency to natural hazards, especially for small and disadvantaged communities; and
- Encourage states to continue developing state-centric tools to assist water systems with capacity development and support coordination between Public Water System Supervision (PWSS) programs and states.

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) and America’s Water Infrastructure Act of 2018 (AWIA) 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. Mandates range from the creation of grant programs to promoting water workforce development. WIIN and AWIA requirements will continue to be critical to achieve the Administration’s priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

Funding for infrastructure supports EPA’s goal to increase the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs (Clean Water State Revolving Fund, DWSRF, and the Water Infrastructure Finance and Innovation Act Program. As of March 2021, over \$17.5 billion has been leveraged in FY 2020 and FY 2021.

### Drinking Water Implementation

In FY 2022, the Agency will continue to work with states to implement requirements for all NPDWRs to ensure that systems install, operate, and maintain appropriate levels of treatment and effectively manage their drinking water treatment plants and distribution systems. Activities include:

- Working with states to optimize corrosion control treatment and develop other strategies to minimize exposure to lead;
- Developing guidance, tools, and trainings to support water systems and primacy agencies in implementing the Lead and Copper Rule Revisions;
- Developing regulations to improve the clarity, readability, and accuracy of information in Consumer Confidence Reports; and
- Focusing on the reduction of the number of community water systems with health-based violations, especially small systems, tribal systems, and systems in underserved communities which have additional challenges.

EPA will continue to support state migration to the Compliance Monitoring Data Portal, which enables drinking water utilities and laboratories to report drinking water data electronically. In addition, EPA will continue development of the Safe Drinking Water Information System Modernization Program management and reporting tool, which will focus on what drinking water regulation or technical, managerial, and financial state and public water system capacity-building trainings, in support of drinking water standard compliance, should be emphasized. Both systems support human health protection through efficient data management and decision support.

In FY 2022, EPA will conduct the following activities to facilitate compliance with rules:

- Overseeing the national PWSS Program by administering grants to states and measuring program results based on state reporting of health-based rule violations at public water systems for over 90 drinking water contaminants;
- Offering training and technical assistance to states, tribes, and public water systems with a priority on addressing significant noncompliance with the NPDWRs;
- Directly implementing the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the U.S. annually; and
- Directly implementing the Drinking Water Program where states and tribes do not have primacy (e.g., Wyoming, the District of Columbia, and tribal lands excluding the Navajo Nation).

In FY 2022, EPA is requesting resources to support evidence-building activities in support of the Evidence Act. EPA will gather existing reports and analyses on data quality of EPA drinking water compliance data; identify what additional data is needed; search for other sources of information; and analyze information to identify and fill data gaps. With this data analysis, EPA will identify system characteristics that support compliance and those that cause compliance challenges. EPA will use these findings to inform and develop policy instruments.

### Drinking Water Standards

To assure the American people that their water is safe to drink, EPA's drinking water regulatory program monitors for a broad array of contaminants, evaluates whether contaminants are a public health concern, and regulates contaminants when there is a meaningful opportunity for health risk reduction for persons served by public water systems. In FY 2022, the Agency also will address drinking water risks, by:

- Re-evaluating the Lead and Copper Rule Revisions (LCRR) to take into consideration the input from impacted communities. On March 12, 2021, EPA published two notices: 1) the first is an extension of the effective date for the revised LCRR from March 16, 2021 until June 17, 2021; 2) the second action proposes to extend the effective date until December 16, 2021 and proposes a corresponding extension of the revised LCR's compliance deadline. During the extension time period, EPA will seek further public input, particularly from communities that are most at-risk of exposure to lead in drinking water. Through the LCRR, EPA is seeking ways to advance water infrastructure improvement efforts for public water systems. Public engagement includes two virtual public listening sessions and a set of community- and stakeholder-focused roundtables including local community groups, national stakeholders and environmental justice organizations;
- Conducting human health risk assessments for water contaminants to develop national recommended ambient water quality criteria under the Clean Water Act (CWA) and health effects assessments to support SDWA actions, including the derivation of maximum contaminant level goals, drinking water health advisories, and human health benchmarks. Consideration of those potentially most at risk – especially sensitive subpopulations (e.g.,

subsistence fishers) and critical life stages (e.g., infants and children) – is key in development of health effects assessments for contaminants in water;

- Conducting technical analyses, as needed, following the Agency’s FY 2021 final regulatory determinations for contaminants on the fourth contaminant candidate list (CCL 4);
- After a thorough review in accordance with the Administration’s executive orders and other directives, EPA reissued the final regulatory determination to regulate PFOA and PFOS in drinking water on February 22, 2021—which was previously announced on January 19, 2021—without substantive change. In FY 2021, EPA began the process to establish enforceable limits for PFOA and PFOS under the Safe Drinking Water Act. PFAS are a set of man-made chemicals that include PFOA and PFOS. PFAS threaten the health and safety of communities across the Nation, disproportionately impacting historically disadvantaged communities. EPA intends to propose NPDWRs for PFOA and PFOS in FY 2023, with a substantial portion of analyses, including conducting health effects assessments/science to support PFOA/PFOS rulemaking, external consultations, peer reviews, and other work being undertaken in FY 2022;
- Continuing to participate in interagency efforts to address PFAS to better understand the health impacts, the extent of occurrence in the environment, and exposures to PFAS;
- Continuing to develop risk communication and other tools to support states, tribes, and localities in managing PFAS and other emerging contaminants in their communities;
- Developing and publishing the final fifth contaminant candidate list (CCL 5) based on the analysis of available health effects and occurrence data on unregulated contaminants;
- Continuing to conduct analyses in support of the fourth six-year review of existing NPDWRs, utilizing state data for regulated contaminants collected between 2012-2019;
- Continuing to support state and tribal efforts to manage cyanotoxins in drinking water, including providing technical assistance;
- Continuing to engage stakeholders through public meetings and consider additional fora to seek expert stakeholder input on potential revisions to the existing Microbial and Disinfection Byproducts Rules. Develop draft technical support documents and other materials to support this work;
- Developing the final rule for the next cycle of the UCMR monitoring (UCMR 5). This includes evaluating and addressing public comments on the UCMR 5 proposed rule published in March 2021. Providing support to drinking water systems and laboratories as they prepare for the collection and analysis of samples during the implementation of UCMR 5; and
- Collecting Community Water System Survey data to capture changes in the conditions of public water systems that have taken place in water systems over the past 14 years.

### Source Water Protection

EPA will continue to partner with states, federal counterparts, drinking water utilities, and other stakeholders to identify and address current and potential impacts to sources of drinking water. In FY 2022, the Agency will be:

- Continuing to develop data-layers and decision support tools to assist source water assessment, planning, and emergency preparation efforts including the Drinking Water Mapping Application for Protecting Source Waters and an online GIS program available through EPA's web-based geospatial platform, Geoplatform;<sup>403</sup>
- Working with state, federal, utility, and local stakeholders to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts to protect drinking water sources;
- Continuing to partner with the U.S. Department of Agriculture (USDA)'s Natural Resources Conservation Service and Forest Service, and state partners to support implementation of the source water protection provisions of the Agriculture Improvement Act of 2018 (2018 Farm Bill). This presents an opportunity to forge stronger connections between EPA and USDA to address agriculture-related impacts to drinking water sources;
- Continuing to provide support for workshops that promote source water protection at the local level and support the integration of source water protection into related programs at the state and federal levels, focusing on reducing nutrient pollution impacts on drinking water sources;
- Working with stakeholders to implement source water protection provisions mandated by AWIA. Support the implementation of the AWIA revisions to the Emergency Planning and Community Right-to-Know Act as it relates to notification of releases of hazardous chemicals that potentially affect source water. In addition, support community water systems having access to hazardous chemical inventory data;
- Continuing to serve as an expert on sources of emerging drinking water contaminants and options for limiting or preventing such contamination through source water protection and integration of SDWA and CWA, particularly national recommended ambient water quality criteria; and
- Supporting the development of outreach and training materials on incorporating source water protection into asset management to further the concept that source water protection is an integral part of the overall planning and management of a utility.

### Underground Injection Control (UIC)

To safeguard current and future underground sources of drinking water from contamination, the UIC Program regulates the permitting, construction, operation, and closure of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. In FY 2022, activities in the UIC Program include:

- Working with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association to identify best practices in oil and gas development, such as reuse and recycling of produced water, that can help safeguard public health;
- Supporting the Administration's efforts to tackle the climate crisis by working with permit applicants on Class VI permits for secure geologic storage of carbon dioxide and working with state UIC programs to obtain state primacy for the Class VI program;

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<sup>403</sup> For more information, please see: <https://www.epa.gov/sourcewaterprotection/dwmaps>.

- Working with authorized state and tribal agencies in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells;
- Supporting states and tribes in applying for primary enforcement responsibility and implementing UIC Program revisions;
- Providing technical assistance, tools, and strategies to states for improving implementation of UIC programs, including development of e-learning material;
- Using national UIC data to assist with promoting nationally consistent approaches to program oversight of state and EPA UIC programs;
- Developing tools to support permitting in direct implementation and state implementation of the Class VI program; and
- Streamlining EPA UIC direct implementation permitting, developing standard work, deploying Lean management principles and reducing the permit application backlog. Through these efforts, the backlog of EPA-issued new UIC permits decreased from 36 to 22.

### Water Reuse

To assure a safe and reliable source of water that is resilient to drought, flooding, and population growth, EPA is working to advance the consideration of water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2022, EPA will continue to support the National Water Reuse Action Plan and develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions in the Plan that provide financial tools to stakeholders to ensure the accessibility of water reuse.<sup>404</sup>

### **Performance Measure Targets<sup>405</sup>:**

<b>(PM DW-02) Community water systems still out of compliance with health-based standards since September 30, 2017.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	875	701

Work under this program supports Safe Drinking Water Act implementation and compliance to support safe drinking water for the nation.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,256.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

<sup>404</sup> For more information, please see <https://www.epa.gov/waterreuse>.

<sup>405</sup> The Agency has made a technical correction to the baseline for the long-term performance goal associated with this program. The adjusted long-term performance goal is “By September 30, 2022, reduce the number of community water systems still in noncompliance with health-based standards since September 30, 2017, to 701.”

- (+\$10,106.0 / +51.8 FTE) This program change is an increase in resources and FTE to support regulatory analysis, development and training, technical assistance for State, Tribal, and Local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This increase also supports development of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule. This total includes \$9.0 thousand in non-pay and 1.0 FTE to support implementation of the Evidence Act. This investment also includes \$8,765.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

SDWA; CWA.

## **Water Quality Protection**

**Marine Pollution**

Program Area: Water Quality Protection

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$9,153.2</i></b>	<b><i>\$9,468.0</i></b>	<b><i>\$12,072.0</i></b>	<b><i>\$2,604.0</i></b>
Total Budget Authority	\$9,153.2	\$9,468.0	\$12,072.0	\$2,604.0
Total Workyears	32.8	31.8	38.0	6.2

**Program Project Description:**

EPA’s Marine Pollution Program: 1) aims to reduce marine litter and improve trash capture activities across the country, and supports the Trash Free Waters Program; 2) addresses incidental discharges under the Clean Water Act Section 312; and 3) protects human health and the marine environment from pollution caused by dumping through implementation of the Marine Protection, Research and Sanctuaries Act (MPRSA) and supports the Ocean Dumping Management Program.

**FY 2022 Activities and Performance Plan:**

*Trash Free Waters Program.* The FY 2022 request includes resources and FTE to expand trash capture and prevention programs across the U.S. tied to water quality and waste management goals and implement activities under the Save Our Seas 2.0 Act. This program provides support to states and municipalities in coastal regions and on major river systems, with a special focus on lower-income areas with environmental justice concerns. Work will focus on high impact activities such as expanding trash prevention and monitoring programs. Examples include installing trash capture systems in stormwater conveyance systems and in waterways using technologies that are cost-effective and that have high trash-removal efficiencies; providing assistance on integrating trash prevention provisions into municipal stormwater management permits and practices, as well as broader watershed plans; aiding targeted source reduction efforts; promoting appropriate protocols for trash monitoring efforts; researching and addressing microplastics (including microfibers) in waterways; engaging in comprehensive outreach and education efforts for trash reduction; and validating and replicating the most effective tools, projects, metrics, and partnerships across the U.S. for subsequent application both in other locations within the U.S. and in countries with the greatest need.

The Trash Free Waters Program has been able to increase the number of place-based projects year by year through active engagement with partners. In FY 2020, 55 Trash Free Water projects were started. EPA will continue to work with its partners to enhance this initiative in FY 2022.

*Vessel Incidental Discharge Act (VIDA).* In December 2018, VIDA was signed into law establishing a new framework for the regulation of discharges incidental to the normal operation of vessels. After considering public comments on the proposed rule, EPA plans final action in FY 2022 to set national performance standards for approximately thirty different categories of discharges from commercial vessels greater than 79 feet in length, and for ballast water from



commercial vessels of all sizes. Following finalization of the regulations, EPA will coordinate with the U.S. Coast Guard on their implementing regulations. EPA plans to issue revised no-discharge zone guidance and continue to work with states on designating no-discharge zones within their waters.

*Ocean Dumping Management Program.* MPRSA regulates the disposition of any material in the ocean unless expressly excluded under MPRSA. In FY2022, EPA will continue to evaluate MPRSA permitting requests for the ocean dumping of all materials except dredged materials and, as appropriate, issue MPRSA emergency, research, general and special permits. This may include addressing climate change-related permitting requests under MPRSA, including proposals for the sub-seabed sequestration of CO<sub>2</sub> in geological formations or marine geoengineering activities (*e.g.*, macroalgae cultivation for carbon sequestration, ocean alkalinity enhancement, addition of reflective materials for solar radiation management). EPA will continue managing 98 EPA-designated ocean disposal sites; conducting oceanographic surveys; and evaluating requests to designate new ocean disposal sites and/or modify (*i.e.*, expand the capacity of) existing EPA-designated sites, and, as appropriate, designating or modifying ocean disposal sites (through rulemaking) under MPRSA. EPA will serve as the Head of the U.S. Delegation for the annual London Convention (LC) and London Protocol (LP) Scientific Groups Meetings and Alternate Head of the U.S. Delegation for the annual Consultative Meeting of the LC and LP Parties.

#### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$38.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,566.0/ +6.2 FTE) This program change increases resources and FTE to build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment also includes \$1,107.0 thousand in payroll costs and essential workforce support costs.

#### **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; Save Our Seas Act 2.0.

## Surface Water Protection

Program Area: Water Quality Protection

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$201,289.7</i></b>	<b><i>\$206,882.0</i></b>	<b><i>\$218,582.0</i></b>	<b><i>\$11,700.0</i></b>
Total Budget Authority	\$201,289.7	\$206,882.0	\$218,582.0	\$11,700.0
Total Workyears	920.7	944.2	990.0	45.8

### 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.

The National Pollutant Discharge Elimination System (NPDES) Program issues on average over 11,000 permits a year to address discharges from among the approximately 15,000 wastewater treatment facilities, more than 60 categories of industries, and almost 300,000 stormwater facilities. CWA established the NPDES permit program to help address water pollution by regulating point sources that discharge pollutants to waters of the United States. EPA authorizes the NPDES permit program to state, tribal, and territorial governments and currently 47 states have authorized programs. EPA is the permitting authority for three states (Massachusetts, New Hampshire, and New Mexico), the District of Columbia, all tribes except in Maine, all territories except the U.S. Virgin Islands, and federally operated facilities in Colorado, Delaware, Vermont, and Washington.

EPA continues to collaborate with the permitting authorities (states) to identify opportunities to enhance the integrity and timely issuance of NPDES permits. EPA is making efforts to modernize permitting and oversight practices by eliminating its permitting backlog and implementing programmatic measures. After program improvements, between March 2018 and March 2021, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 24 and 547 to 338, respectively.

EPA is responsible for conducting oversight of the permitting authorities to ensure adequate implementation of the CWA requirements and regulations. EPA continues to use the Program and Permit Quality Review process to evaluate permit language, factsheets, permit conditions, and administrative records of a particular permitting authority. Through this review mechanism, EPA promotes national consistency and opportunities to enhance the implantation of the Program. This review also evaluates the pretreatment programs across the country. The pretreatment program is a cooperative effort of federal, state, and local governments that perform permitting, and enforcement tasks for discharges to publicly owned treatment works.

## **FY 2022 Activities and Performance Plan:**

In FY 2022, 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. The increase in funding will allow EPA to focus on advancement of clean water infrastructure programs, with an emphasis on building climate change resilience, conducting CWA regulatory reviews, and advancing environmental justice through technical assistance and stakeholder engagement.

### Program Implementation

*Water Quality Criteria and Standards.* In FY 2022, EPA will continue to develop and publish new or revised water quality criteria reflecting the latest scientific knowledge as required by CWA Section 304. EPA also will continue to review and take action on both state and tribal water quality standards and state lists of impaired waters as required by CWA Section 303. The Agency will place special emphasis on improving the water quality standards in tribal waters inside and outside reservations to better ensure that tribes' health and natural resources are protected.

Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will continue to support state and tribal programs by providing scientific water quality criteria information as required by CWA Section 304. EPA also will continue to support states and authorized tribes in adopting and implementing water quality standards in accordance with the water quality standards regulation set forth in 40 CFR part 131. In FY 2022, the Agency will place special emphasis on engaging with underserved communities in the review and setting of state water quality standards. Many underserved communities endure the contamination of their local waters. This work will help empower these communities to secure adequate water quality standards for their local waters and to drive attainment of those standards.

*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. In FY 2022, EPA intends to increase the capability of EPA's Effluent Guidelines program to reduce industrial pollutant discharges through innovative technology nationwide. These discharges often directly and disproportionately affect underserved downstream communities by contaminating their water sources and fish caught for consumption. The Agency will invest in engaging communities that are so often bearing the brunt of the industrial discharges that are the focus of ELGs, through surface water and fish contamination, drinking water contamination, stress on drinking water treatment systems, and impairment of aquatic ecosystems.

*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. EPA will focus resources on

obtaining and using the latest scientific knowledge to identify resource recovery and reuse alternatives, understanding and managing the biosolids lifecycle, engaging partners—particularly those communities most affected—and conducting research. Investment in the biosolids program is critical to addressing near term risks from PFAS, dioxins and dibenzofurans, PCBs, and other chemicals known to be in domestic sewage sludge that is currently applied to land.

*Impaired Waters Listings and Total Maximum Daily Loads (TMDLs).* EPA will work with states and other partners on identifying impaired waters, as required by CWA Section 303(d), and on developing waterbody restoration plans, including TMDLs, for listed impaired waterbodies. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented through local, state, and federal watershed plans and programs to restore waters. EPA also will work with states and tribes on their CWA Section 303(d) programs, TMDLs, and other restoration and protection plans to ensure they are effective and can be implemented. EPA will provide support to promote implementation ready TMDLs and the protection of high-quality waters.

*Monitoring and National Aquatic Resource Surveys.* EPA will continue working with states and tribes to support the National Aquatic Resource Survey’s statistically representative monitoring of the condition of the Nation’s waters which supports CWA Section 305(b). EPA also will continue working with states and tribes to support base water quality monitoring programs and priority enhancements that serve state and tribal CWA programs in a cost-efficient and effective manner. EPA will continue supporting state and tribal water quality data exchange and tools to maximize the use of data from multiple organizations to support water quality management decisions.

*Waters of the United States.* EPA and the Department of the Army published the final Navigable Waters Protection Rule in April 2020. In accordance with Executive Order 13990, EPA and the Department of the Army are reconsidering the rule and intend to provide robust engagement with states, tribes, and stakeholders.

*Water Quality Certification.* In response to Executive Order 13868, issued in April 2019, EPA finalized a rule to update the CWA Section 401 certification regulations in June 2020 and began developing implementation resources and coordinating with other federal agencies as they revise their own regulations. In accordance with Executive Order 13990 *Protecting Public health and the Environment and Restoring Science To Tackle the Climate Crisis*, EPA is reconsidering the rule and intends to provide robust engagement with states, tribes, and stakeholders. Section 401 of the CWA gives states and authorized tribes the authority to assess potential water quality impacts of discharges from federally permitted or licensed infrastructure projects that may affect navigable waters within their borders.

*Water Quality Programs.* The NPDES Program is a vast and complex program that protects human health, safety, and the environment. In FY 2022, EPA will continue to implement the water quality programs that control point source discharges through permitting and pretreatment programs. The program continues to work with states to structure the permit program, support its implementation and better pursue comprehensive protection of water quality on a watershed basis.

In addition, as required under the CWA and Executive Order 12866, EPA will continue to support cost-benefit analysis for CWA regulatory and deregulatory actions. EPA will work with states, tribes, territories, and local communities to safeguard human health; maintain, restore, and improve water quality; and make America's water systems sustainable and secure, supporting new technology and innovation wherever possible.

*Nutrient and Harmful Algal Bloom (HAB) Reductions.* The FY 2022 request directs resources and FTE to support efforts to reduce nutrient pollution and HABs, which remain the most significant widespread water quality challenge across the country, despite decades of efforts to achieve reductions.<sup>406</sup> The sources and impacts of nutrient pollution and HABs vary depending on geographic location, and span urban, rural, and coastal landscapes. Still, in many places nonpoint sources are responsible for a significant portion of nutrient loads. Federal regulatory programs do not comprehensively cover these issues, and therefore a more diverse suite of approaches (non-regulatory, incentive-based, partnership, and market approaches), must be used to complement EPA's existing regulatory drivers. Harnessing the wealth of information accrued via federal, state, and local efforts to reduce nutrients, this effective partnership framework engages our state partners at the forefront of environmental protection. EPA has been working with its partners to address these challenges. For example, EPA partners with the Hypoxia Task Force to help implement state plans to reduce excess nutrients in the Mississippi River/Atchafalaya River Basin and co-hosts a webinar series with the Department of Agriculture on innovative financing in the public and private sectors that can be used to help reduce excess nutrients. As of March 2021, more than 16,600 square miles of watersheds identified as impaired by nutrients in October 2019 are now attaining standards. The FY 2022 request also directs resources to reduce and better predict HABs, which can be caused by nutrient pollution. It also will support science research related to HABs, including development of a national policy on hypoxia and HABs in freshwater, and examining how climate impacts the frequency and intensity of HAB events.

*Per- and Polyfluoroalkyl Substances (PFAS)* The PFAS Action Plan includes the following work: determining whether data are sufficient to develop national recommended ambient water quality criteria; scoping biosolids risk assessments for PFOA and PFOS; development of methods for detecting PFAS in wastewater; collecting information on discharges of PFAS from industrial point sources to determine if revisions to one or more ELGs is warranted; and fish tissue monitoring. In FY 2022 EPA will build on that Plan and continue the collaborative efforts of the EPA Council on PFAS.

*Water Reuse.* To assure a safe and reliable source of water that is resilient to drought, flooding, and population growth, EPA is working to advance the consideration of water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2022, EPA will continue to support the National Water Reuse Action Plan and develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions in the Plan that provide financial tools to stakeholders to ensure the accessibility of water reuse.<sup>407</sup>

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<sup>406</sup> For more information, please see <https://www.epa.gov/nutrientpollution>.

<sup>407</sup> For more information, please see <https://www.epa.gov/waterreuse>.

*Water Sense.* The WaterSense Program is a key component of the Agency’s efforts to ensure long-term sustainable water infrastructure, contribute to GHG reductions, and help communities adapt to drought and climate change. WaterSense provides consumers with a simple label to identify and select water-efficient products to help them save water and money and provides resources and tools to help water utilities carry out efforts to manage water demand and wastewater flows. As of April 2021, the Agency has voluntary specifications for three water-efficient service categories (certification programs for irrigation system auditors, designers, and installation and maintenance professionals) and nine product categories (residential toilets, bathroom faucets and accessories, showerheads, flushing urinals, flushometer-valve commercial toilets, weather-based irrigation controllers, soil moisture-based irrigation controllers, and spray sprinkler bodies). The Program also has a specification to label water-efficient single and multifamily homes that are designed to save water indoors as well as outdoors. Product specifications include water efficiency as well as performance criteria to ensure that products not only save water but also work as well as standard products in the marketplace. Products and homes may only bear the WaterSense label after being independently certified to ensure that they meet WaterSense specifications.

WaterSense has become a national symbol for water efficiency among utilities, plumbing manufacturers, and consumers, and awareness of the WaterSense label is increasing. As of April 2021, the program has labeled more than 37,000 models of plumbing and irrigation products and close to 3,000 homes have earned the WaterSense label. Cumulative water savings in the Program attributed to reported products shipped through the end of 2019 (the most recent year for which there is data) exceed 4.4 trillion gallons, enough water to supply all the homes in the United States for 6 months – and \$86.9 billion in water, sewer, and energy bill savings. The energy savings associated with reducing the need to move, treat, and heat that water is equivalent to 198 MMTCO<sub>2</sub>E of greenhouse gas reductions.<sup>408</sup>

WaterSense has more than 2,000 partners, which include manufacturers, retailers, builders, utilities, state/local governments, and community organizations, that help to educate consumers on the benefits of switching to water-efficient products and efficient water use. In FY 2022, the Program will work with its partners to carry out consumer campaigns that encourage consumers to switch to WaterSense-labeled products and practice other water-efficient behaviors in their homes, outdoors, and in the workplace. WaterSense also is working within the federal government to ensure that it leads by example through the use of water-efficient products and practices.

In 2021, the Agency released a final specification for soil moisture-based irrigation controllers and a major update to the homes program. The update to the homes program increases flexibility in meeting WaterSense’s technical requirements without compromising on overall water efficiency or performance, improves collaboration with green certification programs, and allows for easier implementation and certification. In FY 2022, the Program will look to promote the new irrigation product within the suite of other outdoor products and support the full transition of the homes program to its new structure. The Program also will research other residential and commercial product and service categories to inform future specifications. The Program plans to update its 2012 guide on best management practices to support commercial and institutional facilities and carry out targeted outreach to promote the EPA Water Score for multifamily properties, which was

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<sup>408</sup> WaterSense Accomplishment Reports (updated annually). For more information visit: <https://www.epa.gov/watersense/accomplishments-and-history> .

developed in partnership with ENERGY STAR. In FY 2022, the WaterSense Program also will continue support to additional sectors by working with the ENERGY STAR Program to achieve multiple benefits of water and energy savings.

### 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 (CWSRF) Program, which provides low-interest loans and additional subsidization to help finance wastewater treatment facilities and other water quality projects.<sup>409</sup> The Program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds. Federal capitalization to the SRFs is significantly leveraged; since 1988, the CWSRF program has made 42,842 assistance agreements, funding over \$145 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).

The FY 2022 request:

- Supports funding for the Environmental Finance Centers Program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing;
- Helps drive progress, between FY 2020-2021, the Agency will increase by \$16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA). At the end of March 2021, EPA has leveraged over \$17.5 billion in non-federal dollars; Supports decentralized (septic or onsite) systems that provide communities and homeowners with a safe, affordable wastewater treatment option by supporting the 2020 Decentralized Wastewater Management MOU. Decentralized wastewater systems are used throughout the country for both existing and new homes as well as commercial or large residential settings; they are in small, suburban, and rural areas where connecting to centralized treatment is often too expensive or may not be available.;
- Supports the Wastewater Technology Center that will provide accurate and objective resources on innovative and alternative wastewater technologies with a focus on small, mid-sized, and underserved communities. The Center serves to support effective investments in 21<sup>st</sup> century utilities and will support utilities holistically as they embark on adopting technologies; serve as a forum between the sector and government to identify synergies; share information and springboard new initiatives; support the adoption of innovative and alternative technologies; and increase and facilitate our understanding of the opportunities and impacts of emerging technologies to the National Water Program.
- Supports the AWIA 2018 Wastewater Technology Clearinghouse, a searchable data base that will provide reliable, objective information on proven innovative and alternative technologies for decentralized and centralized alternative wastewater treatment, such as water reuse, small system technologies used by lagoons, resource recovery, and nutrients;

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<sup>409</sup> For more information, please see <https://www.epa.gov/cwsrf>.

- Supports the Sustainable Utility Management programs, implemented in partnership with industry associations and designed to protect and improve infrastructure investments through the Effective Utility Management Program, the Water Workforce Initiative, and tools such as augmented alternatives analysis that help communities leverage investments to achieve water protection goals and other community economic and societal goals; and
- Supports the Water Infrastructure and Resiliency Finance Center in assisting local leaders in identifying financial approaches for their drinking water, wastewater, and stormwater infrastructure needs.
- Work on the Clean Water Needs Survey (CWNS) (reference the FY 2022 requested STAG appropriations language to allow EPA to allocate unused budget authority within the CWSRF American Iron and Steel provision set-aside for work on the CWNS).

#### Program Oversight/Accountability

*The Assessment TMDL Tracking Implementation System (ATTAINS).* States and tribes play a critical role in implementing the CWA. For programs where states and tribes have primacy, the Agency will focus on providing oversight and assistance. The Agency will continue to support states in electronically reporting CWA Section 303(d) and Section 305(b) assessment conclusions through ATTAINS to track improvements in impaired waters. This tool reduces burden on states to track and report progress in meeting water quality standards in waters targeted for local action and greatly improves evidence-based tracking of local actions to improve water quality.

EPA will continue to track state progress in completing TMDLs, alternative restoration approaches, or protection plans with the goal of 84 percent of plans in place at state identified priority waters by the end of 2021. As of March 2021, over 70 percent of state priority waters were addressed by a TMDL, alternative restoration plan, or protection approach. EPA has continued to support Lean efforts in the states to improve their water quality monitoring, assessment, and reporting processes. EPA continues to support streamlining efforts to allow states to reduce the time they spend on administrative reporting and contribute to improved reporting of the Agency's metric to reduce the number of square miles of watershed with surface water not meeting standards. Between August 2019 and March 2021, over 42,000 square miles of watershed that contained impaired waters in FY 2019 attained compliance with water quality standards.

*Eliminate NPDES Backlog.* The FY 2022 request supports work underway to accelerate permitting-related decisions and streamlining efforts focused on establishing clear timelines for permitting processes. EPA plans to continue implementing a national strategy to eliminate the NPDES permit backlog by providing technical assistance and trainings. In addition, EPA will work to publish the final Multi-Sector General Permit, the draft Construction General Permit and the final Pesticide General Permit.

Factors that contribute to delays in the permit issuance process include increased complexity of permitting emerging contaminants, and permit litigation. In FY 2022, EPA will continue to host NPDES-related courses and workshops to build permit writer capacity on a range of topics including permit writing, pretreatment, whole effluent toxicity, stormwater, and nutrients.



In FY 2022, EPA will continue to work with the federal permitting authorities to address PFAS in NPDES permitting. The recently released *Interim Strategy for PFAS in Federally Issued NPDES Permits*, recommends that permit writers include permit requirements for phased-in monitoring and best management practices, as well as a continuing education on permitting practices. In FY 2022, EPA will continue to build upon this strategy by conducting training, collaborating with state permitting authorities, and sharing the latest research and state practices, to prevent this contaminant from reaching surface waters.

In FY 2022, EPA will work on addressing court decisions related to Maui and criminal intent in the permitting program. In *County of Maui v. Hawaii Wildlife Fund*, the Supreme Court held that discharges from point sources through groundwater that eventually reach a water of the United States require an NPDES permit if they are the “functional equivalent” of a direct discharge to a water of the United States. In FY 2021, EPA formed a national workgroup and in FY 2022 will continue to collaborate with stakeholders to better understand the resources and tools needed to implement this decision effectively in permits.

*Integrated Planning.* Clean water infrastructure investment needs are documented to be several hundred billion dollars, with wet weather improvements (CSOs, SSOs, bypasses, and stormwater discharges) comprising a significant portion of this total. Investment needs of this magnitude affect utility rates, and disproportionately impact disadvantaged communities. Integrated planning utilizing green infrastructure allows communities to synchronize infrastructure investments with broader community development goals. An integrated approach creates opportunities for affordable, multi-benefit investments that protect public health, and enhance resiliency. In FY 2022, EPA will continue to implement integrated planning and green infrastructure practices to address wet weather challenges and increase infrastructure resiliency.

*Improving Permit Writer Capacity.* EPA continues to work with our stakeholders and industry to identify challenges in implementation and build permit writers’ capacity. In FY 2022, EPA will continue to lead the Animal Agriculture Discussion Group (AADG), which consists of animal agriculture representatives from U.S. Department of Agriculture (USDA), the animal feeding industry, and the states. AADG provides a forum for industry to engage with permitting authorities, resulting in a shared understanding of how to enhance agricultural practices that lead to greater water quality protection.

*Improving National Aquatic Resource Survey (NARS) Data.* Another process improvement effort is focused on streamlining the flow of NARS data from EPA labs to state partners and data analysts. Improvements are being tracked through an internal process. The Agency will continue to implement these process improvements and monitor impact of data delivery on timeliness of analysis and reporting.

*Improving timeliness of water quality standards actions.* EPA is investing in reducing the backlog of water quality standards (WQS) actions. The Agency will continue to work to decrease the number of state and tribal WQS revision actions that have been submitted to EPA that EPA neither approved nor disapproved within the first 60 days after submittal to EPA, and that have yet to be acted upon. The CWA requires EPA to review state and tribal WQS revisions and either approve within 60 days or disapprove within 90 days.

**Performance Measure Targets:**

<b>(PM SWP-01) Square miles of watersheds with surface waters not meeting standards (cumulative).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	539,536	531,536

<b>(PM SWP-02) Square miles of watersheds with surface waters not meeting standards because of nutrients.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	183,596	180,596

<b>(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	84	100

<b>(PM NPDES-03) Number of existing EPA-issued NPDES permits in backlog.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	230	93

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,968.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,732.0 / +45.8 FTE) This program change is an increase in resources and FTE to support the advancement of clean water infrastructure programs, with an emphasis on building climate change resilience, conducting Clean Water Act regulatory reviews, and advancing environmental justice through technical assistance and stakeholder engagement. This investment also includes \$7,849.0 thousand in payroll costs and essential workforce support costs.

**Statutory Authority:**

CWA; Marine Protection, Research, and Sanctuaries Act; Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

## **Congressional Priorities**

## Water Quality Research and Support Grants

Program Area: Congressional Priorities

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Environmental Programs &amp; Management</i></b>	<b><i>\$15,000.0</i></b>	<b><i>\$21,700.0</i></b>	<b><i>\$0.0</i></b>	<b><i>-\$21,700.0</i></b>
Science & Technology	\$4,992.0	\$7,500.0	\$0.0	-\$7,500.0
Total Budget Authority	\$19,992.0	\$29,200.0	\$0.0	-\$29,200.0

### **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 improving water quality under the Clean Water Act (CWA).

### **FY 2022 Activities and Performance Plan:**

Resources are proposed for elimination for this program in FY 2022. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision Program grant funds and set-asides from the Drinking Water State Revolving Fund.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (-\$21,700.0) This program change proposes to eliminate the Water Quality Competitive Grant Program. Resources are available through other existing programs and states are best positioned to develop technical assistance plans for their water systems.

### **Statutory Authority:**

SDWA § 1442(e); Federal Food, Drug and Cosmetic Act; Food Quality Protection Act; Endangered Species Act; CWA § 104(b)(3).





**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Inspector General  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Inspector General</b>				
Budget Authority	\$43,076.0	\$43,500.0	\$54,347.0	\$10,847.0
Total Workyears	213.1	227.5	258.5	31.0

\*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, \$54,347,000, to remain available until September 30, 2023.*

**Program Projects in IG  
(Dollars in Thousands)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$43,076.0	\$43,500.0	\$54,347.0	\$10,847.0
<b>TOTAL IG</b>	<b>\$43,076.0</b>	<b>\$43,500.0</b>	<b>\$54,347.0</b>	<b>\$10,847.0</b>

\*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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Inspector General</i></b>	<b><i>\$43,076.0</i></b>	<b><i>\$43,500.0</i></b>	<b><i>\$54,347.0</i></b>	<b><i>\$10,847.0</i></b>
Hazardous Substance Superfund	\$10,498.1	\$11,586.0	\$11,800.0	\$214.0
Total Budget Authority	\$53,574.1	\$55,086.0	\$66,147.0	\$11,061.0
Total Workyears	268.4	270.0	301.0	31.0

**Program Project Description:**

EPA’s Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency’s budget. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is met through the mission of the OIG. The OIG conducts and supervises independent audits, evaluations, and investigations while reviewing existing and proposed legislation and regulations relating to the programs and operations of the Agency; provides leadership and coordination; makes evidence-based policy recommendations for activities designed to promote economy, efficiency, and effectiveness; and works to prevent and detect waste, fraud, and abuse in Agency, grantee, and contractor operations.

The OIG activities add value and enhance public trust and safety by keeping the head of the Agency and Congress fully and immediately informed of problems and deficiencies, and the necessity for and progress of corrective actions. The OIG activities also prevent and detect fraud in EPA’s programs and operations, including financial fraud, laboratory fraud, and cybercrime. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA’s mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity.<sup>410</sup> The audit, evaluation, and investigative services programs are directly supported through the OIG’s management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach. EPA’s OIG plans its work with a focus on identifying and influencing resolution of the Agency’s major Management Challenges.

In addition, EPA’s Inspector General was designated by Congress in FY 2004 to serve as the Inspector General for the U.S. Chemical Safety and Hazard Investigation Board (CSB) and provides the full range of audit and investigative services specified by the Inspector General Act, as amended. Specifically, the OIG conducts required audits of the CSB’s financial statements and of CSB’s compliance with the Federal Information Security Management Act. In addition, the OIG

<sup>410</sup> For more information, please see: <https://www.epa.gov/office-inspector-general/epa-oig-organization-profile>.

performs audits and evaluations of the CSB's programmatic and management activities and follow-up on prior audit recommendations.

### **FY 2022 Activities and Performance Plan:**

The activities of the OIG are supported through the core value to be the best in public service through customer service, integrity, and accountability. The summary of this value is to contribute to improved EPA and CSB programs and operations protecting human health and the environment, and enhancing safety; conduct audits, evaluations, and investigations that enable EPA and the CSB to improve business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste, and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses resulting in cleaner air, land, and water, and ensured chemical safety for America. In FY 2022, the OIG will target initiatives supporting EPA's six National Compliance Initiatives; focus on EPA Management Challenges; increase its agility to assess emerging environmental threats; increase its use of data analytics, business analytics, and business intelligence to better target resources to address high risk, high vulnerability areas of interest; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact and increase its return on investment to the American public.

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, and follow-up reviews in compliance with the Inspector General Act, as amended, the Generally Accepted Government Accounting Standards, and the Council of Inspectors General on Integrity and Efficiency's *Quality Standards for Federal Offices of Inspector General*. The OIG conducts the following types of assignments focused on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, program performance audits 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 creates 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 may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include financial fraud, laboratory fraud, serious employee misconduct, program integrity, and cybercrimes. The OIG has been proactively examining EPA program and operations for potentially fraudulent activities, such as products falsely marketed as proven to effectively block various viruses, to include SAR-CoV-2.

The five directorates within the Office of Audit are responsible for independent oversight of EPA and CSB programs and recommending improvement to programs and operations, specifically Contracts and Assistance Agreements; Efficiency; Financial; Forensic; and Information Resources Management. A significant portion of audit resources will be devoted to statutorily mandated work, such as assessing the financial statements of EPA and CSB, as required by the Chief Financial Officers Act and the Accountability of Tax Dollars Act of 2002, respectively. The OIG mandated work also will include assessing the information security practices of EPA and CSB as required by the Federal Information Security Management Act. The work within the Office of Audit assesses economy, efficiency, and effectiveness of program operations supporting EPA major programs and CSB investigations.

The five directorates within the Office of Evaluation are responsible for independent oversight of EPA programs and recommending improvement to programs and operations, specifically: Air; Environmental Research; Land Cleanup and Waste Management; Toxics, Chemical Management, and Pollution Prevention; and Water. The OIG will examine the delivery and performance of national programs, as well as specific cross-regional and single region or place-based issues that represent a risk to public health and the environment in response to stakeholder concerns.

EPA's OIG continues to balance its workload with the capacity of a reduced workforce, while meeting statutorily mandated requirements and delivering a strong return on investment. Three of the four EPA OIG Annual Performance Goals reported to Congress by way of the Semiannual Report are being exceeded, however, goals were adjusted to align with available resources. Based on prior work, cross-agency risk assessment, Agency challenges, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2022:

### **Audits and Evaluations**

#### **Sound and Economical Management**

- Annual mandated improper payments audits in EPA and CSB
- Internal controls
- Annual mandated financial statements audits in EPA and CSB
- Audits of costs claimed by selected grantees and contractors
- Grant, cooperative agreement, and contract administration, such as grantee management of funds
- Maximizing cost efficiencies and process improvement, such as improved acquisition planning
- Follow-up compensatory time off audit, Capital investments in information technology, equipment, facilities, and other items
- Technological changes that create transformation opportunities
- Annual mandated travel card program, including risk assessment in accordance with the Government Charge Card Abuse Prevention Act of 2012
- Annual mandated purchase card and convenience check program, including risk assessment
- Annual mandated toxic substances fees in accordance with the Pesticide Registration Improvement Act and Federal Insecticide, Fungicide, and Rodenticide Act

- Efficiency and effectiveness of collection and payment processes
- Single audit sub-recipients monitoring

#### Efficient Processes and Use of Resources

- Management of the Brownfields Program
- Implementation of the Diesel Emissions Reductions Act for clean diesel funding assistance 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
- High-risk contractors
- Continuity of Operations (COOP) readiness of delegated programs to continue their operations/business as usual during COVID or another COOP event

#### Ensuring the Integrity of EPA Information

- Agency preparedness for providing remote access services
- 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
- Follow-up on prior OIG cybersecurity audit recommendations
- Compliance with policies for federal agency public websites and digital services Plan of Action & Milestones
- Annual mandated audit of compliance with the Federal Information Security Modernization Act for EPA and CSB
- 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
- IT support to the mandated financial statement audits

#### 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
- Follow-up on the Agency's quality system
- Review of contractor federal performance
- Assistance agreements related to cleanup and Brownfields
- Assessing federal facilities differences in attaining Resource Conservation and Recovery Act of 1976 (RCRA) corrective action goals compared to private cleanups

#### Assessing Program Integrity, Results, Oversight, Enforcement

- Evaluation of the Management Audit Tracking System
- Evaluation of the implementation of the Toxic Substances Control Act (TSCA)

- Follow-up on prior OIG work for continuity of operations such as the coronavirus pandemic
- 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, such as Mercury and Air Toxics Standards analysis and National Environmental Policy Act (NEPA) changes and effect on environmental justice
- Evaluation of EPA's programs and adherence to requirements to protect and restore water that sustains human health and the environment, such as per- and polyfluoroalkyl substances (PFAS) in drinking water near military installations and state implementation of Clean Water Act
- Evaluation of EPA's programs, activities, requirements and initiatives to protect human health and the environment through accident prevention and emergency response
- Evaluations of EPA's programs and requirements to protect human health and the environment from chemical risks, including childhood exposure to lead, TSCA compliance for safer chemicals, and environmental justice
- EPA's reporting of goals and accomplishments for funded programs
- 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, such as the PFAS Innovative Treatment Team and radiation cleanup guidelines
- Evaluation of EPA's progress in implementing recommendations from the OIG's RCRA inspections report

## **Investigations**

The Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste and abuse, while protecting the integrity of EPA and CSB programs, operations, and resources. Investigations focus on allegations of criminal activity and serious misconduct in EPA and CSB programs and operations. The OIG performs its proactive work strategically as opportunities and resources allow. Investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2018 – 2022 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OIG investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations*, as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. The OI often collaborates with other law enforcement

entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. Additionally, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, “whose actions protect the government from doing business with entities that pose a business risk to the government.”

The OIG plays a critical oversight role helping to ensure that EPA and CSB funds are properly expended and not subject to fraud, waste, or abuse. The recent COVID-19 pandemic and the resulting frauds has emphasized the nature of the OI in protecting the integrity of the EPA’s programs. Major areas of investigative focus in this oversight include: 1) financial fraud relating to Agency grants and contracts concerning State Revolving Funds, interagency and cooperative agreements, and fraud related to mischarging, defective pricing, defective products and collusion on contracts; 2) laboratory fraud, including that related to water quality and Superfund data as well as payments made by EPA for erroneous environmental testing; 3) 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; 4) program integrity focusing on serious misconduct or criminal activity that could undermine or erode the public trust and confidence in EPA, its programs, or its employees; and 5) cybercrime to identify and counter information technology security threats, illegal intrusions, and abuse of EPA computer systems, as well as investigations and responses in support of EPA’s Office of Homeland Security, to include possible cyber terrorist attacks on EPA’s computer infrastructure.

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 which may lead to better accountability and deterrence.

The OI has further reorganized its Field Operations Directorate by realigning the four field offices into two regional offices - the Eastern Region Field Office and the Western Region Field Office. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI’s operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters is hiring an attorney-advisor and an honors attorney to support our investigative operations.



## **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's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation to identify vulnerability to waste, fraud, and abuse. These assessments 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 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,355.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,492.0 / +31.0 FTE) This program increase supports the investigation of cybersecurity intrusions, COVID-19 disinfectant fraud, the need for robust program oversight, and it provides for enhanced support for data analytics and program fraud detection. The resources also will assist with oversight of Supplemental Appropriations EPA has received as part of the CARES Act and the American Rescue Plan Act of 2021. This investment includes \$5,412.0 in payroll.

### **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 \$66.1 million (\$54.3 million Inspector General; \$11.8 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is \$66.1 million (\$54.3 million Inspector General; \$11.8 million Superfund Transfer)

- The portion of the aggregate President’s Budget needed for training is \$800 thousand (\$640 thousand Inspector General; \$160 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 \$238 thousand (\$190.4 thousand Inspector General; \$47.6 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 2022”.



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**APPROPRIATION: Building and Facilities  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Building and Facilities</b>				
Budget Authority	\$46,542.0	\$33,752.0	\$62,752.0	\$29,000.0
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, \$62,752,000, to remain available until expended.*

**Program Projects in B&F  
(Dollars in Thousands)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$14,325.7	\$6,676.0	\$6,676.0	\$0.0
Operations and Administration				
Facilities Infrastructure and Operations	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
<b>TOTAL B&amp;F</b>	<b>\$46,542.0</b>	<b>\$33,752.0</b>	<b>\$62,752.0</b>	<b>\$29,000.0</b>

## **Homeland Security**

**Homeland Security: Protection of EPA Personnel and Infrastructure**  
Program Area: Homeland Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$4,175.9	\$4,959.0	\$5,139.0	\$180.0
Science & Technology	\$443.0	\$501.0	\$501.0	\$0.0
<b><i>Building and Facilities</i></b>	<b><i>\$14,325.7</i></b>	<b><i>\$6,676.0</i></b>	<b><i>\$6,676.0</i></b>	<b><i>\$0.0</i></b>
Hazardous Substance Superfund	\$994.6	\$1,030.0	\$1,030.0	\$0.0
Total Budget Authority	\$19,939.2	\$13,166.0	\$13,346.0	\$180.0
Total Workyears	7.7	9.2	9.2	0.0

Total workyears in FY 2022 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

**Program Project Description:**

EPA’s Buildings and Facilities resources in the Homeland Security: Protection of EPA Personnel and Infrastructure program support the protection of federal employees, contractors, grantees, and private citizens (occupants) who work within or visit EPA facilities nationwide. EPA’s buildings are a combination of headquarters and regional administrative offices, program and research laboratories, and support facilities/warehouses. These facilities are either EPA owned/leased, or GSA owned/leased. This funding ensures federal mandates are met as they relate to physical security and local emergency preparedness for all Agency locations. These funds support the physical security protection equipment and mechanisms, required to protect occupants, for 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 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to partner with GSA on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency’s modernization of its security infrastructure in compliance with Homeland Security Presidential Directive-12 (HSPD-12)<sup>411</sup> and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks.

In FY 2022, EPA also will complete security projects to ensure the protection of occupants and compliance with federal mandates for physical security, including:

- Migration to ePACS at the Montgomery, Alabama Laboratory, the Newport, Oregon Environmental Laboratory, and the EPA Headquarters facilities in Washington, D.C.

<sup>411</sup> For additional information, please see: <https://www.dhs.gov/homeland-security-presidential-directive-12>.



- Various upgrades to closed-circuit television and physical security in response to vulnerabilities identified by previously conducted physical security assessments.

The Agency will continue to utilize GSA's Managed Service Office program, *USAccess*, for Personal Identity Verification card enrollment and issuance. *USAccess* is a GSA managed, shared services solution that 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.

**Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
Science & Technology	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
<b><i>Building and Facilities</i></b>	<b>\$32,216.3</b>	<b>\$27,076.0</b>	<b>\$56,076.0</b>	<b>\$29,000.0</b>
Leaking Underground Storage Tanks	\$1,066.0	\$836.0	\$837.0	\$1.0
Inland Oil Spill Programs	\$640.2	\$682.0	\$683.0	\$1.0
Hazardous Substance Superfund	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Total Budget Authority	\$470,906.5	\$450,262.0	\$496,678.0	\$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

**Program Project Description:**

EPA’s Buildings and Facilities (B&F) appropriation supports the design, construction, repair, and improvement of EPA’s federally owned and leased land and structures in accordance with applicable codes and standards. Construction, renovation, and alteration projects costing more than \$150 thousand must use B&F funding. B&F resources ensure that the Agency complies with various mandates and goals including: the Energy Policy Act of 2005; the Energy Independence and Security Act of 2007 (EISA); and regulatory mandates associated with soil and water pesticides testing.

**FY 2022 Activities and Performance Plan:**

In accordance with the Memorandum on Implementation of Agency-wide Real Property Capital Planning (M-20-03)<sup>412</sup> and the *Federal Assets Sale and Transfer Act of 2016*,<sup>413</sup> the Agency will continue to review its space needs. EPA is implementing a long-term space consolidation plan that will aim to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. B&F resources are essential to the implementation of the long-term space consolidation plan. B&F resources also support facility-related construction and the repair and improvement (R&I) of EPA’s aging real estate inventory, including the laboratory facilities necessary to support EPA’s mission. Good stewardship practices demand the physical conditions, functionality, safety and health, security, and research capabilities of the Agency’s facilities are adequately maintained to ensure successful completion of EPA’s mission requirements and goals.

<sup>412</sup> For additional information, please refer to: <https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-03.pdf>.

<sup>413</sup> For additional information, please refer to: *Federal Assets Sale and Transfer Act of 2016*, <https://www.congress.gov/114/plaws/publ287/PLAW-114publ287.pdf>.

In line with President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>414</sup> work in this program supports EPA's efforts to increase facility resiliency and sustainability to combat the effects of climate change while adapting EPA space to a growing workforce. EPA will prioritize energy efficiency and climate resiliency investments in new construction and the rehabilitation of United States Government installations, buildings, and facilities.

Through master planning and nationwide efforts to use space more efficiently, EPA identifies B&F projects to be conducted. These projects support the long-term conditions and efficiency of EPA facilities. Further, B&F resources are needed to comply with GSA leasing practices requiring agencies to pay for B&F projects including sustainable features<sup>415</sup> 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, EPA released 116,425 square feet of unused office and warehouse space and is planning to release an additional 26,017 square feet in FY 2021. Planned consolidations will allow EPA to release an expected 467,345 square feet of space in FY 2022. Space consolidation and reconfiguration enable 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. In FY 2022, the Agency will continue to explore opportunities to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce.

The FY 2022 request 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 while also supporting Executive Orders 14008 and 13990,<sup>416</sup> which direct EPA to pursue aggressive energy, water, and building infrastructure requirements. To accomplish this, EPA must invest in structural infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC). These projects also will maintain a safe workplace, provide for high quality science, support agency priorities, and advance the Agency's mission. Delaying essential repairs results in the deterioration of EPA's facilities, which increases long-term repair costs and presents safety risks. EPA will focus on critical facility repairs and infrastructure upgrades to maintain an acceptable Facility Condition Index (FCI), which measures the current state of EPA owned facilities and informs B&F investment decisions in line with the Laboratory Study completed in 2014.<sup>417</sup>

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<sup>414</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>, *Executive Order on Tackling the Climate Crisis at Home and Abroad*.

<sup>415</sup> Many of these features are required by EISA or executive orders.

<sup>416</sup> For more information, please refer to Executive Order 14008: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

For more information, please refer to Executive Order 13990: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.

<sup>417</sup> For additional information on the Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation, please refer to: <https://www.epa.gov/sites/production/files/2015-03/documents/synthesisreportoftheusepalaboratoryenterprise.pdf>.

In FY 2022, EPA will prioritize energy efficiency and climate resilience investments in new construction and the rehabilitation of United States Government installations, buildings, and facilities to ensure they are climate ready. These investments include:

- **National Vehicle and Fuel Emission Laboratory (NVFEL), Ann Arbor, Michigan.** NVFEL is an example of a building sustainability project which entails the repair, replacement and operations and maintenance (O&M) of NVFEL's extensive infrastructure to meet energy environmental requirements leading to energy savings and sustainability to meet the challenges of climate change.
- **Gulf Breeze and Newport Laboratories.** EPA will invest in climate resiliency-infrastructure protection for these two laboratories including sea level and storm rise protection, and power resiliency.

In FY 2022, the Agency will continue the following space optimization projects with the potential for the greatest long-term cost and energy savings:

- **Co-Locating in the Ada, Oklahoma laboratory.** EPA will continue its work to consolidate employees currently in leased laboratory space into owned space. The Agency is co-locating operations for the regional laboratory in Houston, Texas with the EPA-owned laboratory in Ada, Oklahoma. In FY 2022, EPA will begin Phase 2 construction.
- **Optimizing space at the Athens, Georgia laboratory.** In FY 2022, EPA will begin construction in the Main Lab Building (ORD-Athens).
- **Co-Locating in the Corvallis, OR laboratory.** The Agency is co-locating operations for the Region 9 laboratory in Richmond, California with the EPA-owned laboratory in Corvallis, Oregon. In FY 2022, the Agency will finalize construction of the Region 9 Facilities Support Services Center, which is designed for Region 9 laboratory support.

#### **Performance Measure Targets:**

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

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$29,000.0) This change to fixed and other costs is an increase to include \$17 million to support executive order requirements to increase EPA facility resiliency and sustainability to combat the effects of climate change and \$12 million to support the Agency's growing workforce and to ensure an optimal footprint to support the proposed FTE increase in the FY 2022 Budget request.

**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).







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**APPROPRIATION: Hazardous Substance Superfund  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Hazardous Substance Superfund</b>				
Budget Authority	\$1,280,955.8	\$1,205,811.0	\$1,533,814.0	\$328,003.0
Total Workyears	2,638.5	2,636.5	2,671.7	35.2

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

**Bill Language: Hazardous Substance Superfund**

*For necessary expenses to carry out the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including sections 111(c)(3), (c)(5), (c)(6), and (e)(4) (42 U.S.C. 9611), and hire, maintenance, and operation of aircraft, \$1,533,814,000, to remain available until expended, consisting of such sums as are available in the Trust Fund on September 30, 2021, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to \$1,533,814,000 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, \$11,800,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2023, and \$30,985,000 shall be paid to the "Science and Technology" appropriation to remain available until September 30, 2023.*

**Program Projects in Superfund  
(Dollars in Thousands)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Indoor Air and Radiation				
Radiation: Protection	\$2,323.3	\$1,985.0	\$2,612.0	\$627.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$10,498.1	\$11,586.0	\$11,800.0	\$214.0
Compliance				
Compliance Monitoring	\$1,054.3	\$1,000.0	\$1,006.0	\$6.0
Enforcement				
Criminal Enforcement	\$7,292.3	\$7,647.0	\$7,786.0	\$139.0
Environmental Justice	\$566.3	\$826.0	\$5,841.0	\$5,015.0

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Forensics Support	\$1,257.6	\$1,145.0	\$1,164.0	\$19.0
Superfund: Enforcement	\$179,284.5	\$156,773.0	\$159,542.0	\$2,769.0
Superfund: Federal Facilities Enforcement	\$7,155.8	\$7,424.0	\$7,574.0	\$150.0
Subtotal, Enforcement	\$195,556.5	\$173,815.0	\$181,907.0	\$8,092.0
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	\$32,992.9	\$33,020.0	\$33,264.0	\$244.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$994.6	\$1,030.0	\$1,030.0	\$0.0
Subtotal, Homeland Security	\$33,987.5	\$34,050.0	\$34,294.0	\$244.0
Information Exchange / Outreach				
Exchange Network	\$1,341.2	\$1,328.0	\$1,328.0	\$0.0
IT / Data Management / Security				
Information Security	\$927.6	\$659.0	\$5,659.0	\$5,000.0
IT / Data Management	\$15,168.6	\$13,826.0	\$15,202.0	\$1,376.0
Subtotal, IT / Data Management / Security	\$16,096.2	\$14,485.0	\$20,861.0	\$6,376.0
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	\$1,014.2	\$832.0	\$857.0	\$25.0
Legal Advice: Environmental Program	\$628.3	\$443.0	\$450.0	\$7.0
Subtotal, Legal / Science / Regulatory / Economic Review	\$1,642.5	\$1,275.0	\$1,307.0	\$32.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$24,772.5	\$26,561.0	\$27,720.0	\$1,159.0
Facilities Infrastructure and Operations	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Acquisition Management	\$24,356.1	\$23,800.0	\$30,519.0	\$6,719.0
Human Resources Management	\$6,094.4	\$6,202.0	\$6,842.0	\$640.0
Financial Assistance Grants / IAG Management	\$3,561.3	\$3,210.0	\$3,390.0	\$180.0
Subtotal, Operations and Administration	\$141,518.3	\$128,500.0	\$141,272.0	\$12,772.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$15,501.1	\$16,463.0	\$16,634.0	\$171.0
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	\$3,882.1	\$12,824.0	\$12,876.0	\$52.0
Research: Chemical Safety for Sustainability	\$4,115.6	\$0.0	\$0.0	\$0.0
Subtotal, Research: Chemical Safety for Sustainability	\$7,997.7	\$12,824.0	\$12,876.0	\$52.0
Superfund Cleanup				

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Superfund: Emergency Response and Removal	\$203,758.9	\$190,000.0	\$195,489.0	\$5,489.0
Superfund: EPA Emergency Preparedness	\$8,824.2	\$7,700.0	\$7,839.0	\$139.0
Superfund: Federal Facilities	\$23,280.8	\$21,800.0	\$22,189.0	\$389.0
Superfund: Remedial	\$617,575.2	\$589,000.0	\$882,400.0	\$293,400.0
Subtotal, Superfund Cleanup	\$853,439.1	\$808,500.0	\$1,107,917.0	\$299,417.0
<b>TOTAL Superfund</b>	<b>\$1,280,955.8</b>	<b>\$1,205,811.0</b>	<b>\$1,533,814.0</b>	<b>\$328,003.0</b>

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

## **Indoor Air and Radiation**

**Radiation: Protection**

Program Area: Indoor Air and Radiation

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$8,912.4	\$7,661.0	\$10,342.0	\$2,681.0
Science & Technology	\$1,795.6	\$1,735.0	\$2,340.0	\$605.0
<b><i>Hazardous Substance Superfund</i></b>	<b>\$2,323.3</b>	<b>\$1,985.0</b>	<b>\$2,612.0</b>	<b>\$627.0</b>
Total Budget Authority	\$13,031.3	\$11,381.0	\$15,294.0	\$3,913.0
Total Workyears	56.4	53.8	66.7	12.9

**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 2022 Activities and Performance Plan:**

Work in this program directly supports protecting communities from hazardous waste and environmental damage. In FY 2022, EPA’s National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and National Center for Radiation Field Operations (NCRFO) 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 hazardous waste sites.

NAREL and NCRFO provide data evaluation and assessment, document review, and field support through ongoing fixed and mobile analytical capability. Thousands of radiochemical analyses are performed annually at NAREL on a variety of samples from contaminated sites. NAREL is EPA's only radiological laboratory with in-house radiochemical analytical capability. NCRFO provides field-based technical support for screening and identifying radiological contaminants at Superfund and non-Superfund sites across the country, including air sampling equipment and expert personnel.

More specifically, these organizations focus on providing technical support and high-quality data to support agency decisions at sites across the country. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$34.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$81.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities costs.
- (+\$674.0 / +2.4 FTE) This program change increases program capacity for activities such as analytical and field support to manage and mitigate radioactive releases and exposures along with data evaluation and assessment, document review, and field support through ongoing fixed and mobile analytical capabilities. This investment includes \$387.0 thousand in payroll costs.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).



## **Audits, Evaluations, and Investigations**

## Audits, Evaluations, and Investigations

Program Area: Audits, Evaluations, and Investigations

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Inspector General	\$43,076.0	\$43,500.0	\$54,347.0	\$10,847.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$10,498.1</i></b>	<b><i>\$11,586.0</i></b>	<b><i>\$11,800.0</i></b>	<b><i>\$214.0</i></b>
Total Budget Authority	\$53,574.1	\$55,086.0	\$66,147.0	\$11,061.0
Total Workyears	268.4	270.0	301.0	31.0

### **Program Project Description:**

EPA’s Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency’s budget. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is met through the mission of the OIG. The OIG conducts and supervises independent audits, evaluations, and investigations while reviewing existing and proposed legislation and regulations relating to the programs and operations of the Agency; provides leadership and coordination; makes evidence-based policy recommendations for activities designed to promote economy, efficiency and effectiveness; and works to prevent and detect waste, fraud, and abuse in Agency, grantee, and contractor operations of EPA’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 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.<sup>418</sup> The audit, evaluation, 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.

### **FY 2022 Activities and Performance Plan:**

The activities of the OIG are supported through the core value to be the best in public service through customer service, integrity, and accountability. The summary of this value is to contribute to improved EPA Superfund and other cleanup programs and operations protecting human health

<sup>418</sup> For more information, please see: <https://www.epa.gov/office-inspector-general/epa-oig-organization-profile>.

and the environment, and enhancing safety; conduct audits, evaluations, and investigations that enable EPA to improve business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste, and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses resulting in cleaner air, land, and water, and ensured chemical safety for America. In FY 2022, the OIG will: target initiatives supporting EPA's six National Compliance Initiatives; focus on EPA Management Challenges; increase its agility to assess emerging environmental threats; increase its use of data analytics, business analytics, and business intelligence to better target resources to address high risk, high vulnerability areas of interest; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact and increase its return on investment to the American public regarding issues related to the Superfund Program.

The OIG carries out its statutory mission by conducting many types of audits, evaluations, and investigations for EPA. Plans are implemented through audits, evaluations, investigations, and follow-up reviews in compliance with the Inspector General Act (as amended), the Generally Accepted Government Accounting Standards, and the Council of Inspectors General on Integrity and Efficiency's *Quality Standards for Federal Offices of Inspector General*.

The OIG conducts the following types of assignments focused on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, program performance audits and evaluations 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 creates 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 may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include: fraudulent practices, program integrity, laboratory fraud, serious employee misconduct, and cyber-crimes.

EPA's OIG continues to balance its workload with the capacity of a reduced workforce, while meeting statutorily mandated requirements and delivering a strong return on investment. Based on prior work, Agency challenges, cross-agency risk assessment, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2022:

## Audits and Evaluations

The OIG Office of Audit and Office of Evaluation conduct assignments related to Superfund and other land issues. The Office of Audit is comprised of five directorates: Contracts and Assistance Agreements, Efficiency, Financial, Forensic, and Information Resources Management. The Office of Evaluation also is comprised of five directorates: Air, Environmental Research, Land Cleanup and Waste Management, Toxics, Chemical Management, and Pollution Prevention; and Water. The Offices will identify program and management risks and determine if EPA is efficiently and effectively reducing human health risks; taking effective enforcement actions; cleaning up hazardous waste; managing waste; restoring previously polluted sites to appropriate uses; and ensuring long-term stewardship of those sites. The OIG assignments will include: assessing the adequacy of internal controls in EPA (and its grantees and contractors) to protect resources and achieve program results; project management to ensure that EPA (and its grantees and contractors) have clear plans and accountability for performance progress; enforcement to evaluate whether there is consistent, adequate, and appropriate application of the laws and regulations across jurisdictions with coordination between federal, state, and local law enforcement activities; and grants and contracts to verify that such awards are made based upon uniform risk assessment, and that grantees and contractors perform with integrity.

Prior audits and evaluations of the Superfund Program have identified numerous barriers to implementing effective resource management and program improvements. Therefore, the OIG will concentrate its resources on efforts in the following assignment areas:

- EPA's Superfund institutional controls achievement of their stated goal for preventing human exposure at Superfund sites
- EPA's progress in ensuring private party Superfund liabilities are adequately covered by sufficient financial assurance mechanisms
- Superfund portion of EPA's legislatively mandated audits, such as financial statement and Federal Information Security Modernization Act to include sampling, monitoring, communication, and opportunities for cleanup efficiencies
- Survey of remedial project managers on impacts for long-term cleanup due to operational effects of COVID-19 such as: shutdown of pump and treat system, inability to monitor remedy operations, or inability to transport hazardous waste to accomplish remedial objectives
- Assess the effectiveness of actions taken as a result of the 2017 Superfund Task Force Report
- The OIG also will evaluate ways to minimize fraud, waste, and abuse, with emphasis on identifying opportunities for cost savings and reducing risk of resource loss, while maximizing results achieved from Superfund contracts and assistance agreements

## Investigations

The Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA's Superfund Program. Investigations focus on allegations of criminal activity and serious misconduct in EPA Superfund programs and operations. The OIG's investigative process is mostly reactive, and the OI performs its proactive work strategically as opportunities and resources allow. Due to the reactive nature of the OI's work, investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2018 – 2022 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OIG investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations*, as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA Superfund programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. The OI often collaborates with other law enforcement entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. In addition, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk to the government."

The OIG plays a critical oversight role helping to ensure that EPA and U.S. Chemical Safety and Hazard Investigation Board (CSB) funds are properly expended and not subject to fraud, waste, or abuse. Investigative focus in this oversight include: 1) fraudulent practices in awarding, performing, and paying Superfund contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of, or confidence in the Superfund Program and create imminent environmental risks; 3) laboratory fraud relating to data, and false claims, or erroneous laboratory results that undermine the basis for decision-making, regulatory compliance, or enforcement actions in the Superfund Program; 4) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund Program; and 5) 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.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity in the Superfund Program. The results of OI's investigations are published and can serve as a deterrent to future misconduct. In addition, the OI's

investigations provide measurable results wherein recovery and restitution of financial losses are achieved, and administrative actions are taken to prevent those involved from further participation in any Superfund Program or operation which may lead to better accountability and deterrence.

The OI has further reorganized its Field Operations Directorate by realigning the four field offices into two regional offices - the Eastern Region Field Office and the Western Region Field Office. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters will hire an attorney-advisor to assist with investigative operations.

#### 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 and other land issues 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's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation pertaining to the clean-up programs, to include Superfund, to identify vulnerability to waste, fraud, and abuse. These assessments 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 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$148.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$66.0) This program change is an increase to support audits, investigations, increased risk vulnerabilities to fraud, waste, and abuse, and the operations of EPA's Superfund Program.

**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 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 \$66.1 million (\$54.3 million Inspector General; \$11.8 million Superfund Transfer)
- The aggregate President’s Budget for the operations of the OIG is \$66.1 million (\$54.3 million Inspector General; \$11.8 million Superfund Transfer)
- The portion of the aggregate President’s Budget needed for training is \$800 thousand (\$640 thousand Inspector General; \$160 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 \$238 thousand (\$190.4 thousand Inspector General; \$47.6 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 2022”.

## **Compliance**



**Compliance Monitoring**  
Program Area: Compliance

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$98,418.4	\$102,500.0	\$132,350.0	\$29,850.0
Inland Oil Spill Programs	\$181.4	\$139.0	\$2,142.0	\$2,003.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$1,054.3</i></b>	<b><i>\$1,000.0</i></b>	<b><i>\$1,006.0</i></b>	<b><i>\$6.0</i></b>
Total Budget Authority	\$99,654.1	\$103,639.0	\$135,498.0	\$31,859.0
Total Workyears	433.6	453.9	459.9	6.0

**Program Project Description:**

The Superfund Compliance Monitoring Program supports enforcement of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or “Superfund” law. EPA’s national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), provides information and tracks Superfund-related enforcement activities. Electronic tracking of Superfund enforcement work allows EPA to ensure that its enforcement resources are allocated to address the most significant concerns and facilitates transparency.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the Administration’s priorities, including timely enforcement in communities with potential environmental justice concerns.

**Performance Measure Targets:**

<b>(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	10,000	10,000

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$6.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.).

## **Enforcement**

**Criminal Enforcement**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$50,326.2	\$51,275.0	\$59,121.0	\$7,846.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$7,292.3</i></b>	<b><i>\$7,647.0</i></b>	<b><i>\$7,786.0</i></b>	<b><i>\$139.0</i></b>
Total Budget Authority	\$57,618.5	\$58,922.0	\$66,907.0	\$7,985.0
Total Workyears	239.8	257.7	289.7	32.0

**Program Project Description:**

The Criminal Enforcement Program investigates and helps prosecute criminal violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice. EPA’s criminal enforcement agents (Special Agents) do this through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment.

The Criminal Enforcement Program is strengthened by an ongoing collaboration with the Environmental Justice (EJ) Program, other EPA offices, and the U.S. Department of Justice (DOJ) to ensure our Superfund enforcement work is informed and targeted to address overburdened communities and to expand outreach opportunities through those offices.

Within the Criminal Enforcement Program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents in their investigations. EPA’s criminal enforcement attorneys provide legal and policy support for all the program’s responsibilities, including forensics and expert witness preparation, information law, and personnel law to ensure that program activities are carried out in accordance with legal requirements and agency policies. These efforts support environmental crimes prosecutions primarily by the United States Attorneys and DOJ’s Environmental Crimes Section. In FY 2020, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 95.29 percent.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will support the development of a specialized Criminal Enforcement task force within the Enforcement and Compliance Assistance Program to address Superfund-related EJ issues and casework, in partnership with the DOJ. This task force will include Special Agents and criminal justice analysts, as well as witness coordinators, to identify and provide services to victims of environmental crimes in EJ communities. The request will strengthen the Program’s commitment to EJ, specifically by devoting resources toward, and more effectively target, those areas and communities that are disproportionately affected by pollution and environmental crime.

In FY 2022, EPA's Environmental Crime Victim Assistance Program will more closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's environmental justice work. Activities will include data mining and mapping to identify where EJ communities, crime victims, and public health impacts overlap. This strategy will aid EPA in identifying sources of pollution impacting these communities and to focus criminal enforcement resources on the country's most vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in EJ communities.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$139.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

**Statutory Authority:**

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

**Environmental Justice**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$9,482.5	\$11,838.0	\$293,862.0	\$282,024.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$566.3</i></b>	<b><i>\$826.0</i></b>	<b><i>\$5,841.0</i></b>	<b><i>\$5,015.0</i></b>
Total Budget Authority	\$10,048.8	\$12,664.0	\$299,703.0	\$287,039.0
Total Workyears	30.2	39.9	211.9	172.0

**Program Project Description:**

EPA’s Environmental Justice Program coordinates the Agency’s efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and working collaboratively with all stakeholders to build healthy, sustainable communities based on residents’ needs and desires. The Program provides financial and technical assistance to communities working constructively and collaboratively to address environmental justice (EJ) issues. The EJ Program also works with local, state, tribal, and federal governments; community organizations and their stakeholders; business and industry; and academia to establish partnerships seeking to achieve protection from environmental and public health hazards for people of color, low-income, and indigenous communities at or near Superfund sites.

Work in this program directly supports EPA Administrator Michael Regan’s message “Our Commitment to Environmental Justice” issued on April 7, 2021,<sup>419</sup> in addition to supporting implementation of Executive Order (EO) 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. In accordance with the 2018 American Water Infrastructure Act, every EPA regional office employs a dedicated EJ coordinator and the Agency maintains a list of these persons on EPA’s website.<sup>420</sup> The Superfund portion of this program has focused on issues that affect people of color, low income, and indigenous 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.

**FY 2022 Activities and Performance Plan:**

EPA will continue to implement EJ activities in support of the Superfund Program. The EJ Program will continue to promote the active engagement of community groups, other federal agencies, states, tribal and local governments to recognize, support, and advance environmental protection and public health for overburdened communities at or near Superfund sites. The EJ

<sup>419</sup> For more information, please see: <https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiatives-support-environmental-justice-and>.

<sup>420</sup> For more information on EPA’s regional office contacts, please see: <https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice>.

Program will guide EPA's efforts to empower communities to protect themselves from environmental harms, working to utilize nationally consistent data that combines environmental and demographic indicators in mapping and targeting communities with environmental justice concerns at or near Superfund sites. These efforts help build healthy and sustainable communities through technical assistance, enabling overburdened and disadvantaged groups to participate in the new green economy while also better facilitating EPA efforts to further focus federal resources and program design to benefit environmental justice communities and those most at risk of climate change impacts from Superfund sites at or near such sites.

The EJ Program will continue to partner with other agency programs to create scientific analytical methods, a legal foundation, and public engagement practices that enable the incorporation of EJ considerations in EPA's regulatory and policy decisions while also better developing nationally consistent data that combines environmental and demographic indicators in mapping and targeting communities with environmental justice concerns at or near Superfund sites. Finally, the EJ Program will continue to support Agency's efforts to strengthen internal strategies to integrate environmental justice into our day to day activities including communications, training, performance management, and accountability measures.

**Performance Measure Targets:**

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$61.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$4,954.0 / +2.0 FTE) This program change increases resources to support the development and implementation of a cross-agency effort to advance environmental justice and coordinate EJ activities. This investment includes \$380.0 thousand in payroll.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Science & Technology	\$13,726.2	\$14,000.0	\$14,114.0	\$114.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$1,257.6</i></b>	<b><i>\$1,145.0</i></b>	<b><i>\$1,164.0</i></b>	<b><i>\$19.0</i></b>
Total Budget Authority	\$14,983.8	\$15,145.0	\$15,278.0	\$133.0
Total Workyears	57.3	68.9	68.9	0.0

**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 analysis 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.<sup>421</sup> The NEIC maintains a sophisticated chemistry and physical science laboratory, and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA’s Criminal Enforcement Program to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical assistance, consultation, and on-site inspection, investigation, and case resolution services in support of the Agency’s Superfund Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA’s Superfund enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies. The laboratory also will continue to coordinate its support for the Agency’s Superfund, Research and Development, and Land and Emergency Management Programs.

**FY 2022 Activities and Performance Plan:**

The Forensics Support Program provides expert scientific and technical support for EPA’s Superfund enforcement efforts. Effective enforcement relies on the best available science. In FY 2022, NEIC will support the President’s directive to “listen to science - and act. We must strengthen our clean air and water protections. We must hold polluters accountable for their actions. We must deliver environmental justice in communities all across America” (EO 14008,

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<sup>421</sup> *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](http://www.nap.edu/catalog.php?record_id=12589).

sec. 201).<sup>422</sup> To achieve these goals, the Agency will employ NEIC’s environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionately affected by pollution and environmental crime, and to target those areas more effectively.

In FY 2022, NEIC also will continue to streamline its forensics work, and identify enhancements to the Agency’s sampling and analytical methods, using existing and emerging technology. The NEIC also will build on its previous progress to maximize the efficiency and effectiveness of its operations, reduce the time for completion of civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. The results of these efforts will inform EPA’s work in FY 2022 and beyond.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$8.0) This program change increases core program efforts to provide analytical and scientific support for environmental forensics to ensure compliance with environmental laws.

**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).

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<sup>422</sup> For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.



**Superfund: Enforcement**  
Program Area: Enforcement

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$179,284.5</i></b>	<b><i>\$156,773.0</i></b>	<b><i>\$159,542.0</i></b>	<b><i>\$2,769.0</i></b>
Total Budget Authority	\$179,284.5	\$156,773.0	\$159,542.0	\$2,769.0
Total Workyears	719.1	771.3	771.3	0.0

**Program Project Description:**

The Superfund Enforcement Program protects communities by ensuring prompt site cleanup by using an “enforcement first” approach that maximizes the participation of liable and viable parties in performing and paying for cleanups, preserving federal dollars for sites where there are no viable contributing parties. In both the Superfund Remedial and Superfund Emergency Response and Removal Programs, the Superfund Enforcement Program obtains potentially responsible parties’ (PRPs) commitments to perform or pay for cleanups through civil judicial and administrative site actions. The Superfund Enforcement Program works closely with the Superfund Remedial and Superfund Emergency Response and Removal Programs and the U.S. Department of Justice (DOJ) to combine litigation, legal, and technical skills to bring enforcement actions and address emerging issues.

The Superfund Enforcement Program:

- Obtains cleanup commitments from responsible parties and other third parties, thereby providing long-term human health and environmental protections and making contaminated properties available for reuse.
- Negotiates site cleanup agreements and, where necessary, takes enforcement actions to require cleanup and recover costs, thereby preserving federal taxpayer dollar for sites where there are no viable contributing parties.
- 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.

In FY 2020, the Superfund Enforcement Program secured commitments for cleanup and cost recovery and billed parties for oversight costs, all totaling more than \$814 million. The use of Superfund enforcement tools resulted in cleanup and redevelopment at 130 private party sites in FY 2020.

Payments for cleanups, in addition to the performance of cleanup work, help accomplish cleanup efforts. Payments may be paid into special accounts which may be created when EPA receives funds as part of a settlement agreement. Funds received in settlements with PRPs are then 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 2020, EPA created 45 special

accounts and collected \$203.9 million for response work. The Agency disbursed or obligated \$236.6 million from special accounts for response work (excluding reclassifications).

The Superfund Enforcement Program continues to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, to create oversight efficiencies, and to promote the redevelopment and reuse of sites by encouraging PRPs to invest in reuse outcomes. In addition, the Superfund Enforcement Program encourages new private investment in the cleanup and reuse of sites by optimizing tools to encourage third-party investment. EPA also works to ensure that 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 2022 Activities and Performance Plan:**

Work in this program directly supports the Administration's priorities. In FY 2022, EPA will continue its work to achieve prompt site cleanup, maximize the work participation by PRPs, and secure private party funding of cleanups. In addition, the Agency will prioritize its efforts on the most significant sites in terms of human health and environmental impact.

To support the Agency's focus on climate change and environmental justice, the Superfund Enforcement Program intends to:

- Use authorities under CERCLA and RCRA to proactively investigate and prevent threatened releases in climate-sensitive and overburdened communities.
- Secure cleanup and reuse agreements that address impacts on communities and climate change vulnerabilities, including reuse and long-term stewardship opportunities.
- Increase opportunities for community engagement relating to cleanup and reuse agreements to address community concerns in a meaningful manner, including requiring PRPs to provide funding assistance (where appropriate) to help communities understand the technical aspects of Superfund remedies.
- Integrate sustainable development principles into enforcement tools, policies, and guidance used for the cleanup and reuse of contaminated sites.

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. The Agency also will work to address per- and polyfluoroalkyl substances (PFAS) contamination through gathering information to support actions to respond to PFAS releases, including case development.

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. EPA provides financial support to DOJ for these activities.

## Cost Recovery Support

In FY 2022, the Agency also will continue to standardize and streamline the financial management processes for the financial management aspects of Superfund cost recovery and the collection of debt to the federal government. EPA's financial, programmatic, and legal offices will continue to maintain the accounting and billing of Superfund oversight costs attributable to responsible parties. These costs represent EPA's cost of overseeing Superfund site cleanup efforts by responsible parties as stipulated in the terms of settlement agreements. In FY 2020, the Agency collected \$210.2 million in cost recoveries, of which \$27.3 million were returned to the Superfund Trust Fund and \$182.9 million were deposited in site-specific, interest-bearing special accounts.<sup>423</sup>

The Agency is requesting additional resources which will be used to ensure the Program will have the minimum resources needed to pursue an "enforcement first" approach that maximizes PRP participation at Superfund sites by performing enforcement activities such as conducting PRP searches, negotiating site-specific settlements, and preparing cost recovery packages. These activities ensure that responsible parties conduct or pay for cleanups and preserve federal dollars for sites where there are no viable contributing parties. The additional funding also will help to increase opportunities for community engagement, particularly in environmental justice communities, in the development of cleanup and reuse agreements to ensure community concerns are addressed in a meaningful manner.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2,078.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$691.0) This program change will be used to maximize the Superfund enforcement program's ability to ensure PRP-funded cleanups at Superfund sites and to increase opportunities for community engagement, particularly in environmental justice communities, in the development of cleanup and reuse agreements to ensure community concerns are addressed in a meaningful manner.

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<sup>423</sup> In FY 2020, the Agency earned approximately \$81.5 million in interest on the total special account funds invested in the Superfund Trust Fund. The FY 2020 net interest earned from an investment which matured in September 2019.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$7,155.8</i></b>	<b><i>\$7,424.0</i></b>	<b><i>\$7,574.0</i></b>	<b><i>\$150.0</i></b>
Total Budget Authority	\$7,155.8	\$7,424.0	\$7,574.0	\$150.0
Total Workyears	31.8	40.9	40.9	0.0

**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 or “Superfund”) 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 are contaminated with hazardous wastes, unexploded ordnance, radioactive wastes, or other toxic substances. Enforcement actions can facilitate cleanup and potential redevelopment of these sites.

Pursuant to CERCLA Section 120, EPA must enter into Interagency Agreements, commonly referred to as Federal Facility Agreements (FFAs), with responsible federal entities to ensure protective and timely cleanup of their National Priorities List (NPL) sites. The agreements provide that EPA will 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 2022 Activities and Performance Plan:**

Work under this program directly supports the Administration’s priorities. In FY 2022, 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, or have an impact on communities with environmental justice concerns. EPA also will negotiate and amend, as appropriate, FFAs for federal facility sites on the NPL. EPA will work with federal agencies to encourage greater community outreach and transparency. EPA will address emerging issues such as per- and polyfluoroalkyl substances (PFAS), continue to monitor FFAs for compliance, take enforcement actions at priority sites, and expedite cleanup and redevelopment of federal facility sites. EPA will use alternative dispute resolution processes and other approaches to expeditiously resolve formal and informal disputes. EPA also will continue to seek ways to improve its engagement with other federal agencies, state, tribal, and local governments, and their partners, emphasizing protective, timely cleanups that address communities’ needs.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$80.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$70.0) This program change will increase support for core work in the Superfund Federal Facilities Enforcement Program such as focusing its efforts on 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 statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

## **Homeland Security**

**Homeland Security: Preparedness, Response, and Recovery**  
Program Area: Homeland Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Science & Technology	\$27,021.6	\$24,852.0	\$25,545.0	\$693.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$32,992.9</i></b>	<b><i>\$33,020.0</i></b>	<b><i>\$33,264.0</i></b>	<b><i>\$244.0</i></b>
Total Budget Authority	\$60,014.5	\$57,872.0	\$58,809.0	\$937.0
Total Workyears	119.3	124.1	125.8	1.7

**Program Project Description:**

EPA leads or supports many aspects of preparing for and responding to a nationally significant incident involving possible chemical, biological, radiological, and nuclear (CBRN) agents. The Homeland Security Preparedness, Response, and Recovery Program implements a broad range of activities for a variety of federal efforts, including:

- National trainings;
- Participation in national interagency exercises with federal and state partners;
- Support for headquarters and regional Emergency Operations Centers;
- Support for the Agency’s continuity of operations devolution site in the EPA Colorado office;
- Enhancements for national information technology systems;
- Secured warehouse space for homeland security operations and storage; and
- Laboratory analyses of environmental samples and site decontamination projects.

EPA’s homeland security effort develops these responsibilities through research and maintaining a level of expertise, training, and preparedness specifically focused on threats associated with CBRN. This work is consistent with the Department of Homeland Security’s (DHS) National Response Framework.

EPA assists with multi-media training and exercise development/implementation for responders, which establishes and sustains coordination with states, local communities, tribes, and other federal agencies. The Agency also provides technical assistance to other federal agencies, including DHS, the Department of Defense (DOD), the Department of Justice (DOJ), and the Department of Health and Human Services, in the areas of environmental characterization, decontamination, and waste disposal methods. In addition, the Program operates a national



environmental laboratory for chemical warfare agents and implements EPA's National Approach to Response.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, 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 detection, 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.
- Conduct research to enhance response capabilities by developing methods, tools, and information for site characterization, decontamination, waste management, and clearance for priority chemical, biological, and radiological threats while reducing time and cost and ensuring safety.
- Continue the development of sample collection protocols and analysis methods for inclusion in the Environmental Sampling & Analytical Methods (ESAM)<sup>424</sup> on-line tool. The ESAM detection, sampling, and analysis tool helps local, state, tribal, and federal emergency response field personnel and their supporting laboratories more efficiently respond to incidents, enabling smooth transitions of samples and data from the field to the laboratory to the decision makers.
- Utilize the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. ASPECT aids first responders by providing aerial surveillance screening for wide-area chemical, radiological, and nuclear detection, as well as infrared and advanced imagery products with real-time data delivery. ASPECT is pursuing a multi-year strategic modernization, and is poised to support relevant climate crisis and environmental justice missions.
- Operate and enhance the Portable High-Throughput Integrated Laboratory Identification System (PHILIS). PHILIS units provide the Nation with mobile analytical "all hazards" confirmatory labs (qualitative and quantitative) with unique capability to analyze chemical and biological warfare threat agents. PHILIS provides on-scene, high-throughput analysis of air, soil, and water samples in areas that have experienced a significant incident. PHILIS can support risk mitigation of contaminated sites which face climate change impacts and disadvantaged communities by mobilizing laboratory capabilities to areas of need.

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<sup>424</sup> For more information, please see: <https://www.epa.gov/esam>.

- 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). 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 is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$129.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$115.0) This change supports core work in Homeland Security: Preparedness and Response activities, including performing homeland security research to enhance response capabilities.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act, §§ 104, 105, and 106; Homeland Security Act of 2002.

**Homeland Security: Protection of EPA Personnel and Infrastructure**

Program Area: Homeland Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$4,175.9	\$4,959.0	\$5,139.0	\$180.0
Science & Technology	\$443.0	\$501.0	\$501.0	\$0.0
Building and Facilities	\$14,325.7	\$6,676.0	\$6,676.0	\$0.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$994.6</i></b>	<b><i>\$1,030.0</i></b>	<b><i>\$1,030.0</i></b>	<b><i>\$0.0</i></b>
Total Budget Authority	\$19,939.2	\$13,166.0	\$13,346.0	\$180.0
Total Workyears	7.7	9.2	9.2	0.0

Total workyears in FY 2022 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

**Program Project Description:**

The federal government develops and maintains Continuity of Operations (COOP) plans and procedures that provide for the continued performance of its essential functions. The Homeland Security COOP Program works with other government and non-government organizations to ensure that Mission Essential Functions (MEFs) and Primary Mission Essential Functions (PMEFs) continue to be performed during emergency situations. The Department of Homeland Security/Federal Emergency Management Agency’s (FEMA) Federal Continuity Directive-1 requires EPA to develop a continuity plan that ensures its ability to accomplish its MEFs from an alternate site, during a national disaster, continues and the Agency be able to do so with limited staffing and without access to resources available during normal activities.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will:

- 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 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act, §§ 104, 105, 106; Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA’s organic statute).

## **Information Exchange / Outreach**

**Exchange Network**

Program Area: Information Exchange / Outreach

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$14,906.1	\$14,084.0	\$14,226.0	\$142.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$1,341.2</i></b>	<b><i>\$1,328.0</i></b>	<b><i>\$1,328.0</i></b>	<b><i>\$0.0</i></b>
Total Budget Authority	\$16,247.3	\$15,412.0	\$15,554.0	\$142.0
Total Workyears	30.7	30.2	30.2	0.0

**Program Project Description:**

EPA’s Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA’s Digital 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)<sup>425</sup> is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA’s System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes including environmental justice. EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA’s Digital Strategy that supports business process change agencywide. Under this strategy, and the 21<sup>st</sup> Century Act<sup>426</sup>, 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. EPA also is responsible for managing EN technical governance groups

<sup>425</sup> For more information on the Central Data Exchange, please see: <http://www.epa.gov/cdx/>.

<sup>426</sup> For more information on the 21<sup>st</sup> Century Integrated Digital Experience Act, please refer to: <https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf>.

and administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secured approach for EPA and its state, tribal, and territorial partners to more effectively and efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency has provisioned Virtual Exchange Services (VES) or virtual nodes to facilitate more than 110 large-scale data transactions supporting states and tribal partners, with another 20 anticipated by the end of FY 2022. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. The shared electronic identity proofing and signature services for CROMERR support 31 partner regulatory reporting programs to date and over 15 states, tribes, and EPA partners will be added in FY 2022. EPA estimates that partners adopting shared CROMERR services save \$120 thousand in development and at least \$30 thousand in operations each year, which results in a cost avoidance of greater than \$2.5 million for EN partners.

In FY 2022, EPA will continue to improve the functionality and use of the System of Registries.<sup>427</sup> In addition to streamlining the Registries, EPA will launch a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services. Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example is the Agency's effort to promote the adoption of tribal identification services (TRIBES) across EPA systems. This progress is tracked by EPA's Chief Information Officer, who has issued a memorandum calling on all applicable systems to incorporate this shared data service. In FY 2020, EPA increased the number of EPA systems using TRIBES services by more than 26 percent, from 19 to 24 systems, with many other systems currently integrating TRIBES.

In FY 2022, EPA will continue implementing a solution related to shared facility identification information. In FY 2020, EPA began to re-baseline the existing centralized facility registry, as managing facility identification centrally reduces the requirement by programs to manage that information locally. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Similar to facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks the number of registry webpages users and web service hits as one measure of usage. For example, the SRS website is visited by approximately 50 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform, so they are cloud-ready.

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<sup>427</sup> For more information, please see: [https://ofmpub.epa.gov/sor\\_internet/registry/sysofreg/about/about.jsp](https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp).

By 2022, EPA will have moved TRIBES, SRS, and the Registry of EPA Applications, Models and Data Warehouses (READ) into a cloud-based open-source platform. EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

Using the information available in the registries, EPA created RegFinder to help industry discover potentially applicable regulations. In FY 2022, EPA will continue to improve the functionality and information in RegFinder and to improve outreach with regulated industry to ensure the tool meets customer needs. RegFinder builds on services from four EPA data catalogs: 1) SRS; 2) EPA Enterprise Vocabulary; 3) a catalog of federal statutes and regulations (Laws and Regulations Services); and 4) North American Industrial Classification System to enable a user to search for laws and regulations by substance, keyword, or industrial processes.

In FY 2022, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to 1) facilitate the import and export of legitimate goods; and 2) leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 20 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (e.g., due in large part to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high-value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$6,190.4	\$8,285.0	\$14,116.0	\$5,831.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$927.6</i></b>	<b><i>\$659.0</i></b>	<b><i>\$5,659.0</i></b>	<b><i>\$5,000.0</i></b>
Total Budget Authority	\$7,118.0	\$8,944.0	\$19,775.0	\$10,831.0
Total Workyears	12.1	13.1	13.1	0.0

**Program Project Description:**

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program’s mission is to protect the confidentiality, availability, and integrity of EPA’s information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

**FY 2022 Activities and Performance 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. To respond, the Agency maintains a robust, dynamic approach to cybersecurity risk management, governance, and oversight. In FY 2022, EPA requests an increase of \$5 million to strengthen capacity of the Information Security Program in the Superfund Appropriation. The Agency will continue improving its security posture, partnering with public and private sector entities to promote the adoption of cybersecurity best practices, and reporting to the White House and Congress on the status of these initiatives.

EPA will continue implementing the Strengthening and Enhancing Cyber-capabilities by Utilizing Risk Exposure Technology Act (SECURE Technology Act) and Section 889 of the FY 2019 National Defense Authorization Act to mitigate supply chain risks in the procurement of information technology (IT). EPA’s Senior Procurement Official, in consultation with the Chief Information Security Officer, issued agencywide policy implementing the requirements of Section 889 (a)(1)(B), conducted training for the acquisition community, and made all required actions (amendments, modifications, etc.) on existing contracts to fully implement Section 889. The policy also will guide future contracts to fully comply with the Section 889 requirements.

## **Risk Management, Oversight, and Training:**

In FY 2022, EPA will continue to include cybersecurity and privacy components in ongoing senior leadership program reviews. These reviews enhance Chief Information Officer (CIO) oversight by enabling better risk area determination and targeted improvement direction to system and mission program managers. While EPA programs and regions maintain responsibility for improving their performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvements. In FY 2020, this review process led to an 87 percent agencywide reduction in system level vulnerabilities.

In FY 2022, the Agency will continue to collect Federal Information Security Modernization Act (FISMA)<sup>428</sup> metrics and evaluate related processes, tools, and personnel to identify areas of weakness and opportunities for improvement. EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer will continue to monitor and report on these metrics, in line with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements*.<sup>429</sup>

Further, EPA also deploys Agency-specific role-based training to ensure personnel in key cybersecurity roles have the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

## **Network Management and Protection:**

In accordance with OMB Memorandum M-19-17 *Enabling Mission Delivery through Improved Identity, Credential, and Access Management*, EPA will continue to review and improve identity management capabilities through authentication infrastructure and system configurations.

In FY 2022, EPA will strengthen cloud security through cloud access security broker and cloud platform management services, which enables remote workers to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC).<sup>430</sup> The Agency also will implement tools to improve web content filtering capabilities to prevent malicious and unauthorized web content from impacting EPA systems and users. The Agency will continue to build an Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments,<sup>431</sup> and to monitor and report on EPA networks and systems.

The Agency is working to address shortfalls in current Office of Management and Budget risk posture assessments. These investments include Limiting Privilege Users to Trusted Websites, developing an automated mechanism preventing the use of untrusted removable media from

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<sup>428</sup> Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

<sup>429</sup> For more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf>.

<sup>430</sup> For more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf>.

<sup>431</sup> These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: [https://www.epa.gov/sites/production/files/2017-10/documents/epaig\\_20171030-18-p-0031.pdf](https://www.epa.gov/sites/production/files/2017-10/documents/epaig_20171030-18-p-0031.pdf).

workstations and servers, as well as segmenting High Vulnerability Assets across the information environment to improve security and compliance.

### **Incident Management:**

Cyber-attacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. Continuous monitoring capabilities, which serve to identify and address incidents quickly, are vital to ensure that EPA's information environment remains safe. In FY 2022, this investment will support the on-going implementation of capabilities for data labeling and data loss prevention, and remote computer imaging and forensics, all of which will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. In accordance with OMB Memorandum M-20-04 *Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements*,<sup>432</sup> in FY 2022, EPA will continue to mature the Microsoft Cloud Access Service, which will provide a monitoring capability to improve incident detection and response capabilities. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis, forensics, and containment and eradication activities.

Additionally, the Agency practices Coordinated Vulnerability Disclosure (CVD). By working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered, CVD decreases the harm or time an adversary can use to deny or disrupt services to the networks.

EPA continues to leverage capabilities through the Continuous Diagnostics and Mitigation (CDM) Program, which addresses agencies' cybersecurity protection gaps and allows EPA to efficiently identify and respond to federal-wide cybersecurity threats and incidents. In FY 2022, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will focus on closing remaining gaps in privileged access to EPA's network and continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities, and integrate mobile device discovery to expand program capabilities. In FY 2022, EPA estimates a \$12.6 million budget for the CDM Program across the EPM and Superfund accounts.

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<sup>432</sup> For more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf>.

### **Supply Chain Risk Management:**

In FY 2022, EPA will work on developing a strategy for how the Agency will implement Supply Chain Risk Management Security Controls to comply with the Government Accountability Office (GAO) findings<sup>433</sup> and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.<sup>434</sup> This initial work will include coordinating across the Agency with professionals from Information Technology, Information Security and Acquisitions, to update the policy and obtain the necessary tools to address these critical security requirements which were a vulnerability in the SOLAR WINDS FY 2021 intrusion.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$5,000.0) This program change reflects a necessary increase to continue support for the implementation of the critical CDM Program and other IT security requirements. This investment will be used to close existing gaps by improving audit capability, ensuring accountability, and adding protections directly associated with the information.

### **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).

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<sup>433</sup> Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.

<sup>434</sup> For more information, please see: <https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final>.

**IT / Data Management**

Program Area: IT / Data Management / Security

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$86,699.8	\$82,715.0	\$86,744.0	\$4,029.0
Science & Technology	\$3,473.7	\$3,072.0	\$3,121.0	\$49.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$15,168.6</i></b>	<b><i>\$13,826.0</i></b>	<b><i>\$15,202.0</i></b>	<b><i>\$1,376.0</i></b>
Total Budget Authority	\$105,342.1	\$99,613.0	\$105,067.0	\$5,454.0
Total Workyears	442.3	482.4	486.4	4.0

Total workyears in FY 2022 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

**Program Project Description:**

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

This program supports the maintenance of EPA’s IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

To date, throughout the COVID-19 pandemic, EPA has continued to maintain continuity of operations with most of the Agency in a maximum telework posture. Specifically, the IT/DM Program has doubled the Virtual Private Network infrastructure, provisioned over 1,449 new users with EPA laptops enabling day one productivity from telework locations, and deployed Microsoft Teams and Teams Live Events, allowing EPA offices to conduct virtual video-based meetings for up to 10 thousand participants

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will further strengthen its IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2020, EPA scored an overall B+, the second highest rating among CFO Act agencies.

The Agency requests an increase of more than \$1.3 million for the IT/DM Program in the Superfund Appropriation. EPA will continue implementing OMB/NARA Memoranda M-19-21, which directs agencies to manage all permanent records electronically to the fullest extent possible with appropriate metadata and all temporary records in an electronic format or store them in commercial records storage facilities by December 31, 2022. To accomplish this, EPA will continue to make the Agency aware of this Directive and encourage the transfer of inactive permanent and temporary paper records to the Federal Records Centers before the OMB/NARA's target date. EPA will look to apply artificial intelligence and machine learning for content tagging in the records digitization process to improve the access and quality of EPA's digitized permanent records. Further, in FY 2022, EPA will complete buildout of two digitization centers and continue the development and deployment of Records Management Technologies, including: Content Ingestion Services into the National Computer Center Amazon Web Services environment, deployment of a Paper Asset Tracking Tool, and the buildout of a new, cloud-hosted, Record Management Technology application focused on improving search capabilities.

In FY 2022, EPA will bolster its agencywide support for annual operations and maintenance of IT infrastructure, including eDiscovery (supporting the Agency's FOIA Program), Local Area Network Switches and Regional Laptop Refreshes. These services are crucial for EPA's operations, and consistent resources are necessary for operations and the Agency's ability to carry out its mission. This investment will enable EPA to establish a rolling four-year refresh of laptops without any delays for funding, a critical IT infrastructure requirement as EPA adapts to the future of work in a post-COVID environment.

EPA also will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program, which develops training for different stakeholder communities and assesses documentation for all public-facing EPA systems/applications. EPA's Controlled Unclassified Information Program will standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556 – *Controlled Unclassified Information*.<sup>435</sup>

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public. The Program focuses on collaborations such as the E-Enterprise Initiative, which facilitates conversations among EPA, states, and tribal leaders about opportunities to improve customer services across the environmental enterprise. In FY 2022, the CX Program will continue to promote IT modernization, accountability, and transparency, and to improve how it supports and manages the lifecycle of information and information products.

Under the leadership of the Agency's Chief Technology Officer and Chief Architect, EPA will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA also will

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<sup>435</sup> For more information, please refer to the Executive Order: <https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information>.

identify and prioritize the interoperability of data within EPA and across federal agencies that benefits internal and public-facing services. Finally, EPA will continually monitor and develop staff proficiencies in the understanding and use of data.

The Agency also 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. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Application.

EPA's One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure, ensuring that it meets current statutory and evolving security requirements.

### **Performance Measure Targets:**

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

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$66.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,310.0) This program change is an increase for EPA to continue its progress towards upgrading the Agency's enterprise-wide records management system and enhancing the digitization of paper records. Centralizing, managing, and digitizing the Agency's records will decrease onsite storage costs, improve records management, and position EPA to comply with statutory requirements under the Federal Records Act.

### **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**

**Alternative Dispute Resolution**

Program Area: Legal / Science / Regulatory / Economic Review

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$800.2	\$864.0	\$1,141.0	\$277.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$1,014.2</i></b>	<b><i>\$832.0</i></b>	<b><i>\$857.0</i></b>	<b><i>\$25.0</i></b>
Total Budget Authority	\$1,814.4	\$1,696.0	\$1,998.0	\$302.0
Total Workyears	3.5	5.9	6.9	1.0

**Program Project Description:**

EPA’s Alternate Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on Superfund Program matters prior to engaging in formal litigation. The Program provides legal counsel, facilitation, mediation, consensus building advice and support. The Program supports the use of ADR in the Superfund Program’s work with communities and Potentially Responsible Parties.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to provide conflict prevention and ADR services on Superfund Program matters. Specifically, ADR will:

- Continue to administer it’s five-year, \$53 million Conflict Prevention and Resolution Services contract. The contract supports more than 50 individual Superfund sites by providing facilitators to work with Community Advisory Groups and is expected to take on an additional 10-20 sites in FY 2022.
- Directly provide the above services through the conflict resolution specialists on staff. The ADR Program expects to directly support Agency programs and stakeholders by providing facilitation of public meetings, mediation, or other consensus building support on 1-2 Superfund projects.
- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program offers this training through its cadre of eight interactively designed courses to all national program offices and regional offices. Adapting to a virtual environment in FY 2021 has allowed the ADR program to reach Superfund Community Involvement Coordinators in each of the 10 EPA regions and expects that to increase in FY 2022.

The following are examples of FY 2020 accomplishments supporting the Superfund Program:

- Provided facilitation and mediation assistance at more than 50 Superfund sites, including sites from the Administrator’s emphasis list, with particularly challenging community engagement issues, across all EPA regions.
- Provided sustained mediation services regarding a permit dispute to the GE-Pittsfield / Housatonic River Superfund Site. Because of the Conflict Prevention and Resolution Center’s

efforts and resources, the parties were able to reach agreement on reasonable compromises to site clean-up. This matter was an extremely complex and highly charged negotiation.

- Provided mediation services to an EPA-led cost allocation process on the Diamond Alkali / Passaic River Superfund site. The final allocation report is expected to assist the region in negotiations with potentially responsible parties.
- Provided facilitation and training support to the Superfund Community Involvement University, which provides Agency Community Involvement Coordinators public involvement training and skills.

### **Performance Measures Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$22.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3.0) This program change is an increase to support core capacity on Superfund Program matters.

### **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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$49,878.3	\$49,595.0	\$71,895.0	\$22,300.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$628.3</i></b>	<b><i>\$443.0</i></b>	<b><i>\$450.0</i></b>	<b><i>\$7.0</i></b>
Total Budget Authority	\$50,506.6	\$50,038.0	\$72,345.0	\$22,307.0
Total Workyears	250.4	263.9	301.5	37.6

Total workyears in FY 2022 include 8.8 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

**Program Project Description:**

The Legal Advice: Environmental 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 to clean up contaminated sites, which advances environmental justice for neighboring communities and supports EPA’s state, tribal and local partners. For example, the 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.

The 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. The Program is essential to providing the high-quality legal work to ensure that EPA’s decisions protect human health and the environment.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will prioritize its legal support capabilities for the Superfund Program in order to assist with the Administration’s priorities including: tackling the climate crisis, advancing environmental justice, and supporting state, tribal and local partners. The Program will work to support CERCLA activities and these priorities, to include: counseling on how to address environmental justice and climate resiliency in EPA’s remedy decisions at Superfund sites, defensibility of agency actions, drafting significant portions of agency actions, and participating in litigation in defense of agency actions.

The Program will continue to provide key legal advice related to designating Per- and polyfluoroalkyl substances (PFAS) as a CERCLA hazardous substance, an action that would significantly advance environmental justice for communities across the country impacted by PFAS. Legal review is critical to the Superfund Program at many points throughout the cleanup process. This program also provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List (NPL), an important step in advancing cleanup at the Nation’s

most contaminated sites. This benefits states, tribes, and local communities, who may not have adequate resources to address these sites on their own.

The following are examples of recent favorable case outcomes and accomplishments which illustrate this program's important role in implementing the Agency's core priorities and mission:

- Favorable Settlement with Utah in the matter of *In re Gold King Mine Release in San Juan County, Colorado on August 5, 2015*, MDL No: 1:18-md-02824-WJ (D. N.M.): Served as the Agency lead in negotiating a favorable settlement (signed August 5, 2020) with Utah, which had alleged \$1.9 billion in damages from the Gold King Mine release. Utah agreed to dismiss its environmental claims (CERCLA, CWA, and RCRA) and tort claims and EPA has agreed to act on Utah's applications for \$3 million in CWA grants as well as to conduct CERCLA site assessment work at select abandoned mine sites in Utah by December 2021. This settlement allows EPA and its state partner to work cooperatively on addressing Utah's contaminated land and water quality.
- U.S. Supreme Court decision in *Atlantic Richfield, Co. v. Christian, et. al.*, No. 17-1498, slip opinion (U.S. Apr. 20, 2020): Served as the Agency lead for the U.S. brief that was filed with the U.S. Supreme Court in an appeal from a Montana Supreme Court decision, which had held that individual landowners can seek restoration damages under state law to remediate properties that are within the boundaries of the Anaconda Smelter Superfund NPL Site. The Supreme Court affirmed in part and vacated in part the Montana Supreme Court decision. Though the Court held that CERCLA 113(h) does not apply to state courts, the Court left much of the favorable federal precedent on 113(h) untouched. The Court also held that the plaintiffs cannot proceed with any remediation of their properties without first obtaining EPA authorization pursuant to 122(e)(6). Ultimately, EPA obtained a favorable outcome that allows EPA to maintain the protectiveness of its remedies at Superfund sites.
- Favorable Decision in Challenge to NPL listing (*Meritor, Inc. v. EPA*, No. 18-1325 (D.C. Cir.) (July 28, 2020)): Served as the Agency lead in the D.C. Circuit litigation challenging EPA's placement of the Rockwell International Wheel & Trim Site in Grenada, Mississippi, on the Superfund NPL. In a technically oriented opinion, the court upheld the Agency's application of the Hazard Ranking System (HRS) to score the site above the 28.5 numerical threshold for NPL eligibility. The decision is significant as it is the first challenge to a site that was listed based on vapor intrusion under the Subsurface Intrusion pathway which was added to the HRS in January 2017. In denying the petition, the court acknowledged that the Subsurface Intrusion pathway and validity of the HRS framework were not in dispute.
- Favorable Decision in Challenge related to Cleanup of Hudson River PCBs Superfund Site (*State of NY v. EPA*, 1:19-cv-1029 (N.D.N.Y. Mar. 11, 2021)): Served as the Agency lead in litigation by the State of New York challenging EPA's issuance of a Certification of Completion to General Electric at the Hudson River PCBs Superfund Site. The court upheld EPA's cleanup and dismissed New York's claims under the Administrative Procedure Act, holding that EPA had not acted *ultra vires*, and that New York failed to allege any clear error in judgment by EPA when EPA issued the Certification. The Court

also noted that New York's claims challenging the Consent Decree were procedurally improper and that the proper forum for New York to seek relief in this case was by intervening in the original case in which the Consent Decree was issued.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$4.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3.0) This program change is an increase to provide legal representation, legal counseling, and legal support for EPA's Superfund 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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

## **Operations and Administration**

**Acquisition Management**

Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$27,433.0	\$32,247.0	\$34,121.0	\$1,874.0
Leaking Underground Storage Tanks	\$155.9	\$132.0	\$132.0	\$0.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$24,356.1</i></b>	<b><i>\$23,800.0</i></b>	<b><i>\$30,519.0</i></b>	<b><i>\$6,719.0</i></b>
Total Budget Authority	\$51,945.0	\$56,179.0	\$64,772.0	\$8,593.0
Total Workyears	266.3	285.7	325.7	40.0

**Program Project Description:**

Superfund 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.

In response to the COVID-19 pandemic, EPA will continue providing regular guidance and flexibilities to the Agency’s acquisition community and contractors, including increasing the micro-purchase threshold and providing an Emergency Acquisition Toolkit of best practices and templates. EPA also implemented Section 3610 of the Coronavirus Aid, Response, and Economic Security (CARES) Act, which authorized federal agencies to reimburse contractors for paid leave.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an increase of 30 FTE and more than \$6.7 million to strengthen the Acquisition Management Program in the Superfund Appropriation. These resources will assist the Agency to continue its efforts to process and award contract actions in a timely manner in support of EPA program offices and in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP). Timely procurement processing is crucial to efficient operations. In FY 2020, EPA exceeded its target of meeting procurement action lead times (PALT) for 90 percent of contract actions. The Agency is on track to meet the FY 2021 target of 95 percent. In FY 2022, EPA will continue exploring opportunities for improving PALT.

This investment also supports the implementation of supply chain risk requirements of Section 889 of the 2019 National Defense Authorization Act and the “Made in America Laws” referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America’s Workers*<sup>436</sup> while furthering Category Management implementation requirements. In FY 2022,

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<sup>436</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/>.



EPA will focus on establishing a comprehensive architecture for the Agency's supply chain as well as mechanisms to identify and mitigate risk within the supply chain. The Agency will support efforts to ensure there is diversity, and thereby strength, of the supply chain by monitoring and ensuring small business utilization and "Buy American" implementation from a supply chain management and account management lens.

EPA also will work to ensure that its procurement activity aligns with Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.<sup>437</sup> In FY 2022, EPA will aim to eliminate any barriers found in its Analysis of Barriers to Ensuring Equity in EPA Acquisitions, to be completed in FY 2021, to allow for full and equal participation in agency procurement and contracting opportunities and will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services. Further, in line with Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, EPA will work with the Federal Acquisition Regulatory Council in developing and implementing regulatory amendments that promote increased contractor attention on reduced carbon emission and Federal sustainability.

EPA is fully committed to leveraging category management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2022, EPA will continue to leverage data provided by the General Service Administration, and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of Federal Strategic Sourcing vehicles, and BIC acquisition solutions.

- The OMB Category Management focuses on total acquisition spend transitioned from contract vehicles that are unaligned with category management principles to the SUM program. EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions* to mandate the use of enterprise-wide contract vehicles, in addition to BIC contract solutions and other OMB-designated contract solutions. Based on this policy change, EPA anticipates that 58 percent of total addressable spend will have been transitioned into the SUM Program by the end of FY 2022, relative to the FY 2020 result to date of 43.2 percent.
- In FY 2022, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.<sup>438</sup> Through SUM Tier 2 and 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. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools

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<sup>437</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

<sup>438</sup> For additional information, please see: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf> *Best-in-Class Mandatory Solution -Package Delivery Services*.

available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool, which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

- In FY 2022, EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP is transforming the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In FY 2020, EPA realized \$5.9 million cost avoidance by using data analysis tools to monitor specific, measurable data related to print services, cellular services, shipping, Microsoft software, voice services, office supplies, lab supplies, PCs, and furniture. Since the beginning of the Strategic Sourcing Program in FY 2013 through the second quarter of FY 2021, EPA has achieved cost avoidance of \$26.2 million. In FY 2022, EPA anticipates approximately \$4.3 million in additional savings.

In FY 2022, EPA will continue to evaluate options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system, in line with government-wide mandates to increase the use of shared services.<sup>439,440</sup> The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2022, EPA will implement a new Government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration (GSA) and OMB requirements. EPA also will continue implementing the Financial Information Technology Acquisition Reform Act (FITARA) by competing contracts with multiple vendors or confining the scope of the contract to a limited task, thereby avoiding vendor lock-in, and developing acquisition vehicles that support the Agency in FITARA compliance and implementation.

### **Performance Measure Targets:**

Work under this program supports performance results in the Acquisition Management Program under the EPM appropriation and the Central Planning, Budgeting and Finance Program under the EPM appropriation.

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<sup>439</sup> OMB-17-22 “Comprehensive Plan for Reforming the Federal Government, for more information, please see: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-22.pdf>.

<sup>440</sup> OMB-19-16 “Centralized Mission Support Capabilities for the Federal Government, for more information, please see: <https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,515.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,204.0 / +30.0 FTE) This program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner. It also will support the Agency's efforts to "Buy American". This investment includes \$5,204.0 thousand in payroll.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$70,751.8	\$76,718.0	\$81,563.0	\$4,845.0
Leaking Underground Storage Tanks	\$354.8	\$416.0	\$434.0	\$18.0
Hazardous Waste Electronic Manifest System Fund	\$114.5	\$0.0	\$0.0	\$0.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$24,772.5</i></b>	<b><i>\$26,561.0</i></b>	<b><i>\$27,720.0</i></b>	<b><i>\$1,159.0</i></b>
Total Budget Authority	\$95,993.6	\$103,695.0	\$109,717.0	\$6,022.0
Total Workyears	422.0	462.0	465.0	3.0

Total workyears in FY 2022 include 2.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.

Total workyears in FY 2022 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

**Program Project Description:**

EPA’s financial management community maintains a strong partnership with the Superfund Program. EPA’s Office of the Chief Financial Officer (OCFO) supports this continuing partnership by providing a full array of financial management support services and systems necessary to pay Superfund bills and recoup cleanup and oversight costs for the Trust Fund. EPA’s OCFO manages Superfund activities under the Central Planning, Budgeting, and Finance Program in support of integrated planning, budget formulation and execution, financial management, performance and accountability processes, financial cost recovery, and systems to ensure effective stewardship of Superfund resources. This program supports the requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010;<sup>441</sup> Digital Accountability and Transparency (DATA) Act of 2014;<sup>442</sup> and the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;<sup>443</sup> the Federal Management Financial Integrity Act (FMFIA);<sup>444</sup> the Inspector General Act of 1978, as Amended.<sup>445</sup>

**FY 2022 Activities and Performance Plan:**

In FY 2022, 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 ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System which includes a Performance Module, and related financial reporting systems. The Agency is reviewing its financial systems for

<sup>441</sup> For more information, please see: <https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf>.

<sup>442</sup> For more information, please see: <https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf>.

<sup>443</sup> FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), <https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf>.

<sup>444</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf>.

<sup>445</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg1101.pdf>.

modernization opportunities to support greater efficiencies and effectiveness and targeting legacy systems for replacement. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

Also, in FY 2022, EPA will standardize 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. For example, EPA implemented a new billing process in FY 2020 that created efficiencies allowing the Agency to send out over 180 more Superfund bills worth an additional \$62 million in amounts billed to primary responsible parties. EPA will continue to standardize and streamline internal business processes and adopt federal shared services when supported by business case analysis. For example, EPA has implemented Treasury's Invoice Payment Processing System (IPP) for reviewing and paying commercial vendors. As of April 2021, more than 80 percent of contract invoices are being handled through this service. When fully implemented in FY 2022, the full range of payment types will be processed in the system, greatly reducing manual effort, and allowing the elimination of two legacy administrative systems.

During FY 2022, EPA will focus on implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a government-wide effort to standardize and improve financial management of interagency agreements. The goal of G-Invoicing is to align EPA's business processes to deliver the new, more streamlined approach for the end-to-end delivery of financial transactions for interagency agreements. This will involve implementing a new version of EPA's accounting systems software in FY 2022. Extensive testing and training will be needed.

Also, during FY 2022, 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. In FY 2022, EPA will deploy the e-Recovery system for Superfund, Federal Emergency Management Agency, and Oil billing. This new system modernizes the legacy system and improves functionality and security. The Program will continue to implement FITARA requirements in accordance with EPA's Implementation Plan.<sup>446</sup> The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology (IT) needs are properly planned and resourced in accordance with FITARA. In addition, the Program will continue work to implement the OMB-mandated framework under Technology Business Management (TBM) to create transparency under IT resource management and facilitate data-driven decision-making and communication between IT and finance. In addition, the Program is in the early stages of planning a modest reorganization to incorporate updated activities and workflows.

During FY 2022, EPA will continue to follow OMB Circular A-123 guidance, conduct internal control program reviews, and use the results and recommendations from the Office of Inspector General 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

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<sup>446</sup> For more information please see: <http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan>.

financial management program to further evaluate its operations and for management decision-making. For example, in FY 2019, EPA observed a trend that Agency corrective actions were increasingly being implemented beyond the agreed upon resolution date reaching a peak in FY 2020 of 31 outstanding late corrective actions. Through a process of meeting regularly with offices and establishing timelines to effectively closeout corrective actions, by the middle of FY 2021, EPA was able to cut the number of late corrective actions in half. In addition, EPA is dedicated to reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002,<sup>447</sup> EPA has continually reviewed, sampled, and monitored its payments to protect against erroneous payments and complied with reporting requirements with very low rates of erroneous payments (below the 1.5 percent threshold for each payment stream), well below government averages.

**Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

**FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,159.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE from annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

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<sup>447</sup> For more information, please see: <https://www.govinfo.gov/content/pkg/PLAW-107publ300/pdf/PLAW-107publ300.pdf>.

**Facilities Infrastructure and Operations**  
Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
Science & Technology	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
Building and Facilities	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
Leaking Underground Storage Tanks	\$1,066.0	\$836.0	\$837.0	\$1.0
Inland Oil Spill Programs	\$640.2	\$682.0	\$683.0	\$1.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$82,734.0</i></b>	<b><i>\$68,727.0</i></b>	<b><i>\$72,801.0</i></b>	<b><i>\$4,074.0</i></b>
Total Budget Authority	\$470,906.5	\$450,262.0	\$496,678.0	\$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

**Program Project Description:**

Superfund resources in the Facilities Infrastructure and Operations Program fund the Agency’s rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

In response to the COVID-19 pandemic, EPA will continue ensuring the safety of EPA facilities and personnel by following the EPA Workplace Safety Plan in accordance with CDC guidelines. This includes adherence to requirements for mask-wearing, occupancy limits, procuring disinfecting and cleaning supplies, hand sanitizer for use by facility personnel and EPA staff, promoting physical distancing through signage, and procuring safety shields for personnel with increased contact with other people (e.g., security guards, badging office personnel, and administrative staff).

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to invest in the reconfiguration of EPA’s workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465,<sup>448</sup> the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will aim to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also

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<sup>448</sup> For additional information, please refer to: <https://www.congress.gov/bill/114th-congress/house-bill/4465>, *Federal Assets Sale and Transfer Act of 2016*.

will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.

EPA's long-term consolidation plan for FY 2018 – FY 2022 has the potential to provide a cumulative annual rent avoidance of approximately \$28 million across all appropriations by releasing 850,641 square feet. This will help offset EPA's escalating rent and security costs. In FY 2020, EPA released 116,425 square feet of unused office and warehouse space and is planning to release an additional 26,017 square feet in FY 2021. Planned consolidations and space releases in FY 2022 will allow EPA to release an expected 467,345 square feet of space. For FY 2022, the Agency is requesting \$47.53 million for rent, \$2.49 million for utilities, and \$8.96 million for security in the Superfund appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>449</sup> EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space 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 funding to achieve long-term cost avoidance and sustainability goals.

EPA will continue to manage lease agreements with the General Services Administration (GSA) and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. In line with Executive Orders 14008<sup>450</sup> and 13990<sup>451</sup>, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, LEED Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment will support EPA facilities infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC), which is necessary to meet federal sustainability goals. Additionally, EPA will direct all future fleet procurements, where economically feasible, to the purchase of electric vehicles, or lease through GSA electric vehicles. This allows EPA to prioritize energy efficiency and climate resilience in the rehabilitation of United States Government fleet vehicles and combat the climate crisis.

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 FY 2022, the Agency will continue to partner with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized

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<sup>449</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>450</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>451</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.



HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

**Performance Measure Targets:**

Work under this program supports performance results in the Facilities Infrastructure and Operations Program under the EPM appropriation and the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$94.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,713.0) This change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.
- (+\$267.0) This program change is an increase to support the growing workforce at EPA and ensuring an optimal 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).

**Financial Assistance Grants / IAG Management**  
Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$26,319.8	\$25,430.0	\$28,730.0	\$3,300.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$3,561.3</i></b>	<b><i>\$3,210.0</i></b>	<b><i>\$3,390.0</i></b>	<b><i>\$180.0</i></b>
Total Budget Authority	\$29,881.1	\$28,640.0	\$32,120.0	\$3,480.0
Total Workyears	135.8	139.5	159.5	20.0

**Program Project Description:**

Superfund resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs, and suspension and debarment activities. Resources in this program ensure that EPA’s management of grants and IAs meet the highest fiduciary standards, the grant and IA funding produces measurable results for environmental programs, and the Suspension and Debarment Program effectively protects the government’s business interest. These objectives are critically important for the Superfund program, as a substantial portion of the Program is implemented through IAs with the U.S. Army Corps of Engineers and the U. S. Coast Guard.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will work to ensure that its financial assistance activity supports Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.<sup>452</sup> In FY 2022, the Agency will continue to implement activities to achieve efficiencies while enhancing quality and accountability to ensure that opportunities for competitive grants are made publicly available, so all eligible applicants have an opportunity to compete for them. EPA also will explore methods to use the grant competition and grant-making processes to promote the objectives of the Executive Order.

EPA also will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS), which the Agency deployed in FY 2021, in conjunction with the retirement of an outdated legacy grants management system. NGGS has the capability to improve capacity and align with the requirements of the Grant Reporting Efficiency and Agreements Transparency (*GREAT*) Act, applicable Office of Management and Budget (OMB) Quality Service Management Offices

<sup>452</sup> For additional information on the Executive Order, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

(QSMO) standards, and the Federal Integrated Business Framework for grants (e.g., required standard data elements for grants reporting). In FY 2022, EPA will deliver a national solution for electronic grants record management that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards, and will implement a new Government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementation of the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, and ensuring effective grant oversight and accountability. The Agency also will continue to explore opportunities to improve efficiencies within the grants management processes.

In FY 2022, EPA expects to complete activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions, by October 1, 2022, in line with Department of the Treasury requirements.

The Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal programs. In FY 2022, EPA will continue to focus suspension and debarment resources on protecting the integrity of federal procurement and assistance programs. 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 federal assistance awards (e.g., grants, cooperative agreements, loans, and loan guarantees). Several federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs to protect the public interest.

#### **Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$150.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$30.0) This program change will support core program work to ensure the timely processing of financial assistance agreements.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$47,042.8	\$46,229.0	\$53,254.0	\$7,025.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$6,094.4</i></b>	<b><i>\$6,202.0</i></b>	<b><i>\$6,842.0</i></b>	<b><i>\$640.0</i></b>
Total Budget Authority	\$53,137.2	\$52,431.0	\$60,096.0	\$7,665.0
Total Workyears	223.2	229.9	252.4	22.5

**Program Project Description:**

Superfund resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. These resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency’s Human Capital Operating Plan.

In response to the COVID-19 pandemic, EPA has provided workplace flexibilities to employees with dependent care situations, including expanding work hours and schedule requirements. EPA seamlessly implemented a virtual onboarding process during the COVID-19 pandemic, hiring over 1,449 employees since the Agency began remote work status on March 24, 2020.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an additional 0.8 FTE and \$640 thousand to strengthen and expand capacity for the HR Management Program in the Superfund Appropriation. Effective workforce management is critical to EPA’s ability to accomplish its mission. EPA’s efforts in HR functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure employees have the right skills to successfully achieve the Agency’s core mission today and in the future. The Agency is actively involved with OPM’s Chief Human Capital Officer Council and the President’s Management Council Agenda to address the challenges of the 21<sup>st</sup> Century federal workforce. In line with Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>453</sup> EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education activities into the management of EPA’s procurement, real property, public lands and waters, and financial programs.

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<sup>453</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>, *Executive Order on Tackling the Climate Crisis at Home and Abroad*.

In FY 2022, EPA will support evidence-building activities as part of its implementation of the Evidence Act and the activities will be designed to ensure that the workforce strategy is guided by data-driven decisions. This work includes revalidation of EPA's Agency-specific Mission Critical Occupations (MCOs), enhancement of EPA's competency assessment tool, skills gap analysis among Agency-specific MCOs, and knowledge transfer strategies to support succession planning.

In FY 2022, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends. Approximately 25 percent of EPA's workforce is retirement eligible and another 19 percent of the current workforce will become retirement eligible over the next five years.

EPA has increased efforts to improve Diversity and Inclusion, hosting virtual outreach events targeting diverse networks such as veterans, Historically Black Colleges and Universities (HBCUs), and Returned Peace Corps Volunteers. The Agency reviews applicant flow data analysis on diversity every 6 months. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities and recruitment incentives. In FY 2022, EPA will work with STEM-focused institutions to bring on college students to experience working at the Agency, the Society of Hispanic Professional Engineers for promoting a diverse workforce, and participate in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees.

In FY 2022, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate FedTalent, a one-stop-shop talent management system provided through the Department of Interior's Interior Business Center. FedTalent serves as a valuable tool to assist with developing, delivering, and tracking high-impact training. Additionally, EPA will maintain and operate USA Performance, provided through the U.S. Office of Personnel Management, enabling the Agency to automate the performance appraisal process throughout the entire performance rating cycle.

EPA also will work to support the efficient recruitment and onboarding of new employees to build the EPA workforce. EPA's Human Resources Shared Service Centers (HRSSC) leverage data analytics to improve performance across the Agency's Human Resources Management Program, reducing EPA's Time-to-Hire average from 95 days in FY 2018 to 83 days in FY 2020. In FY 2022, EPA will coordinate and deliver a comprehensive Human Resources Management Program, including: outreach/recruitment; employee relations and advisory services; training and employee orientation; and management guidance on workforce planning and personnel policies.

The Agency continues to strengthen and improve its HR Accountability Program through internal assessments with OPM's HRStat framework. With a focus on efficient, effective, and accountable systems, EPA is meeting all regulatory requirements and looks for opportunities for continuous improvement. EPA also will maintain 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.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*,<sup>454</sup> issued on January 22, 2021. EPA reviewed its unions' agreements to identify and eliminate provisions influenced by four revoked EOs and will increase the focus on pre-decisional involvement and interest-based bargaining (IBB). In FY 2022, EPA will continue working to reset and repair a damaged relationship and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

### **Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

### **FY 2022 Change from the FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$53.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$322.0) This net change includes a decrease for workers compensation, childcare subsidy, sign language services, and fees for the federal shared human resource systems and services provided by Department of Interior's Interior Business Center offset by an increase to strengthen agencywide capacity to quickly increase the recruitment and onboarding of employees in key offices and programs (i.e., environmental justice, climate, infrastructure programs, etc.).
- (+\$265.0 / +0.8 FTE) This net program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes \$121.0 thousand in payroll.

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<sup>454</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/>.

**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).



## **Research: Sustainable Communities**

**Research: Sustainable and Healthy Communities**  
 Program Area: Research: Sustainable Communities

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Science & Technology	\$143,191.3	\$133,000.0	\$137,412.0	\$4,412.0
Leaking Underground Storage Tanks	\$520.6	\$320.0	\$327.0	\$7.0
Inland Oil Spill Programs	\$428.2	\$664.0	\$668.0	\$4.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$15,501.1</i></b>	<b><i>\$16,463.0</i></b>	<b><i>\$16,634.0</i></b>	<b><i>\$171.0</i></b>
Total Budget Authority	\$159,641.2	\$150,447.0	\$155,041.0	\$4,594.0
Total Workyears	417.3	421.8	441.8	20.0

**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.”<sup>455</sup>

SHC has made a commitment to explore all possibilities to minimize and mitigate disproportionate, negative impacts and to foster environmental, public health, and economic benefits for overburdened communities. Improved tools as well as Superfund remedial technologies will directly support communities with environmental justice concerns and accelerate the understanding of the negative impacts Superfund sites pose for underserved communities. SHC also is making the commitment to emphasize remediation technologies that improve climate adaptation and climate resilience.

The SHC Research Program is one of six integrated and transdisciplinary research programs in EPA’s Office of Research and Development. Each of the programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *SHC FY 2019-2022 StRAP* builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

SHC’s research under the Superfund appropriation provides federal, regional, and community decision-makers with 1) engineering tools, methods, and information to assess current conditions at Superfund sites; 2) decision support tools to evaluate the implications of alternative remediation approaches and technologies, and reuse of sites; 3) the latest science to support policy development and implementation; and 4) rapid access to technical support through EPA’s Superfund Technical

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<sup>455</sup> 42 U.S.C. § 9660(b).

Support Centers--these centers recorded 144 technical support activities, giving assistance to 99 Superfund and RCRA sites, and responding to requests from all 10 EPA Regions in FY 2019.<sup>456</sup>

***Recent Accomplishments of the SHC Research Program include:***

- **Application of Passive Sampling for Making Management Decisions based on Contaminant Bioavailability at Contaminated Sediment Superfund Sites (Published in March 2021)**<sup>457</sup>: This research was performed to evaluate the use of passive sampling to assess the risk associated with petroleum hydrocarbon contaminated sediments and provide data for remediation decisions. The study investigated polycyclic aromatic hydrocarbons (PAHs) in Saint Jones River soils next to the Dover Gas Light Superfund site. The freely dissolved concentrations of total PAHs were estimated based on equilibrium partitioning and the passive sampling findings. Freely dissolved concentrations of PAHs showed greater toxicity with deeper sediments. Results indicate that natural clean sediments can be used to bury less contaminated sites whereas other techniques such as dredging could be focused on highly contaminated areas. This research provides an evidence base for remedial project managers to use in site clean-up decisions.
- **Strategies for Managing Risk due to Back Diffusion (Published in Winter 2021)**<sup>458</sup>: This review provides a state-of-the-science resource to assist in evaluating treatment options at sites where back diffusion has been identified as a significant factor. Back diffusion is backwards movement of contaminants into areas of relatively higher permeability that makes cleanup more challenging unless it is addressed in the remedial design. This research effort reviewed characteristics of, and remedial strategies used to manage, sites with contaminant plume persistence due to back diffusion. Remedial project managers can use the reported research results as a resource during the initial process of screening remedial technologies and strategies to help select those that hold the most promise and warrant further evaluation for application at a given site.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA research under SHC will support the Land and Emergency Management Program, regional offices, states, and tribes, by providing technical assistance and support to help characterize, remediate, and manage contaminated sites and groundwater, including overburdened communities. The tools developed under the SHC Research Program will help the Land and Emergency Management Program and the regional offices address complex contamination problems at Superfund, Resource Conservation Recovery Act (RCRA), and Brownfields sites in the United States. EPA research personnel and associated support staff also will collect data to model vapor intrusion in multicompartiment and large buildings, sample and analyze contaminated groundwater and sediments at high priority sites (*e.g.* mining influenced waters), provide technical support to the Office of Land and Emergency Management (OLEM), the Regions and States to support decision making and expedite the remediation of Superfund sites and test innovative

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<sup>456</sup> For additional information, please see:

[https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?dirEntryId=349724&Lab=CESER](https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349724&Lab=CESER).

<sup>457</sup> For more information, please see: <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4409?af=R>.

<sup>458</sup> For more information, please see: <https://ngwa.onlinelibrary.wiley.com/doi/epdf/10.1111/gwmmr.12423>.

technologies for site characterization and remediation. Scientific journal articles, datasets, models, and tools will be published to disseminate findings associated with the data.

Per- and polyfluoroalkyl substances (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 contaminated sites. Within the SHC Research Program, EPA aims to understand: environmental PFAS contamination and pathways of exposure for the public; how PFAS can be removed from the environment through safe destruction or degradation; the significant sources, fate and transport pathways, and exposures to humans and ecosystems; and the costs and effectiveness of different methods for removing and remediating PFAS in the natural and built environment. SHC is specifically researching analytical methods, human exposure, contaminated sites source zones, hard to treat streams such as landfill leachate, fate and transport of PFAS in groundwater, remediation performance (treatability and cost models), immobilization/stabilization of PFAS, and novel remedial technologies. This work is being done in collaboration with the Department of Defense through participation in their Strategic Environmental Research and Development Program.<sup>459</sup> EPA research under SHC also is focusing on end-of-life management of PFAS-containing materials (e.g., industrial waste, household waste) to ensure that PFAS from these materials do not impact the environment. This work provides technical support and assistance to states, tribes, and local communities on issues pertaining to ecological and human health risk assessment and site engineering challenges related to PFAS.

### ***Research Planning:***

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

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement program<sup>460</sup> is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory

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<sup>459</sup> For more information about SERDP, please see: <https://www.serdp-estcp.org/About-SERDP-and-ESTCP/About-SERDP>.

<sup>460</sup> For more information on EPA's state engagement efforts, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

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

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$90.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$78.0) This increase to SHC's Superfund Research Program will build capacity to help respond directly to the Superfund law requirements.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

## **Research: Chemical Safety and Sustainability**

**Health and Environmental Risk Assessment**

Program Area: Research: Chemical Safety for Sustainability

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Science & Technology	\$38,921.5	\$37,482.0	\$41,412.0	\$3,930.0
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$3,882.1</i></b>	<b><i>\$12,824.0</i></b>	<b><i>\$12,876.0</i></b>	<b><i>\$52.0</i></b>
Total Budget Authority	\$42,803.6	\$50,306.0	\$54,288.0	\$3,982.0
Total Workyears	152.3	154.9	174.9	20.0

**Program Project Description:**

EPA’s Health and Environmental Risk Assessment (HERA) Research Program is focused on the science of assessments that inform decisions made by EPA and others, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). HERA supports the risk assessment needs of the Agency’s Superfund Program and regional risk assessors. With funding from Superfund, the HERA Research Program provides Provisional Peer-Reviewed Toxicity Values (PPRTVs) and ‘fit-for-purpose’ assessments to respond to emergent scenarios, and technical support on the application of human health and ecological risk assessment practices at hazardous waste sites for Superfund. These assessment tools and activities support risk-based management decisions at contaminated Superfund and hazardous waste sites.

The HERA Research Program is one of six integrated and transdisciplinary research programs in EPA’s Office of Research and Development. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *HERA FY 2019-2022 StRAP* builds upon prior Human Health Risk Assessment StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

HERA supports the Agency’s mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals of concern to the Superfund Program and responding to technical requests on topics relevant to human health or ecological risk assessment at hazardous waste sites. Scientists in the HERA Research Program synthesize available scientific information on the potential health and environmental impacts of exposures to individual chemicals and chemical mixtures in the environment. PPRTVs are an important source of toxicity information and toxicity values to ensure improvements in human health and the environment in communities near Superfund sites.

Priorities for PPRTV development are based on the needs of the Agency’s Land and Emergency Management Program, with input from Agency regional offices, and are evaluated annually. HERA research areas include applying new data streams, read-across approaches and

computational tools, enhancement of supporting data/knowledge bases, and efficiency of derivation for PPRTV values.

There are over 1,300 Superfund sites on the National Priorities List.<sup>461</sup> Communities near Superfund sites or in emergency situations are faced with an urgent need for coordinated assistance to assess and address issues of environmental contamination. The HERA Research Program anticipates environmental contamination issues and develops new assessment approaches to enhance rapid response and screening capabilities and to augment toxicity value derivation procedures for health assessments.

In FY 2022, HERA research will continue to provide information needed to inform Agency decisions about chemicals, with a special emphasis on per- and polyfluoroalkyl substances (PFAS). PFAS comprise of a large class of fluorinated substances of growing concern, and EPA is committed to supporting states, tribes, and local communities in understanding and managing risks associated with these chemicals.<sup>462</sup> HERA research on PFAS represents a major integrative effort that will provide systematic information on a broad range of topics. HERA scientists will continue to identify, curate, evaluate, and extract available physicochemical, structural, exposure, and toxicological data from the published and gray literature to inform study design, categorization approaches, and interpretation of emerging studies.

***Recent Accomplishments of the HERA Research Program include:***

- **PPRTV Documents:** In FY 2021, the HERA Research Program plans to complete nine PPRTV documents<sup>463</sup> based on the needs and priorities of EPA’s Superfund Program. These include, trans-crotonaldehyde, benzo(e)pyrene, 1-bromo-2-chloroethane, 2,3-toluenediamine, 3,4-toluenediamine, and 3,5-dinitroaniline.
- **‘Fit-for-purpose’ Assessment Products:** In April 2021, HERA released the final *Human Health Toxicity Values for Perfluorobutane Sulfonic Acid (CASRN 375-73-5) and Related Compound Potassium Perfluorobutane Sulfonate (CASRN 29420-49-3)*<sup>464</sup>, delivering on EPA’s commitment to address PFAS in the environment. This assessment for PFBS updates and replaces the 2014 PPRTV assessment for PFBS.
- **Technical Support:** In FY 2021, HERA responded to several requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center and Ecological Risk Assessment Support Center<sup>465</sup>. These requests included assistance with employing new approach methods, review of probabilistic risk assessment models, and continued stakeholder engagement on complex science to address needs of Superfund sites across the United States. For the remainder of FY 2021, HERA anticipates providing additional site-specific technical support as needed, as well as completing a state-of-the-science report to discuss technical issues for ecological risk assessment at contaminated sites, entitled *Update on the Benefits of PCB Congener-Specific Analyses*.

<sup>461</sup> For more information, please see: <https://www.epa.gov/superfund/superfund-national-priorities-list-npl>.

<sup>462</sup> For more information, please see: <https://www.epa.gov/pfas/pfas-community-engagement>.

<sup>463</sup> For more information, please see: <https://www.epa.gov/pprtv>.

<sup>464</sup> For more information, please see: <https://www.epa.gov/pfas/learn-about-human-health-toxicity-assessment-pfbs>.

<sup>465</sup> For more information, please see: <https://www.epa.gov/land-research/epas-technical-support-centers>.



## **FY 2022 Activities and Performance Plan:**

In FY 2022, the HERA Research Program's work will focus explicitly on efforts integral to achieving the Agency's priorities and informing EPA's implementation of key environmental regulations. Examples of this work include:

- **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities in understanding and managing risks associated with these chemicals. Decision-making on PFAS chemicals is hindered by a limited number of standard toxicity values. There are still large numbers of PFAS, of high interest to stakeholders, that currently have no federal published, peer-reviewed toxicity values. Within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values.

In FY 2022, PFAS chemicals will be acquired to expand the existing PFAS physical library of compounds to include those PFAS of interest to Agency partners and stakeholders. A web-based PFAS-specific dashboard will be developed to facilitate access to a common, publicly available, and transparent PFAS information resource. PFAS fate, transport, occurrence, and persistence in the environment and in consumer products will be evaluated to help understand exposure scenarios. A tiered toxicity testing strategy will be executed which utilizes new approach methods (NAMs) to evaluate single PFAS chemicals and mixtures in a high throughput manner, followed by targeted in vivo testing for chemicals identified as priorities. This testing approach will include several systems-specific toxicity tests, including developmental neurotoxicity, thyroid toxicity, immunotoxicity, and developmental and reproductive toxicity. Various types of modeling will be used to translate in vitro result into in vivo outcomes and will include the use of adverse outcome pathway (AOP) models that link in vitro results to outcomes relevant to regulatory objectives and in silico predictive toxicity models.

In the ecological domain, HERA is developing multispecies approaches to evaluate species sensitivity differences across taxa to inform aquatic risk benchmarks. Furthermore, work continues to determine the bioaccumulation of PFAS in aquatic species which also is relevant to human health in the context of exposure via fish consumption. This work is being done in collaboration with the National Institute of Environmental Health Sciences: National Toxicology Program. Resources requested in FY 2022 will build upon the research foundation formed from completed work outlined in the PFAS Action Plan.

- **PPRTV Assessments:** In FY 2022, the HERA program will provide at least eight additional PPRTV assessments as prioritized by EPA's Land and Emergency Management Program.
- **Portfolio of Assessment Products:** In FY 2022, the HERA Program will complement the PPRTVs by providing additional 'fit-for-purpose' assessment products for priority chemicals, such as for up to six perfluorinated compounds as prioritized by the Land and Emergency Management Program. Having modernized its assessment infrastructure, HERA will use evidence mapping to provide a better understanding of the extent and nature

of evidence available to address Agency needs (i.e., ‘fit for purpose’). This approach is expected to improve throughput for PPRTV development.

- **Linking Databases and Management Tools:** In FY 2022, the HERA Program will continue to collaborate with the Chemical Safety for Sustainability (CSS) Research Program to link the architecture of HERA’s assessment databases and literature management tools, including Health and Environmental Research Online<sup>466</sup> and the Health Assessment and Workplace Collaborative<sup>467</sup> with the CompTox Chemicals Dashboard<sup>468</sup> being developed in CSS.
- **Rapid Technical Support:** In FY 2022, the HERA Program will continue essential technical assistance across EPA to provide rapid technical support to programs and regions. These activities will provide expedited technical support for evaluating chemical-specific exposures at Superfund and contaminated sites, as well as incorporating case-specific information related to urgent situations.

### ***Research Planning:***

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

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA’s state engagement<sup>469</sup> is designed to inform states about their role within EPA and EPA’s research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

EPA’s commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The

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<sup>466</sup> For more information, please see: <https://hero.epa.gov/hero/>.

<sup>467</sup> For more information, please see: <https://hawcprd.epa.gov/>.

<sup>468</sup> For more information, please see: <https://comptox.epa.gov/dashboard>.

<sup>469</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$28.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$24.0) This program change is an increase to the Health and Environmental Assessment program that will help in advancing science assessments, such as IRIS, as well as analytical approaches for the applications of risk assessments.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

## **Superfund Cleanup**

**Superfund: Emergency Response and Removal**

Program Area: Superfund Cleanup

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$203,758.9</i></b>	<b><i>\$190,000.0</i></b>	<b><i>\$195,489.0</i></b>	<b><i>\$5,489.0</i></b>
Total Budget Authority	\$203,758.9	\$190,000.0	\$195,489.0	\$5,489.0
Total Workyears	269.0	244.7	244.7	0.0

**Program Project Description:**

The Emergency Response and Removal Program (Superfund Removal) is the foundation of federal emergency response to releases of hazardous substances, pollutants, or contaminants and is essential to managing the associated risks. In the case of a national emergency, EPA is charged with preventing, limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA’s 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.<sup>470</sup> Further, this program is responsible for the Agency’s only Primary Mission Essential Function. Superfund Removal cleanups vary in complexity and contain a wide variety of contaminants including mercury, lead, and asbestos.<sup>471</sup>

Over the last 10 fiscal years (2011-2020), EPA completed or oversaw more than 2,872 Superfund removal actions across the country. Superfund Removal sites can be found in remote rural areas as well as large urban settings. Approximately 11 million people, or 3 percent of the population, live within three miles of a Superfund Removal site where EPA completed a removal action in FY 2016.<sup>472</sup> In addition, over 41 percent of removal completions in FY 2019-2020 were in communities with populations over the 80<sup>th</sup> percentile for being people of color, low income, or had less than a high school education.<sup>473</sup>

The Superfund Removal Program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the Agency’s effort to ensure national safety and security for chemical and oil responses. EPA trains, equips, and deploys resources 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

<sup>470</sup> For additional information, please refer to: <https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview>.

<sup>471</sup> Data from US EPA Superfund Enterprise Management System.

<sup>472</sup> 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.

<sup>473</sup> Data from US EPA Superfund Enterprise Management System and US EPA EJ Screen.

communities. Restoration of Superfund Removal sites directly support President Biden’s Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).<sup>474</sup>

EPA Federal On-Scene Coordinators (OSCs) make up the core of the Superfund Removal Program. These trained and equipped EPA personnel respond to, assess, mitigate, and clean up environmental releases regardless of the cause. States, local, and tribal communities rely upon the OSC’s expertise and support to deal with environmental emergencies that are beyond their capabilities and resources.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA is requesting an increase of approximately \$5.5 million for the Superfund Removal Program. These additional resources will support the removal of hazardous waste from communities, with an emphasis on advancing environmental justice and equitable outcomes. In addition, this investment is part of the Administration’s \$1.8 billion targeted to advance environmental justice in tandem with climate work.

In FY 2022, 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 its National Incident Management Assistance Team to set up organizational systems that help with the long-term strategic planning and response efforts.

**Performance Measure Targets:**

<b>(PM 137) Number of Superfund removals completed.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	141	183

<sup>474</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$467.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,022.0) This program change increases support for the removal of hazardous waste from communities, with an emphasis on advancing environmental justice and equitable outcomes.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 104, 105, 106; Clean Water Act (CWA); and Oil Pollution Act (OPA).

**Superfund: EPA Emergency Preparedness**  
Program Area: Superfund Cleanup

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$8,824.2</i></b>	<b><i>\$7,700.0</i></b>	<b><i>\$7,839.0</i></b>	<b><i>\$139.0</i></b>
Total Budget Authority	\$8,824.2	\$7,700.0	\$7,839.0	\$139.0
Total Workyears	32.6	37.4	37.4	0.0

**Program Project Description:**

The Superfund Emergency Preparedness Program provides for EPA’s engagement on the National Response Team (NRT) and Regional Response Teams (RRT) where it ensures federal agencies are prepared to respond to national incidents, threats, and major environmental emergencies. EPA implements the Emergency Preparedness Program in coordination with Department of Homeland Security and other federal agencies 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 2022 Activities and Performance Plan:**

EPA continuously works to improve its management of emergency response assets to be better prepared to handle large unprecedented incidents which increase cost effectiveness and avoid costly cleanup actions. The Superfund Emergency Preparedness Program participates in national and local exercises and drills, coordinates with stakeholders to develop Area and Regional Contingency Plans, and provides technical assistance to industry, states, tribes, and local communities. Specific activities include:

- Chair the NRT<sup>475</sup> and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally focused interagency executive committees addressing oil and hazardous substance emergencies. They serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams.

<sup>475</sup> For additional information, please refer to: <https://www.nrt.org/>.



- 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<sup>476</sup> which provides the approach to manage incidents and works hand in hand with the NRF.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$73.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$66.0) This program change increases essential support for core program work.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

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<sup>476</sup> For additional information, please refer to: <http://www.fema.gov/national-incident-management-system>.

**Superfund: Remedial**  
Program Area: Superfund Cleanup

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$617,575.2</i></b>	<b><i>\$589,000.0</i></b>	<b><i>\$882,400.0</i></b>	<b><i>\$293,400.0</i></b>
Total Budget Authority	\$617,575.2	\$589,000.0	\$882,400.0	\$293,400.0
Total Workyears	935.6	868.8	868.8	0.0

**Program Project Description:**

The Superfund Remedial Program addresses many of the worst contaminated areas in the United States by investigating contamination 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.

By cleaning up and returning land to productive use, the Superfund Remedial Program improves the health and livelihood of all Americans and supports the Administration’s goal to reduce the effects of exposure to Superfund site contamination. Based on an analysis of recent fiscal year data more than 50 percent of site-specific obligations were obligated to Superfund sites in disadvantaged communities. In the same period, more than half of the Superfund Program’s accomplishments under the Human Exposure Environmental Indicator and Sitewide Ready for Anticipated Use measures were at sites in disadvantaged communities.

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 for all Americans by returning Superfund sites to productive use. Reuse and Restoration of Superfund NPL sites directly support President Biden’s Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).<sup>477</sup> As of FY 2020, EPA data show that approximately 1,000 Superfund sites are in reuse—more than half the total number of sites placed on the NPL over the program’s existence. EPA has data on more than 9,900 businesses at 632 of these sites. In FY 2020 alone, these businesses generated \$63.3 billion in sales. These businesses employed more than 227,000 people who earned a combined income of over \$16 billion. Over the last eight years, these businesses generated at least \$384 billion in sales.<sup>478</sup> In FY 2020, EPA made 34 Superfund sites ready for anticipated use.

While conducting cleanup at NPL and SAA sites, Superfund remedial construction projects can enhance our national infrastructure while addressing harmful exposures. Cleanup work lowers human health risk; for example, recent research indicates that Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 1.24

<sup>477</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

<sup>478</sup> For more information on Redevelopment Economics, please refer to: <https://www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites#national>.

miles (2 kilometers) of a Superfund NPL site where lead is a contaminant of concern.<sup>479</sup> Cleanup work under the Superfund Remedial Program also improves property values. A study conducted by researchers at Duke University and the University of Pittsburgh found that residential property values within 3 miles (4.8 kilometers) of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL.<sup>480</sup>

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will prioritize resources to execute its non-delegable, federal responsibility to remediate sites and protect human health, welfare and the environment. The Superfund Remedial program endeavors to maximize the use of special account resources collected from PRPs for site-specific response actions as stipulated in settlement agreements. More than half of non-federal sites on the final NPL do not have an associated open special account and must rely on annually appropriated funds.

In FY 2022, an investment of an additional \$293 million in the Superfund Remedial Program will enable the start of cleanup work at more than 20 NPL sites with new remedial construction projects currently awaiting funding. This investment also will accelerate cleanup work at more than 15 NPL sites with large, ongoing construction projects, which require a substantial funding allocation over multiple years, and allow for enhanced engagement at lead sites. In addition, these additional resources are part of the Administration’s \$1.8 billion targeted to advance environmental justice in tandem with climate work.

In FY 2022, EPA will support the cleanup of Per- and Polyfluoroalkyl Substances (PFAS) and EPA’s Council on PFAS. The council will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders.

**Performance Measure Targets:**

<b>(PM S10) Number of Superfund sites made ready for anticipated use site-wide.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	51	51

<b>(PM 151) Number of Superfund sites with human exposures brought under control.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	10	15

<b>(PM 170) Number of remedial action projects completed at Superfund sites.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	80	80

<sup>479</sup> Details can be found at <https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series>.

<sup>480</sup> 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>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$293,400.0) This program increase will enable the start of cleanup work at more than 20 NPL sites with new remedial construction projects currently awaiting funding. This investment also will accelerate cleanup work at more than 15 NPL sites with large, ongoing construction projects, which require a substantial funding allocation over multiple years.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

**Superfund: Federal Facilities**  
Program Area: Superfund Cleanup

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Hazardous Substance Superfund</i></b>	<b><i>\$23,280.8</i></b>	<b><i>\$21,800.0</i></b>	<b><i>\$22,189.0</i></b>	<b><i>\$389.0</i></b>
Total Budget Authority	\$23,280.8	\$21,800.0	\$22,189.0	\$389.0
Total Workyears	110.8	109.7	109.7	0.0

**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. 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 at which other Federal agencies (OFAs) are the lead agency and EPA is the lead for oversight are among the largest in the Superfund Program. Federal Superfund sites may include specialized environmental contaminants such as munitions and radiological waste, and contaminants of emerging concern such as per-and polyfluoroalkyl substances (PFAS). EPA jointly selects site remedies with OFAs and uses its oversight authority to provide an independent assessment of federal cleanups, to ensure work being conducted by the OFAs comports with site cleanup plans. To ensure efficiencies and consistent approaches to cleanup, the Program collaborates with OFAs and state, local, and Tribal governments. There are 175 Federal Facility sites on the NPL. The sites result in more than \$8 billion per year expended by OFAs under EPA oversight. The resulting cleanup, restoration, and reuse of Federal Facility sites contributes significantly to Superfund program accomplishments. In FY 2020, the Program designated remedial decisions at 54 federal facility sites to address environmental contamination. The Program also achieved 37 Remedial Action Project Completions and reviewed 39 Five-Year Reviews to confirm protective remedies remain in place.

The Superfund Federal Facilities Program supports President Biden’s Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* (January 20, 2021) by recognizing and working to repair inequities that serve as barriers to equal opportunity in the Federal Facility Superfund Program. By working to improve the health and livelihood of communities through the cleanup of sites, the Program supports the return of land to productive use. Over 52 percent of Federal Facility NPL sites are in disadvantaged communities. Cleaning up contaminated sites at Federal Facilities can serve as a catalyst for economic growth and community revitalization.

The Superfund Federal Facilities Program has successfully worked with its partners to facilitate the redevelopment of Federal Facility sites across the country. Reuse and Restoration of Federal

Facility NPL sites directly support President Biden’s Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).<sup>481</sup> Some examples of redevelopment include ecological preserves, recreational areas, cultural/historical resources, public transit infrastructure, and alternative energy sources. A 2020 economic analysis of 45 Federal Facility NPL sites identified over 2,000 businesses that generated \$11 billion in annual sales, provided over 189,000 jobs and \$14 billion in estimated annual employment income.<sup>482</sup>

### **FY 2022 Activities and Performance Plan:**

In FY 2022, the Superfund Federal Facilities Program, as part of its non-delegable statutory oversight responsibility will implement the Administration’s PFAS priority by establishing best practices for PFAS cleanups, and working to keep pace with the growing number of PFAS cleanups at Department of Defense (DOD) and other Federal Facility sites. EPA will work to oversee cleanup efforts where PFAS releases have been identified as a risk to human health. This work supports the implementation of EPA’s Council on PFAS. Currently, the Program is engaged at 96 Federal Facility NPL sites with PFAS detections, ensuring consistent and protective responses. The Program also will prioritize and continue to partner with OFA’s, state, local, and tribal governments, and communities to limit human exposure to potentially harmful levels of lead (Pb) in the environment.

EPA will continue to oversee complex cleanups at Federal Facility NPL sites, such as contamination in groundwater, munitions and explosives of concern, contaminants of emerging concern, and contamination from legacy nuclear weapons development and energy research. While Department of Energy (DOE) has completed cleanup work at many of its sites, DOE estimates that the remaining legacy Cold War sites will take decades to complete due to groundwater, soil, and waste processing. Similarly, the DOD inventory includes sites that contain chemical and explosive compounds which require special handling, storage, and disposal practices, as well as cleanup. EPA will continue to provide oversight and technical assistance at DOD’s military munitions response sites and support DOD’s development of new technologies to streamline cleanups.

To ensure the long-term protectiveness of the remedies, the Agency will continue monitoring, overseeing progress, and improving the quality and consistency of Five-Year Reviews conducted at federal sites where waste has been left in place and land use is restricted. Five-Year Reviews are required under Section 121(c) of CERCLA and the EPA’s role is to concur or make its own independent protectiveness determination. EPA has been working collaboratively with our federal partners to improve the technical quality, timeliness, and cost of the five-year review reports and to ensure engagement with pollution-burdened and underserved communities. In FY 2022, the Superfund Federal Facilities Program will review approximately 40 five-year review reports to fulfill statutory requirements and to inform the public about the protectiveness of remedies.

In FY 2022, the Superfund Federal Facilities Program will work with OFAs to target 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

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<sup>481</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

<sup>482</sup> For additional information, please refer to: <https://www.epa.gov/fedfac/redevelopment-economics-federal-facilities>.

(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.<sup>483</sup> The Docket is updated semi-annually and has nearly 2,400 facilities listed.

**Performance Measure Targets:**

Work under this program supports performance results in the Superfund Remedial Program under the SF appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$205.0) This net change to fixed and other costs the recalculation of base payroll costs for existing FTE, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$184.0) This program change increases core Superfund Federal Facilities Program work, such as oversight of PFAS investigations and cleanup.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

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<sup>483</sup> EPA developed a website called FEDFacts, where all sites are mapped and linked to available environmental information, which may be found at: <https://www.epa.gov/fedfacts>.

## **Superfund Special Accounts**



## **SUPERFUND SPECIAL ACCOUNTS**

### **Background**

EPA has the authority to collect funds from parties to support Superfund investigations and cleanups. Section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorizes EPA to retain and use funds received pursuant to a settlement agreement with a party to carry out the purpose of that agreement. Funds are deposited in Superfund special accounts for cleanup at the sites designated in individually negotiated settlement agreements. Through the use of special accounts, EPA ensures responsible parties pay for cleanup so that annually appropriated resources from the Superfund Trust Fund are generally conserved for sites where no viable or liable potentially responsible parties (PRPs) can be identified. Each account is set up separately and distinctly and may only be used for the sites and uses outlined in the settlement(s) with the party or parties.

Special accounts are sub-accounts in the Superfund Trust Fund. Pursuant to the specific agreements, which typically take the form of an Administrative Order on Consent or a Consent Decree, EPA uses special account funds to finance site-specific CERCLA response actions at the site for which the account was established. Of the current 1,327 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use. As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to the Superfund Program to clean up Superfund sites.

Special account funds are used to conduct many different site-specific CERCLA response actions, including, but not limited to, investigations to determine the nature and extent of contamination and the appropriate remedy, design, construction and implementation of the remedy, enforcement activities, and post-construction activities. EPA also may provide special account funds as an incentive to another PRP(s) who agrees to perform additional work beyond the PRP's allocated share at the site, which EPA might otherwise have to conduct. Because response actions may take many years, the full use of special account funds also may take many years. Once all site-specific response work pursuant to the settlement agreement is complete and site risks are addressed, special account funds may be used to reimburse EPA for site-specific costs incurred using appropriated resources (*i.e.*, reclassification), allowing the latter resources to be allocated to other sites. Any remaining special account funds are transferred to the Superfund Trust Fund, where they are available for future appropriation by Congress to further support response work.

### **FY 2020 Special Account Activity**

Since the inception of special accounts through the end of FY 2020, EPA has collected approximately \$7.6 billion from parties and earned approximately \$666.7 million in interest. Approximately 58 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 42 percent of available special account funds. In addition, at sites with no additional work planned or costs to be incurred by EPA, EPA has transferred over \$43.4 million to the Superfund Trust Fund. As of the end of

FY 2020, over \$4.3 billion has been disbursed for site response actions and approximately \$354.4 million has been obligated but not yet disbursed.

The Agency continues to receive site-specific settlement funds that are placed in special accounts each year, so progress on actual obligation and disbursement of funds may not be apparent upon review solely of the cumulative available balance. In FY 2020, EPA deposited more than \$203.9 million into special accounts and disbursed over \$292.0 million from special accounts (including reclassifications). At the end of FY 2020, the cumulative amount available in special accounts was approximately \$3.47 billion.

Special accounts vary in size. A limited set represent the majority of the funds available. At the end of FY 2020, 4 percent of open accounts had greater than \$10 million available and approximately 70 percent of all available funds in open accounts. There are many accounts with lower available balances. 71 percent of all open accounts with up to \$1 million available represent approximately 6 percent of available funds in all open accounts.

The balance of approximately \$3.47 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. The timeframe required to implement a given remedial action is driven largely by 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, at sites where waste has been left in place.

Over the past five fiscal years, EPA has obligated or disbursed more than \$1.3 billion from special accounts (excluding reclassifications), resulting in the Superfund Program performing a significant amount of work in addition to work the Agency performed using annually appropriated funds. In FY 2020, EPA disbursed and obligated approximately \$236.6 million from special accounts (excluding reclassifications) for response work at more than 750 Superfund sites. Site-specific examples of this work include \$34.7 million to support work at the New Bedford Harbor site in Massachusetts, \$13.5 million for the Cornell Dubilier Electronics Inc. site in New Jersey, and \$15.8 million for the Atlantic Wood Industries, Inc. site in Virginia. In the absence of special account funds, appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund approximately \$236.6 million in response work at sites in addition to the work funded through appropriated funds obligated or disbursed in FY 2020.

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 2020 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2020), current year (FY 2021), and estimated future budget year (FY 2022) activity for special accounts. Exhibit 3 provides prior year data (FY 2020) by EPA regional offices to exhibit the geographic use of the funds.

**Exhibit 1: Summary of FY 2020 Special Account Transactions  
and Cumulative Multi-Year Plans for Using Available Special Account Funds**

<b>Account Status<sup>1</sup></b>		<b>Number of Accounts</b>
Cumulative Open		1,130
Cumulative Closed		408
<b>FY 2020 Special Account Activity</b>		<b>\$ in Thousands</b>
Beginning Available Balance		\$3,446,444.3
FY 2020 Activities		
+ Receipts		\$203,902.0
- Transfers to Superfund Trust Fund (Receipt Adjustment)		(\$7,618.5)
+ Net Interest Earned		\$81,469.2
- Net Change in Unliquidated Obligations		\$33,996.6
- Disbursements - For EPA Incurred Costs		(\$266,146.3)
- Disbursements - For Work Party Reimbursements under Final Settlements		(\$4,431.0)
- Reclassifications		(\$21,511.6)
End of Fiscal Year (EOFY) Available Balance <sup>2</sup>		\$3,466,104.7
<b>Multi-Year Plans for EOFY 2020 Available Balance<sup>3</sup></b>		<b>\$ in Thousands</b>
2020 EOFY Available Balance		\$3,466,104.7
- Estimates for Future EPA Site Activities based on Current Site Plans <sup>4</sup>		\$3,324,040.0
- Estimates for Potential Disbursement to Work Parties Identified in Final Settlements <sup>5</sup>		\$72,367.6
- Estimates for Reclassifications for FYs 2020-2022 <sup>6</sup>		\$37,051.3
- Estimates for Transfers to Trust Fund for FYs 2020-2022 <sup>6</sup>		\$29,864.1
- Available Balance to be Planned for Site-Specific Response <sup>7</sup>		\$2,781.7

<sup>1</sup> FY 2020 data is as of 10/01/2020. The Beginning Available Balance is as of 10/01/2019.

<sup>2</sup> Numbers may not add due to rounding.

<sup>3</sup> Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 10/30/2020 in reference to special account available balances as of 10/01/2020.

<sup>4</sup> "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.

<sup>5</sup> "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.

<sup>6</sup> "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.

<sup>7</sup> 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 2020 – FY 2022<sup>1</sup>**

	<b>FY 2020 Actuals</b>	<b>FY 2021 estimate</b>	<b>FY 2022 estimate</b>
	<b>\$ in Thousands</b>		
Beginning Available Balance	\$3,446,444.3	\$3,466,104.7	\$3,643,330.9
Receipts <sup>2</sup>	\$203,902.0	\$350,000.0	\$350,000.0
Transfers to Trust Fund (Receipt Adjustment) <sup>3</sup>	(\$7,618.5)	(\$4,041.4)	(\$4,041.4)
Net Interest Earned <sup>4</sup>	\$81,469.2	\$75,000.0	\$100,000.0
Net Obligations <sup>3,5</sup>	(\$236,580.7)	(\$226,952.8)	(\$226,952.8)
Reclassifications <sup>3</sup>	(\$21,511.6)	(\$16,779.6)	(\$16,779.6)
End of Year Available Balance <sup>6</sup>	\$3,466,104.7	\$3,643,330.9	\$3,845,557.1

<sup>1</sup> FY 2020 data is as of 10/01/2020. The Beginning Available Balance is as of 10/01/2019.

<sup>2</sup> The estimates for Receipts are in line with more typical years.

<sup>3</sup> The estimates for Transfers to Trust Fund, Net Obligations, and Reclassifications are based on a three-year historical average. <sup>4</sup> FY 2020 net interest earned includes interest earned from an investment which matured in September 2019. Net interest earned in FY 2021 and FY 2022 are estimated utilizing economic assumptions for the FY 2022 President's Budget.

<sup>5</sup> Net Obligations reflect special account funds no longer available for obligation, excluding reclassifications and receipts transferred to the Trust Fund.

<sup>6</sup> Numbers may not add due to rounding.

**Exhibit 3: FY 2020 Special Account Transactions by EPA Regional Offices**

*\$ in Thousands*

	<b>Beginning Available Balance</b>	<b>Receipts</b>	<b>Transfers to Trust Fund (Receipt Adjustment)</b>	<b>Net Interest Earned</b>	<b>Net Obligations</b>	<b>Reclassifications</b>	<b>End of Year Available Balance<sup>2</sup></b>
Region 1	\$204,986.0	\$24,542.5	(\$1,000.0)	\$5,811.1	(\$40,648.9)	(\$6,584.9)	\$187,105.8
Region 2	\$557,328.4	\$52,316.0	\$0.0	\$13,797.2	(\$50,399.0)	(\$2,705.7)	\$570,336.8
Region 3	\$188,380.5	\$10,592.8	(\$114.3)	\$4,344.6	(\$27,502.5)	(\$4,325.3)	\$171,375.8
Region 4	\$70,916.5	\$2,609.5	(\$6,060.2)	\$1,142.3	(\$1,812.2)	(\$3,393.1)	\$63,402.9
Region 5	\$399,925.1	\$21,065.8	(\$37.1)	\$9,503.4	(\$14,453.7)	(\$1,261.5)	\$414,742.0
Region 6	\$122,755.1	\$11,076.6	\$0.0	\$2,870.6	(\$17,449.6)	(\$242.4)	\$119,010.3
Region 7	\$150,153.3	\$12,549.1	\$0.0	\$3,950.3	(\$17,590.3)	(\$588.5)	\$148,474.0
Region 8	\$272,731.3	\$9,198.9	(\$90.6)	\$6,490.1	(\$20,358.8)	(\$1,200.9)	\$266,770.0
Region 9	\$1,328,407.0	\$37,881.8	(\$316.2)	\$29,497.0	(\$23,299.9)	(\$348.9)	\$1,371,820.8
Region 10	\$150,861.1	\$22,068.9	\$0.0	\$4,062.5	(\$23,065.6)	(\$860.4)	\$153,066.5
Total	\$3,446,444.3	\$203,902.0	(\$7,618.3)	\$81,469.2	(\$236,580.7)	(\$21,511.6)	\$3,466,104.7

<sup>1</sup> FY 2020 data is as of 10/01/2020. The Beginning Available Balance is as of 10/01/2019. <sup>2</sup> Numbers may not add due to rounding.





**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

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FY 2022 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Leaking Underground Storage Tanks  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Leaking Underground Storage Tanks</b>				
Budget Authority	\$95,805.6	\$92,203.0	\$92,376.0	\$173.0
Total Workyears	43.0	46.6	46.6	0.0

**Bill Language: Leaking Underground Storage Tanks**

*For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, \$92,376,000, to remain available until expended, of which \$67,007,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act; \$25,369,000 shall be for carrying out the other provisions of the Solid Waste Disposal Act specified in section 9508(c) of the Internal Revenue Code: 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)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Enforcement				
Civil Enforcement	\$657.3	\$620.0	\$634.0	\$14.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$354.8	\$416.0	\$434.0	\$18.0
Facilities Infrastructure and Operations	\$1,066.0	\$836.0	\$837.0	\$1.0
Acquisition Management	\$155.9	\$132.0	\$132.0	\$0.0
Subtotal, Operations and Administration	\$1,576.7	\$1,384.0	\$1,403.0	\$19.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$9,942.8	\$9,470.0	\$9,603.0	\$133.0
LUST Cooperative Agreements	\$57,441.7	\$55,040.0	\$55,040.0	\$0.0
LUST Prevention	\$25,666.5	\$25,369.0	\$25,369.0	\$0.0
Subtotal, Underground Storage Tanks (LUST / UST)	\$93,051.0	\$89,879.0	\$90,012.0	\$133.0
Research: Sustainable Communities				

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Research: Sustainable and Healthy Communities	\$520.6	\$320.0	\$327.0	\$7.0
<b>TOTAL LUST</b>	<b>\$95,805.6</b>	<b>\$92,203.0</b>	<b>\$92,376.0</b>	<b>\$173.0</b>

## **Enforcement**

**Civil Enforcement**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$162,505.0	\$168,341.0	\$194,623.0	\$26,282.0
<b><i>Leaking Underground Storage Tanks</i></b>	<b><i>\$657.3</i></b>	<b><i>\$620.0</i></b>	<b><i>\$634.0</i></b>	<b><i>\$14.0</i></b>
Inland Oil Spill Programs	\$2,237.2	\$2,413.0	\$2,462.0	\$49.0
Total Budget Authority	\$165,399.5	\$171,374.0	\$197,719.0	\$26,345.0
Total Workyears	899.6	916.2	965.2	49.0

**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, and state, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

To protect the Nation’s groundwater and drinking water from petroleum and hazardous substance releases from Underground Storage Tanks (UST), the Civil Enforcement Program provides guidance, technical assistance, and training to promote and enforce cleanups at sites with UST systems.<sup>484</sup> The Enforcement and Compliance Assurance Program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Agency also will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

**Performance Measure Targets:**

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$14.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

<sup>484</sup> For more information, please refer to: <https://www.epa.gov/ust>.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$27,433.0	\$32,247.0	\$34,121.0	\$1,874.0
<b><i>Leaking Underground Storage Tanks</i></b>	<b><i>\$155.9</i></b>	<b><i>\$132.0</i></b>	<b><i>\$132.0</i></b>	<b><i>\$0.0</i></b>
Hazardous Substance Superfund	\$24,356.1	\$23,800.0	\$30,519.0	\$6,719.0
Total Budget Authority	\$51,945.0	\$56,179.0	\$64,772.0	\$8,593.0
Total Workyears	266.3	285.7	325.7	40.0

**Program Project Description:**

Leaking Underground Storage Tank (LUST) resources in the Acquisition Management Program support the Agency’s contract activities.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation and guidance from the Office of Management and Budget Office of Federal Procurement Policy. Acquisition Management resources in LUST support information technology needs and the training and development of EPA’s acquisition workforce.

**Performance Measure Targets:**

Work under this program supports performance results in the Acquisition Management Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$70,751.8	\$76,718.0	\$81,563.0	\$4,845.0
<b><i>Leaking Underground Storage Tanks</i></b>	<b><i>\$354.8</i></b>	<b><i>\$416.0</i></b>	<b><i>\$434.0</i></b>	<b><i>\$18.0</i></b>
Hazardous Waste Electronic Manifest System Fund	\$114.5	\$0.0	\$0.0	\$0.0
Hazardous Substance Superfund	\$24,772.5	\$26,561.0	\$27,720.0	\$1,159.0
Total Budget Authority	\$95,993.6	\$103,695.0	\$109,717.0	\$6,022.0
Total Workyears	422.0	462.0	465.0	3.0

Total workyears in FY 2022 include 2.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.

Total workyears in FY 2022 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

**Program Project Description:**

EPA’s financial management community maintains a strong partnership with the Leaking Underground Storage Tanks (LUST) Program. Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, and systems to ensure effective stewardship of LUST resources. This includes providing financial payment and support services for specialized fiscal and accounting services for the LUST programs.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will ensure secure, efficient, and sound financial and budgetary management of the LUST Program through the use of routine and ad hoc analysis, statistical sampling, and other evidence-based decision-making tools. Building on the work begun in previous years, EPA will continue to monitor and strengthen internal controls with a focus on sensitive payments and property. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

**Performance Measure Targets:**

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$18.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

**Facilities Infrastructure and Operations**  
Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
Science & Technology	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
Building and Facilities	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
<b><i>Leaking Underground Storage Tanks</i></b>	<b><i>\$1,066.0</i></b>	<b><i>\$836.0</i></b>	<b><i>\$837.0</i></b>	<b><i>\$1.0</i></b>
Inland Oil Spill Programs	\$640.2	\$682.0	\$683.0	\$1.0
Hazardous Substance Superfund	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Total Budget Authority	\$470,906.5	\$450,262.0	\$496,678.0	\$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities, Infrastructure and Operations working capital fund (WCF) services.

**Program Project Description:**

Leaking Underground Storage Tank (LUST) resources in the Facilities Infrastructure and Operations Program fund the Agency’s rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

**FY 2022 Activities and Performance Plan:**

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>485</sup> EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA’s workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensure a space footprint that accommodates a growing workforce. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and private landlords. For FY 2022, EPA is requesting \$616 thousand for rent in the LUST appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

<sup>485</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1.0) This net change includes a slight program increase offset by a reduction due to the recalculation of rent, utilities, and security.

**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).

## **Underground Storage Tanks (LUST/UST)**

**LUST / UST**

## Program Area: Underground Storage Tanks (LUST / UST)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$10,841.7	\$11,250.0	\$11,443.0	\$193.0
<b>Leaking Underground Storage Tanks</b>	<b>\$9,942.8</b>	<b>\$9,470.0</b>	<b>\$9,603.0</b>	<b>\$133.0</b>
Total Budget Authority	\$20,784.5	\$20,720.0	\$21,046.0	\$326.0
Total Workyears	87.7	91.6	91.6	0.0

**Program Project Description:**

The Leaking Underground Storage Tank (LUST) resources in the LUST/Underground Storage Tank (UST) Program ensure that petroleum contamination is properly assessed and cleaned up. Potential adverse effects from chemicals such as benzene - a known carcinogen – methyl-tertiary-butyl-ether, alcohols, or lead scavengers in gasoline and the cost to clean up these contaminants underscore the importance of preventing UST releases and complying with UST requirements. Even a small amount of petroleum released from an UST can contaminate groundwater, the drinking water source for many Americans.

This program supports the Administration’s priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality. As of September 2020, there were approximately 53 million people living within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.<sup>486</sup>

Under this program, EPA supports the oversight and implementation of LUST cleanup programs in the states,<sup>487</sup> and directly implements assessments and cleanups of petroleum contamination from USTs in Indian Country. 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 2020, 62,493 LUST sites had not achieved cleanup completion.<sup>488</sup>

As the direct implementer of the program in Indian Country, 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.

<sup>486</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data used includes: (1) UST/LUST information as of late-2018 to mid-2019 depending on state from the UST Finder (<https://www.epa.gov/ust/ust-finder>) and (2) 2015-2018 American Community Survey (ACS) census data.

<sup>487</sup> 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.

<sup>488</sup> Please refer to EPA website: <https://www.epa.gov/sites/production/files/2020-11/documents/ca-20-34.pdf>.

## **FY 2022 Activities and Performance Plan:**

In FY 2020, the Covid-19 pandemic suppressed the number of cleanups completed. 7,211 LUST cleanups were completed nationally, including 16 in Indian Country. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases.

In FY 2022, EPA will engage in the following activities:

- 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.
- Continue developmental updates to the Tribal Underground Storage Tank Database (TrUSTD), which was launched in FY 2021. This database provides a central repository for Tribal UST/LUST data that will both improve data analysis on the Tribal UST/LUST universe, as well as create a platform that will make it easier for EPA to obtain and share Tribal UST/LUST data with the public.
- Monitor the soundness of financial mechanisms, in particular, insurance and state cleanup funds that serve as financial assurance for LUST releases and 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.<sup>489</sup>

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<sup>489</sup> For more information, please refer to: <http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/>.

**Performance Measure Targets:**

Work under this program supports performance results in the LUST Cooperative Agreements Program under the LUST appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$70.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$63.0) This program change increases support to underground storage tank cleanup, which invests in the health of municipalities and tribal communities.

**Statutory Authority:**

Resource Conservation and Recovery Act §§ 8001, 9001-9014.



**LUST Prevention**

Program Area: Underground Storage Tanks (LUST / UST)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Leaking Underground Storage Tanks</i></b>	<b>\$25,666.5</b>	<b>\$25,369.0</b>	<b>\$25,369.0</b>	<b>\$0.0</b>
Total Budget Authority	\$25,666.5	\$25,369.0	\$25,369.0	\$0.0

**Program Project Description:**

The goal of the Leaking Underground Storage Tank (LUST) Prevention Program is to ensure that groundwater sources are protected from petroleum and associated chemicals leaking from underground storage tanks (USTs). This work supports the Administration’s priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985 on supporting underserved communities.<sup>490</sup> As of September 2020, approximately 53 million people live within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.<sup>491</sup>

The LUST Prevention program provides funding to states<sup>492</sup> and tribes to prevent releases from the 540,423 federally regulated USTs by ensuring compliance with federal and state laws through inspections and other activities.<sup>493</sup> Preventing UST releases is more efficient and less costly than cleaning up releases after they occur. The Energy Policy Act (EPAct) of 2005 requires EPA or states to conduct inspections at each regulated UST once every three years.

Funding for LUST Prevention grants is subject to an annual, formula-based allocation process.

**FY 2022 Activities and Performance Plan:**

Due to the increased emphasis on inspections and release prevention requirements, the number of confirmed releases has decreased from 6,847 in FY 2014 to 4,944 reported releases in FY 2020.

As of FY 2020, 22 states and territories have reported compliance with the UST Technical Compliance Rate (TCR) measure, which came about after the UST rule was revised in 2015. The TCR includes new compliance measures for spill prevention and overfill requirements as well as additional leak detection requirements. More states will report on TCR as they reach their

<sup>490</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

<sup>491</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data used includes: (1) UST/LUST information as of late-2018 to mid-2019 depending on state from the UST Finder (<https://www.epa.gov/ust/ust-finder>) and (2) 2015-2018 American Community Survey (ACS) census data.

<sup>492</sup> 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.

<sup>493</sup> Please refer to EPA website: <https://www.epa.gov/sites/production/files/2020-11/documents/ca-20-34.pdf>.

respective UST state regulation effective dates. In FY 2020, EPA reported a TCR rate of 58 percent, a significant improvement from the 44 percent rate from FY 2019.

The remaining states and territories will continue to report the Significant Operational Compliance (SOC) rate until they reach their respective UST state regulation effective dates and move to the TCR. In FY 2020, EPA reported an SOC rate of 68 percent, which mirrors the results from FY 2019.<sup>494</sup>

Major FY 2022 activities include core program priorities, such as inspecting UST facilities to meet the three-year inspection requirement and assisting states in adopting prevention measures (for example, delivery prohibition, secondary containment, and operator training). These activities emphasize bringing UST systems into compliance with release detection and release prevention requirements and minimizing future releases. Due to the Covid-19 pandemic, many states fell behind in their 3-year EPAAct inspection frequency requirement. EPA will work with states to ensure they come back into compliance and return to their regular inspection cycles.

A lack of proper operation and maintenance for UST systems is one of the main causes of petroleum releases and was the main impetus for EPA to propose changes to the federal UST rule that was finalized in October 2015. In FY 2022, EPA expects all states to fully implement the new requirements associated with the federal rule.

EPA is responsible for implementing the UST regulations in Indian Country, in partnership with the tribes. Resources will be used to provide support with all aspects of the tribal prevention programs, including the development of inspection capacity. This includes providing money to support training for tribal staff and educating owners and operators in Indian Country about UST compliance requirements and, in some cases, assisting tribal staff to receive federal inspector credentials to perform inspections on behalf of EPA.

**Performance Measure Targets:**

<b>(PM CR1) Number of confirmed releases at UST facilities.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
		5,150

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**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.

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<sup>494</sup> More information on performance measures can be found at <https://www.epa.gov/ust/ust-performance-measures>.

## LUST Cooperative Agreements

Program Area: Underground Storage Tanks (LUST / UST)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>Leaking Underground Storage Tanks</i>	<i>\$57,441.7</i>	<i>\$55,040.0</i>	<i>\$55,040.0</i>	<i>\$0.0</i>
Total Budget Authority	\$57,441.7	\$55,040.0	\$55,040.0	\$0.0

### Program Project Description:

This funding is used to award cooperative agreements to states<sup>495</sup> 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.<sup>496</sup>

This program supports the Administration’s priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality. As of September 2020, there were approximately 53 million people living within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.<sup>497</sup>

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.<sup>498</sup> 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.<sup>499</sup>

<sup>495</sup> 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.

<sup>496</sup> 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](https://archive.epa.gov/water/archive/web/html/2000report_index.html)).

<sup>497</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data used includes: (1) UST/LUST information as of late-2018 to mid-2019 depending on state from the UST Finder (<https://www.epa.gov/ust/ust-finder>) and (2) 2015-2018 American Community Survey (ACS) census data.

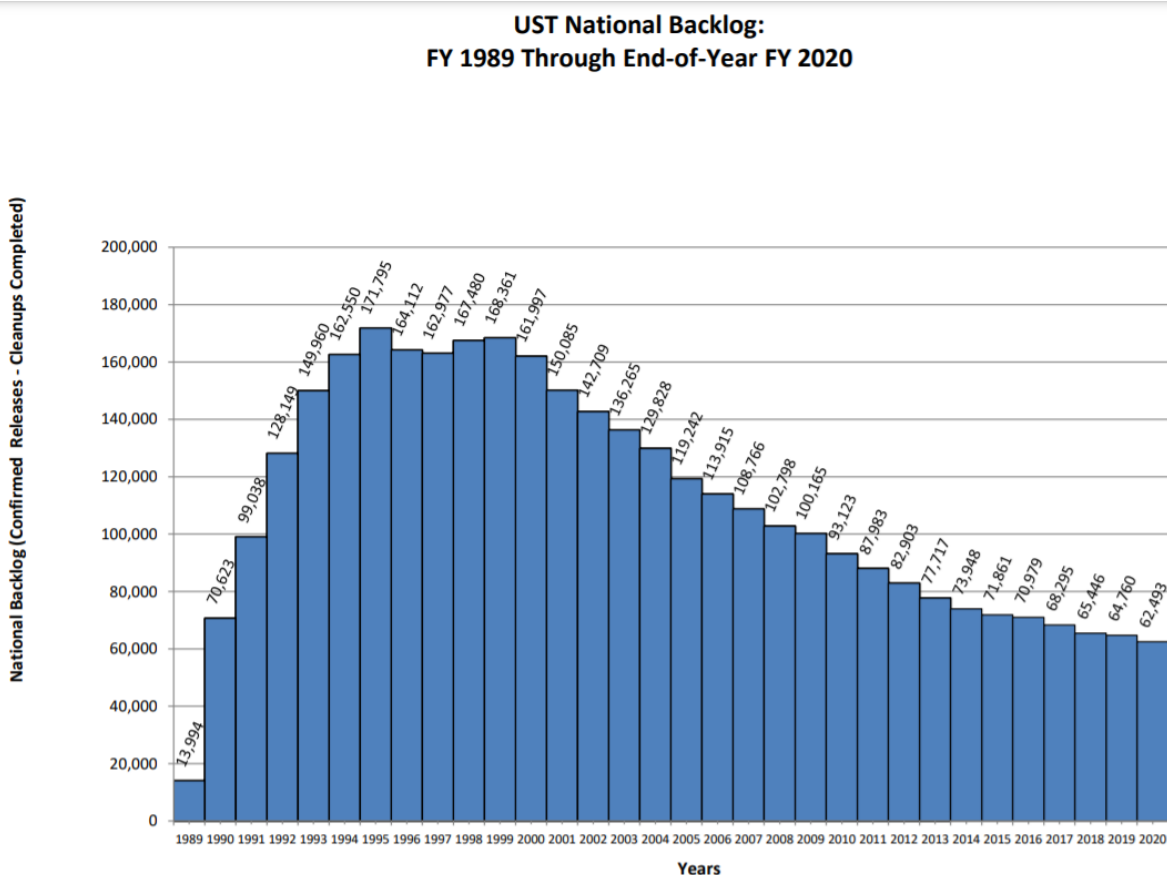
<sup>498</sup> Please see *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, <http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities>.

<sup>499</sup> Please see *Technologies for Treating MtBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, <https://clu-in.org/download/remed/542r04009/542r04009.pdf>.

An EPA study published in 2018 determined 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.<sup>500</sup>

**FY 2022 Activities and Performance Plan:**

In FY 2020, the Covid-19 pandemic suppressed the number of cleanups completed. In this time, the backlog fell to 62,493. The table below shows the progress made on the UST national backlog. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases.



In FY 2022, EPA will engage in the following activities:

- Collaborate with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion. Through the cooperative efforts between EPA and states, the backlog was reduced by approximately 39 percent between the end of 2008 and the end of 2020 (from 102,798 to 62,493).<sup>501</sup>

<sup>500</sup> Guignet, D., Jenkins, R., Ranson, M., & Walsh, P. J. (2018). Contamination and incomplete information: Bounding implicit prices using high-profile leaks. *Journal of environmental economics and management*, 88, 259-282. <https://doi.org/10.1016/j.jeem.2017.12.003>.

<sup>501</sup> Please see EPA website: <http://www.epa.gov/ust/ust-performance-measures>.

- 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 approximately 8,000 cleanups annually, whereas, if EPA were to apply the funding directly, only about 390 cleanups would occur annually (assuming an average cleanup cost of \$141 thousand per site).<sup>502</sup>
- 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.<sup>503</sup>

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 2022, EPA will continue to factor state compliance with EPAct requirements into LUST Cleanup Cooperative Agreement decisions.

**Performance Measure Targets:**

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	11,200	11,200

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Resource Conservation and Recovery Act § 9003(h)(7).

<sup>502</sup> Average cleanup cost per site based on ASTSWMO’s 2019 Annual State Fund Survey Results at: <http://astswmo.org/2019-annual-state-fund-survey/>.

<sup>503</sup> For more information, please see: <http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/>.

## **Research: Sustainable Communities**

**Research: Sustainable and Healthy Communities**  
Program Area: Research: Sustainable Communities

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Science & Technology	\$143,191.3	\$133,000.0	\$137,412.0	\$4,412.0
<b><i>Leaking Underground Storage Tanks</i></b>	<b><i>\$520.6</i></b>	<b><i>\$320.0</i></b>	<b><i>\$327.0</i></b>	<b><i>\$7.0</i></b>
Inland Oil Spill Programs	\$428.2	\$664.0	\$668.0	\$4.0
Hazardous Substance Superfund	\$15,501.1	\$16,463.0	\$16,634.0	\$171.0
Total Budget Authority	\$159,641.2	\$150,447.0	\$155,041.0	\$4,594.0
Total Workyears	417.3	421.8	441.8	20.0

**Program Project Description:**

EPA’s Sustainable and Healthy Communities (SHC) Research Program under the Leaking Underground Storage Tanks (LUST) appropriation provides federal, regional, and community decision-makers with tools, methods, and information to prevent leaking underground storage tanks and mitigate release at LUST sites. Specifically, this research provides information and tools designed to enable decision-makers to better:

- Assess sites and evaluate the implications of alternative remediation techniques, policies, and management actions to assess and cleanup leaks at fueling stations; and
- Protect America’s land, groundwater resources, and drinking water supplies that could be impacted by the Nation’s more than 550 thousand underground fuel storage tanks.<sup>504</sup>

SHC has made a commitment to explore all possibilities to minimize and mitigate disproportionate, negative impacts and to foster environmental, public health, and economic benefits for overburdened communities. Improved tools as well as LUST remedial technologies and research will directly assist communities with environmental justice concerns and accelerate the understanding of the negative impacts LUST sites pose for underserved communities. SHC also is making the commitment to emphasize remediation technologies that improve climate adaptation and climate resilience.

The SHC Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The *SHC FY 2019-2022 StRAP* builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

<sup>504</sup> For more information, please see: <https://www.epa.gov/ust>.

***Recent Accomplishments of the SHC Research Program include:***

**National Database on Underground Storage Tank Infrastructure<sup>505</sup>:** This research provides the first national database on underground storage tanks in the US. It provides geospatial data on facilities and tanks in context with drinking water sources, critical data on the aging infrastructure, and facilities that may be impacted by flooding. Researchers compiled and curated publicly available information regarding the attributes and locations of active and closed underground storage tanks (UST), UST facilities, and leaking UST (LUST) sites. This research will be used by the public and private sectors at the national, state, and local levels to protect this infrastructure, better understand the vulnerabilities to these facilities, and improve protection of public health and the environment. Training is being conducted in FY 2021 with the Agency's Office of Land and Emergency Management (OLEM), the Regions and State partners to better utilize these data to assess facility risk and triage sites for cleanup and protection of drinking water sources. A public website is available and being updated to meet additional partner needs with version 2.0 planned by the end of FY 2023.

**Current Best Practices in Maintaining Hydraulic Control at Fueling Facilities<sup>506</sup>:** This report, published in September 2020, provides an overview of current best practices for hydraulic control of underground storage tanks recommended by commercial, industrial, federal, state, and local agency sources. There are an estimated 65 thousand sites nationwide with leaking underground storage tanks (USTs). Leaking tanks can lead to serious environmental and health risks, including the contamination of ground water, the source of drinking water for nearly half of all Americans. The best practices include 1) general fueling station hydraulic control design (canopies, surfacing materials, drainage, routing, grading), and 2) operation and maintenance practices (housekeeping, spill response, drain management, runoff containment). The report may be used by owner/operators, state and local regulating agencies, and design engineers as a resource for hydraulic control best practices when constructing, maintaining, and upgrading fueling facilities.

**FY 2022 Activities and Performance Plan:**

Work in this program will aim to characterize sites and contaminants released from LUSTs identified under the LUST Trust Fund with an emphasis on assisting the Agency and states in addressing the backlog of sites for remediation. Also, SHC research will help communities remediate contaminated sites at an accelerated pace and lower costs, while reducing human health and ecological impacts. Resulting methodologies and tools will help localities and states return properties to productive use, thus supporting the Agency's mission of protecting human health and the environment in the context of communities. Such work is integral to achieving EPA's priority of revitalizing land and preventing contamination.

In FY 2022, EPA research will continue to develop models, metrics, and spatial tools for EPA regions and states to evaluate the vulnerability of groundwater to LUSTs and the subsequent

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<sup>505</sup> For more information, please see: [https://intranet.ord.epa.gov/sites/default/files/2020-12/UST%20Finder%20User%20Guide\\_0.pdf](https://intranet.ord.epa.gov/sites/default/files/2020-12/UST%20Finder%20User%20Guide_0.pdf) and <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=c220c67462e14763a8e0c4df75550278>.

<sup>506</sup> For more information, please see: <https://intranet.ord.epa.gov/sites/default/files/2020-12/Current%20Best%20Practices%20Hydraulic%20Control%20at%20Fueling%20Facilities.pdf>.



human health risks that follow contamination. A continued focus on corrosion control methods to improve the lifespan of tanks and reduce the likelihood of leaking will be a focus. Version 1.0 of one such model, for evaluating groundwater vulnerability, was developed in FY 2020. Version 2.0 of the model is planned for FY 2023 with groundwater wells continuing to be identified at a national level; the data collected from these wells will be used to support the groundwater vulnerability model at local, state, and national scales. SHC will assist EPA's Underground Storage Tanks Program and states by updating technical guidance manuals and evaluations of risk to underground storage tank system components from new fuel formulations.

### ***Research Planning:***

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

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA's state engagement<sup>507</sup> is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

EPA's commitment to advancing Tribal partnerships is demonstrated in the Research and Development Program, in which key partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues. The Tribal Science Program is committed to development of sound scientific and cultural approaches to meet the needs of tribes.

### **Performance Measure Targets:**

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

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<sup>507</sup> For more information on EPA's engagement with states, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$4.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3.0) This program change is an increase to the Sustainable and Healthy Communities LUST research program, to help build capacity to address contaminants of emerging concern.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.





**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Inland Oil Spill Programs  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Inland Oil Spill Programs</b>				
Budget Authority	\$19,058.8	\$20,098.0	\$22,409.0	\$2,311.0
Total Workyears	77.3	84.8	84.8	0.0

**Bill Language: Inland Oil Spill Programs**

*For expenses necessary to carry out the Environmental Protection Agency's responsibilities under the Oil Pollution Act of 1990, including hire, maintenance, and operation of aircraft, \$22,409,000, 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)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Compliance				
Compliance Monitoring	\$181.4	\$139.0	\$2,142.0	\$2,003.0
Enforcement				
Civil Enforcement	\$2,237.2	\$2,413.0	\$2,462.0	\$49.0
Oil				
Oil Spill: Prevention, Preparedness and Response	\$15,571.8	\$16,200.0	\$16,454.0	\$254.0
Operations and Administration				
Facilities Infrastructure and Operations	\$640.2	\$682.0	\$683.0	\$1.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$428.2	\$664.0	\$668.0	\$4.0
<b>TOTAL Inland Oil Spill Programs</b>	<b>\$19,058.8</b>	<b>\$20,098.0</b>	<b>\$22,409.0</b>	<b>\$2,311.0</b>

## **Compliance**



**Compliance Monitoring**  
Program Area: Compliance

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$98,418.4	\$102,500.0	\$132,350.0	\$29,850.0
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$181.4</i></b>	<b><i>\$139.0</i></b>	<b><i>\$2,142.0</i></b>	<b><i>\$2,003.0</i></b>
Hazardous Substance Superfund	\$1,054.3	\$1,000.0	\$1,006.0	\$6.0
Total Budget Authority	\$99,654.1	\$103,639.0	\$135,498.0	\$31,859.0
Total Workyears	433.6	453.9	459.9	6.0

**Program Project Description:**

The Compliance Monitoring Program is a component of EPA’s Enforcement and 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 (FRP) and Spill Prevention, Control, and Countermeasure (SPCC) systems into EPA’s Integrated Compliance Information System (ICIS). Data related to compliance with FRP and SPCC requirements is made available to the public through EPA’s Enforcement and Compliance History Online (ECHO) website.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests resources to continue to accelerate its efforts to modernize ICIS and support better integration with ECHO. As a result of this data integration, EPA will be in a better position to focus compliance monitoring resources on areas of highest risk and to increase transparency to the public. It also will provide a more complete set of information for this program and improve data quality. Resources will be used to complete scoping on the business requirements and possible technological approaches and to continue development of new software. EPA also will make adjustments to ICIS and ECHO which will facilitate better access of compliance data and community information (e.g., from EPA’s EJSCREEN tool) to EPA and states and to the public. This will enhance EPA’s efforts to integrate environmental justice (EJ) considerations in its work and address compliance concerns in disadvantaged communities.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,001.0) This program change increase will allow EPA to accelerate its efforts to modernize the Integrated Compliance Information System, support better integration with the Enforcement and Compliance History Online website, and enhance efforts to address oil spill compliance concerns in disadvantaged and other environmental justice communities.

**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

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$15,571.8</i></b>	<b><i>\$16,200.0</i></b>	<b><i>\$16,454.0</i></b>	<b><i>\$254.0</i></b>
Total Budget Authority	\$15,571.8	\$16,200.0	\$16,454.0	\$254.0
Total Workyears	65.2	70.6	70.6	0.0

### **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.<sup>508</sup>

There are approximately 550,000 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 3,840 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. Inspections are essential to ensuring that facility staff is knowledgeable about prevention and response plans, and quickly able to put these plans into action. The Agency currently inspects approximately 0.12 percent of SPCC facilities per year. In FY 2020, EPA found 86 percent of SPCC facilities to be out of compliance at the time of the inspection.<sup>509</sup> In FY 2020, EPA initiated off-site compliance monitoring activities for SPCC and FRP facilities to further expand the compliance evaluation tools available to inspectors during the COVID-19 pandemic.<sup>510</sup>

As the lead federal response agency for oil spills occurring in inland waters, EPA receives all spill notifications at the National Response Center and retains the responsibility to ensure that all inland oil spills are responded to within 12 hours. EPA works closely with state and local first responders on smaller spills and leads the response on larger spills. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement funds for site specific oil spill response activities. During FY 2020, EPA responded to approximately 42 oil spills across the Nation.

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<sup>508</sup> For additional information, please refer to: <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations>.

<sup>509</sup> Information from EPA's Oil database.

<sup>510</sup> For additional information, please refer to: [https://www.epa.gov/sites/production/files/2020-07/documents/inspectioncommitments\\_0.pdf](https://www.epa.gov/sites/production/files/2020-07/documents/inspectioncommitments_0.pdf).

## **FY 2022 Activities and Performance Plan:**

In FY 2022, the Oil Spill Prevention, Preparedness and Response Program will:

- Inspect oil facilities to ensure compliance with preventive measures. Inspections involve reviewing the facility's prevention, preparedness, and response plans and discussing key aspects of these plans with facility staff. EPA also will conduct unannounced exercises at FRP facilities to test the facility owner's ability to put preparedness and response plans into action. Finally, EPA will conduct off-site compliance monitoring activities for oil facilities to allow inspectors to make compliance determinations from remote locations as another tool to promote regulatory compliance. EPA will focus inspections at high risk FRP facilities and consider expanding inspection targeting options to promote regulatory compliance in environmental justice (EJ) communities.
- Maintain the National Contingency Plan's Subpart J product schedule, which identifies a list of products that may be used to clean oil spills.
- Maintain the National Oil Database, which compiles data for the Program. The database manages information obtained from new and historical inspections and has streamlined the process for assisting facilities with compliance and equipping inspectors with more efficient inspection processes.
- Deliver required annual oil spill inspector training to federal and state inspectors.

## **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

## **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$134.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$120.0) This program change increases support for the prevention and response to oil spills that occur in and around inland waters.

## **Statutory Authority:**

The Clean Water Act Section 311 as amended by the Oil Pollution Act.

## **Enforcement**

**Civil Enforcement**  
Program Area: Enforcement

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$162,505.0	\$168,341.0	\$194,623.0	\$26,282.0
Leaking Underground Storage Tanks	\$657.3	\$620.0	\$634.0	\$14.0
<b><i>Inland Oil Spill Programs</i></b>	<b>\$2,237.2</b>	<b>\$2,413.0</b>	<b>\$2,462.0</b>	<b>\$49.0</b>
Total Budget Authority	\$165,399.5	\$171,374.0	\$197,719.0	\$26,345.0
Total Workyears	899.6	916.2	965.2	49.0

**Program Project Description:**

The Civil Enforcement Program’s goal is to protect human health and the environment by ensuring compliance with the Nation’s environmental laws. The Civil Enforcement Program collaborates with the U.S. Department of Justice, states, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

The Civil Enforcement Program’s enforcement of Section 311 of the Clean Water Act, as amended by the Oil Pollution Act of 1990, is designed to ensure compliance with the prohibition against oil and hazardous substance spills that violate the statute, as well as the oil spill prevention, response planning, and other regulatory requirements. The Civil Enforcement Program develops policies, issues administrative compliance and penalty orders, 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 will assist in the recovery of cleanup costs expended by the government and provides support for field investigations of spills, Facility Response Plan, Spill Prevention, Control, and Countermeasure and other requirements.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the Administration’s priorities. In FY 2022, EPA also 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, integrate environmental justice considerations in our work to protect communities that have borne a disproportionate burden of pollution, 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:**

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$34.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$15.0) This program change reflects an increase to support the Program's focus on expanding enforcement of environmental justice related regulations and increased polluter accountability within environmental justice communities.

**Statutory Authority:**

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



## **Operations and Administration**

**Facilities Infrastructure and Operations**  
Program Area: Operations and Administration

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
Science & Technology	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
Building and Facilities	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
Leaking Underground Storage Tanks	\$1,066.0	\$836.0	\$837.0	\$1.0
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$640.2</i></b>	<b><i>\$682.0</i></b>	<b><i>\$683.0</i></b>	<b><i>\$1.0</i></b>
Hazardous Substance Superfund	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Total Budget Authority	\$470,906.5	\$450,262.0	\$496,678.0	\$46,416.0
Total Workyears	305.2	315.4	315.4	0.0

Total workyears in FY 2022 include 5.4 FTE to support Facilities, Infrastructure and Operations working capital fund (WCF) services.

**Program Project Description:**

EPA’s Facilities Infrastructure and Operations Program in the Inland Oil Spill Programs appropriation supports the Agency’s rent, transit subsidy, and facility operations. Funding is allocated for such services among the major appropriations for the Agency.

**FY 2022 Activities and Performance Plan:**

In support of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,<sup>511</sup> EPA will work to secure physical and operational resiliency for agency facilities. The Agency will continue to take aggressive action to reconfigure EPA’s workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensure a space footprint that accommodates a growing workforce. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and private landlords. For FY 2022, EPA is requesting \$508 thousand for rent in the Inland Oil Spill Programs appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

<sup>511</sup> For additional information, please refer to: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1.0) This net change includes a slight program increase offset by a reduction due to the recalculation of rent, utilities, and security.

**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).

## **Research: Sustainable Communities**

**Research: Sustainable and Healthy Communities**  
 Program Area: Research: Sustainable Communities

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Science & Technology	\$143,191.3	\$133,000.0	\$137,412.0	\$4,412.0
Leaking Underground Storage Tanks	\$520.6	\$320.0	\$327.0	\$7.0
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$428.2</i></b>	<b><i>\$664.0</i></b>	<b><i>\$668.0</i></b>	<b><i>\$4.0</i></b>
Hazardous Substance Superfund	\$15,501.1	\$16,463.0	\$16,634.0	\$171.0
Total Budget Authority	\$159,641.2	\$150,447.0	\$155,041.0	\$4,594.0
Total Workyears	417.3	421.8	441.8	20.0

**Program Project Description:**

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills.<sup>512</sup> EPA is responsible for oil spill preparedness, response, and associated research, as well as having the lead role in developing protocols for testing spill response products and agents, which is planned with the assistance of partner agencies.<sup>513</sup>

The Sustainable and Healthy Communities (SHC) Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. *SHC's FY 2019-2022 StRAP* builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The SHC Research Program for inland oil spills, funded through the Oil Spill Liability Trust Fund,<sup>514</sup> provides federal, state, tribal, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA assists communities, including economically, socially, and environmentally disadvantaged or impacted communities, by supporting local officials in their response to a spill. As a result of EPA's research, responders can make more informed decisions on approaches and methods to reduce the spread and impact of coastal and inland oil spills, including pipeline and railway spills. Additionally, EPA's remediation expertise is critical in addressing potential impacts to communities and their environmental resources associated with pipeline and railway oil spills.

In support of these response efforts, EPA conducts research related to the Agency's National Contingency Plan (NCP) Product Schedule.<sup>515</sup> The NCP is used nationwide by emergency

<sup>512</sup> For more information, please see: <https://www.epa.gov/emergency-response/epas-scene-coordinators-oscs>.

<sup>513</sup> United States Coast Guard, United States Department of the Interior, United States Department of Transportation, and United States Department of Commerce.

<sup>514</sup> For more information, please see: [https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About\\_NPFC/OSLTF/](https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About_NPFC/OSLTF/).

<sup>515</sup> For more information, please see: <http://www2.epa.gov/emergency-response/national-contingency-plan-subpart-j>.

responders and federal agencies in responding to oil spills. EPA's role is to develop and evaluate response approaches involving bioremediation, dispersants, and other additives. EPA also assesses impacts to surface water and groundwater, especially if they affect drinking water supplies. The Agency relies on this research to provide testing procedures that inform cleanup decisions during an emergency spill response.

***Recent Accomplishments of the SHC Research Program include:***

- **Toxicity of sediment oiled with diluted bitumens to freshwater and estuarine species:** When oil is spilled into an aquatic environment such as lakes, rivers, and oceans, it can harm organisms that live in and near the water environment due to the toxic properties of oil and, potentially, the chemicals used to treat spills. For safe response to oil spills, it is important to understand the toxicity of heavy diluted bitumen (dilbit) oil. Dilbits are increasingly transported within North America and spills have occurred in freshwater and marine environments, with the 2010 Kalamazoo River Michigan being the largest freshwater spill of any oil type and one of the costliest in U.S. history. EPA expanded the knowledge on toxicity of diluted bitumen to aquatic species; this work was published in December 2020.<sup>516</sup> New knowledge from this research helps for understanding broader ecological/environmental impacts of spilled oil in inland and coastal waters.

**FY 2022 Activities and Performance Plan:**

FY 2022 research will focus on conducting research to support regulatory activities and protocol development for EPA's programs and in support of state-delegated programs. This Program will provide on-demand technical support at federal, tribal, or state-managed cleanup sites, as well as assistance during emergencies. The SHC Research Program will continue to conduct health, environmental engineering, and ecological research, and prepare planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes.

Specific activities in FY 2022 include:

- Evaluate the toxicity of high-latitude crude oil treated with dispersants, surface washing agents and chemical herding agents on the NCP Product Schedule. New knowledge from this research helps the oil spill response by providing more reliable standardized toxicity testing results for oil and spill response agents in an aquatic environment.
- Conduct research to better understand oil behavior and dispersion under a variety of environmental conditions. This study aims to close information gaps pertaining to oil dispersion effectiveness with chemical dispersants on the NCP Product Schedule. It will provide valuable information on effectiveness of products in water with varying mixing energy, dosing, salinity, and temperature.

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<sup>516</sup> For more information, please see: Toxicity of sediment oiled with diluted bitumens to freshwater and estuarine amphipods. <https://doi.org/10.1016/j.marpolbul.2020.111941>.

- Conduct research of the aerobic biodegradation of petroleum oils treated with chemical herders and Surface Washing Agents (SWAs). This research is critical because (1) chemical herders are agents that remain in the environment after application and (2) SWAs are the most commonly used agents on the NCP Product Schedule. Thus, understanding the long-term fate of these agents is essential.

***Research Planning:***

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

The Agency assesses the impact of its research through a survey tool and discussion with key users. Metrics center around quality, usability and timeliness of particular research products. This provides evidence for how research products are being used and by whom. Through the evaluation process, the Agency is able to identify targeted areas for improvement. The most recent survey results for FY 2020 research products indicated more than 80 percent met partner needs. EPA is working to improve partner engagement by developing a partner dashboard.

EPA’s state engagement<sup>517</sup> is designed to inform states about their role within EPA and EPA’s research programs, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; and the Association of State and Territorial Health Officials.

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2.0) This program change is an increase to the Sustainable and Healthy Communities Oil Spills research program, focusing on adding to research capacity to support regulatory activities and protocol development for EPA’s programs and in support of state-delegated programs.

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<sup>517</sup> For more information on EPA’s engagement with sates, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

**Statutory Authority:**

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





**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: State and Tribal Assistance Grants  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>State and Tribal Assistance Grants</b>				
Budget Authority	\$4,446,153.1	\$4,313,901.0	\$5,130,007.0	\$816,106.0
Total Workyears	10.2	7.0	7.0	0.0

**Bill Language: State and Tribal Assistance Grants**

*For environmental programs and infrastructure assistance, including capitalization grants for State revolving funds and performance partnership grants, \$3,228,614,000, to remain available until expended, of which—*

*(1) \$1,870,680,000 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 \$1,357,934,000 shall be for making capitalization grants for the Drinking Water State Revolving Funds under section 1452 of the Safe Drinking Water Act:*

*Provided, That for fiscal year 2022, to the extent there are sufficient eligible project applications and projects are consistent with State Intended Use Plans, not less than 10 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants shall be used by the State for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities:*

*Provided further, That the Administrator is authorized to use any remaining funds made available under section 608(f) of title VI of the Federal Water Pollution Control Act (33 U.S.C. 1388), after necessary funds are used to carry out the management and oversight of section 608, up to \$1,500,000 for conducting the Clean Watersheds Needs Survey:*

*Provided further, That for fiscal year 2022, funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants may, at the discretion of each State, be used for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities: Provided further, 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 2022 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 2022, 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 2022, 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 2022, 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 re- served 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 2022, 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 2022, 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 2022, 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 2022, notwithstanding the limitations on amounts specified in section (1) 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 10 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and 14 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, or where such debt was incurred prior to the date of enactment of this Act if the State, with concurrence from the Administrator, determines that such funds could be used to help address a threat to public health from heightened exposure to lead in drinking water or if a Federal or State emergency declaration has been issued due to a threat to public health from heightened exposure to lead in a municipal drinking water supply before the date of enactment of this Act:*

*Provided further, That in a State in which such an emergency declaration has been issued, the State may use more than 14 percent of the funds made available under this title to the State for Drinking Water State Revolving Fund capitalization grants to provide additional subsidy to eligible recipients:*

*Provided further, That notwithstanding section 1452(o) of the Safe Drinking Water Act (42 U.S.C. 300j-12(o)), for fiscal years 2022-2026, the Administrator shall reserve \$12,000,000 of amounts made available for making capitalization grants for the Drinking Water State Revolving Funds to pay the costs of monitoring for unregulated contaminants under section 1445(a)(2)(C) of such Act;*

*(2) \$30,000,000 shall be for architectural, engineering, planning, design, construction and related activities in connection with the construction of high priority water and wastewater facilities in the area of the United States-Mexico Border, after consultation with the appropriate border commission: Provided, That no funds provided by this appropriations Act to address the water, wastewater and other critical infrastructure needs of the colonias in the United States along the United States-Mexico border shall be made available to a county or municipal government unless that government has established an enforceable local ordinance, or other zoning rule, which prevents in that jurisdiction the development or construction of any additional colonia areas, or the development within an existing colonia the construction of any new home, business, or other structure which lacks water, wastewater, or other necessary infrastructure;*

*(3) \$36,186,000 shall be for grants to the State of Alaska to address drinking water and wastewater infrastructure needs of rural and Alaska Native Villages: Provided, That of these funds: (A) the State of Alaska shall provide a match of 25 percent; (B) no more than 5 percent of the funds may be used for administrative and overhead expenses; and (C) the State of Alaska shall make awards consistent with the Statewide priority list established in conjunction with the Agency and the U.S. Department of Agriculture for all water, sewer, waste disposal, and similar projects carried out by the State of Alaska that are funded under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301) or the Consolidated Farm and Rural Development Act (7 U.S.C. 1921 et*

*seq.) which shall allocate not less than 25 percent of the funds provided for projects in regional hub communities;*

*(4) \$130,982,000 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;*

*(5) \$150,000,000 shall be for grants under title VII, subtitle G of the Energy Policy Act of 2005;*

*(6) \$59,000,000 shall be for targeted airshed grants in accordance with the terms and conditions in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act);*

*(7) \$4,000,000 shall be to carry out the water quality program authorized in section 5004(d) of the Water Infrastructure Improvements for the Nation Act (Public Law 114–322);*

*(8) \$41,413,000 shall be for grants under subsections (a) through (j) of section 1459A of the Safe Drinking Water Act (42 U.S.C. 300j–19a);*

*(9) \$36,500,000 shall be for grants under section 1464(d) of the Safe Drinking Water Act (42 U.S.C. 300j–24(d));*

*(10) \$81,515,000 shall be for grants under section 1459B of the Safe Drinking Water Act (42 U.S.C. 300j–19b);*

*(11) \$9,000,000 shall be for grants under section 1459A(l) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(l));*

*(12) \$18,000,000 shall be for grants under section 104(b)(8) of the Federal Water Pollution Control Act (33 U.S.C. 1254(b)(8));*

*(13) \$60,000,000 shall be for grants under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301);*

*(14) \$3,000,000 shall be for grants under section 4304(b) of the America's Water Infrastructure Act of 2018 (Public Law 115–270); and*

*(15) \$1,231,797,000 shall be for grants, including associated program support costs, to States, federally recognized tribes, interstate agencies, tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement, and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104–134, and for making grants under section 103 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator, and under section 2301 of the Water and Waste Act of 2016 to assist States in developing and implementing programs for control of coal combustion residuals, of which: \$46,195,000 shall be for carrying out section 128 of CERCLA; \$9,523,000 shall be for*

*Environmental Information Exchange Network grants, including associated program support costs; \$1,505,000 shall be for grants to States under section 2007(f)(2) of the Solid Waste Disposal Act, which shall be in addition to funds appropriated under the heading "Leaking Underground Storage Tank Trust Fund Program" to carry out the provisions of the Solid Waste Disposal Act specified in section 9508(c) of the Internal Revenue Code other than section 9003(h) of the Solid Waste Disposal Act; \$18,282,000 of the funds available for grants under section 106 of the Federal Water Pollution Control Act shall be for State participation in national- and State-level statistical surveys of water resources and enhancements to State monitoring programs; \$10,200,000 shall be for multipurpose grants, including interagency agreements, in accordance with the terms and conditions described in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act).*

*(16) \$10,000,000 shall be for carrying out section 302(a) of the Save Our Seas 2.0 Act, including up to 2 percent of this amount for the Environmental Protection Agency's administrative costs; Provided, That grants made pursuant to such authority may also be used for the construction, maintenance, and operation of post- consumer materials management or recycling facilities; Provided further, That notwithstanding section 302(a) of such Act, the Administrator may also provide grants pursuant to such authority to intertribal consortia consistent with the requirements in 40 C.F.R. 35.504(a), to former Indian reservations in Oklahoma (as determined by the Secretary of the Interior), and Alaskan Native Villages as defined in Public Law 92–203.*

### Program Projects in STAG

(Dollars in Thousands)

Program Project	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	\$29,186.0	\$36,186.0	\$36,186.0	\$0.0
Brownfields Projects	\$94,203.0	\$90,982.0	\$130,982.0	\$40,000.0
Infrastructure Assistance: Clean Water SRF	\$1,632,518.2	\$1,638,826.0	\$1,870,680.0	\$231,854.0
Infrastructure Assistance: Drinking Water SRF	\$1,320,783.1	\$1,126,088.0	\$1,357,934.0	\$231,846.0
Infrastructure Assistance: Mexico Border	\$26,854.8	\$30,000.0	\$30,000.0	\$0.0
Diesel Emissions Reduction Grant Program	\$99,130.1	\$90,000.0	\$150,000.0	\$60,000.0
Targeted Airshed Grants	\$61,066.4	\$59,000.0	\$59,000.0	\$0.0
Gold King Mine Water Monitoring	\$3,280.3	\$4,000.0	\$4,000.0	\$0.0
Safe Water for Small & Disadvantaged Communities	\$14,182.4	\$26,408.0	\$41,413.0	\$15,005.0
Reducing Lead in Drinking Water	\$3,342.0	\$21,511.0	\$81,515.0	\$60,004.0
Lead Testing in Schools	\$52,196.5	\$26,500.0	\$36,500.0	\$10,000.0
Drinking Water Infrastructure Resilience and Sustainability	\$0.0	\$4,000.0	\$9,000.0	\$5,000.0
Technical Assistance for Treatment Works	\$0.0	\$18,000.0	\$18,000.0	\$0.0
Sewer Overflow Control Grants	\$59.2	\$40,000.0	\$60,000.0	\$20,000.0



<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Water Infrastructure and Workforce Investment	\$0.0	\$3,000.0	\$3,000.0	\$0.0
Subtotal, State and Tribal Assistance Grants (STAG)	\$3,336,802.0	\$3,214,501.0	\$3,888,210.0	\$673,709.0
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	\$171,125.7	\$177,000.0	\$180,000.0	\$3,000.0
Categorical Grant: Public Water System Supervision (PWSS)	\$109,075.2	\$112,000.0	\$122,000.0	\$10,000.0
Categorical Grant: State and Local Air Quality Management	\$222,318.8	\$229,500.0	\$321,500.0	\$92,000.0
Categorical Grant: Radon	\$7,646.0	\$7,795.0	\$8,951.0	\$1,156.0
Categorical Grant: Pollution Control (Sec. 106)				
<i>Monitoring Grants</i>	\$18,586.9	\$17,267.0	\$17,267.0	\$0.0
<i>Categorical Grant: Pollution Control (Sec. 106) (other activities)</i>	\$215,906.4	\$212,733.0	\$217,333.0	\$4,600.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$234,493.3	\$230,000.0	\$234,600.0	\$4,600.0
Categorical Grant: Wetlands Program Development	\$12,922.7	\$14,192.0	\$14,476.0	\$284.0
Categorical Grant: Underground Injection Control (UIC)	\$10,379.5	\$11,164.0	\$11,387.0	\$223.0
Categorical Grant: Pesticides Program Implementation	\$12,642.7	\$12,294.0	\$12,540.0	\$246.0
Categorical Grant: Lead	\$14,362.1	\$14,275.0	\$14,561.0	\$286.0
Categorical Grant: Hazardous Waste Financial Assistance	\$107,033.6	\$101,500.0	\$111,500.0	\$10,000.0
Categorical Grant: Pesticides Enforcement	\$23,799.4	\$24,000.0	\$24,480.0	\$480.0
Categorical Grant: Pollution Prevention	\$4,294.8	\$4,630.0	\$4,723.0	\$93.0
Categorical Grant: Toxics Substances Compliance	\$3,871.9	\$4,760.0	\$4,855.0	\$95.0
Categorical Grant: Tribal General Assistance Program	\$67,289.5	\$66,250.0	\$77,575.0	\$11,325.0
Categorical Grant: Underground Storage Tanks	\$1,468.5	\$1,475.0	\$1,505.0	\$30.0
Categorical Grant: Tribal Air Quality Management	\$13,990.9	\$13,415.0	\$21,415.0	\$8,000.0
Categorical Grant: Environmental Information	\$8,557.1	\$9,336.0	\$9,523.0	\$187.0
Categorical Grant: Beaches Protection	\$8,388.7	\$9,619.0	\$9,811.0	\$192.0
Categorical Grant: Brownfields	\$47,311.9	\$46,195.0	\$46,195.0	\$0.0
Categorical Grant: Multipurpose Grants	\$27,033.1	\$10,000.0	\$10,200.0	\$200.0
Subtotal, Categorical Grants	\$1,108,005.4	\$1,099,400.0	\$1,241,797.0	\$142,397.0
Congressional Priorities				
Congressionally Mandated Projects	\$1,345.7	\$0.0	\$0.0	\$0.0
<b>TOTAL STAG</b>	<b>\$4,446,153.1</b>	<b>\$4,313,901.0</b>	<b>\$5,130,007.0</b>	<b>\$816,106.0</b>

## **Categorical Grants**

## Categorical Grant: Beaches Protection

Program Area: Categorical Grants

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	\$8,388.7	\$9,619.0	\$9,811.0	\$192.0
Total Budget Authority	\$8,388.7	\$9,619.0	\$9,811.0	\$192.0

### Program Project Description:

EPA's Beach Grant Program awards grants to eligible coastal and Great Lakes states, territories, and tribes to improve water quality monitoring at beaches and to notify the public of beach advisories and closings. The Beach Grant Program is a collaborative effort between EPA, states, territories, local governments, and tribes to help ensure that coastal and Great Lakes recreational waters are safe for swimming. Congress created the program with the passage of the Beaches Environmental Assessment and Coastal Health Act (BEACH Act) in October 2000 with the goal of reducing risk to the public of waterborne disease related to the use of recreational water.

EPA awards grants to eligible states, territories, and tribes using an allocation formula developed in consultation with states and other organizations. The allocation takes into consideration beach season length, beach miles, and beach use.<sup>518</sup>

### FY 2022 Activities and Performance Plan:

Eligible states, territories, tribes, and localities will receive grant funding to:

- Administer the grant program;
- Implement monitoring and notification programs consistent with EPA guidance; and
- Submit monitoring and advisory data to EPA for production of an annual report in a timely manner.<sup>519</sup>

### Performance Targets:

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):

- (+\$192.0) This program change increases resources to support EPA's state and tribal partners through the Beaches Grants Program.

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<sup>518</sup> For more information, please see: [www.epa.gov/beach-tech/beach-grants](http://www.epa.gov/beach-tech/beach-grants). See EPA's Beach Advisory and Closing On-line Notification (BEACON) system (<https://watersgeo.epa.gov/beacon2/Beacon.html>) for water quality and notification data that grant recipients provide to EPA.

<sup>519</sup> For more information, please see: <https://www.epa.gov/beach-tech/annual-beach-swimming-season-reports>.

**Statutory Authority:**

Clean Water Act, BEACH Act of 2000.

**Categorical Grant: Brownfields**  
Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$47,311.9</i>	<i>\$46,195.0</i>	<i>\$46,195.0</i>	<i>\$0.0</i>
Total Budget Authority	\$47,311.9	\$46,195.0	\$46,195.0	\$0.0

**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, enhance their response programs, and conduct site assessments and cleanups.

Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.<sup>520</sup> Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of April 2021, the State and Tribal Response Programs have leveraged more than 14,870 jobs and \$2.7 billion in other funding. State and Tribal funding spent on site-specific brownfields work has contributed to 2,752 sites assessed, 428 sites cleaned up and 1,399 sites made ready for anticipated reuse (RAU). Sites receiving these funds are 1.5 times more likely to become RAU than sites receiving brownfields competitive grant funding alone. In 2020, EPA provided funding to 171 states, tribes, territories, and the District of Columbia.<sup>521</sup>

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 these programs have cleaned up over 2,700 properties and made over 72,000 acres ready for reuse. Addressing brownfields on tribal lands also has leveraged over 960 jobs and \$146 million.<sup>522</sup>

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will allocate funding support to approximately 170 state and tribal response programs to oversee the cleanup at approximately 35,000 properties.

<sup>520</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA CA site information as of the end of FY2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

<sup>521</sup> Data from U.S. EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES).

<sup>522</sup> Data from U.S. EPA ACRES.

States and tribes may use categorical grant funding provided under this program in the following ways:

- Conducting site-specific activities, such as assessments and cleanups at brownfields sites;<sup>523</sup>
- 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 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128(a).

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<sup>523</sup> For more information, please see: <https://www.epa.gov/brownfields/types-brownfields-grant-funding#StateTribalResources>.

## Categorical Grant: Environmental Information

Program Area: Categorical Grants

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	<i>\$8,557.1</i>	<i>\$9,336.0</i>	<i>\$9,523.0</i>	<i>\$187.0</i>
Total Budget Authority	\$8,557.1	\$9,336.0	\$9,523.0	\$187.0

### **Program Project Description:**

The funds provided under this categorical grant support the Environmental Information Exchange Network (EN), which is a critical component of the Agency’s Data Strategy and supports the Executive Order 13985 on *Advancing Racial Equality and Support for Underserved Communities through the Federal Government*. The EN is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. The EN offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently.

The Exchange Network Grant Program provides funding to states, territories, and tribes to support their participation in the EN using technology, data standards, open-source software, shared services, and reusable tools. EN partners acquire and develop the hardware and software needed to collect, report, and access environmental data with greater efficiency and integrate information across programs. The EN is the standard approach to share data across states, tribes, territories, and EPA. The EN Grant Program also plays a critical role in evolving the EN technology to support the vision of the Digital Strategy.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, the Environmental Information programs and activities will continue to focus on environmental justice (EJ) for state, local, and tribal partnerships in supporting the Executive Order 13985 on *Advancing Racial Equality and Support for Underserved Communities through the Federal Government*.<sup>524</sup> The EN Program plays a critical role in supporting the Administration’s comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.

Tribal engagement and participation in EN efforts has significantly increased over the past few years with tribes participating in governance groups. As a result, tribes have requested greater EN program administration support, comparable to what states receive. Given the continuing growth in tribal participation in the EN and the expansion of rural broadband through the American

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<sup>524</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

Broadband Initiative,<sup>525</sup> EPA anticipates many more tribes will engage in data management and electronic reporting and, consequently, expanded interest in tribal participation in the EN. In response to this need, EPA will dedicate resources for program administration support to increase tribal engagement in the EN. These resources will support strategic planning and developing implementation approaches for tribes to participate in the EN, build data management and technical capacity, and enable the EN Grant Program to measure the effectiveness of these approaches to meet this goal. This will help to support the Executive Order 13985 and provide EJ to revitalize underserved communities.

In FY 2022, EPA will continue to support the EN through a cooperative agreement with the Environmental Council of the States under the associated program support cost authority (Public Law 113-76<sup>526</sup>). This includes direct support to governance, which represents a cross-section of EPA, state, and tribal organizations.

Under this strategy of state, local, and tribal partnerships, the Agency will continue to advance its business processes, data management, and systems to reduce reporting burden on states and regulated facilities, as well as improve the effectiveness and efficiency of environmental protection programs for all partners. Currently, a total of 166 state, tribal, and territorial partners administer qualified EN grants projects. In FY 2022, EPA anticipates awarding 15 EN grants that will support the Executive Order 13985 and assist states, tribes, and territories to implement activities that align with the following five priorities outlined in the EN Solicitation Notice:

- Expand Data Access and Availability: These activities support the partners' ability to share cross-state, cross-tribal or state-tribal data. The emphasis is on activities which create services and tools that make data available and sharable on-demand through portals, web services, and application programming interfaces.
- Eliminate Industry Paper Reporting and Expand e-Reporting Among Co-Regulators: Grant projects will support developing and implementing EN air, water, and land data flows that enable automated reporting to EPA systems.
- Integrate Foundational EN Services into Environmental Business Processes: These include Virtual Exchange Services, Shared e-Reporting Services, Federated Identity Management Services, and other data services. These central services hosted by EPA reduce burden and avoid cost by minimizing duplicative application development by states and tribes as they develop their business solutions.
- Improve Environmental Management Through Advanced Data Monitoring and Transmittal Processes: EN partners are encouraged to implement innovative approaches to collecting, publishing, and sharing data that reduce costs associated with capturing data in the field while making it more accessible to stakeholders.

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<sup>525</sup> For additional information, please see: <https://www.ntia.doc.gov/blog/2019/american-broadband-initiative-expand-connectivity-all-americans>.

<sup>526</sup> For additional information, please see: <https://www.gpo.gov/fdsys/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf>.



- Augment the Information Management Capacity of EN Partners: Some existing and potential tribal and territorial EN partners have limited experience with electronic data collection and management. Tribal and territorial governments can use grants to conduct coordinated efforts and leverage the EN services given their unique regulatory responsibilities and data needs.

The “National Environmental Information Exchange Network Grant Program Solicitation Notice” sets forth the process for awarding grant funding to states, tribes, and territories.<sup>527</sup> It is an annual guidance document that describes eligibility requirements, the process for application preparation and submission, evaluation criteria, award administration information, and post-award monitoring procedures.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$187.0) This program change increases support for EPA’s state and tribal partners through the Environmental Information Grant Program. The increase will help expand rural broadband and assist states, tribes, and territories to implement activities that align with the five priorities outlined in the EN Solicitation Notice.

**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); Consolidated Appropriations Act, 2021, Pub. L. 116-260.

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<sup>527</sup> For additional information, please see: <https://www.epa.gov/exchangenetwork/exchange-network-grant-program>.

**Categorical Grant: Hazardous Waste Financial Assistance**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$107,033.6</i>	<i>\$101,500.0</i>	<i>\$111,500.0</i>	<i>\$10,000.0</i>
Total Budget Authority	\$107,033.6	\$101,500.0	\$111,500.0	\$10,000.0

**Program Project Description:**

The Hazardous Waste Financial Assistance Grants help states implement the Resource Conservation and Recovery Act (RCRA). Through RCRA, EPA and states protect human health and the environment by minimizing waste generation, preventing the release of millions of tons of hazardous wastes, and cleaning up land and water. Authorized states conduct the direct implementation of permitting, corrective action, and enforcement components of the RCRA Hazardous Waste Management Program.

This grant funding supports all 50 states and six territories. Currently, 48 states and two territories are authorized to implement the RCRA Program. EPA directly implements the RCRA Program in the states of Iowa and Alaska, and in Indian Country. We also provide project specific small grants to tribes selected through a competitive process. 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 2022, EPA will continue a multi-year transition to an updated allocation formula to distribute Hazardous Waste Financial Assistance Grants to the states. The Agency believes that using the most recent data will better align cooperative agreement funding to states needs and maximize the environmental benefits and program performance of this funding. EPA worked in close consultation with the states during the development of the updated allocation formula and began implementation in FY 2021.

Federal investment is needed in the U.S. recycling system. The U.S. solid waste management infrastructure is struggling to maintain pace with rapidly evolving waste streams, leading to inefficient use of domestic resources. Recycling is an important part of a circular economy, which refers to a system of activities that enables resources to maintain their highest values and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas emissions as resource extraction and processing make up approximately 50 percent of the total global greenhouse gas emissions.<sup>528</sup> Improving and enhancing recycling infrastructure will reduce impacts from materials extraction and production on climate, address disproportionate impacts of mismanagement of wastes on overburdened communities, create jobs, and provide feedstock for the manufacturing sector to produce essential products.

<sup>528</sup> U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8.

## **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an additional \$10 million to pilot a new grant program focused on improving solid waste management infrastructure and post-consumer materials management. This investment will use the new authority provided in the Save our Seas 2.0 Act,<sup>529</sup> which was passed by Congress in December 2020. The Solid Waste Infrastructure for Recycling (SWIFR) financing program will help reduce waste, reduce greenhouse emissions, and create jobs. The Agency has proposed bill language in the STAG appropriation as a line item categorical grant for this pilot. The language is inclusive (e.g., states, tribes, Alaska Native Villages, former Indian reservations in Oklahoma and intertribal consortia).

In FY 2022, the Agency (and authorized states) will continue to:

- Issue and renew permits to a portion of the 6,600 hazardous waste treatment, storage and disposal facilities. This includes working with industry, the public, and states to address issues related to management of hazardous waste through development and application of standards, permits, guidance, and training. In FY 2020, EPA and its state partners achieved 104 permit renewals issued at hazardous waste facilities.
- Process permit modifications to keep pace with evolving business practices, technology, market conditions, and cleanup decisions.
- Update controls to encourage facilities to modernize technological systems, expand waste management capability, improve hazardous waste management practices, and make timely cleanup decisions.
- Inspect facilities to ensure compliance and safety.
- Oversee cleanups at hazardous waste management facilities and focus on completing cleanup of the 3,924 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites.
- Oversee cleanups at high priority contaminated hazardous waste management facilities and return cleaned up property to productive use. This includes working with state partners to ensure that responsible parties conduct effective and efficient cleanups that are protective of human health and the environment and reduce the burden on taxpayers.
- Draft implementation documents such as permits and orders, review site assessment plans and results, review remedy selection documents, oversee remedy implementation, oversee public participation, and track progress of cleanups.
- EPA will work with tribes to develop tribal hazardous waste management plans; implement hazardous and universal waste tribal programs; and develop and implement program

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<sup>529</sup> For more information, please visit: <https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf>.

enforcement policies and procedures for tribes through the Tribal Hazardous Waste Grant Program.

- Continue to improve cleanup approaches, share best practices and cleanup innovations<sup>530</sup> and address issues of emerging science.
- Monitor progress in issuing permits more quickly without sacrificing permit integrity. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner. EPA used efficiency tools to focus on reducing the permit backlog, and as a result, some states and regions adopted new practices, such as pre-application meetings and earlier application deadlines, that led to permitting program efficiencies.

**Performance Measure Targets:**

Work under this program supports performance results in the RCRA Corrective Action Program under the EPM appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$10,000.0) This program increase supports a pilot Solid Waste Infrastructure for Recycling grant program.

**Statutory Authority:**

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Consolidated Appropriations Act, 2021, Pub. L. 116-260. Save our Seas 2.0, 2020, Pub. L. 116-224.

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<sup>530</sup> For more information, please visit: <https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy>.

**Categorical Grant: Lead**  
Program Area: Categorical Grants

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	<i>\$14,362.1</i>	<i>\$14,275.0</i>	<i>\$14,561.0</i>	<i>\$286.0</i>
Total Budget Authority	\$14,362.1	\$14,275.0	\$14,561.0	\$286.0

**Program Project Description:**

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention, no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected.<sup>531,532</sup> Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 37.1 million homes in the U.S. have LBP, and 23.2 million homes have significant LBP hazards.<sup>533</sup> Children living at or below the poverty line who live in older housing are at greatest risk. Additionally, children of some racial and ethnic groups and those living in older housing are disproportionately affected by LBP.<sup>534</sup> Accordingly, the Lead Categorical Grants Program and related Lead Risk Reduction Program represent strategic opportunities to advance EPA’s environmental justice (EJ) goals.

Because of these historic and persistent disproportional vulnerabilities of certain racial, and low-income communities to LBP, this program has the potential to create significant EJ gains. EPA’s Lead Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain racial, and low-income communities.<sup>535</sup> This program will thereby play an important role in achieving the Biden-Harris Administration’s goals to enhance environmental justice and equity as set forth in Executive Order

<sup>531</sup> Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: <http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm>.

<sup>532</sup> Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead was 3.0 µg/dL, and among those in families at or above the poverty level, it was 2.1 µg/dL, a difference that was statistically significant. The 95th percentile blood lead level among all children ages 1 to 5 years was 2.5 µg/dL. The 95th percentile blood lead level in Black non-Hispanic children ages 1 to 5 years was 3.0 µg/dL, compared with 2.4 µg/dL for White non-Hispanic children, 1.8 µg/dL for Mexican-American children, and 2.7 µg/dL for children of “All Other Races/Ethnicities.”<sup>532</sup> The differences in 95th percentile blood lead levels between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. *See, America’s Children and the Environment* (EPA, 2019), found at: <https://www.epa.gov/americaschildrenenvironment>

<sup>533</sup> HUD. (2011). *American Healthy Homes Survey, Lead and Arsenic Findings*. [https://www.hud.gov/sites/documents/AHHS\\_REPORT.PDF](https://www.hud.gov/sites/documents/AHHS_REPORT.PDF).

<sup>534</sup> *See, America’s Children and the Environment* (EPA, 2019), found at: <https://www.epa.gov/americaschildrenenvironment>.

<sup>535</sup> Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See, America’s Children and the Environment* (EPA, 2019), found at: <https://www.epa.gov/americaschildrenenvironment>.

13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, by:

- Establishing standards governing lead hazard identification and abatement practices;
- Establishing and maintaining a national pool of certified firms and individuals who are trained to carry out lead hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and,
- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead hazards in their homes.

The Lead Categorical Grant Program contributes to the Lead Risk Reduction Program's goals by providing support to authorized state and tribal programs that administer training and certification programs for lead professionals and renovation contractors.<sup>536</sup> Ensuring that those who undertake LBP Activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and work towards addressing the historic and persistent disproportional vulnerabilities of certain racial, and low-income communities in support of the Biden-Harris Administration's goals under Executive Orders 13985 and 14008.

#### **FY 2022 Activities and Performance Plan:**

In FY 2022, the Lead Categorical Grants Program will continue to provide assistance to 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. Activities conducted as part of this Program include accrediting training programs, certifying individuals and firms, and providing education and compliance assistance to those subject to the abatement and RRP regulations and the Public in support of the Biden-Harris Administration's goals to enhance environmental justice and advance racial equity.

As of March 2021, 39 states and territories, four tribes, the District of Columbia, and Puerto Rico have been authorized to run the lead-based paint abatement program. In addition, 14 states and one tribe are authorized to administer the RRP program. As of the same date, there were 317 accredited RRP providers and more than 57,000 certified renovation firms. In FY 2022, the Lead Categorical Grant Program will continue to provide assistance to existing authorized state and tribal lead programs. EPA also will provide targeted assistance to states and tribes interested in becoming authorized to run the RRP program.

#### **Performance Targets:**

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful

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<sup>536</sup> Please see <http://www.epa.gov/lead> for more information.

performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$286.0) This program change is an increase to support providing grant assistance to states, territories, the District of Columbia, and tribes to develop and implement authorized lead-based paint abatement programs and authorized RRP programs.

**Statutory Authority:**

Toxic Substances Control Act (TSCA), §§ 401-412.

**Categorical Grant: Multipurpose Grants**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$27,033.1</i>	<i>\$10,000.0</i>	<i>\$10,200.0</i>	<i>\$200.0</i>
Total Budget Authority	\$27,033.1	\$10,000.0	\$10,200.0	\$200.0

**Program Project Description:**

EPA and its partners have made enormous progress in protecting air, water, and land resources. The Multipurpose Grants Program supports states, tribes, and territories in the implementation of environmental programs delegated by EPA. Recognizing that environmental challenges differ across states, tribes, and territories, including climate change factors and environmental justice considerations, the Program provides EPA’s partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

**FY 2022 Activities and Performance Plan:**

In FY 2022, these funds will support the implementation of environmental programs delegated by EPA under pertinent environmental laws. States, tribes, and territories have the flexibility to apply the funds toward activities required in a broad array of environmental statutes, depending on local needs and priorities. Results are tracked as required by the Environmental Results Order and support critical work across multiple environmental programs.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$200.0) This program change is an increase in resources for EPA’s state and tribal partners to continue to advance key environmental priorities in their communities.

**Statutory Authority:**

Consolidated Appropriations Act, 2021, Pub. L. 116-260; 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, Compensation and Liability Act (CERCLA); Marine Protection Research and Sanctuaries Act (MPRSA); and Indoor Radon Abatement Act.



**Categorical Grant: Nonpoint Source (Sec. 319)**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$171,125.7</i>	<i>\$177,000.0</i>	<i>\$180,000.0</i>	<i>\$3,000.0</i>
Total Budget Authority	\$171,125.7	\$177,000.0	\$180,000.0	\$3,000.0

**Program Project Description:**

Section 319 of the Clean Water Act (CWA) broadly authorizes states, territories, and tribes to use a range of tools to implement their Nonpoint Source Programs, including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects.<sup>537</sup> Grants under Section 319 are provided to states, territories, and tribes to help them implement their EPA-approved Nonpoint Source Management Programs by remediating past nonpoint source pollution and preventing or minimizing new nonpoint source pollution. Implementation of watershed-based plans helps states achieve load reductions contained in Total Maximum Daily Loads to achieve water quality standards. Since 2006, these implementation projects have allowed states to remediate over 950 nonpoint source water quality impairments so that waterbodies now meet water quality standards or have documented progress towards standards. EPA oversees implementation of these program enhancements and to provide technical assistance to support state and tribal nonpoint source programs. To further accelerate the reduction of nonpoint source pollution, EPA and the U.S. Department of Agriculture (USDA) continue to enhance coordination to achieve improvements in water quality via the National Water Quality Initiative, targeting resources and helping landowners implement practices to control nutrient, pathogen, and sediment pollution in over 300 small watersheds nationwide.

Nonpoint source pollution, caused by runoff that carries excess nutrients, toxics, and other contaminants to waterbodies is the greatest remaining threat to surface and groundwater quality impairments in the United States. As of 2021, the current number of impaired waters is 132,555. Nonpoint sources are the primary cause of impairment in over 80 percent of these impaired waters and nonpoint sources figure significantly in all but ten percent of the other waterbody impairments.

There are approximately 1,800 active Section 319 projects across the ten EPA regions, and more than \$250 million in Section 319(h) funds are currently being used for on-the-ground work in watersheds. Additionally, more than \$240 million in Section 319(h) funds are used for program work, including funding approximately 500 state and tribal FTEs per year.

**FY 2022 Activities and Performance Plan:**

The pervasiveness and widely distributed nature of nonpoint source pollution requires cooperation and involvement from a wide range of stakeholders to address it, including EPA, other federal

<sup>537</sup> For more information see: <https://beta.sam.gov/fal/b59c5cd479ca4eaa013302d217ad183/view>.

agencies, states, tribes, local governments, nonprofit organizations, conservation districts, and private landowners. EPA will work closely with and support the many efforts of states, interstate agencies, tribes, local governments and communities, watershed groups, USDA, Department of Homeland Security's Federal Emergency Management Agency (FEMA), and other federal agencies, and others to develop and implement programs and local watershed projects to restore surface water and groundwater nationwide. EPA provides grant funds to states and over 200 tribes under the CWA Section 319 to implement programs to control nonpoint pollution, including reduction of nitrogen, phosphorus, and sediment loadings. In 2019 there were 22.4 million pounds of nitrogen, 790 thousand tons of phosphorus, and 1.8 million tons of sediment reduced from nonpoint sources.

In FY 2022, the program will continue to work with states and tribes to strengthen and enhance their nonpoint source programs with a continued focus on watershed project implementation and maintaining current Nonpoint Source Management Programs to focus priorities funded through Section 319. EPA will continue to strongly focus on the development and implementation of watershed-based plans to restore impaired waterbodies to meet water quality standards, as well as to protect unimpaired waters. It has been demonstrated repeatedly that achieving water quality results requires targeting, in the right places with the right practices, the primary sources of nonpoint source pollution in a watershed. Watershed-based plans enable this by providing an analysis of sources and relative significance of pollutants of concern; identification of cost-effective techniques to address those sources; availability of needed resources, authorities, and community involvement to affect change; along with monitoring to enable states, tribes, and local communities to track progress and make changes over time to meet their water quality goals.

EPA will continue to forge and strengthen strategic partnerships with other federal agency programs, in particular the USDA Natural Resources Conservation Service (NRCS), which implements Farm Bill conservation programs that can help control nonpoint source pollution. Agricultural sources of pollution in the form of animal waste, fertilizer, and sediments have a particularly profound effect on water quality. In FY 2022, EPA will continue the National Water Quality Initiative partnership with USDA to focus federal resources on agricultural sources of pollution in select watersheds in every state.

To address urban and suburban sources of nonpoint source pollution, EPA will continue to work closely with a broad set of partners to promote the implementation of low-impact development practices (also called green infrastructure). Low-impact development practices, such as rain gardens and permeable pavement, reduce harm to water quality by reducing peak flows during storms, filtering pollutants, and recharging groundwater. Low-impact development practices also may produce co-benefits by mitigating the impacts of natural hazards including flood and drought. Working with states, cities, developers, watershed associations, and federal agencies such as FEMA with an interest in flood protection and floodplain management, EPA will continue to spread knowledge and adoption of low-impact development practices. From 2017-2019, EPA funded a series of pilot projects across nine EPA regions that explored how water quality programs may collaborate with FEMA partners to integrate low-impact development in state and local FEMA Hazard Mitigation Plans. EPA also has developed a set of training materials that provide technical, programmatic, and funding guidance for water quality programs interested in engaging in the Hazard Mitigation planning process. In FY 2022, EPA intends to finalize these training

materials and synthesize lessons learned from the pilot projects to include in a training curriculum that can be shared broadly.

The Section 319 program also recognizes the importance of environmental justice (EJ) and is exploring the role that the program may play in promoting equity and inclusion. In FY 2022, EPA will assess how to integrate climate and environmental justice priorities, particularly with regards to the program’s resilience/hazard mitigation priorities. The program also will amplify current EJ efforts occurring in regional and state programs.

**Performance Measure Targets:**

<b>(PM SWP-01) Square miles of watersheds with surface waters not meeting standards (cumulative).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	539,536	531,536

<b>(PM SWP-02) Square miles of watersheds with surface waters not meeting standards because of nutrients.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	183,596	180,596

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$3,000.0) This program change increases funding for state nonpoint source programs, including implementation of nonpoint source projects and statewide nonpoint source protection activities.

**Statutory Authority:**

Clean Water Act, § 319.

**Categorical Grant: Pesticides Enforcement**  
Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$23,799.4</i>	<i>\$24,000.0</i>	<i>\$24,480.0</i>	<i>\$480.0</i>
Total Budget Authority	\$23,799.4	\$24,000.0	\$24,480.0	\$480.0

**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<sup>538</sup> with states and tribes.

The cooperative agreements: support state and tribal compliance and enforcement activities under FIFRA; provide resources to rebuild programmatic capabilities between EPA and partner agencies; provide vital training programs to EPA, state, territory, and tribal partners; and help deliver environmental justice for overburdened and marginalized communities. 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<sup>539</sup> 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 2022 Activities and Performance Plan:**

Work in this program directly supports the Administration’s priorities, including pesticide compliance and enforcement activities. In addition to maintaining a basic level of pesticide program implementation, compliance assistance, and enforcement to ensure a viable pesticide regulatory and enforcement program, there are four possible focus areas including: 1) prevent or reduce incidents resulting from fumigation exposures; 2) reduce spray drift incidents by increasing awareness and adoption of spray drift reduction techniques and technologies; 3) support tribal pesticide program capacity building and efficient use of state resources; and 4) minimize pesticide risk while protecting human health from emerging public health issues. In FY 2022, EPA will prioritize and award state and tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA.

<sup>538</sup> For additional information, please refer to: <http://www2.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-state-and-tribal-assistance-grant>.

<sup>539</sup> For additional information, please refer to: <http://www2.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs>.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$480.0) This program change is an increase to support state and tribal partners' compliance and enforcement activities and training opportunities through the Pesticides Enforcement Grants Program. These resources can help deliver environmental justice for overburdened and marginalized communities.

**Statutory Authority:**

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 23(a)(1); Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Categorical Grant: Pesticides Program Implementation**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	\$12,642.7	\$12,294.0	\$12,540.0	\$246.0
Total Budget Authority	\$12,642.7	\$12,294.0	\$12,540.0	\$246.0

**Program Project Description:**

The purpose of EPA’s pesticide program implementation grants is to translate pesticide regulatory decisions made at the national level into results at the local level. Under the pesticide statutes, responsibility for ensuring proper pesticide use is in large part delegated to states and tribes. Grant resources allow states and tribes to be more effective regulatory partners.

EPA’s mission, as related to pesticides, is to protect human health and the environment from pesticide risk and to realize the value of pesticide availability by considering the economic, social, and environmental costs and benefits of the use of pesticides.<sup>540</sup> 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 to assist in strengthening and implementing EPA pesticide programs. This program focuses on issues such as worker safety activities, including worker protection and certification and training of pesticide applicators, protection of endangered species,<sup>541</sup> protection of water resources from pesticides, protection of pollinators, and promotion of environmental stewardship and Integrated Pest Management- (IPM-) related activities.

EPA supports implementation of tribal pesticide programs through cooperative agreements contributing to tribal capacity to protect human health by reducing risks from pesticides in Indian Country. The Program is implemented in a manner that recognizes that certain aspects of Native Americans’ lifestyles, such as subsistence fishing or consumption of plants that were not grown as food and possibly exposed to pesticides, may increase exposure to some chemicals or create unique chemical exposure scenarios.<sup>542</sup>

The Agency also funds a multiyear grant in support of the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Issues Research and Evaluation Group. The grant ensures the close coordination of states and EPA on pesticide issues.

<sup>540</sup> 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>.

<sup>541</sup> The Endangered Species Act of 1973 sections 7(a)1 and 7(a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at the U.S. Fish and Wildlife Service’s Endangered Species Act of 1973 internet site: <http://www.fws.gov/endangered/laws-policies/section-7.html>.

<sup>542</sup> For additional information, please visit: <http://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs>.

## **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will continue to carry out the following programs:

### 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. 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 (certifying authorities) submitted their revised certification plans to EPA for review to address the 2017 revisions to the Certification of Pesticide Applicators rule. In FY 2022, EPA will continue to work with these certifying authorities to refine and modify their revised plans as needed. EPA must approve plans by March 4, 2022. Approved certification plans will include a timeframe to fully implement the revised plans. Some certifying authorities began regulatory and program changes in FY 2021 to initiate implementation of revised certification plans. For worker protection, the states, territories, and tribes will continue to train their program and inspection staff on the 2015 final revisions to the Worker Protection Standard, conduct outreach and compliance assistance, and enforce the rule.<sup>543</sup>

### 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.<sup>544</sup> The Endangered Species Act mandates that federal actions will not jeopardize the continued existence of species listed as endangered and threatened, or destroy or adversely modify habitat designated as critical to those species' survival. EPA also 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 2022, these activities will continue to support the Agency's mission to protect the environment from pesticide risk.

### Protection of Water Sources from Pesticide Exposure

Protecting the Nation's water sources from possible pesticide contamination is an important component of EPA's environmental protection efforts. In FY 2022, EPA will continue to 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 resources and take steps to prevent or reduce contamination where pesticide concentrations approach or exceed levels of concern.

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<sup>543</sup> For additional information, please visit: <https://www.epa.gov/pesticide-worker-safety/how-epa-protects-workers-pesticide-risk>.

<sup>544</sup> For additional information, please visit: <https://www.epa.gov/endangered-species/about-endangered-species-protection-program>.

## Integrated Pest Management

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.<sup>545</sup> EPA supports the development and evaluation of new pest management technologies that contribute to reducing both health and environmental risks from pesticide use.

The Pesticide Environmental Stewardship Program (PESP) is an EPA partnership program that works with the Nation's pesticide-user community to promote IPM practices. PESP is guided by the principle that partnership programs complement the standards and decisions established by regulatory and registration actions. Resources will be focused on funding projects across the country that promote IPM and reduce the impacts of pesticide use in agricultural settings. Selected projects could address pesticide use in rural areas or on tribal lands, promoting IPM practices that reduce risk and benefit these communities. Additional funding could expand the IPM in-schools efforts to collaborate with Title 1, tribal, and Head Start schools and daycares in vulnerable communities as well as expand collaboration with federal partners to address bed bug issues in multi-family housing in vulnerable communities.

## Pollinator Health

EPA will continue to work with state and tribal agencies to promote the development and implementation of locally based plans to help improve pollinator health. State pollinator protection plans in several states have been an effective communication and collaboration mechanism between stakeholders at the local level that can lead to reduced pesticide exposure and protection of honeybees, while maintaining the flexibility needed by growers. EPA believes that these plans, developed through a robust stakeholder engagement process at the local level, serve as good models for enhanced local communication and can help accomplish the Agency's goal of mitigating exposure of bees to acutely toxic pesticides.

### **Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$246.0) This program change will support two additional tribal FIFRA cooperative agreements and provide additional resources for states and territories to carry out pesticide program implementation work to protect farm workers.

### **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).

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<sup>545</sup> For additional information, please visit: <http://www.epa.gov/peps/>.



**Categorical Grant: Pollution Control (Sec. 106)**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$234,493.3</i>	<i>\$230,000.0</i>	<i>\$234,600.0</i>	<i>\$4,600.0</i>
Total Budget Authority	\$234,493.3	\$230,000.0	\$234,600.0	\$4,600.0

**Program Project Description:**

Section 106 of the Clean Water Act (CWA) authorizes EPA to provide federal assistance to states, territories, the District of Columbia, tribes, and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources.<sup>546</sup> Prevention and control activities supported through these grants include: providing National Pollutant Discharge Elimination System (NPDES) permits; conducting ambient water quality monitoring; assessing and listing impaired waters; and developing water quality standards and Total Maximum Daily Loads (TMDLs), surveillance, and enforcement.

**FY 2022 Activities and Performance Plan:**

The CWA Section 106 Grant Program supports prevention and control measures that improve water quality.

Monitoring and Assessment

EPA is working with states and tribes to provide monitoring and assessment information to support multiple CWA programs in a cost-efficient and effective manner. The intent is to have scientifically defensible monitoring data that are needed to address priority problems at state, tribal, national, and local levels and to track water quality changes over time.

In FY 2022, 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.<sup>547</sup> The Monitoring Initiative will be funded at \$17.3 million for participation in the NARS and for monitoring program priority enhancements. EPA is implementing recommendations from a Lean Management exercise to improve the timeliness of monitoring data processed for NARS partnerships.

Through the Monitoring and Assessment Partnership, EPA will continue working with states and tribes to develop and apply innovative and efficient monitoring tools and techniques to optimize availability of high-quality data to support priority CWA program needs. EPA also will continue

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<sup>546</sup> The District of Columbia is eligible for 106 funds. A tribe must be eligible under Section 518(e) in the CWA.

<sup>547</sup> For more information, please see: <https://www.epa.gov/water-pollution-control-section-106-grants/monitoring-initiative-grants-under-section-106-clean>.

working with states to support their water quality assessment programs, including helping to assure timely submission of state Integrated Reports and 303(d) lists. EPA will continue to work with states to support electronic reporting, including annual reporting of water quality data through the Water Quality Exchange and submission of Integrated Reports through the Assessment Total Maximum Daily Load Tracking and Implementation System (ATTAINS).

### Reviewing and Updating Water Quality Standards

EPA will work with states and authorized tribes as they review and update their water quality standards periodically as required by CWA and EPA regulations in 40 CFR Part 131. EPA will work with tribes that want to establish water quality standards. For its part, EPA will review and work to formally act upon all state and tribal submissions of new and revised water quality standards in accordance with the Agency's statutory obligations and timeline. The Agency also will continue to track progress by states and authorized tribes as they complete triennial reviews of applicable standards on time as required by CWA.

### Developing TMDLs

EPA will work with states, territories, and authorized tribes to develop and implement TMDLs for CWA Section 303(d) listed impaired waterbodies as a tool for meeting water quality restoration goals. TMDLs focus on achieving clearly defined environmental standards and establishing a pollutant budget, which is then implemented via permit requirements and through local, state, and federal watershed plans and programs to restore waters. EPA will continue to work with states to facilitate accurate, comprehensive, and geo-referenced water quality assessment decisions made available to the public via ATTAINS. In addition, EPA will continue to track state progress in completing TMDLs, alternative restoration approaches or projection plans with a goal of 100 percent of priority plans in place at state identified priority waters under the State-EPA 303(d) Program Vision by 2022. As of March 2021, 70 percent of state priority waters, were addressed by a priority TMDL, other restoration plan, or protection approach. EPA also is working to ensure timely action by the Agency on TMDLs submitted by states. Numerous recent and long-standing efforts have helped to substantially reduce the backlog on TMDLs from more than 700 in FY 2018 to 22 as of March 2021. Between fiscal year 2017 and March 2021, EPA has supported and approved more than 6,000 TMDLs.

### Issuing Permits

The NPDES program is managed by EPA and the states and issues on average over 11,000 permits a year to address discharges from among the approximately 15,000 wastewater treatment facilities, more than 60 categories of industries, and almost 300,000 stormwater facilities. The NPDES program requires point source dischargers of pollutants to waters of the United States to be permitted and pretreatment programs be put in place to control discharges from industrial and other facilities to the Nation's wastewater treatment plants. EPA is working with the states<sup>548</sup> to identify opportunities to enhance the integrity and timely issuance of NPDES permits, while fine-tune permitting implementation practices. EPA continues to provide training and technical assistance to permit writers as they address complex and emerging issues and enhance program oversight to

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<sup>548</sup> Currently no tribes have authority to implement the NPDES program.

ensure permit quality and timeliness. EPA continues to provide technical assistance in the areas of green infrastructure and integrated planning as effective approaches to address wet weather challenges and protect water quality. EPA updated the NPDES application forms to clarify requirements and has provided training on the revised forms, as well as checklists to increase rates of application completeness. After program improvements, between March 2018 and March 2021, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 24 and 547 to 338, respectively. EPA issues NPDES permits for states that do not manage their own programs.

### Conducting Compliance Monitoring and Enforcement

EPA will work with NPDES-authorized states to implement the 2014 CWA NPDES Compliance Monitoring Strategy (CMS).<sup>549</sup> The NPDES CMS establishes national standards for allocation of inspection resources across all NPDES regulated entities to best protect water quality.

EPA works with states on advanced technologies, such as remote water monitoring sensors to collect discharge data, to identify problem areas more efficiently. The Smart Mobile Tools for Field Inspectors software suite provides a digital platform to support inspectors and managers through the entire inspection process – from scheduling an inspection to generating a draft inspection report for management review. The Agency expects that these technologies will improve the analytical capabilities of both EPA and the states and enhance the public’s knowledge about the quality of their environment.

Currently, EPA and states are implementing the NPDES Electronic Reporting Rule, NPDES eRule, in a collaborative manner. States have the option to build their own electronic reporting tools and data systems or they can elect to utilize EPA’s tools and systems. EPA and states implemented Phase 1 of the NPDES eRule in FY 2017 for the following two reports: 1) Discharge Monitoring Reports and 2) Federal Biosolids Annual Report, where EPA is the regulatory authority. For example, currently over 35,000 NPDES permittees in 24 states use EPA’s electronic reporting tool, NetDMR, to submit their Discharge Monitoring Reports. EPA and states started implementing Phase 2 of the NPDES eRule in FY 2018 for general permit reports and all remaining program reports. EPA will continue to work collaboratively with states in FY 2022 to ensure a smooth transition to electronic reporting for the NPDES program. Implementing the NPDES eRule will help EPA and states clean up the Nation’s waters by saving time and resources for the states and regulated community, improving transparency, and obtaining more accurate, timely, complete, and consistent information about the NPDES program.

### Working with Tribal Water Pollution Control Programs

In FY 2022, EPA will work with tribal programs on revising the *Final Guidance on the Award of Grants to Indian Tribes under Section 106 of the Clean Water Act*. Tribes will continue to implement and expand their water pollution control programs by conducting activities that address water quality and pollution problems on tribal lands pursuant to CWA Section 518(e).

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<sup>549</sup> For more information, please see: <https://www.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring>.

**Performance Measure Targets:**

<b>(PM SWP-01) Square miles of watersheds with surface waters not meeting standards (cumulative).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	539,536	531,536

<b>(PM SWP-02) Square miles of watersheds with surface waters not meeting standards because of nutrients.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	183,596	180,596

<b>(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	84	100

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$4,600.0) This program change provides additional resources to states, tribes, and interstate agencies to establish and maintain programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources.

**Statutory Authority:**

CWA § 106.

**Categorical Grant: Pollution Prevention**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$4,294.8</i>	<i>\$4,630.0</i>	<i>\$4,723.0</i>	<i>\$93.0</i>
Total Budget Authority	\$4,294.8	\$4,630.0	\$4,723.0	\$93.0

**Program Project Description:**

The Pollution Prevention (P2) Categorical Grants Program supports the counterpart P2 program under the Environmental Program and Management (EPM) account by providing financial support to states, state entities (i.e., colleges and universities), and federally-recognized tribes and inter-tribal consortia in implementing the Pollution Prevention Act (PPA) of 1990, and state, tribal, and local partner work for the Pollution Prevention (P2) program.

The P2 Program is one of EPA’s primary tools for advancing environmental stewardship and sustainability by federal, state, and tribal governments, businesses, communities, and individuals. The Program seeks to alleviate environmental problems by achieving significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use or inefficient use of hazardous materials, which also advances EPA’s chemical risk reduction and management goals under the Toxic Substances Control Act (TSCA); reductions in the generation of greenhouse gases; and reductions in the use of water. As a result of implementing these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities in their work to support environmental stewardship, corporate social responsibility, and other sustainability work.

**FY 2022 Activities and Performance Plan:**

The Program’s efforts advance the Agency’s priorities to pursue sustainability, take action on climate change, address environmental justice (EJ), make a visible difference in communities, and ensure chemical safety.<sup>550</sup> In FY 2022, the P2 Categorical Grants<sup>551</sup> Program will continue supporting states, state entities, and federally-recognized tribes and inter-tribal consortia to provide technical assistance to businesses, particularly small- and medium-sized firms, to help them identify, develop and implement cost-effective approaches for reducing or eliminating pollution at the source. Because it is often cheaper to prevent pollution from being created at the source rather than cleaning it up afterwards or to pay for control, treatment, and disposal of waste products, these P2 approaches often result in significant long-term savings for businesses. Documenting best practices and developing case studies and training materials will be foundational assets for

<sup>550</sup> For more information about the EPA’s P2 program, please see <http://www.epa.gov/p2/Error! Main Document Only..>

<sup>551</sup> <https://www.epa.gov/p2/grant-programs-pollution-prevention>. Categorical Grants fund core P2 technical assistance and are complementary to the P2 Source Reduction Assistance Grants. In FY2021 there are 42 active P2 Categorical Grants and 11 active P2 Source Reduction Assistance Grants, for a total of 53 grants.

amplifying and replicating environmental stewardship, P2, and sustainability successes resulting from the P2 grant programs.

Through competitive grants to technical assistance centers operated by states and tribes, U.S. businesses can access a range of P2 enabling tools and support programs. In FY 2021, EPA has 42 active two-year categorical grants to states and tribes, all of which will continue through FY 2022. EPA expects to award a similar number of additional two-year grants in FY 2022. Additionally, EPA invests EPM funds in analyses, tool development, training, and outreach (including partnering with industry, its associations, and other enterprise assistance programs), leveraging the success of P2 Categorical Grant recipients and client businesses in a particular sector/location by amplifying and/or replicating those successes to similar businesses in other locales. Such economies of scale for P2 are central to maximizing the effectiveness of the program, and advancing corporate social responsibility, environmental stewardship, and sustainability at the state, tribal, and local levels.

One of the approaches EPA takes to pursue program efficiencies and economies of scale is through sector-focused P2 National Emphasis Areas. For P2 grants awarded in FY 2022, grant applicants will continue to be required to focus on one or more National Emphasis Areas,<sup>552</sup> which were selected based on an analysis of data to identify industry sectors that had high environmental impact, high economic importance, high P2 opportunity, and of local concern to potential grantees.

To further advance EJ in FY 2022, EPA will use analyses of toxic chemical releases from facilities and industrial sites proximal to EJ communities from Toxics Release Inventory reporting and Chemical Data Reporting, where available, and use sector-specific P2 cases studies and best practices – combined with outreach and training – to facilitate adoption of P2 practices in those industries in the EJ communities. Additionally, EPA will advance P2 technical assistance objectives in FY 2022 by customizing, developing, and delivering training to identify and deploy green chemistry and engineering solutions through a range of incentive and related approaches.<sup>553</sup>

### **Performance Targets:**

Work under this program supports performance results in the Pollution Prevention Program under the EPM appropriation.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$93.0) This program change provides increased support to EPA's state and tribal partners to provide technical assistance to businesses, particularly small- and medium-sized firms, to help them identify, develop, and implement cost-effective approaches for reducing or eliminating pollution at the source, including related source reduction, sustainability, and environmental stewardship activities.

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<sup>552</sup> The P2 National Emphasis Areas include: automobile manufacturing and maintenance, aerospace manufacturing and maintenance, chemical manufacturing and processing, metal manufacturing and fabrication, and/or food and beverage manufacturing or processing.

<sup>553</sup> For a description of the network services and regional activities, please visit: <http://www2.epa.gov/p2/pollution-prevention-resource-exchange-p2rx>.

**Statutory Authority:**

Pollution Prevention Act of 1990; Toxic Substances Control Act.

**Categorical Grant: Public Water System Supervision (PWSS)**

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$109,075.2</i>	<i>\$112,000.0</i>	<i>\$122,000.0</i>	<i>\$10,000.0</i>
Total Budget Authority	\$109,075.2	\$112,000.0	\$122,000.0	\$10,000.0

**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 (NPDWRs) under the Safe Drinking Water Act (SDWA). The NPDWRs set forth health-based standards, monitoring, reporting, sanitary surveys, and enforcement elements to ensure that the Nation’s drinking water supplies do not pose adverse health risks.

The PWSS Program grants support the safety of the Nation’s drinking water resources and protect public health and the environment. Primacy agencies use these grants to fund drinking water program personnel who:

- Provide training and technical assistance to owners and operators of public water systems;
- Conduct sanitary surveys (i.e., reviews conducted to determine and support a facility’s capacity to deliver safe drinking water) and address significant deficiencies that may compromise the quality of the finished water;
- Train and certify public water system operators;
- Manage public water system data, facilitate electronic reporting of compliance monitoring data, and submit compliance data to the database of record, the Safe Drinking Water Information System;
- Ensure that public water systems conduct the required public notifications to consumers; and
- Respond to violations and issue enforcement actions.

The PWSS Program is critical to increasing equity as small and disadvantaged communities significantly benefit from support and technical assistance provided by primacy agencies through this vital funding. Fundamental to ensuring safe water is having qualified operators in place at these systems. These funds afford the opportunity for operators to receive the necessary training and certification to continue to protect public health.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will provide funds to support state efforts to assist the most vulnerable water systems in meeting drinking water regulations and in developing the financial and managerial capacity needed to protect federal investments that remedy aging or inadequate infrastructure (e.g., pipe replacement to prevent failures in distribution systems, installation of treatment to remove drinking



water contaminants). EPA’s efforts will help deliver clean drinking water, improve the health of our children, and support environmental justice for communities who too often have been left behind, including rural and tribal communities.

Funds allocated to states and tribes without primacy are used to support direct implementation activities by EPA. In FY 2021, Congress directed that \$10.0 million of the PWSS grant funding be used for “addressing [per- and polyfluoroalkyl substances] PFAS and other contaminants of emerging concern.” In FY 2022, EPA is requesting an additional \$10.0 million to help States and Tribes with primary enforcement authority to implement and enforce NPDWRs under the SDWA. These funds will assist all communities across the country in the provision of safe drinking water.

EPA’s PWSS Program is working with states to pursue a reduction of the number of systems that have health-based non-compliance events. This includes working to decrease the number of community water systems out of compliance with health-based standards. As of April 2021, approximately 2,756 of the original 3,508 systems with health-based violations on September 30, 2017, have been returned to compliance. The PWSS Program helps to facilitate this effort by supporting state drinking water programs and technical assistance providers in achieving and maintaining compliance at drinking water systems, developing best practices, strengthening state capacity, and certifying drinking water operators.

EPA also is enhancing its oversight of the state drinking water programs by improving the scope and consistency of the annual PWSS program review for each primacy agency as required under SDWA. Information gained during these reviews includes an analysis of the completion of sanitary surveys by the primacy agency, an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA, review of state use of the funds and associated impacts, and alignment of program with national enforcement and compliance priorities. The annual program review directly supports the work of the states and EPA to reduce community water systems out of compliance with health-based standards.

**Performance Measure Targets:<sup>554</sup>**

<b>(PM DW-02) Community water systems still out of compliance with health-based standards since September 30, 2017.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	875	701

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$10,000.0) This program change increases funding to help states and tribes with primary enforcement authority to implement and enforce NPDWRs under SDWA. In addition, this increase supports states, territories, and tribes in complying with drinking water regulations, conducting sanitary surveys of public water systems, and providing technical assistance to managers and operators of public water systems.

<sup>554</sup> The Agency has made a technical correction to the baseline for the long-term performance goal associated with this program. The adjusted long-term performance goal is “By September 30, 2022, reduce the number of community water systems still in noncompliance with health-based standards since September 30, 2017, to 701.”

**Statutory Authority:**

Safe Drinking Water Act § 1443.

**Categorical Grant: Radon**  
Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$7,646.0</i>	<i>\$7,795.0</i>	<i>\$8,951.0</i>	<i>\$1,156.0</i>
Total Budget Authority	\$7,646.0	\$7,795.0	\$8,951.0	\$1,156.0

**Program Project Description:**

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risks posed by exposures to indoor radon. Under the statute, EPA assists states and tribes through the State Indoor Radon Grants (SIRG) program, which provides categorical grants to develop, implement, and enhance programs that assess and mitigate radon risk. EPA provides guidance to states and tribes to promote and spread effective strategies for reducing indoor radon public health risks. EPA also works with states and tribes to support targeting SIRG funding to reduce risks for low-income populations that lack resources to mitigate radon risk on their own.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year<sup>555</sup>. EPA’s non-regulatory Indoor Air - Radon Program, which includes the SIRG grants program, promotes actions to reduce the public’s health risk from indoor radon. EPA and the Surgeon General recommend that people do a simple radon home test and, if levels above EPA’s guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many are still in need of mitigation. This voluntary program promotes partnerships between national organizations, the private sector, and more than 50 state, local, and Tribal governmental programs to reduce radon risk.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President’s priority of advancing environmental justice. EPA will administer the SIRG Program, in collaboration with state and tribal partners. EPA will work with states and tribes to address environmental justice concerns by assisting grant recipients to address radon risk reduction in underserved, low-income communities, for example through building code adoption. EPA will work with states and tribes to address challenges from the mandatory match requirement to ensure that programs continue to operate and serve low-income communities.

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<sup>555</sup> For additional information, please see: <https://www.epa.gov/radon>.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$1,156.0) This program change is an increase to support providing guidance to states and tribes to promote and spread effective strategies for reducing indoor radon public health risks. EPA also will work with states and tribes to support targeting SIRG funding to reduce risks for low-income populations that lack resources to mitigate radon risk on their own.

**Statutory Authority:**

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

**Categorical Grant: State and Local Air Quality Management**  
 Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	\$222,318.8	\$229,500.0	\$321,500.0	\$92,000.0
Total Budget Authority	\$222,318.8	\$229,500.0	\$321,500.0	\$92,000.0

**Program Project Description:**

This program provides funding for state air programs, as implemented by state, multi-state, and local air agencies. Section 103 of the Clean Air Act (CAA) provides EPA with the authority to award grants to air 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 for the prevention and control of air pollution, implementation of National Ambient Air Quality Standards (NAAQS) and improving visibility in our national parks and wilderness areas (Class I areas). The continuing activities funded under Section 105 include: analysis and planning for attainment and maintenance of NAAQS; emission reduction measures; development and operation of air quality monitoring networks, and other air program activities. 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 2022 Activities and Performance Plan:**

States are responsible for State Implementation Plans (SIPs), which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility improvement obligations. In FY 2022, affected states will be developing or revising attainment SIPs for areas reclassified to “Moderate” for the 2015 ozone NAAQS, for areas reclassified to “Severe” for the 2008 ozone NAAQS, and for areas designated nonattainment effective April 30, 2021, for the 2010 sulfur dioxide (SO<sub>2</sub>) NAAQS. States also have ongoing SIP obligations associated with visibility improvement requirements, among other requirements identified in the CAA. States also will continue implementing the 2008 8-hour ozone NAAQS, the 2008 lead NAAQS, the 2010 1-hour nitrogen dioxide (NO<sub>2</sub>) NAAQS, and the 2010 1-hour SO<sub>2</sub> NAAQS.

As applicable, states also will continue implementing the previous PM<sub>2.5</sub> and ozone NAAQS, including the 1997 annual and 24-hour PM<sub>2.5</sub> NAAQS, the 2006 24-hour PM<sub>2.5</sub> NAAQS, the 2012 annual PM<sub>2.5</sub> NAAQS, the revoked 1997 8-hour ozone NAAQS and the revoked 1-hour ozone NAAQS. EPA, in close collaboration with states and tribes, will work to reduce the number of areas in nonattainment with the NAAQS. In FY 2022, EPA will work with states to prioritize activities needed to meet obligations for SIP development and in implementing their plans for

attaining and maintaining the NAAQS and achieving regional haze goals and identifying streamlining options. EPA will maximize use of its web-based State Planning Electronic Collaboration System (SPeCS) to review draft SIPs from state air agencies, and to track and process state submittals. States are encouraged to engage with EPA early in their SIP development processes, so EPA has enough time to provide feedback on SIPs prior to formal submission to EPA for review.

### Air Monitoring Networks

The Nation's ambient air quality monitoring network, an essential element of the Agency's environmental infrastructure, serves as the foundation for the air quality management and control programs. States will continue to operate and maintain their ambient air monitoring networks with technical assistance and program support from EPA. The largest part of a state's overall air program includes the collection, analysis, quality assurance, and submittal of ambient air quality data. EPA also proposes to transition the funding of the PM<sub>2.5</sub> 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.

The states will work with EPA to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution. The President's FY 2022 budget request in EPM: Federal Support for Air Quality Management includes \$100 million for a new community air quality monitoring and notification program to support efforts to deliver environmental justice for overburdened and marginalized communities.

The states will collaborate with EPA to initiate the development and implementation of an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public.

### Air Permitting Programs

In FY 2022, states with approved or delegated air permitting programs will implement these programs. EPA will provide technical assistance, as needed.

### Emissions Inventories

The development of a complete quality assured emission inventory is an important step in an air quality management process. These inventories are used to help determine significant sources of air pollutants and establish emission trends over time, target regulatory actions, and estimate air quality through dispersion and photochemical modeling. An emission inventory includes estimates of the emissions from various pollution sources in a specific geographical area. In FY 2022, states will continue to develop inventories and submit data to EPA for the next release of the National Emissions Inventory (NEI). EPA plans to release the 2020 NEI in calendar year 2023.

### Air Quality Forecasts

The program supports state and local air agency capabilities to provide air quality forecasts for ozone and PM<sub>2.5</sub> that provide the public with information they can use to make daily lifestyle decisions to protect their health. This information allows people to take precautionary measures to avoid or limit their exposure to unhealthy levels of air quality. In addition, many communities use

forecasts for initiating air quality “action” or “awareness” days. EPA will update data to allow for state and local agencies to provide important public health information to the public.

#### State and Local Air Toxics Efforts

The program also supports state and local efforts to characterize air toxics problems and take measures to reduce health risks from air toxics. This funding also supports characterization work that includes collection and analysis of emissions data and monitoring of ambient air toxics. In FY 2022, funds will support the National Air Toxics Trends Stations (NATTS), consisting of 26 air toxics monitoring sites and including the associated quality assurance, data analysis, and methods support. Subject to availability, EPA anticipates funds will support the community-scale air toxics grant competition.

#### Visibility Improvement

In FY 2022, EPA will review regional haze SIPs for the second planning period to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. The first State plans for improving visibility in our national parks and wilderness areas were due in December 2007. Under the Regional Haze Rule, states are required to submit updates to their plans to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals.

#### Air Quality Training

In FY 2022, states and multi-jurisdictional organizations will use this funding to establish and maintain training priorities for air quality-related subjects; develop new and update existing air quality-related training materials; and, provide classroom and other types of training for air quality professionals.

The increased funding for FY 2022 will expand these important programs and help accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; capping of oil and gas wells to reduce VOC and methane emissions; developing policies and programs to facilitate build-out of electric vehicle (EV) charging station infrastructure; increasing air quality monitoring in environment justice areas; and supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

#### **Performance Measure Targets:**

Work under this program supports performance results in the Federal Support for Air Quality Management under the EPM appropriation.

EPA is currently evaluating its suite of measures and indicators related to environmental justice and climate change, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice and Climate Change Programs. Measures are under development in this program to address environmental justice and climate change.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$92,000.0) This program change is an increase that will help expand the efforts of air pollution control agencies to implement their programs and to accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; capping of oil and gas wells to reduce VOC and methane emissions; developing policies and programs to facilitate build-out of EV charging station infrastructure; increasing air quality monitoring in environmental justice areas; and supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

**Statutory Authority:**

Clean Air Act §§ 103, 105, 106.



## Categorical Grant: Toxics Substances Compliance

Program Area: Categorical Grants

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	\$3,871.9	\$4,760.0	\$4,855.0	\$95.0
Total Budget Authority	\$3,871.9	\$4,760.0	\$4,855.0	\$95.0

### **Program Project Description:**

The Toxic Substances Control Act (TSCA) Compliance Monitoring Program builds environmental partnerships<sup>556</sup> with states, tribes, and territories to strengthen their ability to address environmental and public health threats from toxic substances. This assistance is used to prevent or eliminate unreasonable risks to human health or the environment and to ensure compliance with toxic substance regulations. The grants support inspection programs associated with lead-based paint (§402(a), §406(b), and the Renovation, Repair, and Painting Rule), the Asbestos Hazard Emergency Response Act (AHERA), and Polychlorinated biphenyls (PCBs).

### **FY 2022 Activities and Performance Plan:**

Work in this program directly supports the Administration's priorities, including compliance monitoring programs to prevent or eliminate unreasonable risks to health or the environment associated with chemical substances such as asbestos, lead-based paint, and polychlorinated biphenyls (PCBs), and to encourage states to establish their own compliance and enforcement programs for lead-based paint and asbestos. EPA may provide funding for compliance monitoring grants to states and tribes under TSCA to conduct inspections to ensure compliance with the Asbestos-in-Schools requirements, the Model Accreditation Plan (MAP), Asbestos Ban and Phase Out Rule, the TSCA Asbestos Worker Protection Rule, lead-based paint regulations, and PCB regulations. For states with asbestos waiver or lead-based paint programs, these grants also fund enforcement activities. In FY 2022, EPA also will continue to award state and tribal assistance grants to aid in the implementation of compliance and enforcement provisions of TSCA.

In recent years, the Agency has consulted with its state partners in the development of a new allocation formula for the TSCA State and Tribal Assistance Grants. EPA began implementing the new formula in FY 2019 and is on target for completing the three-year phased approach in FY 2021. In FY 2022 and beyond, the new fully implemented weighted formula will continue to better align 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. The assistance grants will help rebuild programmatic capabilities between EPA and partner agencies, and support delivering environmental justice for overburdened and marginalized communities.

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<sup>556</sup> For additional information, please refer to: <https://www.epa.gov/compliance/toxic-substances-compliance-monitoring-grant-guidance-fiscal-year-2020>.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$95.0) This program change will support state and tribal partners' compliance and enforcement activities, including providing support for delivering environment justice for overburdened and marginalized communities.

**Statutory Authority:**

Toxic Substances Control Act.

**Categorical Grant: Tribal Air Quality Management**  
 Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$13,990.9</i>	<i>\$13,415.0</i>	<i>\$21,415.0</i>	<i>\$8,000.0</i>
Total Budget Authority	\$13,990.9	\$13,415.0	\$21,415.0	\$8,000.0

**Program Project Description:**

American Indians and Alaskan Natives are disproportionately impacted by air pollution and climate change. They have a higher rate of asthma, diabetes, heart disease and chronic obstructive pulmonary disease (COPD) than the general population. Wildfire season has consistently intensified over the past few years due to climate change and extreme weather conditions which has led to an increase in ambient and indoor air pollution and exacerbated the health of tribal communities. Across the Nation, tribal air issues vary from permitting sources on-reservation, to monitoring for criteria air pollutants, to participating in local, state, regional, and national air quality work groups. In addition to performing emissions inventories and monitoring, other program tasks include addressing indoor air quality issues, and reviewing and commenting on permits issued by other agencies.

This program includes funding for tribes and tribal air pollution control agencies implementing projects and programs to address air pollution issues in Indian Country. Using Section 105 authority of the Clean Air Act (CAA), tribal agencies may develop and implement programs for the prevention and control of air pollution and implementation of primary and secondary National Ambient Air Quality Standards (NAAQS). Using Section 103 authority of the CAA, tribal agencies, 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. Tribes use these resources to perform emissions inventories, monitor air quality and implement regulatory, voluntary and education and outreach programs for their citizens, who are among the most environmentally at-risk populations in the country. Currently only 47 tribes have Section 105 grants and 74 tribes have Section 103 grants.

**FY 2022 Activities and Performance 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, including combating the effects of climate change. 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.

Currently, there are 577 federally recognized tribes. Of those, 63 tribes have treatment in a manner similar to a state status or Treatment as a State with regard to implementing functions pertaining to the management and protection of air resources within reservation boundaries or other areas under the tribe's jurisdiction, for which they have received approval. In addition, EPA awards financial support under the CAA to help build tribal knowledge and increase tribes' capacity to manage air quality issues and encourages tribes to partner with EPA to carry out CAA protections within reservations, tribal communities, and tribal communities that may be disproportionately affected.

In FY 2022, a key activity is to work to reduce the number of days in violation of the NAAQS. This program supports the Agency's priority of building stronger partnerships with individual tribes and with the National Tribal Air Association, whose priorities include tribes' participation in the Agency's policy and rule development and the Tribal Air Monitoring Support (TAMS) Center. The TAMS Center supports the tribes' ability to collect and provide monitoring data to protect the health of their tribal members. Tribes also will focus on increasing the number of tribes with emissions inventories. This will increase a tribe's knowledge on how to best protect their citizens. Tribes also will focus on implementation of nonregulatory and voluntary programs, as well as education and outreach programs. These will assist with pollution reduction while creating a more informed citizenship. In FY 2022, this program also will support modernization of the tribal monitoring networks and promote collaboration with EPA and state and local air agencies on efforts to initiate the development and implementation of an air quality monitoring modernization plan.

The Clean Air Status and Trends Network (CASTNET) has enhanced tribal monitoring capacity by supporting seven sites on tribal lands and training the site operators. In FY 2022, the Agency will continue to build community partnerships by installing additional tribal CASTNET monitoring sites, providing near real-time air quality data and the ability to assess ecological impacts from atmospheric deposition of air pollutants.

The increased funding for FY 2022 will expand these important programs and help accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; capping of oil and gas wells to reduce VOC and methane emissions; developing policies and programs to facilitate build-out of electric vehicle (EV) charging station infrastructure; increasing air quality monitoring in environmental justice areas; and supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

**Performance Measure Targets:**

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

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$8,000.0) This program change is an increase that will help expand the efforts of tribes and tribal air quality control agencies to implement their programs and to accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; capping of oil and gas wells to reduce VOC and methane emissions; and developing policies and programs to facilitate build-out of EV charging station infrastructure. The increase also will support additional air quality monitoring in environmental justice areas and programs to improve transportation options and reduce disproportionate exposure to traffic emissions in Tribes.

**Statutory Authority:**

Clean Air Act §§ 103, 105.

**Categorical Grant: Tribal General Assistance Program**  
Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$67,289.5</i>	<i>\$66,250.0</i>	<i>\$77,575.0</i>	<i>\$11,325.0</i>
Total Budget Authority	\$67,289.5	\$66,250.0	\$77,575.0	\$11,325.0

**Program Project Description:**

In 1992, Congress established the Indian Environmental General Assistance Program (GAP), a program that provides grants and technical assistance to tribes to plan, develop, and establish tribal environmental protection programs consistent with other applicable provisions of law administered by EPA. The Agency works collaboratively with tribal partners on mutually identified environmental and public health priorities to achieve these aims. Funding provided under the GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that EPA may delegate to tribes. GAP funds also may be used to assist in the development and implementation of solid and hazardous waste programs for Indian lands, including solid waste service delivery costs. 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 95 program delegations to administer a variety of programs across a number of statutes, including the Clean Water Act, Safe Drinking Water Act, and the Clean Air Act. Tribes also have developed capacity to assist EPA in implementing federal environmental programs in the absence of an EPA-approved tribal program through Direct Implementation Tribal Cooperative Agreements (DITCAs). As of FY 2021, there are 15 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 may have EPA federal inspector credentials. In addition, GAP also supports tribes with the development of their waste management programs with 267 tribes having Integrated Waste Management Plans.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, GAP grants are essential to assisting 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.

In addition, EPA will strategically invest \$10 million to address inequities to promote environmental justice. This will include funding to assist tribes in developing public participation programs and solid waste infrastructure, as well as furthering equities in Indian country by identifying opportunities for increased direct implementation collaboration.

In FY 2022, the Agency will continue to implement GAP under a national framework set forth in program guidance 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), EPA will continue to establish and refine tools to track the progress tribes achieve toward developing and implementing environmental protection programs in Indian Country. A revised GAP national framework as defined in new guidance is anticipated to be final for implementation in FY 2023.

### **Performance Measure Targets:**

EPA is currently evaluating its suite of measures and indicators related to Environmental Justice, including available data and programs where improved data sets are needed to develop useful performance measures for Environmental Justice Programs. Measures are under development in this program to address environmental justice

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$11,325.0) This program increase is to support additional grant funding to federally recognized tribes and tribal consortia for planning, developing, and establishing environmental protection programs in Indian country and implementing solid and hazardous waste programs. This strategic investment will address inequities by promoting environmental justice and public participation in programs being developed.

### **Statutory Authority:**

Indian Environmental General Assistance Program Act.

## Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$10,379.5</i>	<i>\$11,164.0</i>	<i>\$11,387.0</i>	<i>\$223.0</i>
Total Budget Authority	\$10,379.5	\$11,164.0	\$11,387.0	\$223.0

### **Program Project Description:**

EPA’s Underground Injection Control (UIC) Grant Program funds federal, state, and tribal government agencies that oversee underground injection activities to prevent contamination of underground sources of drinking water from fluid injection practices, as established by the Safe Drinking Water Act (SDWA).

EPA regulates the permitting, construction, operation, and closure of injection wells used to place fluids underground for storage, disposal, enhanced recovery of oil and gas, and mineral recovery. EPA provides grants to states and tribes that have primary enforcement authority (primacy) to implement and manage UIC programs and ensure safe injection well operations that prevent contamination of underground sources of drinking water. Eligible tribes that demonstrate an intent to achieve primacy also may receive grants for the initial development of UIC programs and be designated for “treatment as a state” if their programs are approved. Where a jurisdiction does not have primacy, EPA uses these funds for direct implementation of federal UIC requirements.

### **FY 2022 Activities and Performance Plan:**

The FY 2022 request will support implementation of the UIC Program, which manages approximately 743,000 injection wells<sup>557</sup> across six well types to protect groundwater resources. EPA directly implements UIC programs in seven states and two territories and shares responsibility in eight states and with two tribes. EPA also administers the UIC programs for all other tribes and for Class VI wells in all states but North Dakota and Wyoming.<sup>558</sup> 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 and will continue implementing the recently developed UIC well permit review process. 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. As of March 2021, the backlog of EPA-issued new UIC permits, currently 22, continues to be less than the 2019 baseline of 36.

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<sup>557</sup>As represented in FY 2019 annual inventory.

<sup>558</sup> For more information, please visit: <https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program>.



**Performance Measure Targets:**

Work under this program supports performance results in the Drinking Water Programs under the EPM appropriation and mitigation of climate change to support safe drinking water for the Nation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$223.0) This program change increases resources to support EPA's state and tribal partners through the Underground Injection Control Grant Program.

**Statutory Authority:**

Safe Drinking Water Act § 1443.

## Categorical Grant: Underground Storage Tanks

Program Area: Categorical Grants

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	<i>\$1,468.5</i>	<i>\$1,475.0</i>	<i>\$1,505.0</i>	<i>\$30.0</i>
Total Budget Authority	\$1,468.5	\$1,475.0	\$1,505.0	\$30.0

### Program Project Description:

EPA's Underground Storage Tanks (UST) State and Tribal Assistance Grant (STAG) program provides funding for grants to states under the Solid Waste Disposal Act to improve and enhance UST programs. STAG funds may be used for prevention activities that are not specifically spelled out in the Energy Policy Act (EPA) of 2005 and are used by states that do not have sufficient state resources to fund these core programs.

STAG funds are used by states<sup>559</sup> to fund such activities as: applying for state program approval to operate the UST Program in lieu of the federal program, updating UST regulations, and providing compliance assistance.

### FY 2022 Activities and Performance Plan:

Due to the increased emphasis on inspections and release prevention requirements, EPA has consistently met the yearly goal to minimize the number of confirmed releases. In FY 2020, there were 4,944 reported releases reflecting a downward trend from 6,847 in FY 2014 and 5,678 in FY 2017.

As of FY 2020, 22 states and territories have reported compliance with the UST Technical Compliance Rate (TCR) measure, which came about after the UST rule was revised in 2015. The TCR includes new compliance measures for spill prevention and overfill requirements, as well as additional leak detection requirements. In FY 2020, EPA reported a TCR rate of 58 percent, a significant improvement from the 44 percent rate from FY 2019.

The remaining states and territories will continue to report the Significant Operational Compliance (SOC) rate until they reach their respective UST state regulation effective dates and move to TCR. In FY 2020, EPA reported an SOC rate of 68 percent, which mirrors the results from FY 2019.<sup>560</sup>

EPA has been working with states to both update their state regulations as appropriate and to reapply for state program approval (SPA). EPA anticipates that all states with SPA will have program renewal by the end of FY 2022. In addition, EPA anticipates several new states will apply and be approved for SPA for the first time by the end of FY 2022.

<sup>559</sup> States as referenced here also include the District of Columbia and five territories as described in the definition of a state in the Solid Waste Disposal Act.

<sup>560</sup> More information on performance measures can be found at <https://www.epa.gov/ust/ust-performance-measures>.

**Performance Measure Targets:**

Work under this program supports performance results in the LUST Prevention program under the LUST appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$30.0) This program change increases support for EPA's state and tribal partners through the UST STAG Program.

**Statutory Authority:**

Solid Waste Disposal Act § 2007(f); Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Categorical Grant: Wetlands Program Development**  
Program Area: Categorical Grants

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$12,922.7</i>	<i>\$14,192.0</i>	<i>\$14,476.0</i>	<i>\$284.0</i>
Total Budget Authority	\$12,922.7	\$14,192.0	\$14,476.0	\$284.0

**Program Project Description:**

The Wetlands Program Development Grants Program assists states, tribes, and local governments with building or enhancing their wetland protection and restoration programs. Program grants are used to develop new or refine existing state and tribal wetland programs in one or more of the following areas: 1) monitoring and assessment; 2) voluntary restoration and protection; 3) regulatory programs, including Clean Water Act (CWA) Section 401 certification and Section 404 assumption;<sup>561</sup> 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 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 CWA. The grant funding is split among EPA’s ten regional offices according to the number of states and territories per region. Each region is required, by regulation, to compete the award of these funds to states, tribes, local governments, interstate agencies, and inter-tribal consortia.<sup>562</sup> In addition, EPA sets aside ten percent of the appropriation for a grant competition specifically for tribes and inter-tribal consortia.

**FY 2022 Activities and Performance Plan:**

In FY 2022, 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; investigating opportunities to factor in climate change and environmental justice in decision-making; and developing regulatory controls to avoid, minimize, and compensate for wetland impacts.

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<sup>561</sup> State and tribal assumption of CWA Section 404 is an approach that can be useful in streamlining 404 permitting in coordination with other environmental regulations. When states or tribes assume administration of the federal regulatory program, Section 404 permit applicants seek permits from the state or tribe rather than the federal government. States and tribes are in many cases located closer to the proposed activities and are often more familiar with local resources, issues, and needs. Even when a state assumes permitting under Section 404, the Army Corps of Engineers retains jurisdiction for a certain portion of waters under the CWA as well as those waters subject to Section 10 of the River and Harbors Act for permits.

<sup>562</sup> For more information, please see: [http://water.epa.gov/grants\\_funding/wetlands/estp.cfm](http://water.epa.gov/grants_funding/wetlands/estp.cfm).

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$284.0) This program change increases resources to support EPA's state and tribal partners through the Wetlands Program Development Grants Program.

**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)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	\$99,130.1	\$90,000.0	\$150,000.0	\$60,000.0
Total Budget Authority	\$99,130.1	\$90,000.0	\$150,000.0	\$60,000.0

**Program Project Description:**

The Diesel Emissions Reduction Act (DERA) Grant Program provides support for emission reductions from existing diesel engines through engine replacements, including zero emission replacements, retrofits, and rebuilds; switching to cleaner fuels; idling reduction; and other emission reduction 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 and in the Consolidated Appropriations Act of 2021.

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 nearly 10 million older engines in use that will continue to emit large amounts of nitrogen oxides and particulate matter, including black carbon.<sup>563</sup> DERA grants accelerate the pace at which dirty engines are retired or retrofitted. EPA’s DERA Program promotes strategies to reduce these emissions and protect public health by working with air quality professionals, environmental and community organizations, manufacturers, fleet operators, tribes, and state and local officials. DERA funding provides both a public health and climate benefit and can be directed to areas with the greatest need. DERA funding is targeted to areas with air quality challenges<sup>564</sup> and grants funding is prioritized for projects that benefit communities with environmental justice concerns.

School buses provide the safest transportation to and from school for more than 25 million American children. 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.<sup>565</sup>

Ports are places where large concentrations of diesel equipment often converge – including ships, trucks, rail, and non-road machinery. The near-port communities that bear the brunt of air pollution from these diesel engines are often comprised of low-income populations and people of color. These residents 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

<sup>563</sup> DERA Fourth Report to Congress. <https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf>.

<sup>564</sup> DERA Fourth Report to Congress. <https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf>.

<sup>565</sup> For more information, please visit: <https://www.epa.gov/dera/reducing-diesel-emissions-school-buses>.

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.

EPA estimates that each federal dollar invested in clean diesel projects has leveraged as much as \$3 from other government agencies, private organizations, industries, and nonprofit organizations, generating between \$11 and \$30 in public health benefits. Each federal dollar invested in DERA also results in over \$2 in fuel saving.<sup>566</sup>

### **FY 2022 Activities and Performance Plan:**

The 2022 Budget begins the process of addressing the climate crisis. Taking into account the Diesel Emissions Reduction Act Program's continuing role in advancing environmental justice and tackling the climate crisis, EPA will evaluate the Diesel Emissions Reduction Act Program to identify the appropriate actions the agency can take to support this policy objective in the 2023 Budget, as outlined in Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*.

Work in this Program directly supports Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* and its Justice40 Initiative to target 40 percent of the benefits of climate investments to disadvantaged communities. In FY 2022, EPA will continue to target its funds to direct DERA grants and rebates to reduce diesel emissions in priority areas of highly concentrated diesel pollution to tackle the climate change crisis, with a primary focus on school buses, ports, and areas with environmental justice concerns.

In FY 2022, EPA will increase efforts to support rebates for alternative-fuel and electric bus replacements as part of ongoing work to equip local school districts with cleaner-running buses. In FY 2020, applicants scrapping and replacing diesel buses with engine model years 2006 and older received rebates between \$20,000 and \$65,000 per bus, depending on the fuel type of the replacement bus. Among the hundreds of rebates awarded to schools, more than a dozen rebates supported the purchase of state-of-the-art zero emission electric buses for schools as a part of the DERA School Bus Rebate Program. In FY 2022, EPA will prioritize funding for school bus replacements, particularly for alternative-fuel and electric school bus replacements.

The DERA Grant Program also will prioritize projects that provide a health benefit to residents of communities near centers of goods movement and projects that benefit areas with environmental justice concerns by awarding points to projects that engage affected communities and directly address their needs and concerns. Priority is given to projects that will benefit communities near goods movement facilities like ports that receive a disproportionate quantity of air pollution from diesel fleets. Further priority is given to projects whose leaders engage and partner with affected communities with environmental justice concerns to directly address those needs and concerns. EPA encourages prospective DERA grant applicants to take advantage of a series of community-port collaboration materials,<sup>567</sup> published by EPA's Ports Initiative, including case studies on four

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<sup>566</sup> DERA Fourth Report to Congress. <https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf>.

<sup>567</sup> For more information, please visit: <https://www.epa.gov/community-port-collaboration/community-port-collaboration-toolkit>.



community-port collaboration pilot projects that took place in Seattle, New Orleans, Savannah, and Providence.<sup>568</sup>

Using the formula outlined in the Energy Policy Act of 2005, eligible states and territories are offered 30 percent of the annual DERA appropriation to implement projects under the DERA State Grants Program. The remaining DERA funding is awarded to rebates and competitive grants. Through the DERA School Bus Rebate Program, the Agency will efficiently and precisely target funds toward improving children’s health and turning over the Nation’s school bus fleet with new, cleaner buses. Through the DERA National Grants and the DERA Tribal and Insular Area Grants, the Agency will competitively award grants focusing on areas with poor air quality, especially those impacted most severely by emissions from ports and goods movement. Priority for funding also is given to projects benefitting communities with environmental justice concerns and projects which engage communities in the design and performance of the project. EPA will continue to track, assess, and report the results of DERA grants, such as numbers of engines, emissions benefits, and cost-benefit information.<sup>569</sup> Further, EPA will continue to provide diesel emission reduction technology verification and evaluation and provide that information to the public.<sup>570</sup>

#### **Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

#### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$60,000.0) This program change increases the DERA grant funding available for grants and rebates to reduce harmful diesel emissions and tackle the climate change crisis, with a focus on priority areas including school buses, ports, and communities with environmental justice concerns.

#### **Statutory Authority:**

The Diesel Emissions Reduction Program is authorized by Title VII, Subtitle G of the Energy Policy Act of 2005, 42 USC 16131, *et seq.*, as amended.

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<sup>568</sup> For more information, please visit: <https://www.epa.gov/ports-initiative/case-studies-improving-environmental-performance-and-economic-prosperity-ports-and>.

<sup>569</sup> List of all grant awards under DERA can be found at <https://www.epa.gov/cleandiesel/clean-diesel-national-grants>.

<sup>570</sup> For more information, please visit: <https://www.epa.gov/cleandiesel>.

**Brownfields Projects**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	\$94,203.0	\$90,982.0	\$130,982.0	\$40,000.0
Total Budget Authority	\$94,203.0	\$90,982.0	\$130,982.0	\$40,000.0

**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 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.<sup>571</sup> This idle land drags down property values and can slow a local economy. Brownfields redevelopment is a key to revitalizing main streets, neighborhoods, and rural communities; increasing property values and creating jobs, especially for those environmental justice and persistent poverty communities that are often left out of economic and environmental revitalization. Important environmental impacts of brownfields cleanup and redevelopment include improved water quality associated with reduced runoff from stormwater and nonpoint pollutant sources, and improved air quality associated with reduced greenhouse gas emissions from vehicle travel.<sup>572</sup>

Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of April 2021, grants awarded by the Program have led to over 142,000 acres of idle land made ready for productive use and over 176,800 jobs and \$34.5 billion leveraged.<sup>573</sup> 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.

The Brownfields Program directly supports President Biden’s Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021).<sup>574</sup> Under this program, EPA will focus on core activities, providing funding for: 1) assessment cooperative agreements and Targeted Brownfields Assessments (TBAs); 2) cleanup and multipurpose cooperative agreements; and 3) research, training, and technical assistance to communities for brownfields-related activities, including land revitalization assistance, environmental workforce development, and job training cooperative agreements.

<sup>1</sup> U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

<sup>572</sup> Brownfields Program Environmental & Economic Benefits, please refer to: <https://www.epa.gov/brownfields/brownfields-program-environmental-and-economic-benefits>.

<sup>573</sup> EPA’s ACRES database.

<sup>574</sup> For additional information, please refer to: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

A 2017 study found that housing property values increased 5 to 15.2 percent near brownfield sites when cleanup was completed.<sup>575</sup> 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.<sup>576</sup> In addition, based on historical data provided by the Assessment Cleanup and Redevelopment Exchange System (ACRES) database, \$1 of EPA's Brownfields funding leverages \$20.13 in other public and private funding.<sup>577</sup>

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA requests an increase of \$40 million, as part of the Administration's \$1.8 billion request, targeted to advance environmental justice in tandem with climate work. This investment will align with the President's Environmental Justice Executive Order by stimulating economic opportunity and environmental revitalization in more than 400 historically overburdened communities. These resources 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. In FY 2020, EPA made 809 additional brownfields sites ready for anticipated use. The Brownfields Program will continue to foster federal, state, tribal, local, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged and environmental justice communities. The activities described below will leverage approximately 13,400 jobs and \$2.6 billion in other funding sources.<sup>578</sup>

- Funding will support at least 117 assessment cooperative agreements that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites. Approximately 1,000 site assessments will be completed under these agreements, including in communities affected by the retirement of coal-fired power plants.
- EPA will provide funding for TBAs in up to 120 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, rural, and disadvantaged communities to submit requests for this funding to ensure equal access to brownfields assessment resources. These assessments will be performed through contracts and interagency agreements.
- Funding will support 26 direct cleanup cooperative agreements to enable eligible entities to clean up recipient owned properties.
- The Agency will provide funding for approximately 16 new Revolving Loan Fund (RLF) cooperative agreements. This funding enables recipients to make loans and subgrants for the cleanup of brownfield sites and establishes a sustainable RLF program. In addition, the Agency will provide supplemental funding to approximately 41 existing high performing

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<sup>575</sup> 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>.

<sup>576</sup> 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>.

<sup>577</sup> For more information, please visit [www.epa.gov/brownfields](http://www.epa.gov/brownfields).

<sup>578</sup> 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.

RLF recipients. These awards will lead to approximately 82 additional sites cleaned up, with a particular focus on cleanups in disadvantaged communities.

- Funding will support 15 Environmental Workforce Development & Job Training (EWDJT) cooperative agreements. This funding will provide environmental job training for citizens to take advantage of new jobs created as a result of brownfield assessment, cleanup, and revitalization in their communities. These awards will lead to approximately 735 people trained and 510 placed in jobs.
- Funding also will support training, research, technical assistance cooperative agreements, interagency agreements, and contracts to support states, tribes, and communities for both the Brownfields and Land Revitalization programs and other assistance mechanisms, as authorized under CERCLA 104(k)(7).
- Funding will be provided for technical assistance to an estimated 50 small and disadvantaged communities.

All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via the ACRES database and analyzed by EPA. Maintenance of ACRES focuses on the input of high-quality data, and robust analysis regarding program outcomes and performance will continue to be priorities during FY 2022.

**Performance Measure Targets:**

<b>(PM B30) Number of brownfields sites made ready for anticipated use.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	684	684

<b>(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	1.3	1.3

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$40,000.0) This program change is an increase to supports the cleanup of sites, with a particular focus on those in disadvantaged communities. The investment will stimulate economic development and promote environmental revitalization. \$15 million is designated for quality cooperative agreements targeted at communities affected by the retirement of coal-fired power plants.

**Statutory Authority:**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 101(39) and 104(k).

**Infrastructure Assistance: Alaska Native Villages**  
 Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	<i>\$29,186.0</i>	<i>\$36,186.0</i>	<i>\$36,186.0</i>	<i>\$0.0</i>
Total Budget Authority	\$29,186.0	\$36,186.0	\$36,186.0	\$0.0

**Program Project Description:**

The Alaska Rural and Native Village (ANV) Program reduces disease and health care costs by providing critical basic drinking water and sanitation infrastructure (e.g., flushing toilets and running water) in vulnerable rural and Native Alaskan communities that lack such services disproportionately when compared to the rest of the country. Alaskan rural and native water and sewer systems face not only the typical challenges associated with small system size, but also the challenging climactic and geographic conditions, such as permafrost, shortened construction seasons, and extremely remote locations.

ANV communities look to EPA as a last-resort funding source when they or the State of Alaska are not able to fully finance the needed water infrastructure improvements. The Program serves communities that often lack the debt capacity to apply for other funding sources, including EPA State Revolving Loan Funds. The Indian Health Service’s (IHS) December 2020 analysis illustrate the need to assist these communities – the IHS identified \$308 million of need for water and wastewater infrastructure in Alaska in FY 2020. Many communities on the prioritized list have not been able to advance their projects due to lack of funding.

EPA’s grant to the State of Alaska funds improvements and construction of drinking water and wastewater treatment facilities for these small and disadvantaged communities. Investments in wastewater and drinking water infrastructure in rural Alaskan communities contributed to an increase of access to water and sewer service from 69 percent in the late 1990s to 96.9 percent in 2020.<sup>579</sup> While the gains in the Program have been significant, ANV communities continue to trail behind the non-tribal/non-native population in the United States with access to water and sanitation. In Alaska, a significant percentage of native and rural serviceable households are without complete indoor plumbing.

In addition to funding system upgrades and construction to address the challenges Alaskans face, the ANV Program also uniquely supports training, technical assistance, and educational programs to improve the financial management and operation and maintenance of sanitation systems. This

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<sup>579</sup> For more information please see: State of Alaska OMB Key Performance Indicators Department of Environmental Conservation <https://www.omb.alaska.gov/html/performance/program-indicators.html?p=37&r=1>.

is done through leveraging prioritization and implementation expertise from the State of Alaska<sup>580</sup> with ANV program funds.

The ANV technical assistance program helps to improve the long-term sustainability of the rural water utilities, creating transferable job skills in construction and operation and maintenance activities. The ANV 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.<sup>581</sup> Since 2005, the ANV Program, in collaboration and combination with other federal agencies, has shown a significant increase in the number of projects and ANV homes with increased access to safe water and sanitation.

### **FY 2022 Activities and Performance Plan:**

The FY 2022 request of \$36.2 million will fund a portion of the need in rural Alaskan homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards, given increased regulatory requirements on drinking water systems and the rate of construction of new homes in rural Alaska. Additionally, the request will continue to support training, technical assistance, and educational programs that protect existing federal investments in infrastructure by improving operation and maintenance of the systems. Improved operation and maintenance will improve system performance and extend the life of the asset.

In FY 2022, 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 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

### **Statutory Authority:**

Safe Drinking Water Act Amendments of 1996 § 303; Clean Water Act § 1263a.

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<sup>580</sup> 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.

<sup>581</sup> As reported by the State of Alaska Department of Environmental Conservation Remote Maintenance Worker Program outcome reports (November 2021).

**Infrastructure Assistance: Clean Water SRF**  
 Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>State and Tribal Assistance Grants</i></b>	<b><i>\$1,632,518.2</i></b>	<b><i>\$1,638,826.0</i></b>	<b><i>\$1,870,680.0</i></b>	<b><i>\$231,854.0</i></b>
Total Budget Authority	\$1,632,518.2	\$1,638,826.0	\$1,870,680.0	\$231,854.0
Total Workyears	3.8	3.6	3.6	0.0

**Program Project Description:**

The Clean Water State Revolving Fund (CWSRF) Program capitalizes state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. These funds directly support the Agency’s goal to ensure waters are clean through improved water infrastructure and sustainable management. The CWSRF Program also implements American Iron and Steel<sup>582</sup> (AIS) requirements, as required by law.

The CWSRF Program is the largest source of federal funds for states to provide low-interest loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, green infrastructure projects, and agricultural Best Management Practices (BMPs). This federal investment is designed to be used in concert with other sources of funds to address water quality needs.<sup>583</sup> Other tools, such as additional subsidization, are available as part of the CWSRF Program to assist small and disadvantaged communities. The CWSRF Program is a key component of EPA’s efforts to achieve innovative solutions to wastewater infrastructure needs and realize economic and environmental benefits that will continue to accrue for years in the future.

The revolving nature of the funds and substantial state match contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far the Nation has received more than three dollars of investment in water infrastructure. As of June 2020, the CWSRF Program has provided over \$145 billion in affordable financing for a wide variety of wastewater infrastructure and other water quality projects.<sup>584</sup> In 2020, over 1,600 assistance agreements were made with communities of all sizes, funding \$7.5 billion in projects aimed at treating wastewater, addressing stormwater runoff, tackling non-point source pollution, and addressing a myriad of other environmental issues.<sup>585</sup>

<sup>582</sup> For additional information, please see: <https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>.

<sup>583</sup> For additional information, please see: <http://www.epa.gov/cwsrf>.

<sup>584</sup> 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, 2020).

<sup>585</sup> 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, 2020).

In addition to capitalizing state revolving loan funds, the CWSRF appropriation includes a provision for set-aside funding for tribes to address serious wastewater infrastructure needs and associated health impacts. A portion of the CWSRF appropriation also is used to provide direct grant funding for the District of Columbia and United States territories.

### **FY 2022 Activities and Performance Plan:**

This federal investment will continue to enable progress toward the Nation's clean water needs and infrastructure priorities while creating good paying jobs. The infrastructure and other water management projects receiving low interest loans and additional subsidization from the CWSRF protect public health, strengthen the economy and local neighborhoods, and contribute to healthy ecosystems. Historically underserved communities in particular benefit from the program because of its low-cost financing and additional subsidization make these needed investments more affordable.

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.

In FY 2022, EPA is requesting over \$1.87 billion to provide funding for critical wastewater infrastructure through the CWSRF Program and over \$3.2 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs) combined. The increase of the CWSRF will accelerate infrastructure replacement and investments. The investments support several priority areas including climate change, environmental justice, and creating good paying jobs. The program will encourage states to prioritize funding for projects focused on climate change resiliency. These funding levels advance infrastructure repair and replacement and would allow states, municipalities, and other eligible borrowers to continue to finance high-priority investments that improve water quality and protect human health.

Elsewhere, EPA requests approximately \$80 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Through the WIFIA Program, EPA will make direct loans to regionally or nationally significant water infrastructure projects. The combined investments of the SRFs and WIFIA Program advance the Agency's ongoing commitment to infrastructure repair and replacement. These funds represent a major investment in water infrastructure and will create thousands of good paying jobs across the country.

To help drive progress, EPA has targeted \$8 billion in FY 2022 to increase the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs (CWSRF, DWSRF and WIFIA). During FY 2018 and FY 2019, EPA increased the non-federal dollars leveraged by EPA water infrastructure finance programs by \$20 billion. This success is due to the collaborative efforts of EPA, states, and local communities. As of March 2021, over \$17.5 billion has been leveraged in FY 2020 and FY 2021.



The FY 2022 capitalization of the CWSRF would supplement the more than \$145 billion in assistance provided over the life of the Program. The assistance provided in 2020 from federal capitalization, state contributions, and repayments was \$7.5 billion.

EPA requests that an amount equal to 10-20 percent of the total CWSRF capitalization grant funds made available to each state be used to provide additional subsidization to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these). These funds may be used to address infrastructure needs in marginalized and low-income communities, in addition to those facing environmental justice issues. In addition to capitalizing the CWSRF Program, a portion of the appropriation also will provide direct grants to communities within the tribes and territories. These communities are in great need of assistance given that their sanitation infrastructure lags behind the rest of the country, causing significant public health concerns. To ensure sufficient resources are directed toward these communities that face additional challenges, EPA continues to request a tribal set-aside of 2 percent, or \$30 million, whichever is greatest, of the funds appropriated in FY 2022. EPA also continues to request a territories set-aside of 1.5 percent of the funds appropriated from the CWSRF Program 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.

In conjunction with this request, the FY 2022 President's Budget is submitting a proposal to expand the authority of the existing small set-aside for the American Iron and Steel (AIS) requirement from the CWSRF in order to fund future Clean Watershed Needs Surveys (CWNS). The CWNS is a comprehensive assessment of the capital needs to meet the water quality goals in response to Sections 205(a) and 516 of the Clean Water Act. This assessment and documentation of future needs is critical in the effort to manage and fund our nation's wastewater infrastructure. A comprehensive CWNS is an important tool for identifying critical water quality needs in communities across the Nation, including small and disadvantaged communities, and opportunities to invest in climate resiliency. The proposed appropriation language does not change the current set-aside percentage, which has not needed to be fully utilized to cover current AIS program needs. The current set-aside percentage of up to 0.25% of the CWSRF level will allow EPA to continue to fully fund the required Clean Water AIS management and oversight activities and provide reliable and sufficient resources to conduct the CWNS. The total FY 2022 budget authority need for the CWNS is estimated to be \$1.5 million.

EPA will partner with states to ensure that the CWSRF Program 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 DWSRF Programs. The goal of this effort is to reduce reporting burden by eliminating redundancy and providing a more user-friendly interface for states to submit data.

**Performance Measure Targets:**

<b>(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	8.0	8.0

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$231,854.0) This increase accelerates infrastructure replacement and investments. The investments support several priority areas including climate change, environmental justice, and creating good paying jobs. The program will encourage states to prioritize funding for projects focused on climate change resiliency.

**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)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>State and Tribal Assistance Grants</i></b>	<b><i>\$1,320,783.1</i></b>	<b><i>\$1,126,088.0</i></b>	<b><i>\$1,357,934.0</i></b>	<b><i>\$231,846.0</i></b>
Total Budget Authority	\$1,320,783.1	\$1,126,088.0	\$1,357,934.0	\$231,846.0
Total Workyears	3.2	1.4	1.4	0.0

**Program Project Description:**

EPA’s Drinking Water State Revolving Fund (DWSRF) is designed to assist public water systems finance the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements, protect public health, and support state and local efforts to protect drinking water. These funds provide critical infrastructure necessary to ensure safe drinking water for all Americans while creating good paying jobs and upgrading and modernizing America’s drinking water systems. The 2015 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA), which is conducted every four years, indicated a 20-year capital investment need of \$472.6 billion for public water systems eligible to receive funding from state DWSRF Programs. The capital investment need covers 49,250 community water systems (CWS), 21,400 not-for-profit non-community water systems (NPNCWS), American Indian water systems, and Alaska Native Village (ANV) water systems. The 2015 DWINSA need reflects costs for repairs and replacement of leaking transmission pipes and deteriorated storage and treatment equipment, as well as new infrastructure and other projects, e.g., replacing lead service lines, required to protect public health and ensure compliance with the SDWA.

To reduce public health risks and help ensure safe and reliable delivery of drinking water nationwide, EPA makes capitalization grants to states in order to provide low-cost loans and other assistance to eligible public water systems and maintain robust drinking water protection programs. In addition to maintaining the statutory focus on addressing the greatest public health risks first, states can help those most in need on a per household basis according to state affordability criteria and can utilize set-asides to assist small systems. To maintain a focus on communities most in need, states are required to provide a portion of their capitalization grant as additional subsidization to disadvantaged communities.

The DWSRF Program provides communities access to critical low-cost financing and offers a subsidy to help utilities address long-term needs associated with water infrastructure. Most DWSRF assistance is offered in the form of loans which water utilities repay from the revenues they generate through the rates they charge their customers for service. Water utilities in many communities may need to evaluate the rate at which they invest in drinking water infrastructure repair and replacement to keep pace with their aging infrastructure, many of which may be approaching the end of their lives.

EPA works with states to ensure that DWSRF infrastructure and technical assistance funds are available to water systems in disadvantaged communities that are at most risk. EPA emphasizes assistance to projects which reduce lead and help water systems achieve resiliency to climate change.

### 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<sup>586</sup> are: Small System Technical Assistance (up to two percent), Administrative and Technical Assistance<sup>587</sup> (up to four percent, \$400 thousand or one-fifth percent of the current valuation of the fund, whichever is greater), State Program Management (up to ten percent), and Local Assistance and Other State Programs (up to fifteen 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 almost seventeen percent of the funds awarded to them for program development, of which approximately four percent is used to administer the program. Over the past three years, states have increased their set-asides to approximately 23 percent.

### Non-Federal Leveraging

The federal investment is designed to be used with other sources of funds to address drinking water infrastructure needs. States are required to provide a 20 percent match for their capitalization grant. Some states elect to leverage their capitalization grants through the public debt markets to enable the state to provide more assistance. These features, including state match leveraging and the revolving fund design of the Program, have enabled the states to provide assistance equal to 200 percent of the federal capitalization invested in the Program since its inception in 1997. In other words, for every dollar the federal government invests in this Program, the states, in total, have delivered two dollars in assistance to water systems. In addition, the DWSRF's rate of funds utilized<sup>588</sup> was 95.7 percent in 2020, nearly hitting its funds utilization target of 96 percent.

The FY 2022 capitalization of the DWSRF would supplement more than \$44.7 billion in assistance provided over the life of the Program. The assistance provided in 2020 from federal capitalization, state contributions, and repayments was \$3.6 billion.

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<sup>586</sup> For more information, please see: <https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-5>.

<sup>587</sup> For more information, please see: <https://www.congress.gov/bill/114th-congress/senate-bill/612/text>.

<sup>588</sup> The cumulative dollar amount of loan agreements divided by cumulative funds available for projects.

## National Set-Asides

Prior to allotting funds to the states, EPA is required to reserve certain national level set-asides.<sup>589</sup> 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). In FY 2022, EPA is requesting to set aside \$12 million due to the resources needed to implement the new statutorily mandated expansion of the UCMR program. Section 2021 of the America's Water Infrastructure Act (AWIA) of 2018 requires, subject to availability of appropriations and adequate laboratory capacity, all Public Water Systems (PWSs) serving 3,300 to 10,000 persons to monitor under future UCMR cycles and ensure that a nationally representative sample of PWSs serving fewer than 3,300 persons monitor under future UCMR cycles.

The 1996 SDWA established the current UCMR program including statutory provisions that require EPA to coordinate and pay the monitoring costs for a representative selection of small water systems that serve fewer than 10,000 individuals. Traditionally under this emerging contaminant monitoring program, EPA would require sampling at 800 small water systems that would be selected to represent the over 60,000 small water systems throughout the United States. AWIA included statutory revisions further amending SDWA and mandating (subject to the availability of appropriations) that EPA significantly expand the small water system monitoring program. Starting with UCMR 5 (FY 2022-2026), the total number of small systems monitored will increase 7.5 times, from 800 to 6,000. This will include all 5,200 public water systems that serve between 3,300 and 10,000 individuals and a representative selection of 800 systems serving fewer than 3,300 individuals.

EPA will direct up to two percent or \$20 million, whichever is greater, of appropriated funds to tribes and ANVs. These funds are awarded either directly to tribes or, on behalf of tribes, to the Indian Health Service through interagency agreements. Additionally, EPA will continue to set aside up to 1.5 percent for territories.

In addition, SDWA requires that no funds made available by a state DWSRF as authorized by SDWA Section 1452 (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system unless all of the iron and steel products used in the project are produced in the United States. The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean Water and Drinking Water State Revolving Funds for carrying out the provisions for management and oversight of the requirements of this section.

### **FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will work to increase by \$8 billion the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs (CWSRF, DWSRF and WIFIA). For FY 2022, EPA requests approximately \$1.36 billion for the DWSRF to help finance critical infrastructure improvement projects to public drinking water systems. The funding will accelerate infrastructure replacements and investments. The investments support several priority areas including climate

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<sup>589</sup> Safe Drinking Water Act Sections 1452(i)(1), 1452(i)(2), 1452(j), and 1452(o), as amended.

change, environmental justice, and creating good paying jobs. The program will encourage states to prioritize funding for projects focused on climate change resiliency. In FY 2022, EPA requests over \$3.2 billion for the Drinking Water and Clean Water State Revolving Funds (SRFs), combined. The SRF infrastructure budget, combined with the funding provided by the Water Infrastructure Finance and Innovation Act (WIFIA) Program, provides robust funding for critical drinking and wastewater infrastructure.

Along with the FY 2022 budget, President Biden's American Jobs Plan supports aging water systems that threaten public health in thousands of communities nationwide. To eliminate all lead pipes and service lines in the country, this proposal invests \$45 billion in the DWSRF and in Water Infrastructure Improvements for the Nation Act (WIIN) grants. In addition to reducing lead exposure in the homes, this investment also will reduce lead exposure in 400,000 schools and childcare facilities. The investment also will allow funding recipients to conduct lead service line surveys to know where to target replacement.

The requested funding level reflects the documented needs for drinking water infrastructure and the need to improve infrastructure in small and disadvantaged communities. EPA will continue to foster its strong partnership with the states to provide small system technical assistance with a focus on compliance with rules, operational efficiencies, and system sustainability to ensure clean and safe water. In FY 2022, EPA also will continue to expand local utilities' and existing state programs' knowledge of the funding options available to meet future infrastructure needs.

EPA will continue to work to target a significant portion of assistance from SRFs to small and disadvantaged communities with limited ability to repay loans. In FY 2022, EPA will work with states to ensure that the mandated SDWA requirement for additional subsidization is met. SDWA requires that states provide subsidization to assist disadvantaged communities of six percent to 35 percent of the state's capitalization grant, and in recent appropriations Congress also has mandated an additional level of subsidization.

In FY 2022, the DWSRF Program will continue to implement the Clean Water and Drinking Water Infrastructure Sustainability Policy. This policy focuses on promoting system-wide planning that helps align water infrastructure system goals, analyzing a range of infrastructure alternatives, including energy efficient alternatives, and ensuring that systems have the financial capacity and rate structures to construct, operate, maintain, and replace infrastructure over time.

In FY 2022, EPA is continuing emphasis on strengthening small system technical, managerial, and financial capability through the Capacity Development Program, the Operator Certification Program, the Public Water System Supervision State Grant Program, and the DWSRF. The Capacity Development Program establishes a framework within which states and water systems can work together to help these small systems achieve the SDWA's public health protection objectives. The state Capacity Development Programs are supported federally by the Public Water System Supervision state grant funds and the set-asides established in the DWSRF. In FY 2022, EPA will continue to work with states to review and update their capacity development strategies to include asset management as required by AWIA.

EPA also is seeking more efficient use of federal infrastructure funds by empowering communities to increase water infrastructure investments and non-federal dollars leveraged by water infrastructure finance programs (Clean Water and Drinking Water SRF and WIFIA) to repair and modernize the outdated American water infrastructure.

**Performance Measure Targets:<sup>590</sup>**

<b>(PM DW-02) Community water systems still out of compliance with health-based standards since September 30, 2017.</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	875	701

<b>(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	8.0	8.0

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$231,846.0) This program change increases funding to accelerate water infrastructure replacements and investments. The investment supports several priority areas including climate change, environmental justice, and creating good paying jobs.

**Statutory Authority:**

Safe Drinking Water Act § 1452.

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<sup>590</sup> The Agency has made a technical correction to the baseline for the long-term performance goal associated with this program. The adjusted long-term performance goal is “By September 30, 2022, reduce the number of community water systems still in noncompliance with health-based standards since September 30, 2017, to 701.”

**Gold King Mine Water Monitoring**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$3,280.3</i>	<i>\$4,000.0</i>	<i>\$4,000.0</i>	<i>\$0.0</i>
Total Budget Authority	\$3,280.3	\$4,000.0	\$4,000.0	\$0.0
Total Workyears	0.6	0.0	0.0	0.0

**Program Project Description:**

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure issues as well as improving water quality across the country.

The FY 2022 request of \$4 million will continue to fund the Gold King Mine Program (also referred to as the San Juan Watershed Program). This program was established under Section 5004 of the WIIN Act. EPA and the states and tribes in the San Juan watershed—Arizona, Colorado, New Mexico, Utah, Navajo Nation, Ute Mountain Ute Tribe, and Southern Ute Indian Tribe—are working together to monitor water quality and use the best available data and science to continue improving water quality<sup>591</sup>.

**FY 2022 Activities and Performance Plan:**

EPA, in collaboration with state and tribal partners, will continue to monitor and inform stakeholders about water quality and are preparing to fund pollution prevention and restoration projects that will seek to restore the watershed.

**Performance Measure Targets:**

EPA’s FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Water Infrastructure Improvements for the Nation Act, Title IV, § 5004(d); Clean Water Act § 106.

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<sup>591</sup> For more information, please see: <http://www.epa.gov/sanjuanwatershed>.



**Infrastructure Assistance: Mexico Border**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$26,854.8</i>	<i>\$30,000.0</i>	<i>\$30,000.0</i>	<i>\$0.0</i>
Total Budget Authority	\$26,854.8	\$30,000.0	\$30,000.0	\$0.0

**Program Project Description:**

EPA works collaboratively with United States (U.S.) federal, state, and local partners and the Mexican water agency - CONAGUA - through the U.S.-Mexico Border Water Infrastructure Program to fund planning, design, and construction of high-priority water and wastewater treatment facilities for underserved communities along the border. Investments in wastewater and drinking water infrastructure in communities on both sides of the U.S.-Mexico Border reduce disease and health care costs associated with exposure to raw sewage and drinking water contaminants causing acute and chronic illnesses. U.S.-Mexico Border Water Infrastructure projects stimulate local economies through public health-related economic gains, job creation, and increased demand for goods and services.

Untreated sewage flowing north into the U.S. from Tijuana, Mexicali, and Nogales pollutes important water bodies like the Tijuana, New River, and Santa Cruz rivers. Untreated sewage also pollutes shared waters, such as the Rio Grande, Pacific Ocean, and the Gulf of Mexico. The close proximity and intermingling of border communities that have poor quality drinking water and sanitation poses a serious risk of disease transmission. The U.S. and Mexico share more than two thousand miles of common border from the Gulf of Mexico to the Pacific Ocean and over 62 miles on either side of the international border. The border region is home to more than 15.2 million people with about 8 million living in the U.S. (U.S. Census Bureau 2017 estimates) and more than 7 million living in Mexico's Border Municipalities (Instituto Nacional de Estadística y Geografía-INEGI, 2015 estimate). Twenty-six U.S. federally recognized Native American tribes also are located in the U.S.-Mexico border region.

To date, the program has funded 136 projects. More than nine million people are benefiting from 101 completed projects, and nearly 1.3 million people will benefit from projects currently under construction. Since 2003, the program has provided approximately 61,021 homes with first time access to safe drinking water and around 891,732 homes with first time access to wastewater collection/treatment.

The EPA's Border Water Infrastructure Program is unique among federal funding programs. It is the only federal program that can fund projects on both sides of the border. Citizens of the U.S. benefit from all projects since all funded projects must demonstrate that they will provide a positive public health and/or environmental benefit to the U.S., whether the project is located in the U.S. or Mexico. For example, a wastewater project in Mexico can only be funded if that sewage would otherwise contaminate a U.S. waterbody. Treating these waters after they have been contaminated

and have crossed the border into the U.S. is neither technically feasible nor financially viable. The Agency's investments in the Mexican side projects have represented only a third of the total project construction costs, while leveraging two thirds of the remaining total costs from the Mexican government and other funding sources, and preventing contamination from raw sewage discharges in shared waters. The EPA's investment leverages Mexican funds for the benefit of the U.S. If not for the Agency's investment, Mexican funds would likely be invested in other parts of Mexico that do not directly benefit the U.S. Preventing raw sewage discharges to shared water resources is especially critical in a region that is already facing water scarcity challenges.

The close bi-national cooperation in this program has improved public health and water quality. Improving access to clean and safe water is a key focus of the *Border 2020 Plan*, the bi-national agreement that guides efforts to improve environmental conditions in the U.S.-Mexico Border region.

The U.S.-Mexico Border Program is one of the few federal programs that assists communities in the planning and design of water and sanitation infrastructure projects. Planning and design are essential to advance projects to a construction ready stage, create sustainable communities and access public and private funding. Twenty-six projects with construction costs of approximately \$131.6 million are currently in planning and design. More than 2.4 million border residents will benefit once all these projects are complete.

U.S.-Mexico Border communities are looking to EPA as a last-resort funding source when utilities, cities, or states are not able to fully finance needed infrastructure improvements. The program serves communities that often lack the debt capacity to apply for other funding sources, including EPA's State Revolving Funds. To improve opportunities for communities to request funding support for these critical investment needs, in FY 2017, EPA, in coordination with the North American Development Bank, modified the process to allow for applications to be submitted on a continuous basis through an on-line format available 24 hours a day and seven days per week. Since 2017, a total of 31 applications have been selected and are currently in development or construction. Those applications represent an estimated construction investment need of over \$300 million. The program continues to receive new applications and evaluates these on, at least, a quarterly basis.

EPA investments in these wastewater projects are protecting public health from waterborne diseases and have been a key factor in significant water quality improvements in U.S. waterbodies, such as the Rio Grande (Texas and New Mexico), Santa Cruz River (Arizona), New River (California), and Tijuana River and Pacific Ocean (California). In both the New River and the middle Rio Grande, for example, fecal coliform levels have dropped by over 80 percent (as a result of jointly funded wastewater treatment plants built in Mexicali and Ojinaga, Mexico, respectively). California beaches in the border region that were once closed throughout the year due to wastewater pollution from Mexico now remain open throughout the summer, resulting in decreased health risks to beachgoers and an economic benefit for local governments. The Santa Cruz River now supports a healthy fish population where a few years ago only bloodworms thrived.

### **FY 2022 Activities and Performance Plan:**

With the requested \$30 million for FY 2022, the U.S.-Mexico Border Water Infrastructure Program will continue to fund high-priority water and wastewater infrastructure projects. Projects that receive funding have been evaluated and ranked using a risk-based prioritization system, which enables the program to direct grant funding to projects that demonstrate human health benefits, cost-effectiveness, institutional capacity, and sustainability. EPA coordinates at local, national, and bi-national levels to assess the environmental needs and make prioritized funding decisions. All program funding will be invested in projects that, whether located in the U.S. or Mexico, provide a positive public health and/or environmental benefit to the U.S. The U.S. benefits include improved quality of U.S. water bodies and shared waters and reduced health risk to the U.S. population. The demonstration of a U.S. benefit is one of the fundamental eligibility criteria for projects seeking program assistance.

The U.S.-Mexico Border Water Infrastructure Program will continue to work with the ten border states (four U.S. and six Mexican) and local communities to improve the region's water quality and public health. The U.S. and Mexican governments will collaborate on water infrastructure projects to reduce health risks to residents, including sensitive populations of children and elders, many of whom currently lack access to safe drinking water and sanitation. Additionally, by providing homes with access to basic sanitation, EPA and its partners will reduce the discharge of untreated wastewater into surface water and groundwater.

FY 2022 funding will be allocated to a portion of the construction of projects that have completed planning and design and are ready to move to construction. Final decisions on the use of FY 2022 funding will be based on balancing the construction needs of fully designed projects with the planning and design needs of prioritized projects.

### **Performance Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

### **FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

### **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)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$61,066.4</i>	<i>\$59,000.0</i>	<i>\$59,000.0</i>	<i>\$0.0</i>
Total Budget Authority	\$61,066.4	\$59,000.0	\$59,000.0	\$0.0

**Program Project Description:**

This program awards competitive grant funding to reduce air pollution in nonattainment areas that were ranked as the top five most polluted areas relative to ozone, annual average fine particulate matter (PM<sub>2.5</sub>), or 24-hour PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS). In FY 2020, over \$56 million in competitive grant funds were allocated for this program. This program assists air pollution control agencies in conducting emission reduction activities in these nonattainment areas. The overall goal of the Targeted Airshed Grant Program is to reduce air pollution in the Nation’s areas with the highest levels of ozone and PM<sub>2.5</sub> ambient air concentrations.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports the President’s priorities to tackle the climate crisis and advance environmental justice. The targeted airshed grant program provides funding to air pollution control agencies with responsibilities for the State Implementation Plan (SIP) or Tribal Implementation Plan (TIP) for the eligible nonattainment areas. This program can fund any activities that achieve documentable emission reductions to assist applicable nonattainment areas meet the NAAQS.

Air pollution control agencies that have responsibilities for these areas will continue to implement projects that improve the air quality in the listed nonattainment areas. Expected projects include:

- Replacing vehicles, engines, or equipment;
- Replacing or retrofitting heat devices (e.g., wood burning stoves, fireplaces); and
- Other projects that achieve quantifiable emission reductions for the applicable pollutant(s), such as road paving, providing dry seasoned wood, and other residential wood smoke reduction activities.

Anticipated projects will achieve demonstrable reductions in air pollutants that contribute to the nonattainment status of the eligible areas, including reductions in direct PM<sub>2.5</sub>, NO<sub>x</sub>, volatile organic compounds (VOCs), SO<sub>2</sub>, and/or ammonia. They will provide direct health and environmental benefits to communities. Priority funding for these grants go to emission reduction projects that promote environmental justice in eligible nonattainment areas based on how well the projects will effectively address the disproportionate and adverse cumulative impacts (human health, environmental, climate-related and others) that have affected and/or currently affect people/communities of color, low income, tribal, and indigenous populations.

Over their lifetime, the projects funded by the thirteen FY 2019/FY 2020 Targeted Airshed Grants that were awarded are estimated to reduce total emissions of particulate matter by approximately 5,600 tons and ozone precursors by approximately 6,700 tons.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Safe Water for Small & Disadvantaged Communities**  
 Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>State and Tribal Assistance Grants</i></b>	<b><i>\$14,182.4</i></b>	<b><i>\$26,408.0</i></b>	<b><i>\$41,413.0</i></b>	<b><i>\$15,005.0</i></b>
Total Budget Authority	\$14,182.4	\$26,408.0	\$41,413.0	\$15,005.0
Total Workyears	1.3	1.0	1.0	0.0

**Program Project Description:**

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure and compliance issues around the country. The 2018 America’s Water Infrastructure Act, authorizes EPA to award Assistance for Small and Disadvantaged Communities Drinking Water Grants to states to assist public water systems in underserved, small and disadvantaged communities that are unable to finance activities needed to comply with the National Drinking Water Regulations as well as respond to drinking water contaminants.

**FY 2022 Activities and Performance Plan:**

To assist small and disadvantaged communities with improving their drinking water resources, EPA is requesting \$41.4 million in FY 2022. The \$15 million increase will provide additional grant funding and reflects the President’s priority of addressing lead and other contaminants in drinking water, especially in small and disadvantaged communities. These grants are awarded as non-competitive grants to states, with a separate tribal allotment. The grant program provides assistance to underserved communities that have no household drinking water or wastewater services or are served by a public water system that violates or exceeds any maximum containment level, treatment technique, or action level. Projects eligible for assistance include those designed to return a public water system to compliance; efforts that benefit disadvantaged communities on a per household basis; programs to provide household water quality testing, including testing for unregulated contaminants; and activities necessary for a state to respond to a contaminant.

**Performance Measure Targets:**

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$3.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+\$15,002.0) This increase provides additional grant funding and reflects the President's priority of addressing lead and other contaminants in drinking water, especially in small and disadvantaged communities. These funds have been identified as climate and environmental justice priorities.

**Statutory Authority:**

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2104; Consolidated Appropriations Act, 2021, Pub. L.116-260.

**Reducing Lead in Drinking Water**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>State and Tribal Assistance Grants</i></b>	<b><i>\$3,342.0</i></b>	<b><i>\$21,511.0</i></b>	<b><i>\$81,515.0</i></b>	<b><i>\$60,004.0</i></b>
Total Budget Authority	\$3,342.0	\$21,511.0	\$81,515.0	\$60,004.0
Total Workyears	1.3	1.0	1.0	0.0

**Program Project Description:**

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure issues around the country.

The Reducing Lead in Drinking Water grant program was established in Section 2105 of WIIN. Objectives of the grant program are to reduce the concentration of lead in drinking water by: 1) replacing publicly owned lead service lines; 2) identifying and addressing conditions that contribute to increased concentration of lead in drinking water; and 3) providing assistance to low-income homeowners to replace lead service lines. Priority will be given to applications from disadvantaged communities. In FY 2020, EPA announced the availability of \$40.0 million in grant funding to assist disadvantaged communities with removing sources of lead in drinking water from drinking water systems and schools. In FY 2021, EPA selected ten projects to award the funding and address the objectives of the grant in disadvantaged communities across the Nation.

**FY 2022 Activities and Performance Plan:**

Work in this program directly supports efforts related to the reduction of lead exposures and associated health impacts in disadvantaged communities through infrastructure and/or treatment improvements in public drinking water systems, or the remediation and/or replacement of drinking water infrastructure in schools and childcare facilities. The FY 2022 request includes \$81.5 million for the Reducing Lead in Drinking Water grant program. Funding will be used to provide grants to eligible entities for lead reduction projects in the United States. This increase will allow EPA to fund an additional 10-15 projects across the country.

**Performance Measure Targets:**

Work under this program supports the Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.



**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$2.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$60,002.0) This program change increases funding to support the President's priority of addressing lead in drinking water, especially in small and disadvantaged communities. These funds have been identified as climate and environmental justice priorities.

**Statutory Authority:**

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2105; Consolidated Appropriations Act, 2021, Pub. L. 116-260.

**Lead Testing in Schools**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$52,196.5</i>	<i>\$26,500.0</i>	<i>\$36,500.0</i>	<i>\$10,000.0</i>
Total Budget Authority	\$52,196.5	\$26,500.0	\$36,500.0	\$10,000.0

**Program Project Description:**

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure issues. The America’s Water Infrastructure Act of 2018 (AWIA) strengthened many existing programs within EPA, including a number of programs authorized by WIIN, while creating new programs to tackle significant public health concerns and environmental needs.

The Voluntary School and Child Care Lead Testing Grant Program was established in Section 2107 of WIIN and amended by Section 2006 of AWIA. Objectives of the grant program are to reduce childhood exposure to lead in drinking water by helping states target funding to schools and childcare programs unable to pay for testing and establishing best practices for preventing lead in drinking water. In FY 2019, EPA awarded \$43.7 million in funding for the Program for all 50 states and the District of Columbia. In FY 2020 and FY 2021, EPA announced \$26.0 million and \$26.5 million, respectively, for the Program, continuing work in funding the states, the District of Columbia, and new participants such as Puerto Rico, American Samoa, and the United States Virgin Islands, to implement the program.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA is requesting \$36.5 million to continue providing grants to assist local educational agencies in voluntary testing of lead contamination in drinking water at schools and childcare programs. The FY 2022 increase will support the President’s priority on addressing lead in drinking water, especially in small and disadvantaged communities. The goals of the grant program are to: reduce children’s exposure to lead in drinking water; help states target funding toward schools unable to pay for testing; utilize the Training, Testing, and Taking Action (3Ts) approach to establish best practices for a lead in drinking water prevention program; foster sustainable partnerships at the state and local level to allow for more efficient use of existing resources and exchange of information among experts in various education and health sectors; and enhance community, parent, and teacher cooperation and trust. The additional \$10.0 million will improve drinking water quality for vulnerable populations and help schools better protect children in small and disadvantaged communities from adverse effects of lead in drinking water.

**Performance Measure Targets:**

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$10,000.0) This program change increases resources to support the President's priority on addressing lead in drinking water and providing additional funds to states to target funding to schools and childcare programs that are unable to pay for testing and establishing best practices for preventing lead in drinking water, especially in small and disadvantaged communities.

**Statutory Authority:**

Safe Drinking Water Act § 1464(d), as amended by AWIA, Pub. L. 115-270 § 2006.

**Drinking Water Infrastructure Resilience and Sustainability**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$0.0</i>	<i>\$4,000.0</i>	<i>\$9,000.0</i>	<i>\$5,000.0</i>
Total Budget Authority	\$0.0	\$4,000.0	\$9,000.0	\$5,000.0

**Program Project Description:**

The America’s Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues in both small and large communities across the United States. 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. AWIA mandates range from the creation of grant programs to promoting water quality workforce development.

Section 2005 of AWIA required 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 continue to be critical to achieving the Administration’s priorities by increasing water infrastructure investment and improving drinking water and water quality especially in underserved and disadvantaged communities across the country.

**FY 2022 Activities and Performance Plan:**

The FY 2022 request includes \$9.0 million to fund the Drinking Water Infrastructure Resilience and Sustainability Grant Program. This request supports the President’s priority of assisting eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards.

Program activities in FY 2022 include the conservation of water or the enhancement of water use efficiency; the modification or relocation of existing drinking water system infrastructure, 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. The FY 2022 increase will allow EPA to fund more projects across the country, accelerating the pace of water systems strengthening their resilience.

**Performance Measure Targets:**

Work under this program supports performance results in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision Programs under the STAG appropriation and the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$5,000.0) This program change increases support for water infrastructure in communities, ensuring access to safe drinking water and supports the President's priority of assisting eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards. These funds have been identified as a climate priority and will allow EPA to fund more projects across the country, accelerating the pace of water systems strengthening their resilience.

**Statutory Authority:**

America's Water Infrastructure Act of 2018, P.L. 115-270, Section 2005.

**Technical Assistance for Treatment Works**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$0.0</i>	<i>\$18,000.0</i>	<i>\$18,000.0</i>	<i>\$0.0</i>
Total Budget Authority	\$0.0	\$18,000.0	\$18,000.0	\$0.0

**Program Project Description:**

The America’s Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. AWIA strengthens the federal government’s ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation’s waterways can remain clean and free from pollution. AWIA also 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. Mandates range from the creation of grant programs to promoting water quality workforce development. AWIA programs will help achieve the Administration’s priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

Section 4103 of AWIA authorizes EPA to provide grants to nonprofit organizations to help rural, small, and tribal municipalities to: 1) obtain Clean Water State Revolving Fund (CWSRF) financing; 2) protect water quality and achieve and maintain compliance with the requirements of the Clean Water Act (CWA); and 3) disseminate planning, design, construction, and operation information for small publicly owned wastewater systems and decentralized wastewater treatment systems. This training and technical assistance will assist small rural wastewater systems, many of which are underserved and marginalized, to improve operational performance and sustainable operations over the long term, thereby improving public health and water quality and protecting infrastructure investments. This funding will provide training to operators, staff, and managers on sustainable and effective management, financial, and operational practices.

**FY 2022 Activities and Performance Plan:**

The FY 2022 President’s budget request of \$18.0 million will continue funding for the Technical Assistance for Treatment Works Grant Program. The program supports the President’s Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. In FY 2022, EPA will continue to provide grants to nonprofit organizations to support training and technical assistance to help rural, small, and tribal municipalities obtain CWSRF financing, protect water quality and ensure CWA compliance, and share information on planning, design, construction, and operation of wastewater systems. EPA anticipates making awards of the FY 2021 resources by the end of calendar year 2021.

**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 Act (WIFIA) Program under the WIFIA appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

AWIA, P.L. 115-270, Section 4103.

**Sewer Overflow Control Grants**

Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<i>State and Tribal Assistance Grants</i>	<i>\$59.2</i>	<i>\$40,000.0</i>	<i>\$60,000.0</i>	<i>\$20,000.0</i>
Total Budget Authority	\$59.2	\$40,000.0	\$60,000.0	\$20,000.0

**Program Project Description:**

The America’s Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. AWIA 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. Mandates range from the creation of grant programs to promoting water quality workforce development. AWIA programs will help achieve the Administration’s priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

The Sewer Overflow and Stormwater Reuse Municipal Grant (OSG) Program provides grants to fund projects at treatment works that reduce the incidence of combined sewer overflows, sanitary sewer overflows, stormwater issues, and strengthen climate resiliency. Many underserved and marginalized communities face these issues and may benefit from the work funded by these grants. EPA aims to issue grant awards for this program beginning in FY 2021.

On February 24, 2021, EPA published a *Federal Register* Notice establishing the allocation formula for the upcoming OSG program. This formula describes how EPA will distribute program funds for the states, District of Columbia, and the United States territories to provide grants to municipalities to manage combined sewer overflows, sanitary sewer overflows, and stormwater flows.<sup>592</sup>

**FY 2022 Activities and Performance Plan:**

The FY 2022 request includes \$60 million for the OSG program. The \$20 million increase will be used to help local officials mitigate the impact of extreme weather events on the neighborhoods and livelihoods of their residents. As these events can have a disparate impact on residents of disadvantaged communities, this investment supports the Administration’s priority for environmental justice.

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<sup>592</sup> For more information please visit: <https://www.federalregister.gov/documents/2021/02/24/2021-03756/state-formula-allocations-for-sewer-overflow-and-stormwater-reuse-grants>.



Section 4106 of AWIA re-authorizes and amends the OSG program components for addressing sewer overflows and stormwater management. EPA will award grants using a formula that captures stormwater needs.<sup>593</sup> 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.

**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 Act (WIFIA) Program under the WIFIA appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$20,000.0) This program change increases resources to help local officials mitigate the impact of extreme weather events on the infrastructure and management of combined sewer overflows, sanitary sewer overflows, and stormwater issues. As these events can have a disparate impact on residents of disadvantaged communities, this investment supports the Administration's priority for environmental justice.

**Statutory Authority:**

America's Water Infrastructure Act of 2018, P.L. 115-270, Section 4106, Sec 221 Clean Water Act (33 USC 1301).

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<sup>593</sup> For more information please visit: <https://www.epa.gov/cwsrf/sewer-overflow-and-stormwater-reuse-municipal-grants-program>.

**Water Infrastructure and Workforce Investment**  
 Program Area: State and Tribal Assistance Grants (STAG)

(Dollars in Thousands)

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<i>State and Tribal Assistance Grants</i>	<i>\$0.0</i>	<i>\$3,000.0</i>	<i>\$3,000.0</i>	<i>\$0.0</i>
Total Budget Authority	\$0.0	\$3,000.0	\$3,000.0	\$0.0

**Program Project Description:**

The America’s Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and in small rural communities. AWIA strengthens the federal government’s ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation’s waterways can remain clean and free from pollution. AWIA also 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. Mandates range from the creation of grant programs to promoting water quality workforce development. AWIA programs will help achieve the Administration’s priorities through increasing water infrastructure investment and improving drinking water and water quality across the country.

Section 4304 of AWIA required 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 experienced and qualified non-profit, labor, or educational institutions that can address diverse types of water utilities. The Program will assist in the development and utilization of activities related to workforce development and career opportunities in the water utility sector. Providing this funding promotes the direct connection to industry employers for a skilled and diverse workforce. Water and wastewater utilities provide a unique opportunity to offer high-quality careers and it is imperative to invest in a skilled and diverse workforce for the future.

**FY 2022 Activities and Performance Plan:**

The FY 2022 request of \$3.0 million continues funding for the innovative Water Infrastructure and Workforce Development Investment Grant Program, to: 1) assist in the development and use of innovative activities relating to water workforce development and career opportunities in the drinking water and wastewater utility sector and 2) expand public awareness about drinking water and wastewater utilities and to connect individuals to careers in the drinking water and wastewater utility sector.<sup>594</sup> Program funding can support activities such as internship, pre-apprenticeship, apprenticeship, and post-secondary bridge programs; education programs for elementary,

<sup>594</sup>For more information, please see: <https://www.epa.gov/sustainable-water-infrastructure/innovative-water-infrastructure-workforce-development-program>.

secondary, and higher education students; regional industry and workforce collaboratives; secondary integrated learning laboratories; and leadership development.

**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 Act (WIFIA) Program under the WIFIA appropriation.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**Statutory Authority:**

42 U.S.C. 300j-19e, AWIA, P.L. 115-270, Section 4304.



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**APPROPRIATION: Water Infrastructure Finance and Innovation Fund  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Water Infrastructure Finance and Innovation Fund</b>				
Budget Authority	\$40,760.6	\$65,000.0	\$80,108.0	\$15,108.0
Total Workyears	27.6	28.4	40.0	11.6

**Bill Language: Water Infrastructure Finance and Innovation Fund**

*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, \$72,108,000, 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 \$12,500,000,000: Provided further, That of the funds made available under this heading, \$5,000,000 shall be used solely for the cost of direct loans and for the cost of guaranteed loans for projects described in section 5026(9) of the Water Infrastructure Finance and Innovation Act of 2014 to State infrastructure financing authorities, as authorized by section 5033(e) of such Act: Provided further, That the use of direct loans or loan guarantee authority under this heading for direct loans or commitments to guarantee loans for any project shall be in accordance with the criteria published in the Federal Register on June 30, 2020 (85 FR 39189) pursuant to the fourth proviso under the heading "Water Infrastructure Finance and Innovation Program Account" in division D of the Further Consolidated Appropriations Act, 2020 (Public Law 116–94): Provided further, That none of the direct loans or loan guarantee authority made available under this heading shall be available for any project unless the Administrator and the Director of the Office of Management and Budget have certified in advance in writing that the direct loan or loan guarantee, as applicable, and the project comply with the criteria referenced in the previous proviso: Provided further, That, for the purposes of carrying out the Congressional Budget Act of 1974, the Director of the Congressional Budget Office may request, and the Administrator shall promptly provide, documentation and information relating to a project identified in a Letter of Interest submitted to the Administrator pursuant to a Notice of Funding Availability for applications for credit assistance under the Water Infrastructure Finance and Innovation Act Program, including with respect to a project that was initiated or completed before the date of enactment of this Act.*

*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.*

*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, \$8,000,000, to remain available until September 30, 2023.*

**Program Projects in WIFIA**  
(Dollars in Thousands)

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Water Quality Protection				
Water Infrastructure Finance and Innovation	\$40,760.6	\$65,000.0	\$80,108.0	\$15,108.0
<b>TOTAL WIFIA</b>	<b>\$40,760.6</b>	<b>\$65,000.0</b>	<b>\$80,108.0</b>	<b>\$15,108.0</b>



## **Water Quality Protection**

## Water Infrastructure Finance and Innovation

Program Area: Water Quality Protection

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b><i>Water Infrastructure Finance and Innovation Fund</i></b>	<b><i>\$40,760.6</i></b>	<b><i>\$65,000.0</i></b>	<b><i>\$80,108.0</i></b>	<b><i>\$15,108.0</i></b>
Total Budget Authority	\$40,760.6	\$65,000.0	\$80,108.0	\$15,108.0
Total Workyears	27.6	28.4	40.0	11.6

### **Program Project Description:**

Communities across the country are facing the challenge of finding sustainable and affordable financing to update aging water infrastructure. In addition, critical water infrastructure is vulnerable to flooding and other climate change-related weather events. Our nation's health and wellbeing are dependent on equitable access to drinking water, wastewater, and stormwater systems; however, thousands of communities nationwide are burdened by aging systems that threaten public health. Too many communities whose residents are predominantly of color, indigenous, or low-income suffer disproportionately from lack of modern water infrastructure. To help address these challenges, Congress enacted the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA).

With a small expenditure of federal funds, the WIFIA Program creates powerful leverage resulting in significant funding for water infrastructure projects that protect public health and deliver environmental benefits while supporting local economies and creating jobs. Since 2017, the WIFIA Program has maximized \$255 million in federal funding appropriated by Congress to offer communities \$24.5 billion in credit assistance that, once fully committed through loan agreements, will stimulate over \$49 billion in infrastructure investments. Water utilities have responded, in only four years, WIFIA has received 223 Letters of Interest from borrowers in 43 states and territories.

The WIFIA Program is delivering results. As of May 1, 2021, the Program has issued 50 loans to communities across the country totaling over \$9 billion in credit assistance to help finance nearly \$20 billion for water infrastructure projects. WIFIA loans for these projects have saved communities more than \$4 billion, which they will use to accelerate additional infrastructure investment and keep rates affordable for water system users. These WIFIA financed projects are creating over 49,000 jobs and serving over 31 million people. This demonstrates that WIFIA credit assistance is an effective tool to help address a variety of water infrastructure needs to support all manner of communities nationwide.

The WIFIA Program provides and services direct loans to cover up to 49 percent of eligible costs for water infrastructure projects of regional or national significance. The Program is able to lend its support to a diverse borrower base, including economically-stressed and disadvantaged communities, as well as private companies, and its lending complements the existing State

Revolving Fund 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. The Program supports financing for the rehabilitation and construction of water, wastewater, and stormwater systems to address aging infrastructure, meet regulatory requirements, and help improve communities' long-term strategic, financial, and climate resiliency planning. The Program encourages new revenue streams for infrastructure investment and allows public agencies to complete more projects.

The WIFIA Program is borrower-focused, with a number of flexible terms for credit assistance to stimulate investment while minimizing costs for ratepayers. These flexibilities are designed to increase and accelerate investment in critical water infrastructure projects and include low interest rates. To date, WIFIA borrowers have received interest rates as low as 0.83 percent, with an average interest rate of 1.60 percent. Borrowers also have the options to capitalize interest, backload repayments, and preserve their senior debt capacity.

To help drive progress, between FY 2020 – FY 2021, the Agency will increase by \$16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (i.e., Clean Water State Revolving Fund (CWSRF), Drinking Water State Revolving Fund (DWSRF), and WIFIA). During FY 2018 and FY 2019, EPA increased the non-federal dollars leveraged by EPA water infrastructure finance programs by \$20 billion. The success is due to the collaborative efforts of EPA, states, and local communities. As of March 2021, over \$17.5 billion has been leveraged in FY 2020 and FY 2021.

### **FY 2022 Activities and Performance Plan:**

The FY 2022 request builds on the Program's success accelerating water infrastructure investment that provides for clean and safe water, and it enables the Program to continue to offer support for small and disadvantaged communities while promoting EPA's commitment to environmental justice. With the requested \$80 million, including \$72 million in credit subsidy, EPA could provide up to \$8 billion in direct credit assistance, which when combined with other funding sources could help spur over \$16 billion in total infrastructure investments.

Of the total \$80 million request to implement the Program, \$8 million is for EPA's management and operation administrative expenses, including contract support and associated program payroll. The requested funding 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.

The FY 2022 budget request also includes authority to use fee revenue as outlined in the Water Resources Reform and Development Act, Sections 5029(a), 5030 (b), and 5030(c).<sup>595</sup> 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 \$8 million request for management and operations administrative expenses.

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<sup>595</sup>For more information see EPA Fee Rule: <https://www.federalregister.gov/documents/2017/06/28/2017-13438/fees-for-water-infrastructure-project-applications-under-wifia>.

Sufficient management and operation funding levels allow the credit subsidy to finance a high level of infrastructure investment. The level of management and operation funding is directly attributable to the number of projects funded and the level of credit subsidy utilized to finance a high level of infrastructure investment. High quality underwriting and technical reviews allow EPA to properly mitigate risk, which in turn allows the credit subsidy to support a greater number of projects. Additionally, high quality portfolio monitoring and management is critical to ensuring the Program’s long-term solvency. Stable funding is critical to ensuring that America’s water infrastructure financing needs are met.

Considering recent economic uncertainty resulting from the COVID-19 pandemic, the Program has been monitoring sector level and borrower specific developments. As utilities consider impacts on capital plans, the Program has prepared for the potential impacts of COVID-19 throughout 2021. However, the Program has not identified significant changes in demand from borrowers. WIFIA lending is more important than ever during this period of economic uncertainty, as the Program has been able to provide important flexibilities to communities in the form of no carrying costs, flexible repayment schedules, and significant interest rate savings.

**Performance Measure Targets:**

<b>(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
	8.0	8.0

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- (+\$130.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,370.0 / +11.6 FTE) This increase of resources and FTE supports work in loan servicing and operations, which includes pre-closing financial, technical, and legal reviews, as well as post-closing portfolio management and monitoring, to maintain the Program’s pace and quality of service to its borrowers. This investment also includes \$2,052.0 thousand in payroll costs and essential workforce support costs for the increase in FTE.
- (+\$12,608.0) This increase in resources supports the growing demand for WIFIA loans from communities.

**Statutory Authority:**

Water Infrastructure Finance and Innovation Act of 2014.



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**APPROPRIATION: Hazardous Waste Electronic Manifest System Fund  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
<b>Hazardous Waste Electronic Manifest System Fund</b>				
Budget Authority	\$20,432.0	\$0.0	\$0.0	\$0.0
Total Workyears	9.3	11.0	11.0	0.0

**Bill Language: Hazardous Waste Electronic Manifest System Fund**

*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 2022, to remain available until expended.*

*Note – This language is proposed under the FY 2022 Administrative Provisions.*

**Program Projects in e-Manifest  
(Dollars in Thousands)**

<b>Program Project</b>	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	\$20,317.5	\$0.0	\$0.0	\$0.0
<b>TOTAL e-Manifest</b>	<b>\$20,317.5</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>



**Resource Conservation and Recovery Act (RCRA)**



**RCRA: Waste Management**

Program Area: Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	<b>FY 2020 Actuals</b>	<b>FY 2021 Enacted</b>	<b>FY 2022 Pres Budget</b>	<b>FY 2022 Pres Budget v. FY 2021 Enacted</b>
Environmental Programs & Management	\$64,884.9	\$70,465.0	\$71,082.0	\$617.0
<b><i>Hazardous Waste Electronic Manifest System Fund</i></b>	<b>\$20,317.5</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
Total Budget Authority	\$85,202.4	\$70,465.0	\$71,082.0	\$617.0
Total Workyears	273.6	296.8	296.8	0.0

Total workyears in FY 2022 include 11.0 FTE funded by e-Manifest fees.

**Program Project Description:**

The Resource Conservation and Recovery Act requires companies that ship hazardous waste to track and report the estimated two million shipments each year. The Hazardous Waste Electronic Manifest Establishment Act (e-Manifest Act, Public Law 112-195), enacted on October 5, 2012, required EPA to develop a fee-based electronic hazardous waste manifest system. EPA launched the e-Manifest system on June 30, 2018. From the e-Manifest Program launch through March 2021, EPA has received nearly 5 million manifests and collected over \$57 million in fees.

EPA estimates the e-Manifest system will reduce the burden associated with paper manifests by between 175,000 and 425,000 hours, saving state and industry users more than \$50 million annually, once electronic manifests are widely adopted.<sup>596</sup> Since the 2018 launch, e-Manifest has saved state programs over \$38 million dollars in processing, data entry, and storage costs. 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 implement the e-Manifest Program, including system development, fee collection authority, rulemaking, and advisory committee establishment. In FY 2022, e-Manifest continues to be fully supported by user fees, which includes support for continuing the development and operation of the system and agency personnel that support its use and further its implementation.

**FY 2022 Activities and Performance Plan:**

In FY 2022, EPA will operate the e-Manifest system and will collect and deposit user fees into the Hazardous Waste Electronic Manifest System Fund (approximately \$27 million is anticipated). The authority to collect and spend fees requires authorization from Congress in annual appropriations bills.

<sup>596</sup> For more information, please refer to: <https://www.epa.gov/e-manifest/learn-about-hazardous-waste-electronic-manifest-system-e-manifest>.

In FY 2022, EPA plans to perform the following key activities:

- Continue to implement and enhance electronic signature methods that will ease the logistical burdens of adopting greater use of the electronic and image plus data submission methods.
- Work with individual generators and generator associated groups to increase their registration and use of the e-Manifest system, which will allow for greater fully electronic adoption.
- Continue regular outreach with users and stakeholders to identify new ways to improve the e-Manifest system. This includes regular webinars and targeted demonstrations on how to use the e-Manifest system.
- Operate appropriate accounting and financial reporting interfaces needed to collect and manage user fees, adjust fees as appropriate, and comply with the auditing requirements of the Hazardous Waste Electronic Manifest Establishment Act.
- Hold periodic meetings of the e-Manifest Advisory Board, consisting of state and industry stakeholders and IT experts, to provide input on system operation and implementation of the user fee regulation.
- Develop and enhance the e-Manifest system software to expand developmental capabilities, increase ease of use, and improve program efficiencies.

**Performance Measure Targets:**

EPA's FY 2022 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2022 Change from FY 2021 Enacted Budget (Dollars in Thousands):**

- There is no change in program funding.

**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  
FY 2022 Performance Measures**

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**FY 2022 Performance Measures**

For additional information and past results on EPA's annual performance goals, see the EPA FY 2020 Annual Performance Report.

<b>Performance Measure</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
PM NA1) Number of Nonattainment Areas.	121	101
(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.	4,700	4,700
(PM DW-02) Community water systems still out of compliance with health-based standards since September 30, 2017.	875	701
(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).	8.0	8.0
(PM SWP-01) Square miles of watersheds with surface waters not meeting standards (cumulative).	539,536	531,536
(PM SWP-02) Square miles of watersheds with surface waters not meeting standards because of nutrients.	183,596	180,596
(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.	84	100
(PM NPDES-03) Number of existing EPA-issued NPDES permits in backlog.	230	93
(PM S10) Number of Superfund sites made ready for anticipated use site-wide.	51	51
(PM 170) Number of remedial action projects completed at Superfund sites.	80	80
(PM 151) Number of Superfund sites with human exposures brought under control.	10	15
(PM 137) Number of Superfund removals completed.	141	183
(PM B30) Number of brownfields sites made ready for anticipated use.	684	684
(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.	1.3	1.3

Performance Measure	FY 2021 Target	FY 2022 Target
(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.	133	140
(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.	73	49
(PM HW5) Number of permit renewals issued at hazardous waste facilities.	100	90
(PM RFW) Number of stakeholder actions taken to increase recycling and reduce food loss and waste.	9,750	10,733
(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.	11,200	11,200
(PM CR1) Number of confirmed releases at UST facilities	No Target Established	5,150
(PM P2mte) Reductions in metric tons of carbon dioxide equivalent (MTCO2e) released.	No Target Established	TBD
(PM SC1) Number of new products certified by the Safer Choice program.	200	200
(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines. <sup>597</sup>	N/A	N/A
(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.	1	0
(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.	80	100
(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.	100	100

Performance Measure	FY 2021 Target	FY 2022 Target
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<sup>597</sup> This measure has no targets available for FY 2021 and FY 2022 because there are no statutory deadlines in those years. For more information, see the FY 2020 Annual Performance Report at <https://www.epa.gov/planandbudget/fy-2020-annual-performance-report-apr>.

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.	110	122
(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.	60	20
(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.	607	595
(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where the original PRIA due date was not met.	263	256
(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).	99	99
(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.	10,000	10,000
(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.	75.00	100.00
(PM 444) Percentage of EPA inspection reports timely completed and sent within 70 days of inspection.	75	75
(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.	99	99
(PM 446) Quarterly percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.	12.7	10.1
(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.	325	325
(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting stakeholder needs.	81	82
(PM PE2) Number of new permit applications in backlog.	24	
(PM PE3) Number of existing permit applications in backlog.	256	
(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).	26,017	467,345
<b>Performance Measure</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.	95	97
(PM OP1) Number of operational processes improved.	500	540
(PM CF1) Number of administrative shared services.	9	10
(PM CF2) Number of Agency administrative subsystems.	19	17



**Environmental Protection Agency**

**FY 2022 Annual Evaluation Plan and Other Evidence-Building Activities**

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## EPA’s FY 2022 Annual Evaluation Plan

### Overview

The *Foundations for Evidence-Based Policymaking Act* (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure Agency decisions are made using the best available evidence. EPA’s FY 2022 Evaluation Plan describes significant program evaluations the Agency plans to undertake in FY 2022. Significant evaluations include those that support EPA’s ability to meet an Administrator Priority, is mandated by Congress, or being highlighted as a program priority.

### Office of Chemical Safety and Pollution Prevention (OCSPP)

<b>Title</b>	IT Modernization of EPA Pesticide Tracking Systems		
<b>Lead National Program</b>	Office of Chemical Safety and Pollution Prevention		
<b>Planned Start Date</b>	4/2019	<b>Planned completion date</b>	9/2024

**Purpose and brief description:** In April 2019, EPA kicked off Phase 1 of a multi-year digital transformation to create a fully electronic workflow system for EPA registration and reevaluation activities. This effort builds on the 2016 launch of the Pesticide Submission Portal, a secure, web-based portal in EPA’s Central Data Exchange (CDX) environment through which the public can electronically submit applications for EPA evaluation. In advance of the launch of the new system, EPA developed internal tracking metrics and established baselines of performance using the current Agency systems for review of applications. These metrics measure: 1) timeliness of review, 2) efficiencies realized as a result of the transformation effort, and 3) employee engagement. In July/ August 2020, a pilot of the new system went live for two of the three regulatory divisions within EPA’s Office of Pesticide Programs (OPP), as well as the Information Technology and Resource Management Division (ITRMD) which in-processes all applications. The pilot is specific to registration application workflows under Pesticide Registration Improvement Act (PRIA) and its reauthorizations.

The next phase of this effort will be the development of additional workflows and expansion to all of the divisions that support registration and reevaluation regulatory activities. By 2022, the focus will shift from improving employee user experience to improving customer experience, improving the ability of the regulated community, other stakeholders, partners, and the American public to directly engage with the regulatory and science efforts.

The nature of a digital transformation, pace of technological advancements, and software development lifecycle requires IT organizations to stay in a mode of continuous improvement. Therefore, the lifecycle would mandate that EPA begin to tackle modernization of various components of it as the Agency approaches the fifth year.



**Programmatic or policy decisions this activity will inform:** This activity will inform additional IT systems development.

**Question(s) this activity will address:**

- Will the digital transformation effort and the development and implementation of the Salesforce workflow system result in improved timeliness and performance regarding the review of pesticide registration and registration review activities?
- Will the improved user experience and productivity from the IT-modernization effort result in increased employee job satisfaction?

**Data, tools, method/analytical approach:** Using the information from EPA’s Pesticide Registration Information System (PRISM) and Office of Pesticide Program Information Network (OPPIN), EPA will establish baselines for time spent at each stage of the risk assessment and assess improvement in the overall review processes for registration and registration review cases. The Salesforce interface currently being piloted for antimicrobial and biopesticide applications will allow EPA to establish baselines for how much time is spent at each stage and assess improvements in review processes supporting new active ingredients registration determinations. The employee engagement metric will be tracked by evaluating results to specific questions and focus areas in EPA’s Employee Viewpoint Survey and comparing responses before and after implementation of the IT-modernization effort.

In addition, the augmented intelligence and advance data analytics within Salesforce will allow EPA to identify stages in the review process that present bottlenecks, allowing further system development and/or resource allocation to address identified concerns. Robotic Process Automation (RPA) will enable automation of many routine tasks allowing scientists and regulatory specialists to focus on higher value work.

**Anticipated challenges and proposed solutions:** Challenges preventing key partners from engaging with the digitization effort are related to contract acquisition and increased workload due to COVID-19. EPA is working to address the contract award to mitigate the contract acquisition challenge. The Agency also is adding flexibility for its partners by lengthening the requirement gathering to facilitate and address the increased workload.

**Dissemination of findings:** Process improvements relating to pesticide registration and registration review activities, as well as information technology improvements, are described annually in the PRIA annual report (<https://www.epa.gov/pria-fees/annual-reports-pria-implementation>).

**Office of Enforcement and Compliance Assurance (OECA)**

<b>Title</b>	Evaluate Impact of Pre-Deadline E-reminders on Discharge Monitoring Report (DMR) Non-Receipt		
<b>Lead National Program</b>	Office of Enforcement and Compliance Assurance		
<b>Planned Start Date</b>	7/2020	<b>Planned completion date</b>	1/2022

**Purpose and brief description:** On-time reporting is critical for effective environmental monitoring and enforcement. Self-reporting is integral to the statutory scheme underlying the National Pollutant Discharge Elimination System (NPDES) program, but compliance with DMR submission requirements remains a challenge. DMR non-receipt accounts for about 50 percent of Significant Non-Compliance (SNC) amongst NetDMR states. While prospective reminders hold promise to increase DMR submissions by NPDES permittees, such efforts remain novel and untested within this population. EPA is proposing to empirically test if reminders improve DMR submission timeliness. Many states have already expressed interest in prospective reminders to encourage timely DMR submissions by NPDES permittees, and Stanford and EPA aim through this pilot to prototype and assess the efficacy of such reminders for helping achieve the long term performance goal: by September 30, 2022, decrease the percentage of Clean Water Act NPDES permittees in SNC with their permit limits.

**Programmatic or policy decisions this activity will inform:** NetDMR currently notifies facilities via email when their DMR is 7, 14, and 21 days overdue. The motivation for this trial stems from the experience of some states and academic studies in other fields that suggest prospectively providing recipients clear and credible information about due dates, penalties, and consequences of non-compliance increases compliance. This work will help determine whether this holds true for prospective reminders for DMRs.

**Question(s) this activity will address:**

- **What are the effects of prospective reminders on DMR Non-Receipt SNC Rate?** If the prospective notification is effective, EPA would expect to see a lower DMR non-receipt SNC rate among the facilities that receive a reminder relative to nonrecipients.
- **What are the effects of prospective reminders on DMR Late Submission Rate and Days Overdue?** EPA also might expect to see a change in the timing of submissions, which could provide insight into what appropriate notification windows are. If facilities notified before the deadline remain overdue but submit their (overdue) reports more quickly than the control group, this would suggest that an earlier pre-due date notification could help reduce DMR non-receipt.
- **What are the effects of prospective reminders on Overall SNC Rate?** The current National Compliance Initiative aims to halve the national SNC baseline rate of 29.4 percent by the end of FY 2022. Although prospective reminders may decrease SNC resulting from DMR non-receipt, increased DMR submissions may reveal effluent or other SNC violations. Even if the overall SNC rate remains unchanged because of the switch to another classification, better understanding the revealed nature of the SNC would be an important step towards achieving the NCI.

**Data, tools, method/analytical approach:** EPA will use a randomized control trial in which the Agency sends personalized DMR submission reminders to a randomly selected set of at least 9,000 facility operators no later than three to five days before DMR due dates. EPA will use the existing ICIS-NPDES database for determining SNC rates and will use statistical analysis to determine if there is a difference in the rates between the treatment and control group.

**Anticipated challenges and proposed solutions:** In the current design, EPA assumes three to five days may suffice to compile and submit the DMR while encouraging responsiveness. In practice, a sufficient time window for permits to submit DMRs would depend on many factors, including the time to obtain lab results and prepare the DMR. The behavioral science literature suggests that optimal reminder timing depends on two key factors: the capacity for task completion and behavioral features, such as forgetfulness and procrastination. EPA's proposed reminder window stems from an interest in balancing these competing objectives of permitting sufficient time to complete the reports while prompting action. The Agency can either adjust that window from the outset, or sample size permitting, can explore the feasibility of multiple treatment arms wherein EPA sends reminders at different periods prior to their due date (e.g., 3, 7, 14 days prior).

Additionally, EPA assumes that reducing DMR non-receipt by at least 15 percent among the NetDMR facilities is achievable and meaningful. The proposed study sample size of 9,000 facilities in each group (or 18,000 total between the treated and control, which represents almost all of NetDMR facilities) stems from calculations on how many facilities are needed to discern a reduction in non-receipt from the current average DMR Non-Receipt Rate of 6.6 percent to 5.6 percent (i.e., a 15 percent reduction). Although calculations suggest the Agency would be unable to detect changes smaller than 1 percentage point in one reporting period, effects could be considerably larger. Alternatively, if not enough NetDMR states participate, a longer study period may still provide sufficient power to detect a 15 percent reduction. For example, if the Agency rolls out the study for two reporting periods, EPA need about 7,900 permits in each group to detect a 1 percentage point effect.

**Dissemination of findings:** The aim of this work is a journal publication, with a pre-publication/working paper that would potentially be posted on EPA's website.

## FY 2022 Additional Planned Activities to Support EPA’s Portfolio of Evidence

### Overview

The *Foundations for Evidence-Based Policymaking Act* (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure Agency decisions are made using the best available evidence. EPA’s FY 2022 Evidence-Building Plan describes significant evidence-building activities the Agency plans to undertake for a range of program areas.

EPA’s FY 2022 Evidence-Building Plan is organized by national program. Significant evidence-building activities include those that support EPA’s ability to meet an Administrator Priority, is mandated by Congress, or being highlighted as a program priority.

Additionally, EPA will execute significant evidence-building activities as part of the Agency’s Learning Agenda which is currently being designed in conjunction with the development of *EPA’s FY 2022 – 2026 Strategic Plan*. EPA’s Learning Priorities will focus on a select set of Agency activities and operations, and will address key issues, including but not limited to, equity, environmental justice, diversity and inclusion, and climate change. The Agency plans to describe evidence-building activities that support Learning Priorities in the Learning Agenda published as part of the Strategic Plan in February 2022.

### Significant Evidence-Building Activities

#### Office of Air and Radiation (OAR)

##### Activity 1:

<b>Title</b>	Title V Permitting Program Reviews		
<b>Lead National Program</b>	Office of Air and Radiation		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** EPA periodically assesses state and local permitting programs, including the sufficiency of fees collected, under Title V of the Clean Air Act as part of its responsibility to oversee delegated and approved air permitting programs.

**Programmatic or policy decisions this activity will inform:** In general, these analyses identify good practices, document areas needing improvement, and inform how EPA can help the permitting agencies improve their performance.

##### Question(s) this activity will address:

- What are some good practices and areas of improvement in state and local permitting programs under Title V of the Clean Air Act?
- How can EPA help the permitting agencies improve their performance?

**Data, tools, method/analytical approach:** The method for the analysis includes the gathering of information through the use of questionnaires which are specifically tailored to the permitting authority being reviewed, phone calls to follow up on the questionnaire and any needs for clarification or additional information, review of permits and permit records, and overall discussion and review of program implementation activities. This information is used by EPA to identify potential areas for improvement such as timeliness of permitting actions, highlight any areas where the permitting authority is doing a good job and exhibiting best practices, and to develop a written report of the findings of the program assessment. The draft report is shared with the permitting authority to ensure there are no misunderstanding or misrepresentation of the collected information or erroneous conclusions. Once the report is completed, it is posted on the EPA Region’s website. Depending on the outcome of the assessment, there may be some further interaction between the permitting authority and EPA to ensure implementation of areas for improvement and recommended actions.

**Anticipated challenges and proposed solutions:** The Agency conducts these analyses annually and does not anticipate challenges.

**Dissemination of findings:** The Title V Permit analyses are posted on [EPA’s website](#).

**Activity 2:**

<b>Title</b>	Our Nation's Air: Status and Trends Through 2021		
<b>Lead National Program</b>	Office of Air and Radiation		
<b>Planned Start Date</b>	1/2022	<b>Planned completion date</b>	6/2022

**Purpose and brief description:** EPA is committed to protecting public health and the environment by improving air quality and reducing air pollution. This annual report presents the trends in the nation’s air quality and summarizes the detailed information found at EPA’s Air Trends website and other air quality and emissions data.

**Programmatic or policy decisions this activity will inform:** This activity provides an annual assessment of air quality in an accessible format, allowing EPA, states, and other stakeholders to understand how air quality is changing both in their local area and across the nation. Stakeholders can use this information to help inform their decisions in their air quality programs.

**Question(s) this activity will address:**

- Where are areas experiencing air quality above the national ambient air quality standards?
- Are these areas trending toward improving air quality?

**Data, tools, method/analytical approach:** Existing data is pulled to generate the report, including emissions data from the National Emission Inventory (NEI) and pollutant concentration data for the National Ambient Air Quality Standards pollutants from the Air Quality System (AQS). This data is mainly averaged and summarized. For the NAAQS, trends also are calculated to provide additional context. EPA also collects data from IMPROVE (<http://vista.cira.colostate.edu/Improve/>) to calculate visibility trends on the clearest days (based

on the 20% best or clearest visibility days monitored) and on the most impaired days (based on the 20% worst visibility days monitored). EPA also uses data from the Ambient Monitoring Archive (<https://www3.epa.gov/ttnamti1/toxdat.html#data>) to provide air toxics concentration trends. Specific methodological information can be found here: [https://github.com/USEPA/Air-Trends-Report/blob/master/etrends\\_2020/documentation/Air\\_Trends\\_Report\\_Methodologies.docx](https://github.com/USEPA/Air-Trends-Report/blob/master/etrends_2020/documentation/Air_Trends_Report_Methodologies.docx).

**Anticipated challenges and proposed solutions:** The Agency produces this report annually and does not anticipate challenges. This activity is contingent upon air quality data availability from state, local, and tribal air pollution control agencies.

**Dissemination of findings:** This report is annually included on [EPA’s Air Trends website](#).

### Office of Chemical Safety and Pollution Prevention (OCSPP)

<b>Title</b>	Reducing Use of Animals in Chemical Testing		
<b>Lead National Programs</b>	Office of Chemical Safety and Pollution Prevention Office of Research and Development		
<b>Planned Start Date</b>	10/2020	<b>Planned completion date</b>	10/2035

**Purpose and brief description:** On Sept, 10, 2019, EPA issued a directive to prioritize efforts to reduce animal testing, which included the goals of reducing mammal study requests and funding 30 percent by 2025 and eliminating them by 2035. The directive specifically charged the Agency to establish baselines, measurements, and reporting mechanisms to track its progress. EPA’s “New Approach Methods (NAM) Work Plan: Reducing Use of Animals in Chemical Testing” was released in June 2020 and discusses the development of metrics to measure the reduction in use of mammalian laboratory animals.

From page 12 of NAM workplan ([https://www.epa.gov/sites/production/files/2020-06/documents/epa\\_nam\\_work\\_plan.pdf](https://www.epa.gov/sites/production/files/2020-06/documents/epa_nam_work_plan.pdf)): Within OCSPP, EPA will initially use the number of animals required for testing under the 40 C.F.R. Part 158 as a baseline to measure and track mammalian use for pesticide actions. As guideline requirements vary based on the type of pesticide, specific baselines are as follows: 510 animals for biochemical pesticides, 3,430 animals for microbials, 4,920 animals for antimicrobials and 6,260 animals for conventional pesticides. EPA also will establish a specific baseline for chemicals that fall under TSCA once the ATAETPI analysis is completed. For EDSP, the baseline is 1,800 animals based on the number required to complete the Tier I battery of assays. Within ORD, the average number of mammals used for research purposes between 2016 and 2018 was 8,600 per year. This number will be used as a baseline to provide both a stable and relatively recent estimate of use. OCSPP and ORD will work with EPA’s other offices to establish specific baselines and calculation methods. As additional baselines and metrics are established, EPA will distribute these estimates through the established communication mechanisms.

Additionally, the U.S. Government Accountability Office (GAO) released a report to Congress in 2019 recommending that Federal agencies develop metrics to assess the progress made toward reducing, refining, and replacing animal use in testing. EPA implemented activities and policies

over the past several years that demonstrate significant reductions in the number of animals used in testing and saving resources for the Agency and stakeholders.

**Programmatic or policy decisions this activity will inform:** EPA primarily uses laboratory animal data for assessing the risks of pesticides and industrial chemicals under FIFRA and TSCA. This effort will support metrics that show progress towards replacing animal studies with new approach methods that are more efficient and human relevant.

**Question(s) this activity will address:**

- What progress is being made towards reducing mammal study requests and funding 30 percent by 2025?
- What progress is being made towards eliminating mammalian study requests and funding by 2035?

**Data, tools, method/analytical approach:** EPA tracks the reduction and replacement metrics through internal committees, primarily the Hazard and Science Policy Council (HASPOC) and the Chemistry and Acute Toxicology Science Advisory Council (CATSAC), and division-level processes.

EPA is in the process of an Analysis of TSCA Available, Expected and Potentially Useful Information (ATAEPI) that will provide the foundation for developing metrics for TSCA-specific activities in this area.

**Anticipated challenges and proposed solutions:** Under TSCA, there is no defined set of toxicology data requirements which makes establishing baselines difficult. In addition, EPA needs to develop the processes for tracking and working towards publicly accessible metrics where the submitted data are protected as TSCA Confidential Business Information (CBI).

Accelerating progress towards adopting new methods requires the availability of approaches that are “equal to or better than” the typically used animal studies. Other activities described in the June 2020 Plan will address this challenge.

**Dissemination of findings:** EPA efforts to reduce use of animals in chemical testing is reported in the Annual Reports on PRIA Implementation (<https://www.epa.gov/pria-fees/annual-reports-pria-implementation>). In the future, EPA also will publish metrics on its website.

**Office of Land and Emergency Management (OLEM)**

*Activity 1:*

<b>Title</b>	Population Analysis		
<b>Lead National Program</b>	Office of Land and Emergency Management		
<b>Planned Start Date</b>	5/2022	<b>Planned completion date</b>	7/2022

**Purpose and brief description:** This is a descriptive study. The purpose is to conduct a bi-annual analysis to support evidence-based descriptions of who benefits from EPA’s cleanup and

prevention work, by collecting data on the population living within three and one mile(s) of a Superfund site, Brownfields site, Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) site, Leaking Underground Storage Tank (LUST) site, and Underground Storage Tank (UST) facility that exist in thousands of communities across the United States ranging from remote to large urban settings.

This analysis also supports EPA's *America's Children and the Environment Report*, by estimating the number of children and their socioeconomic/demographic characteristics who live within one-mile of a RCRA CA or Superfund site that may not have had all human health protective measures in place at the time of the analysis.

**Programmatic or policy decisions this activity will inform:** Results are included in EPA's annual budget reviews with OMB, and in budget justifications for Congress. Results also are used in general communications with press, other government agencies, and the public.

**Question(s) this activity will address:** This analysis estimates the population living within three and one mile(s) of a Superfund site, Brownfield site, RCRA CA site, LUST site and UST facility by:

- Race: people who self-identify as white, black, Asian, Native American, Hawaiian/pacific islander, or other
- Ethnicity: people of all races who self-identify as hispanic or non-hispanic
- Minority: all race and ethnicity combinations except "non-hispanic whites"
- Income: below poverty level, and incomes twice or more above poverty level
- Education: less than high school education
- Age: Under 5, Under 18, over 64
- Linguistically isolated: households where all members do not speak English as a first language or "very well"

Populations that are more minority, low income, linguistically isolated, or less likely to have a high school education than the U.S. population as a whole, may have fewer resources with which to address concerns about their health and environment. EPA includes these factors in population analyses to understand the potential for these vulnerabilities in relation to cleanup sites at the national level.

**Data, tools, method/analytical approach:**

- **Data**
  - Site location and status data from the Assessment, Cleanup and Redevelopment Exchange System (ACRES), Superfund Enterprise Management System (SEMS) and RCRA Info for Brownfields, Superfund and RCRA CA, respectively.
  - Site location and status data for LUST sites and UST facilities from ORD's state LUST/UST database
  - Population data from the most recent American Community Survey 5-Year Estimates
- **Methods/Analytical approach:**
  - Latitude and longitude coordinates are used to map site locations. Then 1- and 3-mile buffers are drawn from the site location. Depending on data availability, the



- site location is either a point, a modeled circular site boundary based on site acreage around a point or the actual site boundaries.
  - Using census block group centroids and the 1- and 3- mile buffers, the population and characteristics are estimated. If the census block centroid falls within the buffer, then the population of that census block is included in the estimation of the near site population.
  - We compare the near site populations to the overall U.S. population to identify differences in the characteristics listed above.
- We follow the methods used in the America’s Children and the Environment Report Indicators E10 and E11. For more details on the methods, see <https://www.epa.gov/americaschildrenenvironment/ace-environments-and-contaminants-contaminated-lands#MethodsTools>.
  - This spatial analysis is done using ArcGIS and R software suites

**Anticipated challenges and proposed solutions:** Geospatial data available to map site boundaries is limited. EPA continues to work to improve geospatial data on Superfund and RCRA Corrective Action site boundaries. The LUST/UST data used was obtained from the USTFinder. The USTFinder is a new web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. USTFinder was made possible by a large ORD data collection effort. Ability to update estimates for LUST/UST in the future depends on whether ORD updates data in the USTFinder.

**Dissemination of findings:** EPA will share the results of these analyses on EPA’s website and include the information in Agency documents that are available to the public.

**Activity 2:**

<b>Title</b>	Annual Evidence Literature Search		
<b>Lead National Program</b>	Office of Land and Emergency Management		
<b>Planned Start Date</b>	5/2022	<b>Planned completion date</b>	8/2022

**Purpose and brief description:** EPA collects and maintains evidence on many programs, including programs that implement regulations and efforts under the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Emergency Planning and Community Right-to-Know Act (EPCRA) and portions of the Oil Pollution Act of 1990. Each year, EPA uses a literature search protocol to identify any new research (conducted by researchers not at the Agency) that documents and describes the effectiveness, efficiency or impact of these programs.

**Programmatic or policy decisions this activity will inform:** Results of the evidence literature search are used to better understand the effectiveness, efficiency and impacts of EPA’s programs, which may inform decision-making about program structure or policies. Results also may be used for communication to our stakeholders.

**Question(s) this activity will address:** The evidence literature search identifies new external research that analyzes EPA’s program effectiveness, efficiency, or impacts. Studies identified are assessed for robustness, and if of high quality and relevance to an EPA’s program will be shared for consideration for further evaluation or action.

**Data, tools, method/analytical approach:** For the search, EPA uses Scopus, Google Scholar, Science Direct, ProQuest Energy and Environment, ProQuest Dissertations and Theses, and Open Access Theses and Dissertations (OATD) along with a standard list of search terms that EPA developed for each of the following eight programmatic categories. Initial results are catalogued in an EndNote library, and then further assessed for relevance and robustness. Those of high quality and relevance are shared, and then catalogued in OLEM’s Evidence Portfolio and Learning Agenda Tool.

1. Office of Superfund Remediation and Technology Innovation (OSRTI): Superfund Program
2. Office of Emergency Management (OEM): Superfund Removal
3. Office of Brownfields and Land Revitalization (OBLR): Brownfields Program
4. Office of Underground Storage Tanks (OUST): Underground Storage Tanks Program
5. Office of Resource Conservation and Recovery (ORCR): RCRA Program: RCRA Subtitle C and RCRA Subtitle D
6. ORCR: RCRA Program: Sustainable Materials Management (SMM) Practices EPA Voluntary SMM Programs
7. RE-Powering America’s Land
8. OEM: Oil Spill Prevention: Spill Prevention, Control, and Countermeasures (SPCC), Regulation and Facility Response Plan (FRP) Program, and the Risk Management Plan (RMP) Regulation

**Anticipated challenges and proposed solutions:** There are no anticipated challenges.

**Dissemination of findings:** EPA does not post literature search results as a standalone document; however, EPA does cite the literature in public documents.

**Activity 3:**

<b>Title</b>	Redevelopment Economics at Remedial Sites (non-federal facility)		
<b>Lead National Program</b>	Office of Land and Emergency Management		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** Cleaning up contaminated sites can serve as a catalyst for economic growth and community revitalization. The Superfund Remedial Program facilitates the redevelopment of sites across the country while protecting human health and the environment. Collaborative efforts among state, local, and tribal partners, redevelopers and other federal agency programs encourage restoration of sites. Since Superfund sites often encompass buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a

community's economic growth. EPA has initiated efforts to collect economic data at a subset of Superfund sites.

**Programmatic or policy decisions this activity will inform:** Economic data are included in budget justifications to Congress and are used in general communication with key stakeholders and the public.

**Question(s) this activity will address:** The analysis will provide current, reliable business-related information for a subset of Superfund sites in reuse and continued use. Some innovative business owners and organizations reuse Superfund sites for a variety of purposes. These uses can help economically revitalize communities near Superfund sites.

**Data, tools, method/analytical approach:** The study estimates economic activity at Superfund sites in reuse from reputable sources based on methodology developed by EPA's Superfund Redevelopment Initiative and outlined on the public webpage: [Redevelopment Economics at Superfund Sites](#). Information on the number of employees and sales volume for on-site businesses typically comes from Hoovers/Dun & Bradstreet, the ReferenceUSA and Manta databases.

**Anticipated challenges and proposed solutions:** The contract supporting this project ends July 2021 which may impact collection of the data. The new contract is expected to be awarded in July 2021. Should there be a delay in awarding the contract, a proposed solution may be a justification for other than full and open competition (JOFOC).

**Dissemination of findings:** The summary of the results will be shared on [EPA's website](#).

**Activity 4:**

<b>Title</b>	Redevelopment Economics at Federal Facilities		
<b>Lead National Program</b>	Office of Land and Emergency Management		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** Cleaning up contaminated sites at federal facilities can serve as a catalyst for economic growth and community revitalization. The Superfund Federal Facilities Program facilitates the redevelopment of federal facility sites across the country by assisting other federal agencies (OFAs) expedite activities related to CERCLA response actions, while protecting human health and the environment. Collaborative efforts among OFAs; developers; and state, local, and tribal partners encourages restoration of sites. Since federal facility Superfund sites often encompass thousands of acres with buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of federal facility Superfund sites which is outlined on the public webpage [Redevelopment Economics at Federal Facilities](#).

**Programmatic or policy decisions this activity will inform:** Economic data are included in budget justifications to Congress and are used in general communication with other Federal agencies and the public.

**Question(s) this activity will address:** The analysis will provide current, reliable business-related information for a subset of federal facility Superfund sites in reuse and continued use. Some innovative business owners and organizations reuse Superfund sites for a variety of purposes. These uses can help economically revitalize communities near Superfund sites. EPA has initiated efforts to collect economic data at a subset of federal facility Superfund sites.

**Data, tools, method/analytical approach:** The study estimates economic activity at federal facilities Superfund sites in reuse from reputable sources based on methodology developed by EPA’s Superfund Redevelopment Initiative, which is outlined in more detail at Redevelopment Economics at Federal Facilities. Information on the number of employees and sales volume for on-site businesses typically comes from Hoovers/Dun & Bradstreet, the ReferenceUSA and Manta databases.

**Anticipated challenges and proposed solutions:** There are no anticipated challenges.

**Dissemination of findings:** The summary of the results will be shared on EPA’s website.

## Office of Mission Support (OMS)

### *Activity 1:*

<b>Title</b>	EPA Space Reduction – Annual Review		
<b>Lead National Program</b>	Office of Mission Support		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** This annual assessment is a continuation of the Real Property Efficiency Plan completed in FY 2016 and it supports the Long-Term Performance Goal of releasing over 850,000 square feet of space by the end of FY 2022. The purpose of the assessment is to measure the square footage of unused EPA space released each fiscal year. EPA reports space release each year, this activity helps assess and inform results.

**Programmatic or policy decisions this activity will inform:** Results from this evidence-building activity will inform EPA’s leadership in assessing and evaluating challenges associated with consolidation and space release efforts and establishing annual targets for releasing unused office and warehouse space.

**Question(s) this activity will address:**

- What is EPA’s progress toward meeting the LTPG?
- What are the specific challenges associated with accomplishing each space release?

**Data, tools, method/analytical approach:** As space is released, EPA tracks the square footage of the space release in EPA’s Office of Administrative Services Information Systems (OASIS).

**Anticipated challenges and proposed solutions:** Milestones in space release plan are subject to change due to a number of environmental factors outside of EPA’s control (e.g. lease terms, GSA actions, delays in associated consolidation efforts, funding level reductions). EPA will use findings from this activity to identify logistical challenges and assess opportunities for advancing other milestones and close the gap needed to meet the LTPG.

**Dissemination of findings:** This activity is considered a key component of a management strategic decision-making process and its findings will not be shared publicly. The results of this activity will be shared with internal stakeholders, including senior leaders in EPA.

**Activity 2:**

<b>Title</b>	Strategic Sourcing		
<b>Lead National Program</b>	Office of Mission Support		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** The purpose of the annual assessment is to measure EPA’s progress toward the implementation of Category Management and adoption of Federal Strategic Sourcing vehicles and Best-in-Class acquisition solutions, and to provide information that will help EPA determine the services and products most conducive to strategic sourcing.

**Programmatic or policy decisions this activity will inform:** Results from this evidence-building activity will inform EPA’s Strategic Sourcing plan and decision-making. Based on the results from this annual assessment, EPA expects to deploy new strategic sourcing initiatives that will improve the Agency’s buying power.

**Question(s) this activity will address:** What are the services and products most conducive to strategic sourcing that EPA can implement to maximize efficiencies and improve the Agency’s buying power?

**Data, tools, method/analytical approach:** This annual internal assessment will build on current data provided by the General Service Administration (GSA). Methods of analysis are spend analysis, trend analysis, and data visualization.

Data is collected in the Federal Procurement Data System – Next Generation (FPDS-NG), obligations are categorized in accordance with OMB’s Category Management guidelines and presented in the D2D.gov (data-to-decisions) Dashboards.

Internally, EPA tracks and displays this data in the Agency’s Savings Tracker Qlik Dashboard.

**Anticipated challenges and proposed solutions:** Data is contingent on GSA reporting. EPA relies on FPDS data and the D2D data to track, validate, and confirm the information that is shared with and reported by OMB. EPA will continue to work with GSA to verify the information reported by GSA.

**Dissemination of findings:** Data used for this analysis is already accessible by the public here: <https://d2d.gsa.gov/report/public-category-management-dashboards-analytics>.

## Office of Research and Development (ORD)

### Activity 1:

<b>Title</b>	Research Area: Assessment and Management of Harmful Algal Blooms		
<b>Lead National Program</b>	Office of Research and Development		
<b>Planned Start Date</b>	10/2019	<b>Planned completion date</b>	09/2022

**Purpose and brief description:** Harmful algal blooms (HABs) are increasing in frequency, intensity, and geographic range. Potential impacts from blooms and associated toxins include health risks to humans, pets, livestock, wildlife, and other biota; restricted recreational activities; increased treatment costs; and decreased economic revenue. HABs are complex ecological processes that are affected by various conditions (i.e., physical, chemical, biological, hydrological, and meteorological) and therefore are difficult to predict. This research area focuses on toxicity and impacts to humans and biota, mitigation of blooms and their effects in source and drinking waters, and the characterization of bloom-impacted environments.

**Programmatic or policy decisions this activity will inform:** EPA, states, and tribes need tools to predict toxic bloom occurrence, characterize bloom development, increase effectiveness of cyanotoxin monitoring techniques, and understand the impacts of shifting temperature patterns and hydrologic regimes on blooms. This research will inform best management practices of HABs including but not limited to refining Drinking Water Health advisories and informing Recreational Criteria for cyanotoxin exposures.

**Question(s) this activity will address:** This research area, under EPA’s Safe and Sustainable Water Resources research program (SSWR), supports the current planned activities in the StRAP, and will expand the state of scientific understanding and best management approaches for nutrient/harmful algae bloom reduction.

**Data, tools, method/analytical approach:** This research area will produce a large amount of data, methods, and tools to advance the understanding of adverse health impacts among people, other animals, and plants that are associated with exposure to HABs. The data, tools, and method/analytical approaches used to produce individual outputs and products in this research area may include, but are not limited to:

- Development and evaluation of water treatment technologies and toxin exposure levels
- Whole organism toxicity studies, computational toxicology, pharmacokinetic studies, and epidemiological studies
- Collection and analysis of satellite data, surveillance datasets, environmental, human health, and decision support work, existing data, and/or review of new literature
- Observational or field research, laboratory experiments, and modeling methods/measurements of water quality processes and nutrient management

**Anticipated challenges and proposed solutions:** This research area will produce a large volume of scientific deliverables which will require complex research planning, facilitation, review coordination, task prioritization, and regular interactions with the program customer to ensure deliverables/products address the customer needs. In FY 2022, EPA will continue to develop more efficient methods of project implementation and tracking.

**Dissemination of findings:** Research area findings will take a variety of publicly available forms including journal publications, open-access tools and models, and technical fact sheets.

**Activity 2:**

<b>Title</b>	Research Area: Waste Recovery and Beneficial Use		
<b>Lead National Program</b>	Office of Research and Development		
<b>Planned Start Date</b>	10/2018	<b>Planned completion date</b>	09/2022

**Purpose and brief description:** Many existing materials considered as waste for disposal could potentially be reused, recycled, or reprocessed to reduce the consumption of natural resources, decrease waste generation, and reduce the volume of materials disposed into hazardous and non-hazardous landfills. This project will contribute to providing methodologies that can be used to determine whether the potential for adverse impacts to human health and the environment from a proposed beneficial use is comparable to or lower than that posed by an analogous product, or at or below relevant health-based and regulatory benchmarks.

**Programmatic or policy decisions this activity will inform:** This research will enhance scientific understanding of material recycling, waste remediation, and potential for adverse human health and environmental impacts of beneficial material reuse.

**Question(s) this activity will address:** This research area, under EPA’s Sustainable and Healthy Communities research program (SHC), supports the planned activities in the StRAP, and will answer questions concerning potential for recycling materials and quantify the risks and associated adverse impacts of beneficial reuse of materials. Planned FY 2022 specific topic areas include, but are not limited to, studying advanced separation technologies for recovery and reuse of industrial-use solvents, engineering soil amendments for remediation of lead and other contaminants, and remediation of industrial by-products.

**Data, tools, method/analytical approach:** This research area will produce numerous tools, models, and peer reviewed journal articles. These outputs and products produced will use a variety of data, tools, and method/analytical approaches including, but not limited to:

- Evaluation and characterization of emerging technologies, policies, sorting, and identification trends in reuse, recycling, and demolition activities.
- Collection and analysis of data from ORD colleagues, existing data, and/or review of new literature to address issues related to leaching of organics into groundwater
- LEAF methods and software (i.e., LeachXS-Lite) to measure organic and inorganic Constituents of Potential Concern (COPCs)

- In situ laboratory experiments on soil amendments, including implementation of screening tools and engineered soil amendment mixtures

**Anticipated challenges and proposed solutions:** This research area will produce a large volume of scientific deliverables which will require complex research planning, facilitation, review coordination, task prioritization, and regular interactions with the program customer to ensure deliverables/products address the customer needs. In FY 2022, EPA will continue to develop more efficient methods of project implementation and tracking.

**Dissemination of findings:** Research area findings will take a variety of publicly available forms including journal publications, open access tools, and models

## Office of Water (OW)

### *Activity 1:*

<b>Title</b>	Drinking Water Infrastructure Revolving Fund State Reviews		
<b>Lead National Program</b>	Office of Water		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** Annually, EPA completes reviews of each State Drinking Water Revolving Fund Program.

**Programmatic or policy decisions this activity will inform:** These reviews assess if states are effectively implementing the Drinking Water Revolving Fund Categorical Grant program to facilitate community water system compliance with the Safe Drinking Water Act.

### **Question(s) this activity will address:**

- Are states effectively implementing the Drinking Water Revolving Fund Categorical Grant program to facilitate community water system compliance with the Safe Drinking Water Act and complying with the EPA’s State and Tribal Assistance Grant program requirements?

**Data, tools, method/analytical approach:** Data are provided from each state Drinking Water State Revolving Fund (DWSRF) program review conducted by EPA headquarters and regions. The review includes elements such as state fund usage and utilization rates, financial transaction reviews, and state compliance rates with drinking water standards.

**Anticipated challenges and proposed solutions:** There are no anticipated challenges.

**Dissemination of findings:** EPA makes publicly available an annual report on the status of the national DWSRF program. EPA also shares project and financial data at the national and state level.



**Activity 2:**

<b>Title</b>	Public Water System Supervision (PWSS) Program Reviews		
<b>Lead National Program</b>	Office of Water		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** EPA annually conducts reviews of agencies with Public Water System Supervision (PWSS) primacy (55 reviews).

**Programmatic or policy decisions this activity will inform:** These reviews assess if primacy entities are effectively implementing the PWSS program to oversee community water system compliance with the Safe Drinking Water Act.

**Question(s) this activity will address:**

- Are primacy entities effectively implementing the range of activities in the PWSS program to oversee community water system compliance with the Safe Drinking Water Act?

**Data, tools, method/analytical approach:** Data are provided via program review reports by agencies with primacy for the PWSS program. The reports are reviewed by EPA and it includes elements such as state use of the funds and the associated impact, compliance and implementation of SDWA regulations, alignment of program with national enforcement and compliance priorities, and public communication efforts.

**Anticipated challenges and proposed solutions:** There are no anticipated challenges.

**Dissemination of findings:** EPA's regional offices engage and share results with primacy agencies under their purview. EPA shares PWSS information on water system compliance rates across and within states.

**Activity 3:**

<b>Title</b>	Safe Drinking Water Information System (SDWIS) National Regulation Non-Compliance Review		
<b>Lead National Program</b>	Office of Water		
<b>Planned Start Date</b>	10/2021	<b>Planned completion date</b>	9/2022

**Purpose and brief description:** EPA will conduct a review of the SDWIS National Public Water System Regulation Non-Compliance data.

**Programmatic or policy decisions this activity will inform:** The review assesses what drinking water regulation or technical, managerial, and financial state and public water system capacity-building training in support of drinking water standard compliance should be emphasized for the future term.

**Question(s) this activity will address:**

- Is the Agency getting the data it and the public need to understand compliance with drinking water standards?

**Data, tools, method/analytical approach:** Data are provided from EPA's SDWIS-Fed and states' SDWIS-State data systems, along with state program reviews mentioned above in Activity 2.

**Anticipated challenges and proposed solutions:** There are no anticipated challenges.

**Dissemination of findings:** SDWIS Fed is a publicly available database and SDWIS State, with compliance information, is managed by individual primacy agency.





**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

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## COORDINATION WITH OTHER FEDERAL AGENCIES

### Air and Radiation Programs

#### *National Ambient Air Quality Standards (NAAQS) Implementation*

EPA cooperates with other agencies to achieve goals related to ground level ozone and particulate matter (PM), and to ensure the actions of other agencies are compatible with state plans for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). The Agency works closely with the U.S. Department of Agriculture (USDA), Department of the Interior (DOI), and Department of Defense (DOD) on issues such as prescribed burning at silviculture and agricultural operations. EPA, the U.S. Department of Transportation (DOT), and the U.S. Army Corps of Engineers (USACE) also work with state and local agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities.

#### *Air Quality in the Agricultural Sector*

To improve EPA's understanding of environmental issues in the agricultural sector, the Agency works with the USDA and others to improve air quality while supporting sustainable agriculture. The collaborative approach to the agriculture sector includes scientific assessment, outreach and education, and implementation/compliance.

#### *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 works with the Department of the Army on advancing emission measurement technology and with NOAA for meteorological support for our modeling and monitoring efforts. EPA collects real-time ozone and PM measurements from state and local agencies, which are used by both NOAA and EPA to improve and verify Air Quality Forecast models.

EPA's *AirNow* Program (the national real-time Air Quality Index reporting and forecasting system) works with the National Weather Service (NWS) to coordinate NOAA air quality forecast guidance with state and local agencies for air quality forecasting efforts and to render the NOAA model output in EPA's Air Quality Index (AQI), which helps people determine appropriate air quality protective behaviors. In wildfire situations, EPA and the USFS work closely with states to deploy monitors and report monitoring information and other conditions on *AirNow*. The *AirNow* Program also collaborates with the NPS and the USFS in collecting air quality monitoring observations, in addition to over 130 state, local, and tribal air agency observations, and with NASA in a project to incorporate satellite data with air quality observations.

EPA, the USDA, and the DOI established a collaborative framework to address issues pertaining to wildland fire and air quality. The agreement recognizes the key roles of each agency, as well as opportunities collaboration. For example, the partnership explains that the agencies seek to reduce the impact of emissions from wildfires, especially catastrophic wildfires, and the impact of those emissions on air quality. In addition, the partnership highlights opportunities for enhancing coordination among the agencies through information sharing and consultation, collaboration on tools and information resources, and working together to collaborate with state and other partners, among others on strategic goals.

#### *Mobile Sources*

EPA works with the DOT's National Highway Traffic Safety Administration (NHTSA) on the coordinated national program establishing standards to improve fuel efficiency for light-duty vehicles. Specifically, EPA, in coordination with the DOT's fuel economy and fuel consumption standards programs, implements vehicle and commercial truck greenhouse gas standards.

To address criteria pollutant emissions from marine and aircraft sources, EPA works collaboratively with the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO), as well as with other federal agencies, such as the U.S. Coast Guard (USCG) and the Federal Aviation Administration (FAA). EPA also collaborates with the USCG in the implementation of Emission Control Area (ECA) around the U.S., and with Mexico and Canada in the North American Commission for Environmental Cooperation (CEC) to evaluate the benefits of establishing a Mexican ECA.

To better understand the sources and causes of mobile source pollution, EPA works with the DOE and DOT to fund applied research projects including transportation modeling projects. EPA also works closely with the DOE on refinery cost modeling analyses to support clean fuel programs, and coordinates with the DOE regarding fuel supply during emergency situations.

For mobile sources program outreach, the Agency participates in a collaborative effort with DOT's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), and the Centers for Disease Control and Prevention (CDC) to educate the public and communities about the impacts of transportation choices on traffic congestion, air quality, climate change, and human health. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. EPA works with the DOE, DOT, and other agencies, as needed, on the requirements of the Energy Policy Act of 2005 and the Energy Independence and Security



Act of 2007, such as the Renewable Fuel Standard. EPA also has worked with other agencies on biofuel topics through the Biomass Research and Development Institute.

To develop air pollutant emission factors and emission estimation algorithms for military aircraft, ground equipment, and vehicles, EPA partners with the DOD. This partnership provides for the joint undertaking of air-monitoring/emission factor research and regulatory implementation.

### *Air Toxics*

EPA works closely with other health agencies such as the CDC, the National Institute of Environmental Health Sciences (NIEHS), and the National Institute for Occupational Safety and Health (NIOSH) on health risk characterization for both toxic and criteria air pollutants. The Agency also contributes air quality data to the CDC's Environmental Public Health Tracking Program, which is made publicly available and used by various public health agencies.

### *Addressing Transboundary Air Pollution*

In developing regional and international air quality projects, and in working on regional agreements, EPA works with the Department of State (DOS), NOAA, NASA, DOE, USDA, U.S. Agency for International Development (USAID), and the Office of Management and Budget (OMB), and with regional organizations. In addition, EPA has partnered with other organizations and countries worldwide, including the United Nations Environment Programme (UNEP), the European Union (EU), the Organization for Economic Cooperation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), the CEC, Canada, Mexico, China, and Japan. EPA also partners with environment and public health officials and provides technical assistance through UNEP to facilitate the development of air quality management strategies to other major emitters and/or to key regional or sub-regional groupings of countries.

### *Stratospheric Ozone*

EPA works closely with the DOS and other federal agencies in international negotiations among Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, with the goal of protecting the ozone layer and through managing ozone depleting substances (ODS) it controls. EPA also supports several multinational environmental agreements to simultaneously protect the ozone layer and climate system working closely with the DOS and other federal agencies, including OMB, Office of Science Technology and Policy (OSTP), Council on Environmental Quality (CEQ), USDA, Food and Drug Administration (FDA), Department of Commerce (DOC), NOAA, and NASA.

EPA works with other agencies, including the Office of the United States Trade Representative (USTR) and the Department of Commerce (DOC), to analyze potential trade implications in stratospheric protection regulations that affect imports and exports. EPA has coordinated efforts with the Department of Justice (DOJ), Department of Homeland Security (DHS), Department of Treasury (U.S. Treasury), and other agencies to curb the illegal importation of ODS.

### *Radiation and Radiation Preparedness and Response*

EPA works primarily with the Nuclear Regulatory Commission (NRC), DOE, and the DHS on multiple radiation-related issues. EPA has ongoing planning and guidance discussions with DHS on emergency response activities, including exercises responding to nuclear related incidents. As the regulator of DOE's Waste Isolation Pilot Plant (WIPP), EPA is charged with coordinating with DOE to ensure the facility is operating in compliance with EPA regulations. EPA is a member of the Interagency Radiation Source Protection and Security Task Force, established in the Energy Policy Act, to improve the security of domestic radioactive sources. EPA also is a working member of the interagency Nuclear Government Coordinating Council (NGCC), which coordinates across government and the private sector on issues related to security, communications and emergency management within the nuclear sector.

For emergency preparedness, EPA coordinates with other federal agencies through the Federal Radiological Preparedness Coordinating Committee and the Advisory Team for Environment, Food and Health which provides federal scientific advice and recommendations to state and local decision makers, such as governors and mayors, during a radiological emergency. EPA participates in planning and implementing exercises including radiological anti-terrorism activities with the NRC, DOE, DOD, Department of Health and Human Services (DHHS), and DHS.

EPA is a charter member and co-chairs the Interagency Steering Committee on Radiation Standards (ISCORS), which was created at the direction of Congress. Through its activities, member agencies are kept informed of cross-cutting issues related to radiation protection, radioactive waste management, and emergency preparedness and response. ISCORS also helps coordinate U.S. responses to radiation-related issues internationally.

During radiological emergencies, EPA works with expert members of the International Atomic Energy Agency (IAEA). EPA also works with OECD's Nuclear Energy Agency (NEA) on two committees: the Radioactive Waste Management Committee (RWMC) and the Committee on Radiation Protection and Public Health (CRPPH). Through participation on the CRPPH, EPA is successful in bringing U.S. perspectives to international radiation protection policy.

### *Climate Change*

To carry out a diverse range of regulatory and partnership programs to help tackle the climate crisis, EPA works with a number of other federal agencies, including the Department of Energy (DOE), the Department of Agriculture (USDA), the Department of Housing and Urban Development (HUD), Department of State (DOS), the U.S. Agency for International Development (USAID), the Department of the Interior (DOI), the Federal Energy Regulatory Commission (FERC), and the Department of Transportation (DOT).

Climate protection partnership programs, government-wide, stimulate the development and use of renewable energy technologies, energy efficient products, and other strategies that will help reduce greenhouse gas (GHG) emissions. The effort is led by EPA and DOE with significant involvement from the USDA, HUD, and the National Institute of Standards and Technology (NIST).

The Global Methane Initiative (GMI) is a U.S. led, international public-private partnership that brings together over 40 partner governments and over 1,000 public and private sector organizations

to advance methane recovery and use methane as a clean energy source. EPA works with the U.S. State Department on the GMI, building on the success of EPA's domestic methane programs and focusing on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater.

EPA also will support the State Department as the technical lead in developing projections and compiling information on GHG mitigation policies and measures as part of the upcoming U.S. Biennial Report and National Communication as required by the U.N. Framework Convention on Climate Change.

#### *Research Supporting the Air and Radiation Program*

EPA continues to coordinate with other agencies, such as NOAA, DOE, USDA, National Institutes of Health (NIH), and FHWA to develop sustainable approaches to manage risks from air pollution. In addition, the FY 2022 President's Budget for EPA funds collaborative research in climate adaptation and resilience with the new Advanced Research Projects Agency for Climate (ARPA-C) that will be located within DOE. The ARPA model of high-risk, accelerated research is uniquely meant to conduct R&D that, if successful, results in transformational technology advancements.

### **Water Programs**

#### *Collaboration with Public and Private Partners on Water Infrastructure Preparedness, Response and Recovery*

EPA coordinates with other federal agencies, primarily DHS, CDC, FDA, and DOD, on biological, chemical, and radiological contaminants of high concern, and how to detect and respond to their presence in drinking water and wastewater systems. EPA maintains a close linkage with the Federal Bureau of Investigation (FBI) and DHS, particularly with respect to ensuring the timely dissemination of threat information through existing communication networks. Additionally, throughout the pandemic, EPA worked with DHS and other federal agencies to coordinate aspects of information sharing, disseminate personal protective equipment, address shortages of treatment chemicals, provide for equipment and qualified water system operators, and recognize water system operators and associated contract personnel as critical workers.

EPA works with USACE and the Federal Emergency Management Agency (FEMA) to refine coordination processes among federal partners engaged in providing emergency response support to the water sector, including maintaining clear roles and responsibilities under the National Disaster Recovery Framework. EPA continues to work with FEMA, USACE, and other agencies, on the Federal Interagency Floodplain Management Task Force regarding water resources and floodplain management.

As the Agency in charge of water sector security, EPA works with DHS Cyber and Infrastructure Security Agency (CISA) and other government agencies on the Industrial Control System (ICS) working group to develop an ICS interagency Strategy and Implementation Plan. EPA also

collaborates with CISA on various working groups and cybersecurity issues such as roles and responsibilities, ICS supply chain, cyber workforce, cybersecurity standards, and cyber response.

### *Drinking Water Programs*

EPA and the U.S. Geological Survey (USGS) established an Interagency Agreement to coordinate activities and information exchange in the areas of unregulated contaminants occurrence, the environmental relationships affecting contaminant occurrence, protection area delineation methodology, and analytical methods. This effort improves the quality of information to support risk management decision-making at all levels of government, generates valuable new data, and eliminates potential redundancies. EPA also collaborates with the Department of Housing and Urban Development (HUD) to develop strategies to decrease drinking water lead exposure in homes. The partnership promotes the exchange of information, leverages funding, and reviews processes to facilitate better-informed and coordinated decisions and investments.

EPA collaborates with DHHS to better understand, characterize, and manage public health risks from Contaminants of Emerging Concern (CECs), with activities spanning from assessing CDC's waterborne disease surveillance data related to *legionella* and other biofilm-related pathogens to partnering with FDA on antibiotic resistance-related issues. EPA collaborates with multiple federal agencies to address Per- and Polyfluoroalkyl Substances (PFAS) issues including the DOD, the Department of Energy (DOE), USDA, FDA, DHHS, the NIH, the Consumer Product Safety Commission, the Small Business Administration (SBA), NASA, FAA, and OMB.

### *Infrastructure Support for Tribal Water Systems*

EPA coordinates the multi-agency tribal Infrastructure Task Force (ITF), created to develop and coordinate federal activities in delivering water infrastructure, wastewater infrastructure and solid waste management services to tribal communities. The ITF is the formal mechanism for interagency coordination among EPA, Indian Health Service, HUD, USDA, and the Bureau of Indian Affairs.

### *Sustainable Rural Drinking and Wastewater Systems*

EPA and USDA work together to increase the sustainability of rural drinking water and wastewater systems to ensure the protection of public health, water quality, and sustainable communities. The two agencies facilitate coordinated funding for infrastructure projects that aid in the compliance of national drinking water and clean water regulations.

### *National Water Sector Workforce Development: Department of Veterans Affairs*

EPA and Departments of Education, Interior, Agriculture, and Veterans Affairs (VA) are building on existing collaborations, exploring new opportunities and actions, and identifying potential additional federal programs and partners to support the nation's water sector professionals.

### *Coordination with Department of Defense on Analytical Methods for Detecting PFAS*

EPA's Clean Water Act (CWA) analytical methods program is collaborating with the DOD on their efforts to develop an analytical method for detecting certain PFAS compounds in wastewater.

#### *Source Water Protection and Harmful Algal Blooms (HABs)*

To combat HABs and hypoxia, the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 (HABHRCA 2014, P.L. 113-124, recently reauthorized through the National Integrated Drought Information System [HABHRCA 2017, Public Law 115-423]) emphasizes the mandate to advance the scientific understanding and ability to detect, predict, control, mitigate, and respond to HABs and hypoxia. This legislation established the Interagency Working Group on HABHRCA (IWG-HABHRCA) which tasked the group with coordinating and convening federal agencies to discuss HAB and hypoxia events in the U.S., and to develop action plans, reports, and assessments of these situations. The IWG-HABHRCA is co-chaired by representatives from EPA, NOAA, and the OSTP, and it is composed of the following member agencies and departments: CDC, FDA, NIEHS, USACE, USGS, BOEM, NPS, FWS, NASA, USDA, DOS, and the National Science Foundation (NSF).

#### *2018 Farm Bill Source Water Protection Provisions*

EPA collaborates with the USDA Natural Resources Conservation Service (NRCS), state and utility partners to develop implementation strategies and guidance to comply with the 2018 Farm Bill provisions. These provisions dedicate at least 10 percent of total funds available for conservation programs (with the exception of the Conservation Reserve Program) to be used for source water protection. The Agency partners with NRCS to foster collaboration at the state and local levels to identify priority source water protection areas in each state to address agriculture-related impacts to drinking water sources. EPA also is collaborating with USFS in developing strategies to implement the 2018 Farm Bill (Title VIII, Subtitle D, Section 8404) Source Water Protection provisions requiring a "Water Source Protection Program" on National Forest Service (NFS) lands. EPA is supporting USFS by fostering partnerships with state, utilities, and other water stakeholders.

#### *Source Water Collaborative*

EPA participates in the Source Water Collaborative along with USDA (NRCS, Farm Service Agency (FSA), USFS), USGS, and 25 other national organizations. The goal of the collaboration is to protect sources of drinking water by combining the strengths and tools of its member organizations. EPA provides funding to support these efforts.

#### *Carbon Capture, Utilization, and Storage (CCUS)*

EPA participates in quarterly and ad hoc meetings with DOE, Department of Interior (DOI), Internal Revenue Service (IRS), Department of Transportation (DOT), and Department of Justice (DOJ) to share information on carbon capture and storage developments. EPA serves as a liaison to DOE's National Risk Assessment Partnership to advance its work in developing tools to improve collective understanding of risk at CO<sub>2</sub> storage projects and inform science and risk-based decision-making at geologic sequestration projects; and to explore opportunities to integrate the

partnership work into EPA's Class VI permitting process. EPA also will collaborate with DOE and the Council on Environmental Quality (CEQ) on several reports and other initiatives related to carbon sequestration requested by Congress, including developing a report on Underground Injection Control (UIC) Class VI permitting.

### *Research to Support Water Programs*

While EPA is the federal agency mandated to ensure safe drinking water, other federal and non-federal entities conduct research that complements EPA's research on priority contaminants in drinking water. Cooperative research efforts have been ongoing with the American Water Works Association, Water Research Foundation, and other stakeholders to coordinate drinking water research where the private sector is conducting research in areas such as analytical methods, treatment technologies, and the development and maintenance of water resources. EPA also has worked with the USGS to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

Interagency coordination in research also is occurring in developing sediment criteria. Here, EPA has joint research initiatives with NOAA and USGS for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

EPA also conducts studies with the USGS to monitor the occurrence of CECs. Research efforts to monitor the effects of chemical mixtures continue, increasing our understanding of wastewater effluent impacts to human and aquatic health and prioritizing future research on developing solutions for the removal of CECs in wastewater treatment operations.

## **Land and Emergency Management Programs**

### *Brownfields*

EPA's Brownfields and Land Revitalization Programs partner with the 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.

### *Superfund Remedial Program*

The Superfund Remedial Program maintains ongoing coordination and collaboration with ATSDR, NIEHS, HUD and USACE as well as with the Federal Mining Dialogue and the Federal Remediation Technologies Roundtable, two multi-agency consortia. Interaction with these entities enhances program implementation through activities that are mutually beneficial, such as information sharing and resource leveraging. For example, ATSDR has a statutory mandate to complete health assessments on sites listed on EPA's National Priorities List while EPA conducts site characterization and remediation. Moreover, EPA site managers work with their ATSDR counterparts to coordinate public human health messaging. For NIEHS, EPA collaborates and coordinates academic research related to contaminant toxicities, site characterization and

remediation and risk communication. EPA collaborates with HUD on residential risk evaluation and mitigation, while the Agency's work with USACE spans 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. EPA's participation in the Federal Mining Dialogue has established the Agency's role in a multi-agency (e.g., DOE, DOI, etc.) partnership to address mining sites on federal and mixed ownership lands. Membership in the Federal Remediation Technologies Roundtable facilitates EPA's collaboration with multiple federal entities, such as DOD, NASA, DOT, to advance the use of innovative technologies to clean up hazardous waste contamination.

### *Superfund Federal Facilities Restoration and Reuse Program*

EPA's Superfund Federal Facilities Restoration and Reuse Program coordinates with other Federal Agencies (OFAs); state, Tribal, and local governments; and communities to implement its statutory responsibilities to ensure protective and efficient cleanup and reuse of federally contaminated land on the Federal Agency Hazardous Waste Compliance Docket and the NPL. Successful coordination requires strong partnerships and enhanced engagement by having regularly scheduled and ad hoc meetings that target and resolve critical programmatic issues, emphasize selection and implementation of protective cleanups, and recognize site reuse opportunities and successes. EPA has committed to early engagement with our partners that focus on issues with a problem-solving and action-oriented approach.

The Program also coordinates with national organizations that help to improve engagement such as the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the Interstate Technology and Regulatory Council (ITRC), and the Environmental Council of the States (ECOS). ASTSWMO has a Federal Facilities Research Center Subcommittee that promotes and enhances state and territory involvement in the cleanup and reuse of contaminated federal facilities and fosters information exchange by and between states, territories, and OFAs. This includes identifying and researching emerging issues related to state and federal cleanup programs at federal facility sites, producing and disseminating resource documents and tools, and working with EPA and OFAs on a variety of federal facility issues and forums. Current topics of interest include addressing contaminants of emerging concern like perchlorate, PFAS and 1,4-dioxane; ensuring ARARs are identified and implemented; monitoring long-term remedies to ensure protectiveness; and participating in the implementation and oversight of the Munitions Response Program. ITRC is a state-led coalition working to reduce barriers to the use of innovative air, water, waste, and remediation environmental technologies and processes. ITRC produces documents and training that broaden and deepen technical knowledge and expedite quality regulatory decision making while protecting human health and the environment. EPA, along with OFAs and industry representatives, works through ITRC in defining continuing research needs through its teams including on topics of relevance and benefit to federal facility sites, like PFAS, 1,4-dioxane, and the remediation of complex sites.

Through the establishment of a national cleanup dialogue with the Department of Energy (DOE) and the states in coordination with ECOS, EPA supports special emphasis engagement for nuclear weapons sites, the largest and costliest portfolio of remaining federal facilities cleanup work. The

Dialogue enhances ongoing working relationships in the cleanup of DOE Environmental Management sites and focuses on topics of mutual relevance and highest priority to ensure timely advancement of protective cleanups. The Dialogue exemplifies how collaboration can advance DOE sites and foster an understanding of challenges and successes nationally.

EPA also participates with OFAs and states on the Munitions Response Dialogue, partners with DoD research and development programs on munitions management and environmental restoration. Current MRD activities include EPA, DoD, Federal Land Management Agencies and states updating and harmonizing previous munitions risk/hazard assessment methodologies. The MRD's goal is to achieve consensus on an updated munitions risk/hazard assessment methodology. EPA also co-chairs the Intergovernmental Data Quality Task Force (IDQTF) with DoD and DOE. The IDQTF works to ensure that environmental data are of known and documented quality and suitable for the intended use.

EPA actively participates in the Defense Environmental Restoration Program and Formerly Used Defense Sites (FUDS) forums hosted by the Department of Defense (DoD). DoD's gathering of State and Federal regulators offers a unique opportunity to partner, share information, and facilitate more efficient and effective management of DoD's cleanup program. Recent forums focused on emerging issues, best practices, and lessons learned, as well as new policies and technology investments to maximize efficiencies and minimize the time it takes to complete cleanup at active, Base Realignment and Closure installations, and FUDS. Similar forums hosted by DoD service components provide EPA and states further opportunities for engagement, often focused on topics tailored to the unique aspects of the response programs of the Army, Navy or Air Force.

EPA also coordinates with OFAs on the Federal Mining Dialogue (FMD). The FMD is a cooperative initiative among federal environmental and land management agencies that provide 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 mine and mineral processing sites across the country. EPA also engages with OFAs in the complementary Abandoned Uranium Mine Work Group, which focuses on investigation and cleanup of legacy uranium ore mining and mill tailing sites in the in the western U.S. Multiple program and enforcement offices participate for EPA in both venues to ensure coordinated engagement across the Agency.

#### *RCRA Waste Minimization and Recycling: Supporting Sustainable Materials Management*

Natural resource extraction and processing make up approximately 50 percent of total global greenhouse gas (GHG) emissions. Under RCRA, EPA provides data, information, guidelines, tools, and technical assistance on resource conservation, recycling, and resource recovery. As part of this work, EPA focuses on increasing the conservation and recovery of municipal solid waste (e.g., plastics, aluminum, paper, food waste) and industrial waste (construction and demolition materials). EPA works closely with other federal agencies to advance resource conservation and recovery through EPA's 2021 National Recycling Strategy, interagency efforts to reduce food loss and waste, and implementation of the Save our Seas Act 2.0.



The Save our Seas Act 2.0, passed by Congress in December 2020, demonstrates bipartisan congressional interest and provides EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and extensive federal coordination. EPA will coordinate with DOE, several offices within the Department of Commerce (NIST, NOAA, USTR and ITA); and USAID to implement Save our Seas. EPA also works with federal agencies to implement the National Recycling Strategy.

EPA works collaboratively with the U.S. Department of Agriculture (USDA), and U.S. Food and Drug Administration (FDA) to reduce food waste in support of the national goal of reducing food loss and waste by 50 percent by 2030. EPA also is providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste.

#### *Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) Polychlorinated Biphenyl (PCB) Programs*

The RCRA Corrective Action Program coordinates closely with OFAs, primarily DOD and DOE, which have many corrective action sites. A top Agency priority is to help federal facilities meet the Program's goals of investigating and cleaning up hazardous releases. EPA also coordinates with other agencies on cleanup and disposal issues posed by PCBs under the authority of the Toxic Substances Control Act (TSCA).

#### *Emergency Preparedness and Response*

EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil discharges pose to human health and the environment. EPA's leadership in federal preparedness begins with co-chairing the National Response Team (NRT) and the 13 Regional Response Teams (RRTs) with the USCG. These teams, which have member participation from 15 total federal agencies (EPA, USCG, United States Department of State, United States Department of Defense, U.S. Department of Homeland Security/Federal Emergency Management Agency, United States Department of Energy, United States Department of Agriculture, United States Department of Health & Human Services (including CDC, NIOSH, and ATSDR), United States Department of Interior, United States Department of Commerce, United States Department of Transportation, United States Nuclear Regulatory Commission, United States General Services Administration, United States Department of Justice, United States Department of Labor (including OSHA), provide guidance and deliver federal assistance to state, local, and tribal governments to plan for and respond to natural disasters, acts of terrorism, 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.

EPA supports the Weapons of Mass Destruction Strategic Group (WMDSG) crisis-action team intended to coordinate the United States Government's efforts to successfully resolve a WMD threat and support interagency senior leader decision making. The WMDSG is comprised of over 50 SMEs representing over 15 different departments and agencies. The WMDSG is on call 24/7/365 to respond to the FBI's Strategic Information and Operations Center (SIOC) within 2

hours. The WMDSG – led by the FBI – provides enhanced coordination by focusing on information sharing and operation synchronization. The WMDSG helps maintain situational awareness by working directly with FBI Counterterrorism Division (CTD) regarding investigative activities, and the National Assets Command Post (NACP) regarding crisis operations.

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.

The National Biodefense Strategy (NBS) provides a single coordinated effort to orchestrate the full range of activity that is carried out across the United States Government to protect the American people from biological threats. With National Security Presidential Memorandum (NSPM)-14, this strategy explains how the United States Government will manage its activities more effectively to assess, prevent, detect, prepare for, respond to, and recover from biological threats, coordinating its biodefense efforts with those of international partners, industry, academia, non-governmental entities, and the private sector. The Biodefense Steering Committee, chaired by the Secretary of Health and Human Services, and comprising the Secretary of State, the Secretary of Defense, the Attorney General, the Secretary of Agriculture, the Secretary of Veterans Affairs, the Secretary of Homeland Security, and the Administrator of the Environmental Protection Agency, will be responsible for overseeing and coordinating the execution of the strategy and its implementation plan, and ensuring federal coordination with domestic and international government and non-governmental partners.

### *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 discharges 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. Under the authorities provided by the Federal Water Pollution Control Act (FWPCA) or Clean Water Act (CWA), EPA develops oil discharge response, prevention and preparedness regulations. EPA also provides compliance monitoring activities to enforce these regulations and coordinates with USCG, DOT, and BSEE in their implementation.

### *Strengthen Human Health and Environmental Protection in Indian Country*

EPA, DOI, DHHS, USDA, and HUD work through several MOUs as partners to improve infrastructure on tribal lands. All five federal partners have committed to continue federal coordination in delivering services to tribal communities. The Infrastructure Task Force has built on prior partner successes, including improved access to funding and reduced administrative burden for tribal communities through the review and streamlining of agency policies, regulations, and directives as well as improved coordination of technical assistance to water service providers and solid waste managers through regular coordination meetings and web-based tools.

### *Homeland Security*

EPA's Homeland Security, Preparedness and Response Program continues to develop and maintain agency assets and capabilities to respond to and support nationally significant incidents with emphasis on those involving chemical warfare agents. The Program implements a broad range of activities for a variety of internal and multi-agency efforts consistent with the NRF and the Homeland Security Presidential Directives that EPA leads or supports. This includes being the lead analytical agency for environmental sampling during a CWA incident. EPA also coordinates its preparedness activities with DHS, FEMA, FBI, and other federal, state and local agencies.

### *Research to Support Homeland Security*

EPA collaborates with numerous agencies on Homeland Security research in order to leverage funding across multiple programs and produce synergistic results. EPA's Homeland Security Research Program works with DHS to back decisions made in its role as a lead agency responsible for cleanup during a Stafford Act declaration under ESF-10 and as the lead agency for water infrastructure. EPA also works with the DOD and its sub-organizations in its research work related to biological and chemical warfare agents. Further, EPA participates in a tri-agency research partnership (Technical Coordination Working Group [TCWG]) with the DOD and DHS that focuses on chemical and biological defense needs and gaps. TCWG activities include: information sharing; joint science and technology research projects; and complementing policies. EPA also collaborates with the CDC in conducting biological agent research.

EPA works with these aforementioned entities and others to address areas of mutual interest and concern related to both homeland security cleanup and water infrastructure protection issues. The Program conducts joint research with USDA and DOI focusing on addressing homeland security threats at the intersection of the environment/public health and agriculture/natural resources. EPA also works with DOE to access and conduct research at the DOE's National Laboratories specialized research facilities, such as to establish the Water Security Test Bed and develop analytical capabilities for biological and chemical agents in environmental matrices.

### *Research to Support Land and Emergency Management Programs*

EPA has complementary and joint programs with the USFS, USGS, USDA, USACE, NOAA, BLM, and many others to minimize duplication, maximize scope, and maintain a real-time information flow for land and emergency management issues. EPA coordinates its research to support a range of environmental priorities at other federal agencies, including work with DOD in its Strategic Environmental Research and Development Program and the Environmental Security Technology Certification Program, and works with DOE and its Office of Health and Environmental Research. EPA also conducts collaborative laboratory research with DOD, DOI, and USGS to improve characterization and risk management options for dealing with subsurface contamination. EPA also works through the Interstate Technology Regulatory Council (ITRC) in defining continuing research needs through its teams on topics including PFAS, radionuclides, and brownfields.

## **Chemical Safety and Pollution Prevention Programs**

### *General Coordination for Chemical Safety*

EPA established an Interagency Policy Group comprised of other Federal agencies with interest and expertise in chemical issues to hold periodic meetings to obtain input on significant actions such as the TSCA Risk Evaluations rules and potential existing chemical candidates for Prioritization under TSCA. The agencies on the Interagency Policy Group include: CPSC, DOD, OMB, NASA, DOL, SBA, NIH, FDA and CDC. EPA has utilized this group to review TSCA materials including, but not limited to, risk evaluations documents related to scoping of existing chemicals for risk evaluation and associated draft risk evaluations.

EPA also engages in biannual meetings with the OMNE<sup>598</sup> Committee, which includes the Occupational Safety and Health Administration (OSHA), Mining Safety and Health Administration (MSHA), NIOSH, and the NIEHS. The OMNE Committee exists to provide a venue for federal agencies to share information and coordinate activities regarding proposed rules, risk assessments, and risk management strategies for controlling exposure to chemicals.

### *Federal Lead Action Plan*

Established by Executive Order 13045, the President's Task Force on Environmental Health Risks and Safety Risks to Children comprises 17 federal departments and offices and is co-chaired by the Secretary of DHHS and the EPA Administrator. In December 2018, through cross-governmental collaboration, the Task Force unveiled the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts (Federal Lead Action Plan). The Federal Lead Action Plan is a blueprint for reducing lead exposure and associated harms by working with a range of stakeholders, including states, tribes and local communities, along with businesses, property owners and parents. In 2019, EPA released the *Implementation Status Report and the Progress Report on EPA-specific goals, objectives and actions under the Federal Lead Action Plan*. In FY 2021 and FY 2022, the Agency will continue to lead those goals and actions, coordinate with federal, state, tribal and community partners to amplify the impacts, and report on activities and implementation, as appropriate.

### *Participation in International Agreements addressing Chemicals and Pesticide Management*

To participate more effectively in international agreements addressing chemicals and pesticide management (e.g., the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention, the Strategic Approach to International Chemicals Management, etc.), EPA coordinates with other federal agencies, including USTR, DOS, DOC, USDA, DOE, and HHS, on a regular basis to develop the policy views and positions of the United States. EPA also coordinates with other parts of the U.S. Government, including ATSDR, NIH, and CPSC, on more technical international matters related to the safety and management of chemicals and pesticides. At the regional and global levels, EPA engages in bilateral cooperation and information exchange with a wide range of countries and regional organizations, such as the European Union (EU), Canada, China, Australia, Japan, Brazil, and many others.

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<sup>598</sup> The OMNE Committee is named for the first letter in each participating agency's name.

In addition to participating in the U.S. Government trade development process, EPA also specifically engages in trilateral cooperation with Canada and Mexico through the U.S.-Mexico-Canada (USMCA) Free Trade Agreement, particularly with respect to the provisions related to agriculture, technical barriers to trade, and environment, among others. Such engagement is designed to promote further trade and regional cooperation among the three governments through targeted efforts and technical working groups. EPA also works closely with a number of countries in the context of the Organization for Economic Cooperation and Development (OECD) to further coordination amongst the OECD Member countries and observer governments. For example, OCSPP serves as the National Coordinator for the United States in support of the OECD Test Guidelines Program's mutual acceptance of data work, which aims to reduce the need to repeat health effects studies due to incompatible test protocols. Additionally, EPA is engaged in the OECD Working Group on Pesticides (WGP), which shares pesticide registration work and develop tools to monitor and minimize pesticide risk to human health and the environment, and with the Chemicals and Biotechnology Committee, which oversees eleven working groups and other subsidiary bodies in the chemicals and pesticide arenas.

#### *Certification and Training, Worker Protection, IPM, and Environmental Stewardship*

EPA will continue to coordinate with USDA, DOD, DOI, DOE, tribes, territories, and states to implement Certification Plans for pesticide applicators who use the riskiest pesticides. EPA provides technical guidance and assistance to the states and tribes in the implementation of all pesticide program activities, such as protecting workers, promoting Integrated Pest Management and environmental stewardship. EPA also provides support through grants, cooperative agreements, or interagency agreements with states, tribes and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, environmental groups, and other entities, as necessary, to assist in strengthening and implementing EPA's pesticide activities, such as worker protection, pollinator protection and certifying pesticide applicators.

#### *Assessing Potential Pesticide Risks with Supplemental Data*

EPA relies on data from DHHS and USDA to supplement data from the pesticide industry in order to assist the Agency in assessing the potential risks of pesticides in the diets of adults and children. Specifically, EPA uses National Health and Nutrition Survey (NHANES) food consumption survey data developed by the DHHS, as well as pesticide residue data in food commodities generated by the USDA in its Pesticide Data Program (PDP) as inputs for dietary risk assessment.

#### *Endangered Species & Pollinator Protection*

EPA will continue collaborating with the USDA, FWS, and NMFS on protecting endangered and threatened species and improving methods for assessing potential risks and effects of pesticides to them. EPA, in cooperation with USDA, other federal agencies, state agencies, tribes, territories, and other entities, will continue to address pesticide risks to bees and other pollinators which are critical to our environment and the production of food crops.

## *Homeland Security – Protecting Food & Agriculture Sectors*

EPA collaborates with the agencies such as DOD, DHS, USDA, FDA, FEMA, and other federal, tribal and state organizations on a variety of homeland security issues as part of the Government Coordinating Council (GCC) For Food and Agriculture. The issues focus on protecting the public and food and agriculture sector from various threats (e.g., biological agents, diseases, or natural disasters) which are vital to critical functions of the government and private sector. EPA collaborates with these organizations on many issues such as research pertaining to effective disinfectants for high threat microorganisms, planning for response to various potential incidents, training and development of policies and guidelines. In addition to GCC efforts, EPA continues to partner with the OSHA, NIOSH, and CPSC on risk assessment and risk mitigation activities.

### *Pesticide Program Dialogue Committee (PPDC)*

One of the Agency's methods for receiving input on pesticide issues has been the Pesticide Program Dialogue Committee (PPDC), a Federal Advisory Committee, that brings together a broad cross-section of knowledgeable stakeholders from organizations that represent divergent views in order to discuss pesticide regulatory, policy, and implementation issues. The PPDC includes members from federal and state governments, industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups, and others. The PPDC provides a structured environment for meaningful information exchanges and discussions, and keeping the public involved in decisions that affect them. Dialogue with outside groups is essential for the Agency to remain responsive to the needs of its many partners.

### *General Research to Support Chemical Safety*

EPA participates in a multi-agency effort under the *Tox21* collaboration. *Tox21* pools chemical research, data and screening tools from multiple federal agencies including EPA, and the NIH and FDA. EPA has contributed a chemical library, currently exceeding 4,000 chemicals, to the *Tox21* testing program.<sup>599,600</sup> Nearly all of this library includes data from EPA's Toxicity Forecaster (*ToxCast*<sup>TM</sup>), an effort that utilizes existing resources to develop faster, more thorough predictions of how chemicals may affect human and environmental health. The full *Tox21* library comprises approximately equal sized contributions from EPA, the National Toxicology Program (NTP), and the National Center for Advancing Translational Sciences (NCATS), and currently exceeds 9,000 unique substances.

Per- and Polyfluoroalkyl Substances (PFAS) are a class of chemicals of emerging concern (CECs) in the environment. For most PFAS chemicals, there are little or no published toxicity data available.<sup>601</sup> In collaboration with the NTP, EPA is addressing this data gap by conducting high-throughput toxicological screening assays on hundreds of PFAS chemicals. The results will be used to identify categories of PFAS chemicals having similar structural and toxicological properties that may inform the development and strength of predictive toxicological models.

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<sup>599</sup> Collins, F.S., Gray, G.M., and Bucher, J.R. (2008). Transforming environmental health protection. *Science*, 319, 906–907. doi: 10.1126/science.1154619.

<sup>600</sup> Tice, R.R., Austin, C.P., Kavlock, R.J., and Bucher, J.R. (2013). Improving the human hazard characterization of chemicals: a *Tox21* update. *Environmental Health Perspectives*, 121, 756–765. doi: 10.1289/ehp.1205784.

<sup>601</sup> For more information, please see: <https://www.epa.gov/pfas/epa-pfas-research>.

Resources requested in FY 2022 will build upon the research foundation formed from completed work outlined in the *PFAS Action Plan*.

#### *Research to Support the Amended Toxic Substances Control Act*

EPA collaborates globally with other federal agencies on research to accelerate the pace of chemical risk assessment and to provide greater regulatory certainty for the public. EPA is working with Health Canada and the European Joint Research Center on the development and testing of new non-animal approach methodologies to evaluate chemicals quickly and cost-effectively for safety. These new approach methods are a critical part of implementing the TSCA Strategic Plan to reduce, refine, and replace the use of vertebrates in toxicity testing and evaluation. EPA also commenced work with Health Canada and ECHA to promote sharing of non-confidential chemical safety information with the intent of advancing chemical evaluations across regulatory jurisdictions. This collaborative approach will help EPA and other federal agencies screen, prioritize and evaluate chemicals, and promote implementation of alternative methods to replace vertebrate animal testing under TSCA. Finally, EPA is engaged in multiple OECD chemical safety groups that share information, expertise, and research results related to chemical safety. Ultimately, these international efforts will work towards creating transparent data requirements for industry and reducing the regulatory uncertainty of multiple regulatory environments globally.

#### *Research to Support Agencywide Risk Assessment Activities*

EPA consults and collaborates routinely with other federal agencies about the science of individual Integrated Risk Information System (IRIS) assessments, as well as efforts to prioritize and coordinate chemical evaluations. IRIS maintains an interagency working group that consists of various federal agencies (e.g., DOD, NASA, SBA, DOT, DOE, DOI, etc.), and the White House. EPA also coordinates, respectively, with: ATSDR, through an MOU on the development of toxicological reviews and toxicology profiles; NIEHS and the National Toxicology Program, on assessment methodology, software, and assay development platforms; FDA on advisories and reports; and DOD on assessment development. In addition, EPA contracts with the National Academy of Sciences' National Research Council (NRC) on very difficult and complex human health risk assessments through consultation or review. EPA also participates in the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) to work towards increasing the efficiency and effectiveness of U.S. federal agency test method review, eliminating unnecessary duplication of effort, sharing experience among U.S. federal regulatory agencies, and reducing, refining, and replacing the use of animals in testing.

### **Enforcement and Compliance Assurance Programs**

#### *General Enforcement Coordination*

The Enforcement and Compliance Assurance Program coordinates closely with:

- DOJ on all civil and criminal environmental enforcement matters. In addition, the Program has coordinated with other agencies on specific environmental issues as described herein;
- The Chemical Safety and Hazard Investigation Board, OSHA, and ATSDR in preventing and responding to accidental releases and endangerment situations;

- DOI's Bureau of Indian Affairs, and DHHS's IHS on issues relative to compliance with environmental laws in Indian country;
- The DOC and SBA on the implementation of SBREFA. In addition, it has collaborated with the SBA to maintain current environmental compliance information at *Business.gov*, a website initiated as an e-government initiative in 2004, to help small businesses comply with government regulations. The IRS on cases that require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws;
- USACE on wetlands issues;
- DOT's Pipeline and Hazardous Materials Safety Administration on pipeline spills;
- USDA on the regulation of animal feeding operations and on food safety issues arising from the misuse of pesticides and shares joint jurisdiction with the Federal Trade Commission on pesticide labeling and advertising; and,
- United States Customs and Border Protection in order to stop the importation of internal combustion vehicles and engines that do not meet Clean Air Act requirements.

### *International Trade*

EPA works with U.S. Customs and Border Protection (CBP) on implementing the secure International Trade Data System (ITDS) across all federal agencies and on pesticide imports and on hazardous waste and Cathode Ray Tube exports, as well as on a variety of other import/export issues under the various statutes (e.g., imports of vehicles and engines).

### *Coordination on Issues Involving Shared Jurisdiction*

EPA and FDA share jurisdiction over general-purpose disinfectants used on non-critical surfaces and some dental and medical equipment surfaces. EPA and FDA also collaborate and share information on Good Laboratory Program inspections to avoid duplication of inspections and maximize efficient use of limited resources. The Agency has entered into an agreement with the HUD concerning enforcement of the TSCA lead-based paint notification requirements. The Agency has coordinated with the USCG under the Act to Prevent Pollution from Ships, and on discharges of pollutant from ships and oil spills under the CWA. EPA also works with the DOI on CWA permit enforcement on the Outer Continental Shelf, as well as both the Interior and Transportation Departments on enforcement of CWA requirements for offshore facilities.

### *Criminal Enforcement*

EPA's Criminal Enforcement Program coordinates with the FBI, CBP, DOL, U.S. Treasury, USCG, DOI and DOJ and with international, state, tribal, and local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also works with DOJ to establish task forces that bring together federal, state, tribal, and local law enforcement organizations to address environmental crimes. EPA has an Interagency Agreement with DOJ's Environment and Natural Resources Division to develop the first federal Environmental Crime Victim Assistance Program. This allows both agencies to meet their statutory obligations under the Crime Victims' Rights Act (CVRA) and the Victims' Rights and Restitution Act (VRRRA), to



make sure that environmental crime victims are notified of and accorded their rights under the CVRA and VRRRA. 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*

Most environmental statutes require departments, agencies and instrumentalities of the U.S. government to comply with environmental requirements just like any other regulated entity. EPA and states inspect federal facilities and take enforcement actions, as appropriate. In addition, Executive Order 12088 on *Federal Compliance with Pollution Control Standards* directs EPA to monitor compliance by federal agencies with all environmental laws and provide technical assistance. The Federal Facility Enforcement Program coordinates with other federal, state, tribal, and local agencies to ensure compliance by federal agencies with all environmental laws. EPA works through the Federal Facilities Environmental Stewardship and Compliance Assistance Center (*FedCenter*) ([www.fedcenter.gov](http://www.fedcenter.gov)), which is governed by a board of more than a dozen contributing federal agencies. EPA also partners with other federal agencies to identify ways to expedite cleanup of Superfund sites and prevent and address regulatory compliance issues. *FedCenter* works with federal agencies to plan Federal Environmental Symposiums to encourage collaboration, information sharing, stewardship, and improved environmental compliance across the federal government. EPA is working with other Agencies through *FedCenter* to address Administration priorities including PFAS and environmental justice.

### *Superfund Enforcement*

EPA oversees federal agency CERCLA cleanups for federal facilities listed on the National Priorities List (NPL) through a Federal Facility Agreement. Where appropriate, EPA takes action to enforce and coordinates with OFAs in their use of CERCLA enforcement authority. This includes the coordinated use of such authority at individual hazardous waste sites that are located on both non-federal land (EPA jurisdiction) and federal lands (other agency jurisdiction). As required by Executive Order 13016, EPA also reviews and concurs on the use of CERCLA Section 106 authority by other departments and agencies. In addition, EPA coordinates closely with Federal Land Management Agencies (FLMAs), such as BLM and USFS, at mixed ownership sites (*i.e.*, those sites located partially on privately-owned land and partially on federally owned land) pursuant to Executive Order 12580. EPA frequently enters into Memoranda of Understanding (MOUs) with FLMAs designed to provide a framework for agencies to coordinate response actions. Most recently, as part of the Superfund Task Force Recommendations, EPA has been working on an MOU with FLMAs to improve the efficient and effective use of federal resources to cleanup at mixed ownership mining sites. EPA also meets with DOI and USDA as part of the Federal Mining Dialogue, to discuss developments arising out of the CERCLA work at such sites.

EPA also coordinates with DOI, USDA, DOC, DOE, and DOD to ensure that appropriate and timely notices, required under CERCLA, are sent to the Natural Resource Trustees notifying them of potential damages to natural resources. EPA also coordinates with Natural Resource Trustees on natural resource damage assessments, investigations, and planning of response activities under Section 104 of CERCLA. When an enforcement action is initiated at a site where hazardous

substances are found to have caused damages to natural resources, EPA coordinates with the Trustees by including them in negotiations with potentially responsible parties concerning the releases that have caused those damages.

Under Executive Order 12580, EPA's Superfund Federal Facilities Enforcement Program assists federal agencies in complying with CERCLA, and ensures that: (1) all federal facility sites on the NPL have interagency agreements, also known as Federal Facility Agreements (FFAs) with enforceable cleanup schedules; (2) FFAs are monitored for compliance; (3) federal sites are transferred to new owners in an environmentally responsible manner; and (4) compliance assistance is available to the extent possible. This program also ensures that federal agencies comply with Superfund cleanup obligations "in the same manner and to the same extent" as private entities. To enable the cleanup and reuse of such sites, the Federal Facilities Enforcement Program also has coordinated creative solutions that help restore facilities, so they can once again serve an important role in the economy and welfare of local communities, and the country.

### **International and Tribal Affairs Programs**

#### *Supporting Global Policy to Reduce Pollution and Harmful Chemicals*

EPA has a strong network of partners working to achieve reductions in global mercury use and emissions, particularly when adverse U.S. impacts would be likely. EPA works closely with the DOS in leading the technical and policy engagement for the U.S. in the Minamata Convention on Mercury and the multi-stakeholder Global Mercury Partnership. In addition to the DOS, EPA collaborates with several federal agencies including USGS and USAID to advance robust implementation of the Minamata Convention by other countries. EPA also continues to share information through the Arctic Council on reducing releases of mercury which disproportionately impact indigenous arctic communities.

Similarly, EPA is engaged in a multi-pronged effort to address the growing global problem of marine litter. Here, EPA works with the DOS, NOAA, Peace Corps, and USAID to advance policy and technical solutions for marine litter in global fora. EPA also is working with USDA, OMB and FDA on the on reducing food waste which includes international cooperation on measuring food waste reductions and pilot activities that can create market opportunities for U.S. technologies and innovation.

#### *Supporting Environmental Priorities in Global Trade Policy and Implementation of Environmental Cooperation Agreements*

Since the 1972 Trade Act mandated the U.S. Trade Representative to 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, the Trade Policy Review Group and relevant subcommittees – 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.

EPA continue its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America. EPA also will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. EPA also continues active participation in the United States Trade Representative (USTR) led Interagency Environment Committee for Monitoring and Environment (IECME) established to promote Mexican and Canadian compliance with their environmental obligations. In addition, EPA continues to work with partners (including the Treasury Department, State Department, U.S. Agency for International Development, and the U.S. International Development Finance Corporation), to improve environmental governance of U.S. funded international development projects.

### *Addressing Transboundary Pollution*

EPA collaborates with countries around the world to address foreign sources of pollution in coordination with DOS, USAID, DOJ, Treasury, and others. EPA works closely with DHHS to advance recognition of environmental risk factors of non-communicable diseases (NCDs) and how to mitigate the risks, including from lead and mercury. In addition, EPA continues to strengthen its activities in the Arctic by working with Alaska, tribes, federal agencies, and the private sector to build international support for U.S. environmental policy objectives through the Arctic Council. These objectives cover a range of topics, including reducing emissions and exposure to mercury. EPA also plays a leadership role with other agencies including NOAA, DOS, and USAID in crafting sound programs to address marine litter globally, ensuring that sound waste management and recycling strategies are advanced in key source countries.

### *Working in Indian Country*

EPA works under a five-federal agency MOU to better coordinate the federal government's efforts in providing access to safe drinking water and basic wastewater facilities for tribal communities. EPA, DOI, DHHS, USDA, and HUD work as the Federal Tribal Infrastructure Task Force (TITF) to use their combined authorities to maintain a framework to enhance interagency efficiency and coordination, and to cultivate greater cooperation in carrying out their tribal infrastructure responsibilities. Since 2007, the TITF has: maintained procedures necessary for a common understanding of the programs pertaining to funding infrastructure construction, solid waste management efforts, and technical assistance to tribes; worked together to improve the capacity of tribal communities to operate and maintain sustainable infrastructure; enhanced the efficient leveraging of funds; worked directly with tribes to promote an understanding of federal programs; identified ways to improve construction, operation, and maintenance of sustainable infrastructure; and worked to allow and facilitate the exchange of data and information amongst partners.<sup>602</sup>

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<sup>602</sup> For additional information, please visit: <https://www.epa.gov/tribal/federal-infrastructure-task-force-improve-access-safe-drinking-water-and-basic-sanitation>.

## **Central Planning, Budgeting and Finance Programs**

### *Working with Federal Partners on Improving Management and Accountability throughout the Federal Government*

EPA participates and makes active contributions to standing interagency management committees, including:

- the Chief Financial Officers Council focuses on improving resources management and accountability throughout the federal government;
- the Performance Improvement Council coordinates and develops strategic plans, performance plans, and performance reports as required by law;
- OMB-led E-Government initiatives such as the Financial Management and Budget Formulation and Execution Lines of Business;
- the Bureau of Census-maintained the Federal Assistance Awards Data System; and
- the President’s Management Council oversees developing and implementing Cross-Agency Priority (CAP) goals.

### *Provide Government-to-Government Employee Relocation Services*

EPA provides government-to-government employee relocation services via interagency agreements through EPA’s Federal Employee Relocation Center (FERC) as a Working Capital Fund (WCF) activity. EPA-FERC provides “one-stop shop” domestic and international relocation services to other federal agencies to increase operational efficiency and save the government money. EPA-FERC currently provides relocation services internally to all EPA offices, and externally to the Transportation Security Administration (TSA), DOL, Office of Personnel Management (OPM), United States Patent and Trademark Office (USPTO), DHHS, and the USDA. EPA also coordinates appropriately with Congress and other federal agencies, such as the U.S. Treasury, the Government Accountability Office (GAO), and GSA.

## **Mission Support Programs**

### *Working with Federal Partners on Improving Management and Accountability throughout the Federal Government*

EPA provides leadership and expertise to government-wide activities in various areas of human resources, grants management, contracts management, suspension and debarment, and homeland security. These activities include specific collaboration efforts through:

- The Chief Human Capital Officers Council, a group of senior leaders that discuss human capital initiatives across the federal government.

- The Legislative and Policy Committee, a committee comprised of other federal agency representatives who assist OPM in developing plans and policies for training and development.
- The Chief Acquisition Officers Council, the principal interagency forum for monitoring and improving the federal acquisition system. The Council also is focused on promoting the President's specific initiatives and policies in all aspects of the acquisition system.
- The Award Committee for E-Government (E-Gov) provides strategic vision for the portfolio of systems/federal wide supporting both federal acquisition and financial assistance. Support also is provided to the associated functional community groups, including the Procurement Committee for E-Gov, the Financial Assistance Committee for E-Gov, and the Intergovernmental Transaction Working Group.

The Interagency Suspension and Debarment Committee (ISDC), a representative committee of federal agency leaders in suspension and debarment. The Committee facilitates lead agency coordination, serves as a forum to discuss current suspension and debarment related issues, and assists in developing unified federal policy. Besides participating in the ISDC, EPA: 1) provides instructors for the National Suspension and Debarment Training Program offered through the Federal Law Enforcement Training Center, and 2) supports the development of coursework and training on the suspension and debarment process for the Inspector General Academy and the Council of the Inspectors General on Integrity and Efficiency.

The Financial Management Line of Business (FMLoB) has been expanded to also encompass the Grants Management Line of Business. The combined FMLoB, with U.S. Treasury as the managing partner, will more closely align the financial assistance and financial management communities around effective and efficient management of funds. EPA also participates in the Grants.gov Users' Group, as well as the Federal Demonstration Partnership which is designed to reduce the administrative burdens associated with research grants.

The Partnership for Sustainable Communities initiative, a collaborative effort with HUD and DOT, improves the alignment and delivery of grant resources to communities designated under certain environmental programs. It also helps identify cases in the Program that may warrant consideration of suspension and debarment.

The Interagency Committee on Federal Advisory Committee Management (Committee Management Officer Council) provides leadership and coordination on federal advisory committee issues and promotes effective and efficient committee operations government-wide. In addition to serving on the Council, EPA works with the GSA Committee Management Secretariat to establish and renew advisory committees, conduct annual reviews of advisory committee activities and accomplishments, maintain committee information in a publicly accessible online database, and develop committee management regulations, guidance, and training. Further, EPA participates on

the GSA Federal Advisory Committee Act (FACA) Attorney Council Interagency Workgroup to keep abreast of developments in the statutory language, case law, interpretation and implementation of the FACA.

The Interagency Security Committee (ISC) is the leading organization for nonmilitary federal departments and agencies in establishing policies for the security and protection of federal facilities, developing security standards, and ensuring compliance with those standards. EPA participates in the ISC as a primary member and in sub-committees and workgroups to facilitate EPA's compliance with ISC standards for facilities nationwide.

The OPM Background Investigations Stakeholder Group (BISG) is a collaborative organization that is derived from the Intelligence Reform and Terrorism Prevention Act of 2004. The BISG is comprised of senior security officials across the federal government who are responsible for the submission, adjudication and/or oversight of personnel security programs. EPA works with this group to discuss topics regarding background investigations, focusing on standardizing and improving the Agency's personnel security program.

EPA manages the Senior Environmental Employment (SEE) Program's interagency agreements with other federal agencies. The interagency agreements are with the CEQ, the FHWA, NOAA, and the Gulf Coast Ecosystem Restoration Council. SEE participants provide administrative, technical, and professional support to these agencies for projects relating to pollution prevention, abatement, and control.

EPA's Office of Administrative Law Judges (OALJ) partners with the USPTO, NOAA, the Alcohol and Tobacco Tax and Trade Bureau, the Merit Systems Protection Board, and the Equal Employment Opportunity Commission to serve as Presiding Officers for proceedings to adjudicate complaints brought before the partner organizations. This collaboration allows partner organizations the ability to provide constitutionally guaranteed legal due process and review without staffing and supporting their own office of Administrative Law Judges, while EPA's judges expand their experience and knowledge in the area of administrative law. The services OALJ provides to other agencies are reimbursed by the borrowing organization.

#### *Work with the Department of Interior's Interior Business Center*

In FY 2022, EPA will continue working with DOI's Interior Business Center (IBC), an OPM- and OMB-approved Human Resources Line of Business shared service center. IBC offers HR transactional processing, compensation management and payroll processing, benefits administration, time and attendance, HR reporting, talent acquisition systems, and talent management systems. EPA also continues its charter membership on the OPM HR Line of Business Multi Agency Executive Strategy Committee (MAESC), providing advice and recommendations to the Director of OPM as well as additional government-wide executive leadership, for the implementation of the HR Line of Business vision, goals, and objectives.

### *Partnering with GSA on the USAccess Program*

EPA is partnering with GSA on the *USAccess* Program for Personal Identity Verification cards and identity credential solutions, which provides an efficient, economical and secure infrastructure to support its credentialing needs, and migrations to the Enterprise Physical Access Control System, allowing the Agency to control access in EPA space, including restricted and secure space.

### *Environmental Information Programs*

To support EPA's overall mission, the Agency collaborates with federal, state, and tribal agencies on a variety of initiatives focused on making government more efficient and transparent in protecting human health and the environment. EPA's Environmental Information programs are primarily involved in the information technology (IT), information management (IM), and information security aspects of the projects on which it collaborates.

### *The Chief Information Officer (CIO) Council*

The CIO Council is the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of federal information resources. The Council develops recommendations for IT/IM policies, procedures, and standards; identifies opportunities to share information resources; and assesses and addresses the needs of the federal IT workforce.

### *eRulemaking*

The eRulemaking Program is a Federal E-Government shared Line of Business (LoB) that manages the Federal Docket Management System (FDMS) and Regulations.gov. The Program provides the public with one-stop access to electronic dockets and the ability to electronically comment on proposed rulemakings and de-regulatory actions for multiple federal agencies.

At the beginning of FY 2020, the Program Managing Organization transitioned from EPA to the GSA. EPA will continue working with GSA as a Partner Agency to improve FDMS and provide the public with access to electronic dockets and the ability to electronically comment on proposed rulemaking and de-regulatory actions.

### *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 8 million EPA-related electronic filings needed to clear legitimate imports and exports. With the move from paper filings to electronic filings combined with automated processing through ACE, filing time can be reduced from weeks/days to minutes/days. This significant processing improvement directly impacts the movement of goods into commerce and the economy while helping to ensure compliance with environmental and CBP laws and regulations. It also helps the U.S. Government keep pace with the speed of business.

### *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 to automate the 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. EPA will continue to collaborate with CBP to support regulatory changes and integrate with new ACE capabilities for streamlining the import and export processes for America's businesses.

### *Geospatial Information*

EPA works with 31 federal agencies through the activities of the Federal Geographic Data Committee (FGDC) and the OMB Geospatial Line of Business (Geo LoB). EPA also participates in the FGDC Steering Committee. 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 GeoPlatform, EPA's Environmental Dataset Gateway, the Exchange Network, National Environmental Policy Act (NEPA) Assist, EJScreen, the EPA Metadata Editor,



Facilities Registry System (FRS) Web Services, and *My Environment*. EPA also works closely with its state, tribal, and international partners in a collaboration that enables consistent implementation of data acquisition and development, standards, and technologies supporting the efficient and cost-effective sharing and use of geographically based data and services.

## **The Administrator's Office**

### *Regulatory Management and Economic Analyses*

EPA's Policy Office (OP) interacts with federal agencies during its rulemaking activities. Per governing statutes and agency priorities, OP submits "significant" regulatory actions to OMB for interagency review prior to signature and publication in the *Federal Register*. In addition, OP coordinates EPA's review of other agency's regulatory actions submitted to OMB for review. Under the Congressional Review Act, rules are submitted to each chamber of Congress and to the Comptroller General of the United States. For regulations that may have a significant economic impact on a substantial number of small entities, OP collaborates extensively with SBA and OMB. OP also collaborates with other federal regulatory and natural resource agencies to collect data used in economic cost-benefit analyses of environmental regulations and policies and to foster improved interdisciplinary research and reporting. Activities include representing EPA on interagency workgroups or committees tasked with measuring the economic costs and benefits of federal policies and programs. Occasionally, OP also provides technical reviews of other agencies research and analyses.

### *Children's Health*

The Administrator of EPA and the Secretary of DHHS co-chair the President's Task Force on Environmental Health Risks and Safety Risks to Children. The Task Force comprises 17 federal departments, agencies and White House offices. A senior staff steering committee, co-chaired by the Director of EPA's Office of Children's Health Protection (OCHP), coordinates interagency cooperation on Task Force priority areas. As part of this effort, OCHP coordinates with other agencies to improve government-wide support in implementing children's health legislative mandates and outreach, including providing children's environmental health expertise on interagency activities and coordinating EPA expertise. OCHP also coordinates with ATSDR to support provision of training and hands on consultations with doctors, nurses, and other medical professionals to address issues of potential exposures of children to environmental contaminants, such as lead and asthma triggers including mold and vermin. OCHP also works with other federal agencies to address emerging risks to children's environmental health and supports federal interagency information exchange and cooperation, such as on lead and wildfires.

### *Environmental Justice*

Presidential Executive Order (EO) 14008 on *Tackling the Climate Crisis at Home and Abroad* enhanced and expanded several important means of interagency coordination and collaboration related to environmental justice. EO14008 elevated the existing Interagency Working Group on Environmental Justice, formerly chaired by EPA, to the White House Environmental Justice

Interagency Council (IAC), chaired by the Council on Environmental Quality (CEQ). This executive order also established a White House Environmental Justice Advisory Council (WHEJAC) to provide advice and recommendations to the IAC and CEQ on environmental justice recommendations for the entirety of the executive branch of the federal government. The IAC will be the primary venue for inter-agency coordination of executive branch federal activities related to environmental justice. Through the Justice40 initiative, also mandated in EO14008, the IAC will work to achieve the goal that forty percent of federal resources for climate change benefit disadvantaged communities and will publish an annual public performance scorecard on implementation by federal agencies. The IAC will likewise coordinate recommendations on further updates to EO12898 and provide leadership to interagency efforts to address current and historic environmental injustices. As stipulated in EO14008, EPA will provide all support necessary for administration of the WHEJAC and is one of three agencies charged with providing support to CEQ for administration of the IAC. EPA also will play a prominent membership role within the IAC as a participating agency.

#### *National Climate Task Force*

The Administrator of EPA is a member of the National Climate Task Force. The Task Force shall facilitate the organization and deployment of a Government-wide approach to combat the climate crisis. This Task Force shall facilitate planning and implementation of key Federal actions to reduce climate pollution; increase resilience to the impacts of climate change; protect public health; conserve our lands, waters, oceans, and biodiversity; deliver environmental justice; and spur well-paying union jobs and economic growth. As necessary and appropriate, members of the Task Force will engage on these matters with State, local, Tribal, and territorial governments; workers and communities; and leaders across the various sectors of our economy.

### **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**

As required by the Reports Consolidation Act of 2000, the Office of Inspector General identifies issues they consider as the Environmental Protection Agency's top management challenges and assesses progress in addressing those challenges. EPA 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 2020 management challenges identified by the OIG and presents the Agency's responses.

### **Maintaining Operations During Pandemic and Natural Disaster Responses**

***Summary of Challenge:** The OIG notes that EPA needs to maintain human health and environmental protection, business operations, and employee safety during the coronavirus pandemic and future natural disasters.*

**Agency Response:** During this time of COVID-19, the Agency continues to carry out management, operational, and statutory responsibilities in the face of the unprecedented challenge represented by the pandemic. EPA worked with its partners and maintained a robust posture for its Response Support Corps and several Special Teams ready to respond to local and national emergencies and time-critical removals. Through innovation, flexibility where appropriate to allow for easier adaptation to the evolving circumstances posed by the virus, and ongoing systematic implementation of performance management and evaluation, the Agency has continued its important work. EPA recognizes the current COVID-19 pandemic does create new challenges for the Agency to successfully respond to its primary mission essential functions and ensure that its employees are able to operate in a safe manner. The Agency's resilience, robust management systems and a committed workforce ensures EPA continues to perform its work at a high level.

EPA has relied on its performance management and evaluation system to monitor progress towards outcomes. The Agency established a variety of organizational goals to drive progress toward key mission outcomes. These strategic goals articulate clear statements of what the Agency wants to achieve to advance its mission and address relevant national problems, needs, challenges, and opportunities. Strategic objectives define the outcome or management impact the Agency is trying to achieve. Each strategic objective is tracked through long-term performance goals, annual performance goals, indicators, and other evidence. EPA's FY 2020 Annual Performance Report (APR) described progress towards the strategic goals and objectives outlined in the *FY 2018-2022 EPA Strategic Plan*, available at <https://www.epa.gov/planandbudget/strategicplan>. This APR presented results toward the annual performance goals and targets in the Agency's FY 2020 Annual Performance Plan (APP) and Congressional Justification (CJ) as updated in the FY 2021 APP and CJ.

EPA has made significant progress toward a broad range of policy outcomes including significant improvements in performance over recent years. The Agency will continue progress toward its performance targets to improve the efficiency and cost effectiveness of its operations.

In parallel, each regional emergency response program is continuously evaluating the availability of On-Scene Coordinators and Special Teams in light of the COVID-19 pandemic to inform decision-making of future deployments as necessary. The emergency response program leadership team will, prior to significant personnel deployments, discuss steps which the Agency can take to mitigate risk and adhere to the latest field activities guidelines.

The Office of Mission Support (OMS) continues providing leadership on agency operations in the face of the COVID-19 pandemic: ensuring the safety of the workplace through enhanced cleaning and safety protocols; implementing CARES Act Section 3610 contracting provisions; supporting the workforce through implementation of workforce flexibilities; and supporting agency leadership on the regarding ongoing operations. OMS' goal and focus are to prevent and/or limit COVID-19 from impeding the mission of the Agency despite the significant and far-reaching impacts of the pandemic on the Agency and workforce.

Additionally, actions the Agency has adapted to continue to protect human health and the environment amid the pandemic are highlighted below:

- Ensuring that all Americans have safe water by working closely with the water sector and the Agency's federal and state partners to support drinking water and wastewater services that are essential to helping reduce the spread of COVID-19. The Agency focused its efforts on critical threats such as water sector worker absenteeism, supply chain disruptions, and financial impacts – both immediate and long-term.
- Working closely with Centers for Disease Control (CDC) to jointly develop guidance for cleaning and disinfecting public spaces, workplaces, businesses, and homes.
- Expanded indoor air quality outreach and technical assistance to schools, tribes and the general public to improve ventilation and filtration practices as a key component to COVID-19 interventions.
- Expanded work under the Emerging Viral Pathogens Guidance for Anti-microbial Pesticides program, where EPA deployed, for the first time against SARS-CoV-2, expedited review of submissions from companies requesting to add emerging viral pathogen claims to their already registered surface disinfectant labels.
- Working with the Federal Tribal Infrastructure Task Force to identify available federal resources, information, and programs to support tribal water systems.
- Establishing a variety of compliance monitoring guidance documents and innovative processes to ensure a continued field presence, albeit virtual.
- Developing COVID-19 Interim Guidelines for Inspections for conducting inspections during the COVID-19 public health emergency.
- Developed key Off-Site Compliance Monitoring Guidance.
- The Office of Civil Enforcement continues to initiate and conclude civil administrative and judicial enforcement actions; issue information requests; conduct settlement discussions and negotiations; and oversee implementation of consent decrees. National policy development continues with additional efficiencies.

- Establishment of a framework for addressing the impact of the COVID-19 public health emergency on site remediation enforcement programs. In April 2020, the Office of Land and Emergency Management and the Office of Enforcement and Compliance Assurance issued a joint memorandum titled *Interim Guidance on Site Field Work Decisions Due to Impact of COVID-19*. The interim guidance addresses response field activities, non-field activities, and cleanup enforcement issues at “sites across the country under a range of EPA authorities including, but not limited to, the Superfund Program, RCRA corrective action, TSCA PCB cleanup provisions, the Oil Pollution Act, and the Underground Storage Tank Program.”
- Developing a plan to maintain Emergency Radiation Air Monitoring Capabilities during a pandemic.
- Understanding Adaptations to Nuclear Power Plant Public Safety Plans through working with state partners and the Federal Emergency Management Agency’s (FEMA) Radiological Emergency Preparedness Program to understand how pandemic considerations were being considered for public health decision-making for a nuclear power plants.

**FY 2021 Spring Update:** The coronavirus pandemic necessitated unexpected and sudden changes to EPA’s management, administrative, and programmatic operations to protect human health and the environment. In early March 2020, EPA switched over to virtual workplace within a span of two to three weeks. The shift initially had negative impacts on performance. Subsequently, much of the Agency’s work recovered to appropriate performance levels, but some activities have had sustained negative impacts. EPA will continue to monitor the effects of the pandemic on performance.

The FY 2020 APR addressed impacts of the pandemic on annual performance goals, finding direct or indirect impacts on 12 out of the 45 (about 27%) total annual performance goals. The negative impacts on EPA’s performance were primarily in operational areas that require the field presence of EPA staff, partners, or contractor personnel. In addition, a complete and sudden transition of EPA’s entire workforce and its operations required development and implementation of IT solutions at a rapid pace. While this rapid transformation created some positive benefits (e.g., increased participation in online technical assistance, conversion of paper-based processes to digital processes, etc.), it also highlighted some of the issues for disadvantaged communities that could not take advantage of the changes because of their lack of internet connections.

Agency leadership will continue to engage in discussions with program and regional office leadership on COVID-19 and anticipated potential risks associated with achieving strategic objectives based on performance data moving forward. Discussions also will continue as part of the Agency’s Quarterly Performance Reviews to assess performance and identify actions to mitigate impacts as appropriate.

**Responsible Agency Official:** David Bloom, Deputy Chief Financial Officer, Office of the Chief Financial Officer; and Donna Vizian, Principal Deputy Assistant Administrator, Office of Mission Support

## **Complying with Key Internal Control Requirements**

**Summary of Challenge:** *According to the OIG, EPA faces overarching challenges with implementing and operating internal controls that establish and maintain an effective work environment. This includes developing internal control risk assessments; ensuring data quality; and effective operational policies and procedures.*

**Agency Response:** EPA continues to comply with key internal control requirements to ensure programs are operating effectively and efficiently. The GAO *Standards for Internal Control in the Federal Government* (known as the Green Book) serves as the overall framework for establishing and reporting on the effectiveness of EPA's internal controls. As outlined in the Agency's annual guidance, program and regional offices are required develop and maintain an Internal Control Matrix for key program and processes within their respective organizations. The matrix is based on the Green Book standards and provides the basis for the Assistant and Regional Administrator's attestation to the soundness of internal controls for the organization. Furthermore, the matrix describes the risks that may impede the organization from accomplishing its goals and objectives and includes the associated controls (e.g., policies, procedures, measures, etc.) in place to address the identified risks. In developing the matrix, program and regional offices consider all risk factors—strategic, operational, and fraud—and assess the impact and likelihood to the program if the risk were to occur. Additionally, the Agency performs risk assessments for its strategic objectives and uses the results of the assessment to inform the Agency Risk Profile, which is required by OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*.

To strengthen the Agency's process, OCFO developed a template to assist organizations in identifying internal controls and conducting reviews of those controls. The template allows managers and staff to describe the details of the review and the procedures used to determine if controls are operating as intended and sufficient in responding to risk identified. In addition, this year, as part of its oversight responsibility for EPA's Management Integrity Program, OCFO plans to perform internal control reviews in various program offices. The results of the review, as well as information reported in the templates, will assist in determining whether controls are designed, implemented, and operating effectively. The results also will support development of the Administrator's statement of assurance on the overall effectiveness of internal controls for the agency.

In response to the OIG audit, *EPA Needs to Conduct Risk Assessments When Designing and Implementing Programs*, Report 20-P-0170, May 18, 2020, the Office of the Chief Financial Officer has made available on-line training modules that provide awareness and key information on EPA's Management Integrity Program. The training is targeted for managers and staff and focuses on roles and responsibilities for implementing and overseeing internal controls. The AA and RA must report completion of the training for all appropriate staff in their annual assurance letters.

In reference to improving data quality, under the Clinger Cohen Act (1996), the EPA Chief Information Officer in the Office of Mission Support has delegated authority for environmental information including oversight responsibility for the Agency's Quality Program, as described in

the Agency's Quality Policy and Procedure. The Agency's Quality Program is decentralized and implemented by the program offices and regions with specific responsibilities for assuring the quality of environmental information collected, produced, evaluated or used is appropriate for their programmatic decisions. OMS has developed a long-term corrective action plan to address the 15 findings identified in the OIG audit, EPA Needs to Address Internal Control Deficiencies in the Agencywide Quality System, Report No. 20-P-0200, June 22, 2020. The plan includes steps to increase effective information and communication.

**Responsible Agency Officials:** Jeanne Conklin, Controller, Office of the Controller; and Jeff Wells, Director, Office of Enterprise Information Programs

### **EPA Needs to Improve Oversight of States, Territories and Tribes Authorized to Accomplish Environmental Goals**

*Summary of Challenge:* The OIG notes that while the Agency has made important progress, it continues to face challenges in improving oversight of, and results from state, territory, and tribal environmental programs that EPA oversees.

*Agency Response:* EPA takes its role seriously in overseeing state, territorial, and tribal implementation of federal environmental programs to carry out EPA's mission of protecting public health and the environment. Effective oversight is critical in protecting all Americans, including those in communities that have been historically marginalized, underserved, and overburdened by pollution. Upon being confirmed and sworn in, Administrator Michael S. Regan made a strong commitment to EPA's oversight role in remarks before the Environmental Council of the States (ECOS) on March 16, 2021, stating: "[T]he heart of our work is about protecting public health and the environment. There will be certain baseline standards we're going to expect states to meet to ensure we're fulfilling that responsibility."

Protection of the environment and of communities is a shared goal and responsibility of EPA and the states, territories, and tribal nations who are our co-regulator partners. Federal oversight is important to identify any program deficiencies and implement solutions to ensure human health and the environment are protected in every zip code. To this end, Acting Assistant Administrator of the Office of Environment Compliance Assurance (OECA) Larry Starfield issued a memorandum on April 30, 2021, regarding strengthening EPA's enforcement in communities with environmental justice concerns. He stated: "[I]f there is a situation where a community's health may be impacted by noncompliance, and our co-regulator is not taking timely or appropriate action, we should not hesitate to step in and take necessary action." EPA's role is to ensure the protection of communities regardless of where a person lives.

The Agency is committed to meeting its oversight responsibilities, addressing disparities, and executing on its mission for all Americans. The Agency has oversight programs for several major programs that continuously oversee states, territories, and tribes, such as the OECA's State Review Framework reviews. Additionally, the Office of Water's National Pollutant Discharge Elimination System (NPDES) permit reviews, the Office of Water's Safe Drinking Water Act annual reviews, the Office of Air and Radiation's Clean Air Act Title V program reviews, and the Office of Land and Emergency Management's RCRA program reviews all contribute to this goal. In 2021, EPA



plans to reconvene the Agency's internal Oversight workgroup to review and consider improvements to its oversight programs.

Additional activities to address state oversight issues include the following:

- OECA reviews all state CAA Title V, CWA NPDES, and RCRA Subtitle C compliance and enforcement programs once every five years through the State Review Framework.
- In 2018, OECA initiated a focused effort to complete recommended state improvement actions identified in the prior reviews, resulting in the completion of 619 out of 669 (over 90%) recommendations by mid-2021.

**Responsible Agency Official:** Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations

### **EPA Needs to Improve Its Workload Analysis to Accomplish Its Mission Efficiently and Effectively**

***Summary of Challenge:** According to the OIG, EPA has not executed the required workforce plan to ensure that the Agency is well-staffed to achieve its goals and objectives of protecting human health and the environment. EPA needs ongoing and comprehensive workload analysis to adequately respond to and prepare for future staffing gaps and shortages in essential positions.*

**Agency Response:** EPA has addressed the workforce planning requirements of 5 CFR Part 250, Subpart B, Strategic Human Capital Management by completing the EPA FY 2019 Human Capital Operation Plan (HCOP) and issuing its FY 2020-2023 Workforce Plan. EPA also is using workload analyses as one factor in planning workforce levels and examining critical processes.

EPA is implementing the Agency's FY 2020-2023 Workforce Plan, which describes human capital strategies for full-time, part-time, "at will," and wage employees and will update its HCOP after OPM issues new guidance this summer. The Office of the Chief Financial Officer (OCFO) is assessing ongoing workload efforts and examining critical work processes through Monthly Business Reviews and Lean implementation efforts. The Agency discusses workforce and workload planning strategies at senior level management meetings.

EPA is updating its workforce and workload strategies following the new Administration's priorities and initiatives. Specific activities include:

- Developed and deployed a Talent Enterprise Diagnostic Tool to assess skills gaps, especially those among EPA's agency-specific Mission Critical Occupations.
- Developed, maintained, and enhanced EPA's Workforce Demographics Dashboard and Diversity Dashboard.
- Hired additional workforce planning staff.
- Reviewing planned outcomes and processes for three ongoing workload projects (Superfund FTE, Regional labs, and air regional work) to gather lessons learned and insights that could apply to broader processes, such as data collection, methodology, program variability, and implementation strategies.

- EPA’s workforce planning performance metrics are tracked through periodic reports, such as HR Stat.
- Agency workforce and workload strategies are regularly discussed at Agency senior managers’ meetings and process improvements are tracked and reported at managers’ Monthly Business Reviews.

**Responsible Agency Official:** Maria Williams, Director, Office of Budget

### **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 continues to face challenges in implementing a vigorous cybersecurity program that strengthens its network defenses and data security in a time of ever-increasing threats to federal government networks. Without enhanced information technology security, EPA remains vulnerable to existing and emerging cyber threats.*

**Agency Response:** The Agency is committed to protecting its information and technology assets. EPA understands the prevalence and complexity of the ever-growing cybersecurity attacks and is aware of the potential impact to the Agency’s mission if information assets are compromised. EPA has established and implemented processes and internal controls for monitoring and managing contractor support actions to address concerns associated with this management challenge. Specific actions taken to address the issue include:

- Developing and implementing processes within the Office Mission Support operations to improve management and oversight of audits and corrective actions.
- Working with the Office of General Counsel to develop standard security language to include in the Agency’s Environmental Protection Agency Acquisitions Guide (EPAAG) Section 39.1.2.
- Incorporating a verification component for the cybersecurity requirements identified in the EPAAG 39.1.2 into the Federal Information Technology Acquisition Reform Act process.
- Developing training for contract officers and contract officer representatives on their responsibilities for identifying contracts that require EPAAG Section 39.1.2 tasks.
- Establishing a tracking and reporting process that ensures all contractors with access to EPA information systems complete information security awareness training, and that contractors with significant security responsibilities also complete role-based training.
- Ensuring adequate cybersecurity is implemented on contractor operated systems by:
  - Assessing systems for proper implementation and operation of adequate cybersecurity controls.
  - Monitoring for timely completion of corrective actions for identified cybersecurity weaknesses.
  - Managing risks at the tactical, mission, and enterprise levels.

In addition, EPA has made significant strides addressing other recommendations highlighted in the OIG report. Specific actions the Agency has taken include:

- Worked with the Department of Homeland Security regarding the risk of the Electronic Manifest System. As a result, EPA maintained its original categorization but agreed to review the system's categorization annually and when significant changes to the system occur.
- Replaced the incident tracking system and implemented controls in the new system to protect the confidentiality and sensitivity of Personal Identifiable Information and enforce password management requirements according to federal and agency guidance.
- Documented the CIO's role in information security through policy and procedures.
- Documented and implemented controls to validate plans of action and milestones for vulnerability testing results.
- Established a process to periodically review security settings for the Agency's tracking system to validate whether they meet standards and implemented audit logging capabilities to capture data changes and a log review process.

The processes implemented to address the OIG recommendations were reviewed by the OIG for the FY 2019 Federal Information Security Management Act (FISMA) report and found to be adequate. Additionally, agencywide metrics related to IT security are tracked monthly and discussed in senior leader Monthly Business Reviews.

**Responsible Agency Official:** Tonya Manning, Director, Office of Information Security and Privacy

**EPA Needs to Improve Risk Communication to Provide Individuals and Communities with Sufficient Information to Make Informed Decisions to Protect their Health and the Environment**

***Summary of Challenge:** OIG acknowledges that the Agency has taken important steps to improve risk communication, however, challenges remain across many EPA programs. The Agency needs more effective risk communication strategies to guide, coordinate, and evaluate its communication efforts to convey potential hazards.*

**Agency Response:** Risk communication goes to the heart of EPA's mission of protecting human health and the environment. The Agency is committed to ensuring that it carries out effective risk communication by sharing meaningful, understandable, and actionable information on human health and environmental risks with the American public. To build a consistent and effective approach to risk communication, EPA hired a senior risk communication advisor in November 2019 who is responsible for coordinating risk communication across the Agency.

Over the past year and a half, EPA has made significant progress in the important work of improving the quality and consistency of our risk communication. This work will be continued with an additional focus on the Biden Administration's priorities of environmental justice and climate change. Recent progress in this area includes:

Completing a research-based risk communication framework (the SALT Framework) to be used by anyone who communicates risk on behalf of the Agency.

This framework, which is based on a process of **Strategy, Action, Learning and Tools**, provides a research-based approach and best practices for communicating our work to the American people. When followed consistently, it will strengthen the effectiveness of EPA's risk communication across our many programs and roles. It is a critical first step in addressing the current issues EPA faces in risk communication and has the potential to transform the way the Agency carries out its mission of protecting human health and the environment.

The SALT framework is now being used to integrate and improve risk communication planning, practice, and outcomes across all EPA offices, regions, and programs. For example, it is being used to develop strategies for communicating on COVID, ethylene oxide (EtO) emissions, and Superfund decisions at sites across the Nation. It also is being used to begin conversations with our external state and academic partners on how to improve all of our organizations' risk communication, including the Environmental Council of States, the Society for Risk Analysis, the Society of Environmental Toxicology and Chemistry, and others.

Providing additional risk communication tools for staff and managers and updating the Agency's risk communication website.

Along with the SALT framework, the Agency has developed additional tools for risk communicators which are now housed on an updated and revamped agency website. This website includes an updated definition of risk communication, videos explaining key concepts in risk communication, and several case studies on how to use the SALT framework to achieve improved outcomes.

Establishing a premier, scientifically grounded risk communication training platform to conduct ongoing training for EPA staff and managers.

EPA developed a risk communication training platform in partnership with COMPASS Science Communication, a nationally recognized leader in science communication training, which was built on best practices from an EPA-specific risk communication research review. It is designed to use the best available technologies for virtual adult learning and uses a participatory learning model which is validated in education research to increase the consolidation of learning, the development of new skills, and network formation.

This 20-hour course is available to EPA staff and managers on an ongoing basis and has been used to train 170 people as of June 2021. It covers governing principles from the science of risk communication as well as topics such as: understanding your audience, building trust, effective messaging, the process for risk communication at EPA, and the SALT framework. The course also includes participatory exercises, role plays, and scenarios with outside experts.

Each class is structured around a specific hazard, audience, or Agency function with the goal of building knowledge, skills, and networks around best practice in risk communication. Classes completed as of June 2021 have included a focus on community engagement under EPA's in land

and emergency management programs, lead contamination, PFAS issues, environmental justice, tribal partnerships, and EPA's role in agriculture and addressing wildfires. Staff are chosen to participate based on their roles communicating risk on these issues and topics and have included staff from every office and region with a strong focus on staff who do direct community engagement as a part of their roles.

EPA plans to use this course to train an additional 250 staff and managers in FY 2022. Future plans also include cross-training partners from other agencies whether federal, state, local, or tribal.

Leveraging the science of risk communication through active engagement with the scientific community both inside EPA and in academia.

To both share the work we are doing and learn from the scientific and academic community, EPA's senior risk communications advisor serves on interagency and interorganizational groups focused on social, behavioral, and economic sciences. In addition, over the next year EPA will be working with the academic community to conduct research on the American public's knowledge of and feelings about today's environmental issues, so that we can better meet their needs in our risk communication.

Establishing a cross-agency work group with over 100 participants to increase coordination and build the Agency's risk communication tools.

The EPA Risk Communication Work Group, which is open to all interested Agency staff, serves as a forum for keeping up to date on what's going on across the Agency in risk communication. In addition, smaller Work Group Action Teams are working with program experts from across the Agency to build out EPA's risk communication tools portfolio to support the SALT Framework.

**Responsible Agency Officials:** Nancy Grantham, Principal Deputy Associate Administrator, Office of Public Affairs

### **EPA Needs to Improve on Fulfilling Mandated Reporting Requirements**

***Summary of Challenge:** OIG believes that the Agency faces challenges in tracking and submitting reports mandated by law that contain key program information for Congress, the Administrator, and the public.*

***Agency Response:** In 2018, OIG identified an instance where the Agency had not fulfilled a mandatory, statutorily required report to Congress, and has identified other instances where reports were not issued to Congress. The two reports that OIG identified have since been issued. OIG believes the Agency should make a comprehensive effort to identify the causes for programs not issuing required reports, implement targeted plans to address the causes, and complete and issue any remaining missing reports. OIG also believes the Agency should continue to work with Congress to eliminate the requirements of duplicative or unnecessary reports from our authorizing statutes.*

EPA has taken the corrective actions identified in the 2018 OIG Report regarding the BEACH Act Report, which has since been issued to Congress. The Office of Congressional and Intergovernmental Relations' Associate Administrator issued a memorandum in March 2018 to remind EPA's Assistant Administrators and Associate Administrators that the Agency's standard practice is to track reports to Congress by using the Office of Policy Action Development Process Tracker. OCIR, OP, and OCFO meet regularly to address tracking and preparing for the upcoming replacement of the ADP Tracker. Additionally, the Agency continues to provide a list of the unnecessary and duplicative reports that EPA suggests eliminating from its statutes to OMB as part of the budget process, in consultation with Congress. The Agency believes this effort will improve tracking of Reports to Congress so that statutory requirements are met in the future.

Additional activities to address this issue include the following:

- During FY 2021 OCIR and OCFO set up weekly meetings and leveraged the new Agency software via Teams on status of Agency inventory of reports to Congress.
- During FYs 2019, and 2020, and 2021, held internal meetings between OCIR, OP, and OCFO to coordinate the tracking of reports to Congress, to prepare for when the ADP Tracker is replaced, and to discuss the potential for a having a single means of tracking statutorily mandated reports to Congress and those required by appropriations law.
- Continue working with program offices to update the list of unnecessary or duplicative reports as part of the FY 2022 and 2023 budget proposals.

**Responsible Agency Official:** Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations

### **Integrating and Leading Environmental Justice Across the Agency and Government**

*Summary of Challenge:* OIG believes that EPA needs to enhance its consideration of environmental justice across programs and regions and provide leadership in this area for the federal government.

**Agency Response:** The Agency continues to address issues and concerns raised by GAO and EPA's OIG regarding its leadership of integration of environmental justice within EPA. This includes leadership from OP and OEJ senior representatives on EPA initiatives to implement President Biden's Executive Order (EO) 13985 on Racial Equality and EO 14008 on Tackling the Climate Crisis at Home and Abroad, and participation on inter-agency and intra-agency working groups. Additionally, on April 7, 2021, EPA Administrator Michael Regan issued an agencywide memo titled *Our Commitment to Environmental Justice* which clearly communicated his priority of centering EJ throughout all of EPA's activities. Administrator Regan's memo contained specific instructions on integration of EJ within programmatic activities, full enforcement of our environmental and civil rights laws, emphasis on meaningful engagement and consultation, and reinforcing our leadership in implementing President Biden's executive direction. Efforts to address EPA-specific recommendations made in the GAO report issued October 2019 entitled, *Federal Efforts Need Better Planning, Coordination, and Methods to Assess Programs* are now largely guided through implementation of EO 14008 and EO 13985. Many of the responsibilities for leadership on the inter-agency items relevant to those GAO recommendations now lie with the White House Council on Environmental Quality. EPA is supporting and engaging CEQ on

providing government-wide leadership on those recommendations. Additionally, the Agency is reviewing recommendations made by OIG.

**Responsible Agency Official:** Philip Fine, Principal Deputy Associate Administrator, Office of Policy; and Matthew Tejada, Office Director, Office of Environmental Justice

## **EPA USER FEE PROGRAMS**

In FY 2022, EPA will have several user fee programs in operation. These user fee programs and proposals are referenced below. In FY 2022, the Agency also will conduct a review to determine whether fees should be assessed for programs that provide special benefits to recipients beyond those that accrue to the general public, in accordance with OMB Circular A-25.

### **Current Fees: Pesticides**

Fee collection authority exists under the Federal Insecticide, Fungicide, and Rodenticide Act of 1988, as amended by the Pesticide Registration Improvement Extension Act of 2018 (P. L. 116-8) (“PRIA-4”), which was passed in March 2019. PRIA-4 reauthorizes these fee authorities through fiscal year 2023 and adjusts fee amounts for certain registration activities.

#### **Pesticides Maintenance Fee (7 U.S.C. §136a-1(i))**

The Maintenance Fee provides funding for the registration review programs, and a certain percentage supports the processing of applications involving inert ingredients and expedited processing of some applications, such as fast track amendments. PRIA-4 reauthorizes collection of this fee through FY 2023 and raises the collection target by \$3.2 million to an average collection of \$31 million over five years of PRIA-4 authorization.

#### **Enhanced Registration Services (7 U.S.C. §136w-8(b))**

Entities seeking to register pesticides for use in the United States pay a fee at the time the registration action request is submitted to EPA, setting specific timeframes for the registration decision service. This process has introduced new pesticides to the market more quickly. PRIA-4 reauthorizes collection of these fees through FY 2023 and adjusts fee amounts for certain types of registrations. In FY 2022, EPA expects to collect approximately \$20 million from this fee program.

### **Current Fees: Other**

#### **Clean Air Part 71 Operating Permits Program**

Title 40 CFR Part 71 § 71.9 authorizes and establishes requirements for the Clean Air Part 71 program - a comprehensive Federal air quality operating permit program for air pollution control agencies that do not have a delegated Title V program on charging and collecting user fees, as required by Section 502(b)(3) of the Clean Air Act. All sources subject to the operating permit requirements of Title V shall have a permit to operate that assures compliance with all applicable requirements. The owners or operators shall pay annual fees that are sufficient to cover the permit program costs, in accordance with the procedures described in this section.

#### **Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)**

On June 22, 2016, the “Frank R. Lautenberg Chemical Safety for the 21st Century Act” (P.L. 114-182) was signed into law, amending numerous sections of TSCA, including providing authority



for the establishment of a new, broader TSCA User Fee program that replaces and expands the former Section 5 Pre-Manufacturing Notification Fee. Section 26 of TSCA authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA Sections 4, 5, 6, and 14<sup>603</sup>. 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 EPA-Initiated Risk Evaluations and Manufacturer-Requested Risk Evaluations (MRREs) under TSCA Section 6.

EPA promulgated the TSCA User Fee Rule in October 2019<sup>604</sup> and collected \$2.7 million in fee revenue in FY 2019 from Section 5 submissions. In FY 2020, \$3 million in fee revenue was collected from Section 5 submissions as well as \$2.5 million from two Section 6 MRREs for chemicals on the TSCA Work Plan. In FY 2021, fee collections are expected to be \$30.0 million (\$3 million from Section 5, \$25.65 million from 19 of the 20 Section 6 EPA-Initiated Risk Evaluations, \$1.25 million from one Section 6 MRRE for a TSCA Work Plan chemical, and less than \$0.1 million from Section 4 Test Orders. However, nearly \$17 million of the collections for the 19 Section 6 Risk Evaluations is not due to be paid until September 2, 2021, rendering the funds un-usable by EPA until early FY 2022. In FY 2022, EPA anticipates collecting similar amounts for Sections 4 and 5 (\$3.1 million) and \$2.5 million for an assumed two Section 6 MRREs for TSCA Work Plan Chemicals, subject to potential fee level changes. EPA will apportion FY 2021 Section 6 collections over the risk evaluation lifecycle (3-3.5 years). TSCA requires EPA to update the Fees every three years<sup>605</sup>. Fees collected/projected to be collected in FY 2019 through FY 2021 equated to approximately 14 percent of associated expenditures for those three fiscal years, well below the 25 percent target. EPA proposed revisions to the fee rule in December 2020 but plans to re-propose in light of public comments; as such, EPA now expects to finalize an amended fee rule in FY 2022 (which may not go into effect until FY 2023).

### **Motor Vehicle and Engine Compliance Program Fee**

This fee is authorized by the Clean Air Act of 1990 and is administered by the Office of Transportation and Air Quality. Fee collections for manufacturers of light-duty vehicles, light- and heavy-duty trucks, and motorcycles began in August 1992. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly regulated vehicles and engines. The fees established for new compliance programs are paid by manufacturers of heavy-duty and nonroad 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 nonroad engines. EPA intends to apply certification fees to additional industry sectors as new programs are developed. In FY 2022, EPA expects to collect approximately \$23.6 million from this fee program based upon a projection of the original rulemaking cost study adjusted for

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<sup>603</sup> TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act, Section 26(b) (1) and (4)

<sup>604</sup> <https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act>

<sup>605</sup> <https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act>

inflation. EPA is not currently authorized to expend these collected funds but is proposing such authority.

### **Hazardous Waste Electronic Manifest**

The Hazardous Waste Electronic Manifest Establishment Act (P. L. 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In accordance with the Act, EPA established the e-Manifest Program. EPA finalized the user fee rule, *Hazardous Waste Management System: User Fees for the Electronic Hazardous Waste Manifest System and Amendments to Manifest Regulations*, in December 2017, and the e-Manifest system launched in June 2018.

In FY 2022, EPA will continue to operate the e-Manifest system and the Agency anticipates collecting and depositing approximately \$27 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.

### **Water Infrastructure Finance and Innovation Program Account (WIFIA) Program Fees**

The FY 2022 Budget requests authorization for the Administrator to collect and obligate fees established in accordance with the Water Resources Reform and Development Act of 2014. These funds shall be deposited in the Water Infrastructure Finance and Innovation Program Account (WIFIA) and remain available until expended. WIFIA fee regulations were first promulgated in FY 2017. Fee revenue will be used for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms.

The requested WIFIA program fee expenditure authority would be in addition to the \$8 million request for administrative and operations expenses. Fee revenue does not take the place of the request for WIFIA administration. The appropriated administrative level and the anticipated fee revenue are both needed to successfully implement the WIFIA Program. In FY 2022, EPA estimates that \$13 million in WIFIA fees could be collected.

### **Fee Proposals: Other**

#### **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 2022 request carries forward the proposed statutory language from the FY 2021 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.

## Working Capital Fund

In FY 2022, the Agency will be in its 26<sup>th</sup> 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. The WCF mechanism provides an efficient method for a full cost approach to agency programs. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and the Omnibus Consolidated Appropriations Act of 1997. EPA received permanent WCF authority in the Department of Interior and Related Agencies Appropriations Act of 1998. The Modernizing Government Technology (MGT) Act<sup>606</sup> provided additional authority for information technology development activities in agency working capital funds.<sup>607</sup>

EPA's Chief Financial Officer (CFO) initiated the WCF in FY 1997 as part of an effort to: 1) be accountable to agency offices, the Office of Management and Budget, and Congress; 2) increase the efficiency of the administrative services provided to program offices; and 3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by a management representative within the Office of the Chief Financial Officer, is comprised of 22 voting members from program and regional offices.

In FY 2022, there will be 12 agency activities provided under the WCF. These are the Agency's information technology services, agency postage, Cincinnati voice services, background investigations, and enterprise human resources IT services managed by the Office of Mission Support; financial and administrative systems, employee relocations, and a budget formulation system managed by the Office of the Chief Financial Officer; the Agency's Continuity of Operations (COOP) site managed by the Land and Emergency Management program; regional information technology service and support managed by EPA Region 8; legal services managed by the Office of General Counsel; and multimedia and agency servicing contracts managed by the Office of the Administrator.

The Agency's FY 2022 budget request includes resources for these 12 activities in each National Program Manager's submission, totaling approximately \$300 million. These estimated resources may be adjusted during the year to incorporate any program office's additional service needs during the operating year. To the extent these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2022, the Agency will continue to perform relocation services for other federal agencies, delivering high quality services external to EPA.

The Agency anticipates that there may be minor increases and decreases in FY 2022 due to several IT improvements, including increased cloud computing, improved network infrastructure, cybersecurity requirements, continuous diagnostic and mitigation program implementation, and

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<sup>606</sup> The MGT Act was enacted as part of the Fiscal Year 2018 National Defense Authorization Act on December 12, 2017.

<sup>607</sup> EPA determined that the Agency's existing WCF meets the requirements of the MGT Act. EPA's WCF provides a range of integral IT infrastructure, application, and hosting services. In addition, EPA's WCF possesses the structure and governance framework to satisfy the requirements for the Technology Modernization Fund (TMF) identified in the MGT Act.

discovery services. Other funding shifts have been included in the FY 2022 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.

**ACE:** Air, Climate, and Energy

**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

**AIM:** American Innovation and Manufacturing Act of 2019

**APA:** Administrative Procedures Act

**ARP:** American Rescue Plan

**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)

**CARES:** Coronavirus Aid, Relief, and Economic Security Act

**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  
**DERA:** Diesel Emissions Reduction Act  
**DPA:** Deepwater Ports Act  
**DREAA:** Disaster Relief and Emergency Assistance Act  
**ECRA:** Economic Cleanup Responsibility Act  
**EFOIA:** Electronic Freedom of Information Act  
**EISA:** Energy Independence and Security Act of 2007  
**EO:** Executive Order  
**EPAct:** Energy Policy Act of 2005  
**EPAA:** Environmental Programs Assistance Act  
**EPCA:** Energy Policy and Conservation Act  
**EPCRA:** Emergency Planning and Community Right to Know Act (1986)  
**ERD&DAA:** Environmental Research, Development and Demonstration Authorization Act  
**ESA:** Endangered Species Act  
**ESECA:** Energy Supply and Environmental Coordination Act  
**FACA:** Federal Advisory Committee Act  
**FAIR:** Federal Activities Inventory Reform Act  
**FASA:** Federal Acquisition Streamlining Act (1994)  
**FCMA:** Fishery Conservation and Management Act  
**FEPCA:** Federal Environmental Pesticide Control Act of 1972, enacted as amendments to FIFRA  
**FFDCA:** Federal Food, Drug, and Cosmetic Act  
**FFMIA:** Federal Financial Management Improvement Act of 1996  
**FGCAA:** Federal Grant and Cooperative Agreement Act  
**FIFRA:** Federal Insecticide, Fungicide, and Rodenticide Act (1972)  
**FLPMA:** Federal Land Policy and Management Act  
**FMFIA:** Federal Managers' Financial Integrity Act (1982)  
**FOIA:** Freedom of Information Act  
**FPA:** Federal Pesticide Act  
**FPAS:** Federal Property and Administration Services Act  
**FQPA:** Food Quality Protection Act (1996)  
**FRA:** Federal Register Act  
**FSA:** Food Security Act  
**FSMA:** Food Safety Modernization Act

**FTTA:** Federal Technology Transfer Act

**FUA:** Fuel Use Act

**FWCA:** Fish and Wildlife Coordination Act

**FWPCA:** Federal Water Pollution and Control Act (also known as the Clean Water Act [CWA])

**GISRA:** Government Information Security Reform Act

**GMRA:** Government Management Reform Act

**GPRA:** Government Performance and Results Act (1993)

**GPRAMA:** Government Performance and Results Modernization Act of 2010

**HMTA:** Hazardous Materials Transportation Act

**HSWA:** Hazardous and Solid Waste Amendments of 1984, enacted as amendments to RCRA

**IGA:** Inspector General Act

**IPA:** Intergovernmental Personnel Act

**IPIA:** Improper Payments Information Act

**ISTEA:** Intermodal Surface Transportation Efficiency Act

**IT:** Information Technology

**ITMRA:** Information Technology Management Reform Act of 1996-aka Clinger/Cohen Act

**MPPRCA:** Marine Plastic Pollution, Research and Control Act of 1987

**MPRSA:** Marine Protection Research and Sanctuaries Act

**NAWCA:** North American Wetlands Conservation Act

**NEPA:** National Environmental Policy Act

**NHPA:** National Historic Preservation Act

**NISA:** National Invasive Species Act of 1996

**ODA:** Ocean Dumping Act

**OPA:** Oil Pollution Act of 1990

**OWBPA:** Older Workers Benefit Protection Act

**PBA:** Public Building Act

**PFCRA:** Program Fraud Civil Remedies Act

**PHSA:** Public Health Service Act

**PLIRRA:** Pollution Liability Insurance and Risk Retention Act

**PPA:** Pollution Prevention Act

**PR:** Privacy Act of 1974

**PRA:** Paperwork Reduction Act

**PREA:** Pesticide Registration Extension Act of 2012 (also known as PRIA 3)

**PRIA:** Pesticide Registration Improvement Act of 2003  
**PRIA 4:** Pesticide Registration Improvement Extension Act of 2018  
**PRIRA:** Pesticide Registration Improvement Renewal Act  
**QCA:** Quiet Communities Act  
**RCRA:** Resource Conservation and Recovery Act of 1976, enacted as amendments to SWDA  
**RFA:** Regulatory Flexibility Act  
**RICO:** Racketeer Influenced and Corrupt Organizations Act  
**RLBPHRA:** Residential Lead-Based Paint Hazard Reduction Act  
**SARA:** Superfund Amendments and Reauthorization Act of 1986  
**SBLRBREERA:** 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  
**SOS2.0:** Save Our Seas Act 2.0  
**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  
**USMCA:** United States-Mexico-Canada Agreement  
**USTCA:** Underground Storage Tank Compliance Act  
**VIDA:** Vessel Incidental Discharge Act  
**WIFIA:** Water Infrastructure Finance and Innovation Act  
**WIIN:** Water Infrastructure Improvements for the Nation Act  
**WQA:** Water Quality Act of 1987  
**WRDA:** Water Resources Development Act  
**WSRA:** Wild and Scenic Rivers Act  
**WWWQA:** Wet Weather Water Quality Act of 2000



**FY 2022 STAG CATEGORICAL PROGRAM GRANTS**  
**Statutory Authority and Eligible Uses**  
**(Dollars in Thousands)**

<b>Grant Title</b>	<b>Statutory Authorities</b>	<b>Eligible Recipients</b>	<b>Eligible Uses</b>	<b>FY 2020 Actual Dollars (X1000)</b>	<b>FY 2021 Enacted Dollars (X1000)</b>	<b>FY 2022 President's Budget Dollars (X1000)</b>
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 <sub>2.5</sub> monitoring network and associated program costs.	\$35,974.8	\$41,904.8	\$58,660.0
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.	\$7,589.8	\$7,488.2	\$20,000.0
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.	\$5,217.1	\$4,197.8	\$6,500.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Actual Dollars (X1000)	FY 2021 Enacted Dollars (X1000)	FY 2022 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Sections 103, 105, 106.	Air pollution control agencies as defined in section 302(b) of the CAA; Multi-jurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA section 302(b) agency officers and whose mission is to support the continuing environmental programs of the States); Interstate air quality control region designated pursuant to section 107 of the CAA or of implementing section 176A, or section 184 NOTE: only the Ozone Transport Commission is eligible.	Carrying out the traditional prevention and control programs required by the CAA and associated program support costs, including all monitoring activities, including PM 2.5 monitoring and associated program costs (Section 103 and/or 105); Coordinating or facilitating a multi-jurisdictional approach to carrying out the traditional prevention and control programs required by the CAA (Sections 103 and 106); Supporting training for CAA Section 302(b) air pollution control agency staff (Sections 103 and 105); Supporting research, investigative, and demonstration projects (Section 103).	\$172,898.1	\$175,270.2	\$235,640.0
				Section 105 grants	Section 105 grants	Section 105 grants
				\$639.0	\$639.0	\$700.0
				Section 106 grants	Section 106 grants	Section 106 grants
				<b>Total:</b>	<b>Total:</b>	<b>Total:</b>
				<b>\$222,318.8</b>	<b>\$229,500.0</b>	<b>\$321,500.0</b>

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Actual Dollars (X1000)	FY 2021 Enacted Dollars (X1000)	FY 2022 President's Budget Dollars (X1000)
Tribal Air Quality Management	CAA, Sections 103 and 105; Tribal Cooperative Agreements (TCA) in annual Appropriations Acts.	Tribes; Intertribal Consortia; State/Tribal College or University	Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting CAA training for Federally-recognized Tribes.	\$9,990.9	\$9,415.0	\$17,415.0
				Section 103 grants	Section 103 grants	Section 103 grants
				\$4,000.0	\$4,000.0	\$4,000.0
				Section 105 grants	Section 105 grants	Section 105 grants
				<b>Total:</b>	<b>Total:</b>	<b>Total:</b>
				<b>\$13,990.9</b>	<b>\$13,415.0</b>	<b>\$21,415.0</b>
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.	\$7,646.0	\$7,795.0	\$8,951.0
Multipurpose Grants	Consolidated Appropriations Act, 2021, Pub. L. 116-260; 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.	\$27,033.1	\$10,000.0	\$10,200.0
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.	\$234,493.3	\$230,000.0	\$234,600.0
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.	\$171,125.7	\$177,000.0	\$180,000.0

<b>Grant Title</b>	<b>Statutory Authorities</b>	<b>Eligible Recipients</b>	<b>Eligible Uses</b>	<b>FY 2020 Actual Dollars (X1000)</b>	<b>FY 2021 Enacted Dollars (X1000)</b>	<b>FY 2022 President's Budget Dollars (X1000)</b>
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.	\$12,922.7	\$14,192.0	\$14,476.0
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.	\$109,075.2	\$112,000.0	\$122,000.0
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.	\$10,379.5	\$11,164.0	\$11,387.0
Beaches Protection	BEACH Act of 2000; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Local Governments	Develop and implement programs for monitoring and notification of conditions for coastal recreation waters adjacent to beaches or similar points of access that are used by the public.	\$8,388.7	\$9,619.0	\$9,811.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Actual Dollars (X1000)	FY 2021 Enacted Dollars (X1000)	FY 2022 President's Budget Dollars (X1000)
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); Save our Seas 2.0, 2020, Pub. L. 116-224.	States, Tribes, Intertribal Consortia	Development & Implementation of Hazardous Waste Programs.  In FY 2022, propose to initiate a pilot for the construction, maintenance, and operation of post-consumer materials management or recycling facilities.	\$107,033.6	\$101,500.0	\$101,500.0  \$10,000.0 Pilot for post-consumer materials management or recycling facilities  <b>Total:</b> <b>\$111,500.0</b>
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.	\$47,311.9	\$46,195.0	\$46,195.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Actual Dollars (X1000)	FY 2021 Enacted Dollars (X1000)	FY 2022 President's Budget Dollars (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.	\$1,468.5	\$1,475.0	\$1,505.0
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.	\$11,364.3	\$11,051.0	\$11,272.0
				– States formula	– States formula	– States formula
				\$1,278.4	\$1,243.0	\$1,268.0
				HQ Programs: - Tribal - PREP - School IPM	HQ Programs: - Tribal - PREP - School IPM	HQ Programs: - Tribal - PREP - Pollinator Protection
				<b>Total:</b> <b>\$12,642.7</b>	<b>Total:</b> <b>\$12,294.0</b>	<b>Total:</b> <b>\$12,540.0</b>

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Actual Dollars (X1000)	FY 2021 Enacted Dollars (X1000)	FY 2022 President's Budget Dollars (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.	\$12,403.2  404(g) State/Tribal Certification  \$1,958.9  404(g) Direct Implementation  <b>Total:</b> <b>\$14,362.1</b>	\$12,328.0  404(g) State/Tribal Certification  \$1,947.0  404(g) Direct Implementation  <b>Total:</b> <b>\$14,275.0</b>	\$12,575.0  404(g) State/Tribal Certification  \$1,986.0  404(g) Direct Implementation  <b>Total:</b> <b>\$14,561.0</b>
Toxic Substances Compliance	Toxic Substances Control Act (TSCA) § 28(a) and 404(g); 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.	\$3,871.9	\$4,760.0	\$4,855.0
Pesticide Enforcement	FIFRA § 23(a)(1); Consolidated Appropriations Act, 2021, (P.L. 116-260); 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.	\$23,799.4	\$24,000.0	\$24,480.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Actual Dollars (X1000)	FY 2021 Enacted Dollars (X1000)	FY 2022 President's Budget Dollars (X1000)
Pollution Prevention	Pollution Prevention Act of 1990, Section 6605; TSCA Section 10; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Provides assistance to States and State entities ( <i>i.e.</i> , 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.	\$4,294.8	\$4,630.0	\$4,723.0
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.	\$67,289.5	\$66,250.0	\$77,575.0
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)  Consolidated Appropriations Act, 2021 (Public Law 116-260)	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.	\$8,557.1	\$9,336.0	\$9,523.0



**Environmental Protection Agency  
FY 2022 Annual Performance Plan and Congressional Justification**

**PROGRAM PROJECTS BY PROGRAM AREA  
(Dollars in Thousands)**

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Science &amp; Technology</b>				
<b>Clean Air and Climate</b>				
Clean Air Allowance Trading Programs	\$7,537.7	\$6,793.0	\$8,800.0	\$2,007.0
Climate Protection	\$7,326.8	\$7,895.0	\$9,997.0	\$2,102.0
Federal Support for Air Quality Management	\$8,974.6	\$7,154.0	\$10,222.0	\$3,068.0
Federal Vehicle and Fuels Standards and Certification	\$98,543.9	\$96,783.0	\$110,169.0	\$13,386.0
<b>Subtotal, Clean Air and Climate</b>	<b>\$122,383.0</b>	<b>\$118,625.0</b>	<b>\$139,188.0</b>	<b>\$20,563.0</b>
<b>Indoor Air and Radiation</b>				
Indoor Air: Radon Program	\$39.9	\$157.0	\$157.0	\$0.0
Radiation: Protection	\$1,795.6	\$1,735.0	\$2,340.0	\$605.0
Radiation: Response Preparedness	\$3,402.1	\$3,096.0	\$4,039.0	\$943.0
Reduce Risks from Indoor Air	\$235.5	\$161.0	\$168.0	\$7.0
<b>Subtotal, Indoor Air and Radiation</b>	<b>\$5,473.1</b>	<b>\$5,149.0</b>	<b>\$6,704.0</b>	<b>\$1,555.0</b>
<b>Enforcement</b>				
Forensics Support	\$13,726.2	\$14,000.0	\$14,114.0	\$114.0
<b>Homeland Security</b>				
Homeland Security: Critical Infrastructure Protection	\$12,926.2	\$10,380.0	\$14,342.0	\$3,962.0
Homeland Security: Preparedness, Response, and Recovery	\$27,021.6	\$24,852.0	\$25,545.0	\$693.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$443.0	\$501.0	\$501.0	\$0.0
<b>Subtotal, Homeland Security</b>	<b>\$40,390.8</b>	<b>\$35,733.0</b>	<b>\$40,388.0</b>	<b>\$4,655.0</b>
<b>IT / Data Management / Security</b>				
IT / Data Management	\$3,473.7	\$3,072.0	\$3,121.0	\$49.0
<b>Operations and Administration</b>				
Facilities Infrastructure and Operations	\$68,812.7	\$67,500.0	\$68,533.0	\$1,033.0
<b>Pesticides Licensing</b>				
Pesticides: Protect Human Health from Pesticide Risk	\$3,109.5	\$2,803.0	\$2,840.0	\$37.0
Pesticides: Protect the Environment from Pesticide Risk	\$1,757.7	\$2,207.0	\$2,230.0	\$23.0
Pesticides: Realize the Value of Pesticide Availability	\$379.9	\$876.0	\$970.0	\$94.0
<b>Subtotal, Pesticides Licensing</b>	<b>\$5,247.1</b>	<b>\$5,886.0</b>	<b>\$6,040.0</b>	<b>\$154.0</b>

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Research: Air, Climate and Energy</b>				
Research: Air, Climate and Energy	\$95,350.8	\$95,250.0	\$156,210.0	\$60,960.0
<b>Research: Safe and Sustainable Water Resources</b>				
Research: Safe and Sustainable Water Resources	\$108,506.9	\$112,250.0	\$116,588.0	\$4,338.0
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$143,191.3	\$133,000.0	\$137,412.0	\$4,412.0
<b>Research: Chemical Safety for Sustainability</b>				
Health and Environmental Risk Assessment	\$38,921.5	\$37,482.0	\$41,412.0	\$3,930.0
Research: Chemical Safety for Sustainability				
<i>Endocrine Disruptors</i>	\$19,833.8	\$16,253.0	\$16,851.0	\$598.0
<i>Computational Toxicology</i>	\$23,616.2	\$21,406.0	\$22,229.0	\$823.0
<i>Research: Chemical Safety for Sustainability (other activities)</i>	\$52,257.7	\$51,859.0	\$54,738.0	\$2,879.0
Subtotal, Research: Chemical Safety for Sustainability	\$95,707.7	\$89,518.0	\$93,818.0	\$4,300.0
<b>Subtotal, Research: Chemical Safety for Sustainability</b>	<b>\$134,629.2</b>	<b>\$127,000.0</b>	<b>\$135,230.0</b>	<b>\$8,230.0</b>
<b>Water: Human Health Protection</b>				
Drinking Water Programs	\$4,265.0	\$4,364.0	\$6,444.0	\$2,080.0
<b>Congressional Priorities</b>				
Water Quality Research and Support Grants	\$4,992.0	\$7,500.0	\$0.0	-\$7,500.0
<b>Total, Science &amp; Technology</b>	<b>\$750,441.8</b>	<b>\$729,329.0</b>	<b>\$829,972.0</b>	<b>\$100,643.0</b>
<b>Environmental Programs &amp; Management</b>				
<b>Clean Air and Climate</b>				
Clean Air Allowance Trading Programs	\$15,503.2	\$13,153.0	\$18,138.0	\$4,985.0
Climate Protection	\$103,054.5	\$97,000.0	\$103,689.0	\$6,689.0
Federal Stationary Source Regulations	\$21,244.6	\$20,733.0	\$26,618.0	\$5,885.0
Federal Support for Air Quality Management	\$131,855.1	\$138,020.0	\$257,808.0	\$119,788.0
Stratospheric Ozone: Domestic Programs	\$4,872.4	\$4,633.0	\$10,901.0	\$6,268.0
Stratospheric Ozone: Multilateral Fund	\$8,347.0	\$8,711.0	\$18,000.0	\$9,289.0
<b>Subtotal, Clean Air and Climate</b>	<b>\$284,876.8</b>	<b>\$282,250.0</b>	<b>\$435,154.0</b>	<b>\$152,904.0</b>
<b>Indoor Air and Radiation</b>				
Indoor Air: Radon Program	\$2,680.4	\$3,136.0	\$3,167.0	\$31.0
Radiation: Protection	\$8,912.4	\$7,661.0	\$10,342.0	\$2,681.0
Radiation: Response Preparedness	\$2,616.2	\$2,404.0	\$2,908.0	\$504.0
Reduce Risks from Indoor Air	\$10,934.8	\$11,750.0	\$13,837.0	\$2,087.0

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Subtotal, Indoor Air and Radiation</b>	<b>\$25,143.8</b>	<b>\$24,951.0</b>	<b>\$30,254.0</b>	<b>\$5,303.0</b>
<b>Brownfields</b>				
Brownfields	\$23,332.9	\$24,000.0	\$24,197.0	\$197.0
<b>Compliance</b>				
Compliance Monitoring	\$98,418.4	\$102,500.0	\$132,350.0	\$29,850.0
<b>Enforcement</b>				
Civil Enforcement	\$162,505.0	\$168,341.0	\$194,623.0	\$26,282.0
Criminal Enforcement	\$50,326.2	\$51,275.0	\$59,121.0	\$7,846.0
Environmental Justice	\$9,482.5	\$11,838.0	\$293,862.0	\$282,024.0
NEPA Implementation	\$15,337.8	\$16,943.0	\$18,966.0	\$2,023.0
<b>Subtotal, Enforcement</b>	<b>\$237,651.5</b>	<b>\$248,397.0</b>	<b>\$566,572.0</b>	<b>\$318,175.0</b>
<b>Geographic Programs</b>				
Geographic Program: Chesapeake Bay	\$87,690.4	\$87,500.0	\$90,500.0	\$3,000.0
Geographic Program: Gulf of Mexico	\$13,833.9	\$20,000.0	\$22,447.0	\$2,447.0
Geographic Program: Lake Champlain	\$13,387.0	\$15,000.0	\$20,000.0	\$5,000.0
Geographic Program: Long Island Sound	\$20,642.6	\$30,400.0	\$40,000.0	\$9,600.0
Geographic Program: Other				
<i>Lake Pontchartrain</i>	\$947.0	\$1,900.0	\$1,932.0	\$32.0
<i>S.New England Estuary (SNEE)</i>	\$5,244.8	\$5,500.0	\$6,252.0	\$752.0
<i>Geographic Program: Other (other activities)</i>	\$3,672.1	\$3,000.0	\$3,050.0	\$50.0
Subtotal, Geographic Program: Other	\$9,863.9	\$10,400.0	\$11,234.0	\$834.0
Great Lakes Restoration	\$346,143.7	\$330,000.0	\$340,000.0	\$10,000.0
Geographic Program: South Florida	\$2,739.6	\$6,000.0	\$7,155.0	\$1,155.0
Geographic Program: San Francisco Bay	\$5,907.2	\$8,922.0	\$12,000.0	\$3,078.0
Geographic Program: Puget Sound	\$32,861.0	\$33,750.0	\$35,000.0	\$1,250.0
<b>Subtotal, Geographic Programs</b>	<b>\$533,069.3</b>	<b>\$541,972.0</b>	<b>\$578,336.0</b>	<b>\$36,364.0</b>
<b>Homeland Security</b>				
Homeland Security: Communication and Information	\$4,935.3	\$4,145.0	\$4,557.0	\$412.0
Homeland Security: Critical Infrastructure Protection	\$990.3	\$909.0	\$1,008.0	\$99.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$4,175.9	\$4,959.0	\$5,139.0	\$180.0
<b>Subtotal, Homeland Security</b>	<b>\$10,101.5</b>	<b>\$10,013.0</b>	<b>\$10,704.0</b>	<b>\$691.0</b>
<b>Information Exchange / Outreach</b>				
State and Local Prevention and Preparedness	\$13,660.5	\$13,736.0	\$14,003.0	\$267.0
TRI / Right to Know	\$12,225.3	\$13,206.0	\$13,450.0	\$244.0
Tribal - Capacity Building	\$13,639.3	\$12,902.0	\$15,971.0	\$3,069.0
Executive Management and Operations	\$50,346.8	\$46,836.0	\$54,792.0	\$7,956.0

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Environmental Education	\$6,388.7	\$8,580.0	\$8,615.0	\$35.0
Exchange Network	\$14,906.1	\$14,084.0	\$14,226.0	\$142.0
Small Minority Business Assistance	\$1,363.2	\$1,680.0	\$1,884.0	\$204.0
Small Business Ombudsman	\$2,145.2	\$1,778.0	\$1,929.0	\$151.0
Children and Other Sensitive Populations: Agency Coordination	\$6,209.9	\$6,173.0	\$6,247.0	\$74.0
<b>Subtotal, Information Exchange / Outreach</b>	<b>\$120,885.0</b>	<b>\$118,975.0</b>	<b>\$131,117.0</b>	<b>\$12,142.0</b>
<b>International Programs</b>				
US Mexico Border	\$2,955.4	\$2,837.0	\$3,192.0	\$355.0
International Sources of Pollution	\$6,240.6	\$6,746.0	\$8,006.0	\$1,260.0
Trade and Governance	\$5,608.4	\$5,292.0	\$6,080.0	\$788.0
<b>Subtotal, International Programs</b>	<b>\$14,804.4</b>	<b>\$14,875.0</b>	<b>\$17,278.0</b>	<b>\$2,403.0</b>
<b>IT / Data Management / Security</b>				
Information Security	\$6,190.4	\$8,285.0	\$14,116.0	\$5,831.0
IT / Data Management	\$86,699.8	\$82,715.0	\$86,744.0	\$4,029.0
<b>Subtotal, IT / Data Management / Security</b>	<b>\$92,890.2</b>	<b>\$91,000.0</b>	<b>\$100,860.0</b>	<b>\$9,860.0</b>
<b>Legal / Science / Regulatory / Economic Review</b>				
Integrated Environmental Strategies	\$11,398.1	\$9,475.0	\$17,719.0	\$8,244.0
Administrative Law	\$4,524.5	\$4,975.0	\$5,704.0	\$729.0
Alternative Dispute Resolution	\$800.2	\$864.0	\$1,141.0	\$277.0
Civil Rights Program	\$9,468.4	\$9,205.0	\$13,946.0	\$4,741.0
Legal Advice: Environmental Program	\$49,878.3	\$49,595.0	\$71,895.0	\$22,300.0
Legal Advice: Support Program	\$14,475.0	\$15,865.0	\$18,315.0	\$2,450.0
Regional Science and Technology	\$1,060.5	\$638.0	\$1,174.0	\$536.0
Science Advisory Board	\$3,903.2	\$3,205.0	\$3,475.0	\$270.0
Regulatory/Economic-Management and Analysis	\$12,643.4	\$12,421.0	\$13,463.0	\$1,042.0
<b>Subtotal, Legal / Science / Regulatory / Economic Review</b>	<b>\$108,151.6</b>	<b>\$106,243.0</b>	<b>\$146,832.0</b>	<b>\$40,589.0</b>
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$70,751.8	\$76,718.0	\$81,563.0	\$4,845.0
Facilities Infrastructure and Operations	\$285,437.3	\$285,441.0	\$297,748.0	\$12,307.0
Acquisition Management	\$27,433.0	\$32,247.0	\$34,121.0	\$1,874.0
Human Resources Management	\$47,042.8	\$46,229.0	\$53,254.0	\$7,025.0
Financial Assistance Grants / IAG Management	\$26,319.8	\$25,430.0	\$28,730.0	\$3,300.0
<b>Subtotal, Operations and Administration</b>	<b>\$456,984.7</b>	<b>\$466,065.0</b>	<b>\$495,416.0</b>	<b>\$29,351.0</b>
<b>Pesticides Licensing</b>				
Science Policy and Biotechnology	\$1,887.3	\$1,546.0	\$1,546.0	\$0.0
Pesticides: Protect Human Health from Pesticide Risk	\$60,580.8	\$60,181.0	\$60,929.0	\$748.0
Pesticides: Protect the Environment from Pesticide Risk	\$37,650.6	\$39,543.0	\$39,952.0	\$409.0

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Pesticides: Realize the Value of Pesticide Availability	\$6,173.0	\$7,730.0	\$7,792.0	\$62.0
<b>Subtotal, Pesticides Licensing</b>	<b>\$106,291.7</b>	<b>\$109,000.0</b>	<b>\$110,219.0</b>	<b>\$1,219.0</b>
<b>Research: Chemical Safety for Sustainability</b>				
Research: Chemical Safety for Sustainability	\$143.0	\$0.0	\$0.0	\$0.0
<b>Resource Conservation and Recovery Act (RCRA)</b>				
RCRA: Corrective Action	\$35,671.5	\$38,453.0	\$38,836.0	\$383.0
RCRA: Waste Management	\$64,884.9	\$70,465.0	\$71,082.0	\$617.0
RCRA: Waste Minimization & Recycling	\$9,051.3	\$9,982.0	\$10,202.0	\$220.0
<b>Subtotal, Resource Conservation and Recovery Act (RCRA)</b>	<b>\$109,607.7</b>	<b>\$118,900.0</b>	<b>\$120,120.0</b>	<b>\$1,220.0</b>
<b>Toxics Risk Review and Prevention</b>				
Endocrine Disruptors	\$11,030.3	\$7,533.0	\$7,565.0	\$32.0
Pollution Prevention Program	\$11,475.6	\$12,558.0	\$12,588.0	\$30.0
Toxic Substances: Chemical Risk Management	\$0.0	\$0.0	\$0.0	\$0.0
Toxic Substances: Chemical Risk Review and Reduction	\$67,369.7	\$60,280.0	\$75,519.0	\$15,239.0
Toxic Substances: Lead Risk Reduction Program	\$11,859.6	\$13,129.0	\$13,385.0	\$256.0
<b>Subtotal, Toxics Risk Review and Prevention</b>	<b>\$101,735.2</b>	<b>\$93,500.0</b>	<b>\$109,057.0</b>	<b>\$15,557.0</b>
<b>Underground Storage Tanks (LUST / UST)</b>				
LUST / UST	\$10,841.7	\$11,250.0	\$11,443.0	\$193.0
<b>Water: Ecosystems</b>				
National Estuary Program / Coastal Waterways	\$30,863.9	\$31,822.0	\$31,963.0	\$141.0
Wetlands	\$20,212.0	\$19,300.0	\$24,899.0	\$5,599.0
<b>Subtotal, Water: Ecosystems</b>	<b>\$51,075.9</b>	<b>\$51,122.0</b>	<b>\$56,862.0</b>	<b>\$5,740.0</b>
<b>Water: Human Health Protection</b>				
Beach / Fish Programs	\$1,337.2	\$1,584.0	\$1,804.0	\$220.0
Drinking Water Programs	\$101,007.3	\$106,903.0	\$118,265.0	\$11,362.0
<b>Subtotal, Water: Human Health Protection</b>	<b>\$102,344.5</b>	<b>\$108,487.0</b>	<b>\$120,069.0</b>	<b>\$11,582.0</b>
<b>Water Quality Protection</b>				
Marine Pollution	\$9,153.2	\$9,468.0	\$12,072.0	\$2,604.0
Surface Water Protection	\$201,289.7	\$206,882.0	\$218,582.0	\$11,700.0
<b>Subtotal, Water Quality Protection</b>	<b>\$210,442.9</b>	<b>\$216,350.0</b>	<b>\$230,654.0</b>	<b>\$14,304.0</b>
<b>Congressional Priorities</b>				
Water Quality Research and Support Grants	\$15,000.0	\$21,700.0	\$0.0	-\$21,700.0
<b>Total, Environmental Programs &amp; Management</b>	<b>\$2,713,792.7</b>	<b>\$2,761,550.0</b>	<b>\$3,427,494.0</b>	<b>\$665,944.0</b>

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Inspector General</b>				
<b>Audits, Evaluations, and Investigations</b>				
Audits, Evaluations, and Investigations	\$43,076.0	\$43,500.0	\$54,347.0	\$10,847.0
<b>Total, Inspector General</b>	<b>\$43,076.0</b>	<b>\$43,500.0</b>	<b>\$54,347.0</b>	<b>\$10,847.0</b>
<b>Building and Facilities</b>				
<b>Homeland Security</b>				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$14,325.7	\$6,676.0	\$6,676.0	\$0.0
<b>Operations and Administration</b>				
Facilities Infrastructure and Operations	\$32,216.3	\$27,076.0	\$56,076.0	\$29,000.0
<b>Total, Building and Facilities</b>	<b>\$46,542.0</b>	<b>\$33,752.0</b>	<b>\$62,752.0</b>	<b>\$29,000.0</b>
<b>Hazardous Substance Superfund</b>				
<b>Indoor Air and Radiation</b>				
Radiation: Protection	\$2,323.3	\$1,985.0	\$2,612.0	\$627.0
<b>Audits, Evaluations, and Investigations</b>				
Audits, Evaluations, and Investigations	\$10,498.1	\$11,586.0	\$11,800.0	\$214.0
<b>Compliance</b>				
Compliance Monitoring	\$1,054.3	\$1,000.0	\$1,006.0	\$6.0
<b>Enforcement</b>				
Criminal Enforcement	\$7,292.3	\$7,647.0	\$7,786.0	\$139.0
Environmental Justice	\$566.3	\$826.0	\$5,841.0	\$5,015.0
Forensics Support	\$1,257.6	\$1,145.0	\$1,164.0	\$19.0
Superfund: Enforcement	\$179,284.5	\$156,773.0	\$159,542.0	\$2,769.0
Superfund: Federal Facilities Enforcement	\$7,155.8	\$7,424.0	\$7,574.0	\$150.0
<b>Subtotal, Enforcement</b>	<b>\$195,556.5</b>	<b>\$173,815.0</b>	<b>\$181,907.0</b>	<b>\$8,092.0</b>
<b>Homeland Security</b>				
Homeland Security: Preparedness, Response, and Recovery	\$32,992.9	\$33,020.0	\$33,264.0	\$244.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$994.6	\$1,030.0	\$1,030.0	\$0.0
<b>Subtotal, Homeland Security</b>	<b>\$33,987.5</b>	<b>\$34,050.0</b>	<b>\$34,294.0</b>	<b>\$244.0</b>
<b>Information Exchange / Outreach</b>				
Exchange Network	\$1,341.2	\$1,328.0	\$1,328.0	\$0.0

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>IT / Data Management / Security</b>				
Information Security	\$927.6	\$659.0	\$5,659.0	\$5,000.0
IT / Data Management	\$15,168.6	\$13,826.0	\$15,202.0	\$1,376.0
<b>Subtotal, IT / Data Management / Security</b>	<b>\$16,096.2</b>	<b>\$14,485.0</b>	<b>\$20,861.0</b>	<b>\$6,376.0</b>
<b>Legal / Science / Regulatory / Economic Review</b>				
Alternative Dispute Resolution	\$1,014.2	\$832.0	\$857.0	\$25.0
Legal Advice: Environmental Program	\$628.3	\$443.0	\$450.0	\$7.0
<b>Subtotal, Legal / Science / Regulatory / Economic Review</b>	<b>\$1,642.5</b>	<b>\$1,275.0</b>	<b>\$1,307.0</b>	<b>\$32.0</b>
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$24,772.5	\$26,561.0	\$27,720.0	\$1,159.0
Facilities Infrastructure and Operations	\$82,734.0	\$68,727.0	\$72,801.0	\$4,074.0
Acquisition Management	\$24,356.1	\$23,800.0	\$30,519.0	\$6,719.0
Human Resources Management	\$6,094.4	\$6,202.0	\$6,842.0	\$640.0
Financial Assistance Grants / IAG Management	\$3,561.3	\$3,210.0	\$3,390.0	\$180.0
<b>Subtotal, Operations and Administration</b>	<b>\$141,518.3</b>	<b>\$128,500.0</b>	<b>\$141,272.0</b>	<b>\$12,772.0</b>
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$15,501.1	\$16,463.0	\$16,634.0	\$171.0
<b>Research: Chemical Safety for Sustainability</b>				
Health and Environmental Risk Assessment	\$3,882.1	\$12,824.0	\$12,876.0	\$52.0
Research: Chemical Safety for Sustainability	\$4,115.6	\$0.0	\$0.0	\$0.0
<b>Subtotal, Research: Chemical Safety for Sustainability</b>	<b>\$7,997.7</b>	<b>\$12,824.0</b>	<b>\$12,876.0</b>	<b>\$52.0</b>
<b>Superfund Cleanup</b>				
Superfund: Emergency Response and Removal	\$203,758.9	\$190,000.0	\$195,489.0	\$5,489.0
Superfund: EPA Emergency Preparedness	\$8,824.2	\$7,700.0	\$7,839.0	\$139.0
Superfund: Federal Facilities	\$23,280.8	\$21,800.0	\$22,189.0	\$389.0
Superfund: Remedial	\$617,575.2	\$589,000.0	\$882,400.0	\$293,400.0
<b>Subtotal, Superfund Cleanup</b>	<b>\$853,439.1</b>	<b>\$808,500.0</b>	<b>\$1,107,917.0</b>	<b>\$299,417.0</b>
<b>Total, Hazardous Substance Superfund</b>	<b>\$1,280,955.8</b>	<b>\$1,205,811.0</b>	<b>\$1,533,814.0</b>	<b>\$328,003.0</b>
<b>Leaking Underground Storage Tanks</b>				
<b>Enforcement</b>				
Civil Enforcement	\$657.3	\$620.0	\$634.0	\$14.0
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$354.8	\$416.0	\$434.0	\$18.0
Facilities Infrastructure and Operations	\$1,066.0	\$836.0	\$837.0	\$1.0

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Acquisition Management	\$155.9	\$132.0	\$132.0	\$0.0
<b>Subtotal, Operations and Administration</b>	<b>\$1,576.7</b>	<b>\$1,384.0</b>	<b>\$1,403.0</b>	<b>\$19.0</b>
<b>Underground Storage Tanks (LUST / UST)</b>				
LUST / UST	\$9,942.8	\$9,470.0	\$9,603.0	\$133.0
LUST Cooperative Agreements	\$57,441.7	\$55,040.0	\$55,040.0	\$0.0
LUST Prevention	\$25,666.5	\$25,369.0	\$25,369.0	\$0.0
<b>Subtotal, Underground Storage Tanks (LUST / UST)</b>	<b>\$93,051.0</b>	<b>\$89,879.0</b>	<b>\$90,012.0</b>	<b>\$133.0</b>
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$520.6	\$320.0	\$327.0	\$7.0
<b>Total, Leaking Underground Storage Tanks</b>	<b>\$95,805.6</b>	<b>\$92,203.0</b>	<b>\$92,376.0</b>	<b>\$173.0</b>
<b>Inland Oil Spill Programs</b>				
<b>Compliance</b>				
Compliance Monitoring	\$181.4	\$139.0	\$2,142.0	\$2,003.0
<b>Enforcement</b>				
Civil Enforcement	\$2,237.2	\$2,413.0	\$2,462.0	\$49.0
<b>Oil</b>				
Oil Spill: Prevention, Preparedness and Response	\$15,571.8	\$16,200.0	\$16,454.0	\$254.0
<b>Operations and Administration</b>				
Facilities Infrastructure and Operations	\$640.2	\$682.0	\$683.0	\$1.0
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$428.2	\$664.0	\$668.0	\$4.0
<b>Total, Inland Oil Spill Programs</b>	<b>\$19,058.8</b>	<b>\$20,098.0</b>	<b>\$22,409.0</b>	<b>\$2,311.0</b>
<b>State and Tribal Assistance Grants</b>				
<b>State and Tribal Assistance Grants (STAG)</b>				
Infrastructure Assistance: Alaska Native Villages	\$29,186.0	\$36,186.0	\$36,186.0	\$0.0
Brownfields Projects	\$94,203.0	\$90,982.0	\$130,982.0	\$40,000.0
Infrastructure Assistance: Clean Water SRF	\$1,632,518.2	\$1,638,826.0	\$1,870,680.0	\$231,854.0
Infrastructure Assistance: Drinking Water SRF	\$1,320,783.1	\$1,126,088.0	\$1,357,934.0	\$231,846.0
Infrastructure Assistance: Mexico Border	\$26,854.8	\$30,000.0	\$30,000.0	\$0.0
Diesel Emissions Reduction Grant Program	\$99,130.1	\$90,000.0	\$150,000.0	\$60,000.0
Targeted Airshed Grants	\$61,066.4	\$59,000.0	\$59,000.0	\$0.0
Gold King Mine Water Monitoring	\$3,280.3	\$4,000.0	\$4,000.0	\$0.0
Safe Water for Small & Disadvantaged Communities	\$14,182.4	\$26,408.0	\$41,413.0	\$15,005.0



	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
Reducing Lead in Drinking Water	\$3,342.0	\$21,511.0	\$81,515.0	\$60,004.0
Lead Testing in Schools	\$52,196.5	\$26,500.0	\$36,500.0	\$10,000.0
Drinking Water Infrastructure Resilience and Sustainability	\$0.0	\$4,000.0	\$9,000.0	\$5,000.0
Technical Assistance for Treatment Works	\$0.0	\$18,000.0	\$18,000.0	\$0.0
Sewer Overflow Control Grants	\$59.2	\$40,000.0	\$60,000.0	\$20,000.0
Water Infrastructure and Workforce Investment	\$0.0	\$3,000.0	\$3,000.0	\$0.0
<b>Subtotal, State and Tribal Assistance Grants (STAG)</b>	<b>\$3,336,802.0</b>	<b>\$3,214,501.0</b>	<b>\$3,888,210.0</b>	<b>\$673,709.0</b>
<b>Categorical Grants</b>				
Categorical Grant: Nonpoint Source (Sec. 319)	\$171,125.7	\$177,000.0	\$180,000.0	\$3,000.0
Categorical Grant: Public Water System Supervision (PWSS)	\$109,075.2	\$112,000.0	\$122,000.0	\$10,000.0
Categorical Grant: State and Local Air Quality Management	\$222,318.8	\$229,500.0	\$321,500.0	\$92,000.0
Categorical Grant: Radon	\$7,646.0	\$7,795.0	\$8,951.0	\$1,156.0
Categorical Grant: Pollution Control (Sec. 106)				
<i>Monitoring Grants</i>	\$18,586.9	\$17,267.0	\$17,267.0	\$0.0
<i>Categorical Grant: Pollution Control (Sec. 106) (other activities)</i>	\$215,906.4	\$212,733.0	\$217,333.0	\$4,600.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$234,493.3	\$230,000.0	\$234,600.0	\$4,600.0
Categorical Grant: Wetlands Program Development	\$12,922.7	\$14,192.0	\$14,476.0	\$284.0
Categorical Grant: Underground Injection Control (UIC)	\$10,379.5	\$11,164.0	\$11,387.0	\$223.0
Categorical Grant: Pesticides Program Implementation	\$12,642.7	\$12,294.0	\$12,540.0	\$246.0
Categorical Grant: Lead	\$14,362.1	\$14,275.0	\$14,561.0	\$286.0
Categorical Grant: Hazardous Waste Financial Assistance	\$107,033.6	\$101,500.0	\$111,500.0	\$10,000.0
Categorical Grant: Pesticides Enforcement	\$23,799.4	\$24,000.0	\$24,480.0	\$480.0
Categorical Grant: Pollution Prevention	\$4,294.8	\$4,630.0	\$4,723.0	\$93.0
Categorical Grant: Toxics Substances Compliance	\$3,871.9	\$4,760.0	\$4,855.0	\$95.0
Categorical Grant: Tribal General Assistance Program	\$67,289.5	\$66,250.0	\$77,575.0	\$11,325.0
Categorical Grant: Underground Storage Tanks	\$1,468.5	\$1,475.0	\$1,505.0	\$30.0
Categorical Grant: Tribal Air Quality Management	\$13,990.9	\$13,415.0	\$21,415.0	\$8,000.0
Categorical Grant: Environmental Information	\$8,557.1	\$9,336.0	\$9,523.0	\$187.0
Categorical Grant: Beaches Protection	\$8,388.7	\$9,619.0	\$9,811.0	\$192.0
Categorical Grant: Brownfields	\$47,311.9	\$46,195.0	\$46,195.0	\$0.0
Categorical Grant: Multipurpose Grants	\$27,033.1	\$10,000.0	\$10,200.0	\$200.0
<b>Subtotal, Categorical Grants</b>	<b>\$1,108,005.4</b>	<b>\$1,099,400.0</b>	<b>\$1,241,797.0</b>	<b>\$142,397.0</b>
<b>Congressional Priorities</b>				
Congressionally Mandated Projects	\$1,345.7	\$0.0	\$0.0	\$0.0

	FY 2020 Actuals	FY 2021 Enacted	FY 2022 Pres Budget	FY 2022 Pres Budget v. FY 2021 Enacted
<b>Total, State and Tribal Assistance Grants</b>	<b>\$4,446,153.1</b>	<b>\$4,313,901.0</b>	<b>\$5,130,007.0</b>	<b>\$816,106.0</b>
<b>Hazardous Waste Electronic Manifest System Fund</b>				
<b>Resource Conservation and Recovery Act (RCRA)</b>				
RCRA: Waste Management	\$20,317.5	\$0.0	\$0.0	\$0.0
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$114.5	\$0.0	\$0.0	\$0.0
<b>Total, Hazardous Waste Electronic Manifest System Fund</b>	<b>\$20,432.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
<b>Water Infrastructure Finance and Innovation Fund</b>				
<b>Water Quality Protection</b>				
Water Infrastructure Finance and Innovation	\$40,760.6	\$65,000.0	\$80,108.0	\$15,108.0
<b>Total, Water Infrastructure Finance and Innovation Fund</b>	<b>\$40,760.6</b>	<b>\$65,000.0</b>	<b>\$80,108.0</b>	<b>\$15,108.0</b>
<b>Subtotal, EPA</b>	<b>\$9,457,018.4</b>	<b>\$9,265,144.0</b>	<b>\$11,233,279.0</b>	<b>\$1,968,135.0</b>
Cancellation of Funds	\$0.0	-\$27,991.0	\$0.0	\$27,991.0
<b>TOTAL, EPA</b>	<b>\$9,457,018.4</b>	<b>\$9,237,153.0</b>	<b>\$11,233,279.0</b>	<b>\$1,996,126.0</b>

**Notes:**

Superfund transfer resources for the audit and research functions are shown in the Superfund account.

FY 2020 Actuals include resources for Hurricanes Harvey, Irma, and Maria; USMCA; Disaster Relief Act; and CARES Act.

FY 2021 excludes the American Rescue Plan Act.

Two programs have been renamed: Atmospheric Protection is now Climate Protection; Research: Air and Energy is now Research: Air, Climate and Energy. One program area has been renamed from the Clean Air Program Area to the Clean Air and Climate Program Area.

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## Eliminated Programs

### Eliminated Program Projects

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**Water Quality Research and Support Grants** (FY 2022 President's Budget: \$0.0, 0.0 FTE)

This program is proposed for elimination in the FY 2022 President's Budget. Work to advance water quality protection can be accomplished within core statutory programs funded in the budget request.

The Program focuses on water quality and water availability research; 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. For training and technical assistance aspects of the Program, 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). For research and development components of the Program, 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 twenty-five percent match, including in-kind contributions; and often partner with the Agency.

## Expected Benefits of E-Government Initiatives

### **eRulemaking**

The eRulemaking Line of Business is designed to: enhance public access and participation in the regulatory process through electronic systems; reduce the burden on citizens and businesses in finding relevant regulations and commenting on proposed rulemaking actions; consolidate redundant docket systems; and improve agency regulatory processes and the timeliness of regulatory decisions. EPA has served as the managing partner for this Line of Business; however, in FY 2020, EPA transferred management services to the General Services Administration (GSA). EPA continues to be involved as a partner agency.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Service Fee (in thousands)</b>
2020	020-99-99-99-99-0060-24	\$1,000.0
2021	020-99-99-99-99-0060-24	\$1,063.0
2022	020-99-99-99-99-0060-24	\$1,330.0

### **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 reduces costs and improves 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 2022. 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.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-99-99-99-99-3100-24	\$225.0
2021	020-99-99-99-99-3100-24	\$225.0
2022	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 online. 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.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Service Fee (in thousands)</b>
2020	020-00-01-16-04-1218-24	\$130.0
2021 <sup>608</sup>	020-00-01-16-04-1218-24	\$0.0
2022	020-00-01-16-04-1218-24	\$0.0

## **Financial Management Line of Business**

The Financial Management Line of Business (FM LoB) is a multi-agency effort whose goals include achieving process improvements and cost savings in the acquisition, development, implementation, and operation of financial management systems. By incorporating the same FM LoB-standard processes as those used by central agency systems, interfaces among financial systems are streamlined, and the quality of information available for decision-making is improved.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-00-01-01-04-1100-24	\$96.0
2021	020-00-01-01-04-1100-24	\$88.0
2022	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

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<sup>608</sup> As of FY 2021, OMB does not require an EPA contribution for USA Jobs.

community to apply for grants using common forms, processes, and systems. EPA believes that the central site raises the visibility of its grant 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).

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-00-04-00-04-0160-24	\$331.0
2021	020-00-04-00-04-0160-24	\$335.0
2022	020-00-04-00-04-0160-24	\$347.0

### **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 online training modules for budget activities – a valuable resource to all agency budget staff. The LoB has developed the capability to have secure, virtual online 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.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-99-99-99-99-3200-24	\$110.0
2021	020-99-99-99-99-3200-24	\$120.0
2022	020-99-99-99-99-3200-24	\$120.0

### **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 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.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-00-01-16-04-1200-24	\$69.0
2021	020-00-01-16-04-1200-24	\$68.0
2022	020-00-01-16-04-1200-24	\$69.0

### **Hiring Assessment Line of Business**

The Hiring Assessment Line of Business (Hiring LoB) supports developing, promoting, testing, and scaling additional processes and technology in support of assessment processes and related hiring improvements, including government-wide hiring actions and shared certificates. In FY 2022, EPA will create a talent team to help implement data-driven assessment strategies to improve selection outcomes, to share new approaches and best practices, and to identify government-wide implementation challenges. Together, talent teams and the Hiring LoB will create a multi-level effort focused on improving hiring outcomes, both within agencies and across government.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-00-01-16-04-1200-24	\$0.0
2021	020-00-01-16-04-1200-24	\$0.0
2022	020-00-01-16-04-1200-24	\$66.0

### **Integrated Acquisition Environment**

The Integrated Acquisition Environment (IAE) is comprised of a number of government-wide automated applications and/or databases that streamline the acquisition business process across the government and support EPA’s contracting and grants programs. 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 leverages some IAE systems via electronic linkages to EPA’s Acquisition System (EAS); 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 SAM vendor data: contracting officers can download vendor-provided representation and certification information electronically via SAM, which allows vendors to submit this information once rather than separately for every contract proposal. Additionally, contracting officers access the Federal Awardee Performance and Integrity Information System, which contains records on contractor performance, including past performance evaluations, and suspensions and debarments.

Through the IAE, contracting officers also can review Wage Determinations to obtain information required under the Service Contract Act and the Davis-Bacon Act. EAS links to the Contract Awards system, expected to be deployed in FY 2021, 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 subcontracting data submission for contracts identified as requiring this information. EPA publishes notices of proposed contract actions expected to exceed \$25 thousand to the Contact Opportunities listing. Vendors use this publicly available information to identify business opportunities in federal contracting.

The IAE houses Assistance Listings (formerly called Catalog of Federal Domestic Assistance (CFDA), which provides a comprehensive description of all federal assistance including information on eligibility, how to apply, and matching requirements for public consumption.

Further, EPA’s IAE fee supports use of services for standardized obligations and award-related information reporting for all Federal financial assistance and procurement awards as required by the Federal Financial Accountability and Transparency Act of 2006 (FFATA) and the DATA Act of 2014.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Service Fee (in thousands)</b>
2020	020-00-01-16-04-0230-24	\$720.0
2021	020-00-01-16-04-0230-24	\$720.0
2022	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.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-99-99-99-99-0090-24	\$41.0
2021	020-99-99-99-99-0090-24	\$44.0
2022	020-99-99-99-99-0090-24	\$46.0

### **Freedom of Information Act Portal**

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the OMB and the Department of Justice (DOJ) to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of this National FOIA Portal. EPA and other federal agencies were asked to contribute to this effort.

<b>Fiscal Year</b>	<b>Account Code</b>	<b>EPA Contribution (in thousands)</b>
2020	020-99-99-99-99-0090-24	\$43.0
2021	020-99-99-99-99-0090-24	\$43.0
2022	020-99-99-99-99-0090-24	\$37.0



## Proposed FY 2022 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.

### Pesticide Licensing 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 2022 Budget carries forward the proposed statutory language from the FY 2021 President's Budget to allow registration service fees to be spent on additional activities related to registration of pesticides, such as processing and review of submitted data, laboratory support and audits, and rulemaking support.

The following proposed statutory language would ease spending restrictions related to PRIA registration service fees.

PRIA registration service fees:

The addition of language specifying that PRIA fees collected in FY 2022 will remain available until expended would simplify aspects of budget execution. The proposal to allow EPA to collect and spend PRIA fees in FY 2022 and to authorize expanded use of PRIA fee collections is below.

Proposed Language to Add to the FY 2022 Budget

*The Administrator of the Environmental Protection Agency is authorized to collect and obligate pesticide registration service fees in accordance with section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136w-8): Provided, That such fees collected shall remain available until expended.*

*Notwithstanding section 33(d)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136w-8(d)(2)), the Administrator of the Environmental Protection Agency may assess fees under section 33 of FIFRA (7 U.S.C. 136w-8) for fiscal year 2022.*

*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 (7 U.S.C. 136d(a)(2)), supplemental distributor labels, transfers of registrations and data compensation rights, additional uses registered by states under section 24(c) of FIFRA (7 U.S.C. 136v(c)), data compensation petitions, reviews of minor amendments, and notifications; review of applications for emergency exemptions under section 18 of FIFRA (7 U.S.C. 136p) and ensuring data collection activities, laboratory support and audits; administrative support; risk communication activities;*

*development of policy and guidance; rulemaking support; information collection activities; and the portions of salaries related to work in these areas.*

### **Hazardous Waste Electronic Manifest**

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In FY 2022, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately \$26 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will be utilized for the operation of the system and necessary program expenses. Fees will fully support the e-Manifest Program, including future development costs. In recent appropriations acts, Congress has provided an advance on the appropriation for the e-Manifest Program, to be reduced by the amount of fees collected so as to result in a final fiscal year appropriation of \$0. Because the Program is now fully operational and fee-supported, this language is no longer necessary. The language to authorize collection and spending of the fees is below. Language specifying that e-Manifest fees collected in FY 2022 will remain available until expended would simplify aspects of budget execution.

Propose a modification to an existing provision:

*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 2022, to remain available until expended.*

### **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<sup>609</sup> will be deposited in the TSCA Service Fee Fund for use by EPA. Fees under this structure began to be incurred through EPA rulemaking on October 1, 2018 and replace the former Pre-Manufacturing Notification Fees. In recent appropriations acts, Congress has provided an advance on the appropriation for the TSCA Program, to be reduced by the amount of fees collected, so as to result in a final fiscal year appropriation of \$0. Because the Program began collecting fees in FY 2019, this language is no longer necessary and was not included in the FY 2021 President’s Budget. Language specifying that TSCA fees collected in FY 2022 will remain available until expended would simplify aspects of budget execution.

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<sup>609</sup> For additional information, please refer to: <https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act>.

Propose a modification to an existing provision:

*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 2022, to remain available until expended.*

### **Student Services Contracting Authority**

In the FY 2022 Budget, the Agency requests authorization for the Office of Research and Development (ORD), the Office of Chemical Safety and Pollution Prevention (OCSPP), and the Office of Water (OW) to hire pre-baccalaureate and post-baccalaureate students in science and engineering fields. This authority would provide ORD, OCSPP, and OW with the flexibility to hire qualified students that work on projects that support current priorities, programmatic functions, and the Agency's environmental goals.

Proposed Language to add to FY 2022 Budget:

*For fiscal years 2022 through 2026, the Office of Chemical Safety and Pollution Prevention and the Office of Water may, using funds appropriated under the headings "Environmental Programs and Management" and "Science and Technology", contract directly with individuals or indirectly with institutions or nonprofit organizations, without regard to 41 U.S.C. 5, for the temporary or intermittent personal services of students or recent graduates, who shall be considered employees for the purposes of chapters 57 and 81 of title 5, United States Code, relating to compensation for travel and work injuries, and chapter 171 of title 28, United States Code, relating to tort claims, but shall not be considered to be Federal employees for any other purpose: Provided, That amounts used for this purpose by the Office of Chemical Safety and Pollution Prevention and the Office of Water collectively may not exceed \$2,000,000 per year.*

### **Special Accounts and Aircraft for Superfund Response Actions**

31 U.S.C. 1343(d) generally states that appropriated funds are not available for aircraft unless "the appropriation specifically authorizes" its use for such purpose. The FY 2020 Further Consolidated Appropriations Act (P.L. 116-94) made EPA's annually appropriated Superfund Trust Fund money available to hire, maintain, and operate aircraft for the purposes of carrying out the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). However, the FY 2020 Further Consolidated Appropriations Act did not include specific authority for EPA to also use funds recovered from Potentially Responsible Parties – which are deposited into Superfund "special accounts" and made available to EPA in a separate, permanent indefinite appropriation – for aircraft. Accordingly, in the FY 2022 Budget, the Agency requests parity in authority to use Superfund special account funds for aircraft, so that EPA may carry out CERCLA response actions funded with special account money in the same manner as the Agency would with annually appropriated Superfund money.

*The appropriation provided by 42 U.S.C. 9622(b)(3) is available for the hire, maintenance, and operation of aircraft.*

## **Changes to EPA’s use of the Title 42 Hiring Authority**

EPA is requesting changes to its Title 42 Authority to increase the cap from 50 to 75 hires for the Office of Research and Development (ORD) and to extend the authority to include the Office of Chemical Safety and Pollution Prevention (OCSPP). This would include a cap of 25 hires. ORD currently uses this authority to fill highly competitive, PhD-level positions where recruiting through the GS system is not appropriate. ORD has a robust process for managing the Program, including an Operations Manual that provides requirements on recruiting, compensation, ethics, and term renewals. OCSPP faces similar challenges in hiring specialized talent.

Proposed Language to add to FY 2022 Budget:

*The Administrator may, after consultation with the Office of Personnel Management, employ up to seventy-five persons at any one time in the Office of Research and Development and twenty-five persons at any one time in the Office of Chemical Safety and Pollution Prevention under the authority provided in 42 U.S.C. 209, through fiscal year 2025.*

## **Working Capital Fund Authority**

On December 12, 2017, the Modernizing Government Technology (MGT Act)<sup>610</sup> was signed into law, authorizing CFO-Act agencies to set up information technology (IT) specific WCFs, which allows them to fund IT modernization projects and reinvest savings for additional modernization projects in the future. In the FY 2022 Budget, the Agency requests language be added to clarify and ensure that EPA has the ability to utilize funds deposited into EPA’s WCF to modernize and develop the Agency’s IT systems. The Agency has a well-established WCF where nearly 80 percent of the current service offerings are IT related. Establishing a separate IT WCF would be duplicative and more costly than to utilize the Agency’s existing WCF. By seeking the proposed authorizing language change, EPA will clarify its existing authority and harmonize it with the intent of what Congress envisioned in the passage of the MGT Act.

Proposed Language to add to FY 2022 Budget:

*The Environmental Protection Agency Working Capital Fund, 42 U.S.C. 4370e, is available for expenses and equipment necessary for modernization and development of information technology of, or for use by, the Environmental Protection Agency.*

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<sup>610</sup> For more information on the MGT Act, please refer to Section G of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115-91): <https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf>.

**MAKING LITIGATION COSTS TRANSPARENT-EQUAL ACCESS FOR JUSTICE ACT (EAJA)**

**FY 2020\***

Date of Final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case and Findings Basis	Hourly Rate of Attorney	Hourly Rate of Expert Witness
2/3/2020	<i>Anacostia Riverkeeper, et. al. v. Wheeler</i>	<i>District of Columbia Circuit Court</i>	16-cv-01651-CRC	Judge Christopher R. Cooper	\$39,500	EPA Appropriations	Negotiated	Anacostia Riverkeeper, Inc., Kingman Park Civic Association, and Potomac Riverkeeper Network	Plaintiffs alleged that EPA's approval of the District of Columbia's Total Maximum Daily Loads (TMDLs) for bacteria violated the Clean Water Act and the Administrative Procedures Act. The district court vacated EPA's approval of the TMDLs and stayed the vacatur for one year. A settlement agreement was made for EAJA fees.	Various Petitioners requested rates from \$300/hr to \$500/hr.	None
9/1/2020	<i>Friends of Animals v. U.S. EPA</i>	<i>District of Oregon, Pendleton Division</i>	2:17-cv-01410-SU	Judge Michael Simon (Magistrate Judge Patricia Sullivan)	\$87,000	EPA Appropriations	Negotiated	Friends of Animals, Inc.	Plaintiff challenged EPA's denial of Plaintiff's petition under Section 6(b) of FIFRA that EPA initiate a Special Review of the pesticide ZonStat-H to determine whether its registration should be cancelled or revised. The district court entered an order adopting the Findings and Recommendations of the Magistrate Judge that EPA's denial of Plaintiff's petition was arbitrary and capricious and remanded the matter to EPA for reconsideration. A settlement agreement was made for EAJA fees.	Various Petitioners requested rates from \$300/hr to \$500/hr.	None

\*In the FY 2019 Explanatory Statement accompanying the Consolidated Appropriations Act, 2019 (P.L. 116-6), the House and Senate Committees on Appropriations requested Department of Interior, EPA, and the Forest Service make publicly available the EAJA fee information as specified in the explanatory statement accompanying Division G of the Consolidated Appropriations Act, 2017 (P.L. 115-31). **EPA proposes that this document concludes its reporting obligations** for Equal Access to Justice Act fee information and will not be providing a report in its FY 2023 Congressional Justification unless alerted by Congress to continue.

## 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.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Covered by Agency (mark "x" if covered)	Basis for Category
2	Category I Clinical Position	X	The small population of EPA Research Physicians experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that, absent the allowance, some EPA physicians would seek employment at federal agencies that provide the allowance.
	Category II Research Position		
	Category III Occupational Health		
	Category IV-A Disability Evaluation		
1	Category IV-B Health and Medical Admin.	X	The small population of EPA Research Physicians experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that, absent the allowance, some EPA physicians would seek employment at

			federal agencies that provide the allowance.
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**Physicians' Comparability Allowance (PCA) Plan (continued)**

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.

<b>Number of Physicians Receiving PCAs by Category (non-add)</b>	<b>Category of Physician Position</b>	<b>Recruitment and retention problem</b>
2	Category I Clinical Position	The small population of EPA Research Physicians experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that, absent the allowance, EPA physicians would seek employment at federal agencies that provide the allowance.
	Category II Research Position	
	Category III Occupational Health	
	Category IV-A Disability Evaluation	
1	Category IV-B Health and Medical Admin.	The small population of EPA Research Physicians experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that absent the allowance, EPA physicians would seek employment at federal agencies that provide the allowance.

Explain how the agency determines the amounts to be used for each category of physicians.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Basis of comparability allowance amount
2	Category I Clinical Position	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.
	Category II Research Position	
	Category III Occupational Health	
	Category IV-A Disability Evaluation	
1	Category IV-B Health and Medical Admin.	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.

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

Department and component:

Environmental Protection Agency

Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

*(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*  
 Historically, the number of EPA Research Physicians is between three and seven positions. This small population experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool.  
 In FY 2020, EPA used the PCA to recruit and retain a qualified candidate to fill a vacancy left by a FY 2019 retirement. In FY 2021 and FY 2022, EPA will use the allowance to retain these employees.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2020 (Actual)	CY 2021 (Estimates)	BY* 2022 (Estimates)
3a) Number of Physicians Receiving PCAs	3	3	3
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements	3	3	3
4a) Average Annual PCA Physician Pay (without PCA payment)	\$182,600	\$188,100	\$193,700
4b) Average Annual PCA Payment	\$24,000	\$19,300	\$19,300

\*BY data will be approved during the BY Budget cycle. Please ensure each column is completed.

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

*(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*  
 The Agency is told regularly that, absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

An agency with a very small number of physician positions and a low turn-over rate among them still needs the allowance authority to maintain the stability of the small population. Those who opt for federal employment in opposition to private sector employment still want the maximum pay available in the federal sector. Were it not for the PCA, EPA would regularly lose some of its physicians to other federal agencies that offer the allowance, both requiring EPA to refill vacant positions and making it more difficult for EPA to fill those positions. Turn-over statistics should be viewed in this light.

## **FY 2022: Consolidations, Realignment, or Other Transfer of Resources**

### Environmental Justice as a National Program Manager

The FY 2022 President's Budget signals EPA's and the Administration's intent to establish a new National Program Manager (NPM) for Environmental Justice. Currently the Office of Environmental Justice is located within the Office of Policy within the Office of the Administrator. The proposed reorganization would elevate environmental justice to ensure it is considered across regional offices, National Program Managers, and statutory authorities. The head of the new NPM would be an Assistant Administrator to be nominated by the President and confirmed by the Senate. Further information and details on the proposed reorganization are under development. EPA will work closely with the Office of Management and Budget and the Congress on the proposal.

### Office of the Chief Financial Officer

In FY 2022, the Office of the Chief Financial Officer (OCFO) is considering a reorganization to realign functions and staff within OCFO to better position OCFO to meet critical mission requirements from new statutory requirements of the Evidence Act and increased reporting requirements as effectively as possible without a corresponding increase in resources. The reorganization also would realign functions to balance workload across OCFO, eliminate organizational layers, and consolidate similar or duplicative functions to better leverage personnel and resources. At this time, OCFO does not foresee any changes to its budget structure. The proposed reorganization would not affect any other EPA program office or regional office.

### Center for Environmental Social Sciences

In FY 2022, the Office of Research and Development (ORD) is considering a reorganization that would create a Center for Environmental Social Sciences (CESS). This Center will house talent and innovation uniquely able to address the complex interactions between pollution sources, exposures, non-chemical stressors, and communities. The Center will employ social science experts in sociology, economics, anthropology, geography, demography, political science, decision science, behavioral science, risk and science communication, translational science, community engagement, and urban planning. Integrated with EPA's capabilities to analyze and address natural and technological systems, the Center would conduct solutions-focused research, support meaningful collaborations with communities with environmental justice concerns, improve risk communication, and tailor science-based tools and solutions for communities.

### Office of Mission Support

In FY 2022, the Office of Mission Support (OMS) is considering a reorganization to realign functions and staff within OMS to better position the office to meet critical mission needs from

new requirements associated with President Biden’s Executive Orders on climate,<sup>611</sup> supporting underserved communities and acquisition.<sup>612</sup> The reorganization also would realign functions to balance workload across OMS, eliminate organizational layers, and consolidate similar or duplicative functions to better leverage personnel and resources. This proposed reorganization would not affect any other EPA program office or regional office.

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<sup>611</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

<sup>612</sup> For additional information, please see: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

**EPA Budget by National Program Manager and Major Office**

Dollars in Thousands

NPM	Major Office	FY 2021 Enacted Budget			FY 2022 President's Budget					
		Pay(\$K)	Non-Pay (\$K)	Total (\$K)	FTE	Pay(\$K)	Non-Pay (\$K)	Total (\$K)	FTE	
OA	Immediate Office	\$4,019	\$448	\$4,467	27.0	\$6,246	\$657	\$6,903	39.5	
	Office of Congressional and Intergovernmental Relations	\$7,351	\$416	\$7,767	43.2	\$7,587	\$414	\$8,001	43.2	
	Office of Public Affairs	\$5,428	\$325	\$5,754	30.5	\$5,605	\$330	\$5,935	30.5	
	Office of Public Engagement	\$1,123	\$85	\$1,208	8.0	\$1,159	\$85	\$1,244	8.0	
	Office of Policy	\$26,998	\$10,676	\$37,674	158.7	\$46,859	\$271,329	\$318,188	278.9	
	Children's Health Protection	\$2,548	\$2,402	\$4,950	13.1	\$2,587	\$2,452	\$5,038	13.1	
	Environmental Education	\$927	\$7,053	\$7,980	5.2	\$939	\$7,040	\$7,980	5.2	
	Office of Civil Rights	\$3,066	\$168	\$3,235	20.9	\$3,315	\$478	\$3,793	20.9	
	Executive Secretariat	\$3,674	\$155	\$3,829	20.1	\$3,787	\$154	\$3,942	20.1	
	Executive Services	\$2,844	\$268	\$3,112	14.9	\$2,936	\$2,425	\$5,362	14.9	
	Homeland Security	\$2,230	\$316	\$2,545	11.3	\$2,459	\$510	\$2,969	12.3	
	Science Advisory Board	\$3,132	\$334	\$3,465	18.7	\$3,180	\$476	\$3,657	18.7	
	Small and Disadvantaged Business Utilization	\$1,797	\$739	\$2,536	9.7	\$1,959	\$904	\$2,863	9.7	
	Regional Resources	\$42,318	\$12,163	\$54,481	251.2	\$55,426	\$13,679	\$69,105	327.0	
		<b>OA TOTAL</b>	<b>\$107,454</b>	<b>\$35,548</b>	<b>\$143,002</b>	<b>632.5</b>	<b>\$144,044</b>	<b>\$307,487</b>	<b>\$451,531</b>	<b>842.0</b>
OAR	Immediate Office	\$10,041	\$10,282	\$20,323	56.7	\$10,342	\$10,075	\$20,417	56.7	
	Office of Air Quality Planning and Standards	\$56,630	\$20,991	\$77,621	341.0	\$66,028	\$125,922	\$191,950	383.6	
	Office of Atmospheric Programs	\$38,052	\$58,548	\$96,600	216.5	\$44,735	\$53,839	\$98,574	253.4	
	Office of Transportation and Air Quality	\$59,030	\$42,647	\$101,677	336.0	\$63,229	\$81,607	\$144,836	343.3	
	Office of Radiation and Indoor Air	\$24,461	\$13,324	\$37,785	142.0	\$31,683	\$15,303	\$46,985	180.4	
	Regional Resources	\$98,158	\$403,841	\$501,999	598.5	\$110,188	\$564,950	\$675,138	652.1	
		<b>OAR TOTAL</b>	<b>\$286,372</b>	<b>\$549,633</b>	<b>1,690.7</b>	<b>\$326,205</b>	<b>\$851,695</b>	<b>\$1,177,900</b>	<b>1,869.5</b>	
	OCFO	Immediate Office	\$1,795	\$4,743	\$6,538	11.0	\$1,947	\$5,051	\$6,999	11.0
		Office of Budget	\$6,936	\$2,934	\$9,869	42.5	\$7,524	\$2,733	\$10,257	42.5
		Office of Planning, Analysis and Accountability	\$4,080	\$295	\$4,375	25.0	\$4,426	\$295	\$4,721	25.0
Office of Technology Solutions		\$8,225	\$23,525	\$31,749	49.4	\$8,923	\$23,883	\$32,806	49.4	
Office of Resource and Information Management		\$2,366	\$1,684	\$4,051	14.5	\$2,567	\$1,249	\$3,816	14.5	
Office of the Contoller		\$22,406	\$2,108	\$24,514	133.0	\$24,308	\$2,103	\$26,412	133.0	
OCFO enterprise		\$1,093	\$568	\$1,660	4.8	\$1,156	\$549	\$1,706	4.8	
Office of Continuous Improvement		\$2,057	\$427	\$2,484	10.0	\$2,139	\$451	\$2,590	10.0	
	<b>OCFO TOTAL</b>	<b>\$31,392</b>	<b>\$2,094</b>	<b>\$33,486</b>	<b>203.3</b>	<b>\$33,694</b>	<b>\$1,965</b>	<b>\$35,659</b>	<b>206.3</b>	
	<b>OCFO TOTAL</b>	<b>\$80,349</b>	<b>\$38,378</b>	<b>\$118,727</b>	<b>493.5</b>	<b>\$86,686</b>	<b>\$38,280</b>	<b>\$124,966</b>	<b>496.5</b>	

NPM	Major Office	FY 2021 Enacted Budget				FY 2022 President's Budget			
		Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE	Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE
OCSPP	Immediate Office	\$2,275	\$1,296	\$3,571	12.0	\$2,326	\$1,230	\$3,556	12.0
	Office of Pesticide Programs	\$58,895	\$23,347	\$82,242	339.0	\$59,744	\$23,529	\$83,273	339.0
	Office of Pollution Prevention and Toxics	\$45,967	\$24,646	\$70,613	295.9	\$61,210	\$24,790	\$86,000	383.5
	Office of Program Support	\$33,586	\$3,383	\$36,968	183.0	\$34,445	\$3,281	\$37,725	183.0
	Regional Resources	\$22,179	\$31,145	\$53,324	141.8	\$22,595	\$31,581	\$54,176	141.8
	<b>OCSPP TOTAL</b>	<b>\$162,902</b>	<b>\$83,816</b>	<b>\$246,718</b>	<b>971.7</b>	<b>\$180,319</b>	<b>\$84,411</b>	<b>\$264,730</b>	<b>1,059.3</b>
OECA	Immediate Office	\$6,694	\$2,978	\$9,672	42.7	\$6,839	\$2,958	\$9,796	42.9
	Office of Civil Enforcement	\$22,127	\$6,342	\$28,469	108.2	\$24,035	\$15,732	\$39,767	117.4
	Office of Criminal Enforcement, Forensics, and Training	\$60,941	\$9,532	\$70,473	305.5	\$67,960	\$9,531	\$77,490	333.4
	Office of Compliance	\$20,703	\$20,131	\$40,834	113.2	\$21,837	\$51,272	\$73,109	118.2
	Federal Facilities Enforcement Office	\$2,594	\$553	\$3,147	14.0	\$2,634	\$558	\$3,192	14.0
	Office of Site Remediation Enforcement	\$13,047	\$20,088	\$33,135	67.0	\$13,243	\$21,125	\$34,369	67.0
	Regional Resources	\$294,224	\$49,149	\$343,373	1,773.1	\$305,267	\$55,668	\$360,935	1,817.8
	<b>OECA TOTAL</b>	<b>\$420,331</b>	<b>\$108,773</b>	<b>\$529,104</b>	<b>2,423.7</b>	<b>\$441,815</b>	<b>\$156,844</b>	<b>\$598,659</b>	<b>2,510.7</b>
OGC	Immediate Office	\$2,489	\$55	\$2,544	14.5	\$2,212	\$55	\$2,267	11.0
	Air and Radiation Law Office	\$7,249	\$35	\$7,284	44.0	\$9,048	\$40	\$9,088	45.0
	Pesticides and Toxic Substances Law Office	\$3,460	\$36	\$3,496	21.0	\$4,021	\$35	\$4,056	26.0
	Solid Waste and Emergency Response Law Office	\$2,132	\$63	\$2,195	13.2	\$3,418	\$82	\$3,500	17.0
	Water Law Office	\$1,644	\$10	\$1,654	9.3	\$4,825	\$25	\$4,850	24.0
	Civil Rights - Title VI	\$1,859	\$200	\$2,059	10.2	\$3,358	\$553	\$3,911	16.7
	Other Legal Support	\$22,593	\$5,354	\$27,947	92.6	\$25,424	\$10,966	\$36,390	98.4
	Regional Resources	\$23,307	\$33	\$23,340	139.9	\$34,589	\$832	\$35,421	162.7
		<b>OGC TOTAL</b>	<b>\$64,733</b>	<b>\$5,786</b>	<b>\$70,519</b>	<b>344.7</b>	<b>\$86,894</b>	<b>\$12,588</b>	<b>\$99,482</b>
OIG	Immediate Office	\$632	\$61	\$694	3.6	\$714	\$316	\$1,030	4.0
	Office of Chief of Staff	\$1,739	\$356	\$2,095	10.0	\$1,964	\$183	\$2,147	11.1
	Office of Counsel	\$4,268	\$407	\$4,675	24.5	\$4,821	\$449	\$5,270	27.3
	Office of Management	\$6,007	\$4,519	\$10,527	34.4	\$6,785	\$7,896	\$14,681	38.4
	Office of Audit	\$13,912	\$808	\$14,720	79.7	\$15,715	\$1,039	\$16,754	88.9
	Office of Evaluations	\$11,224	\$643	\$11,867	64.3	\$12,678	\$840	\$13,518	71.7
	Office of Investigations	\$9,327	\$1,181	\$10,509	53.5	\$10,535	\$2,213	\$12,748	59.6
	<b>OIG TOTAL</b>	<b>\$47,110</b>	<b>\$7,976</b>	<b>\$55,086</b>	<b>270.0</b>	<b>\$53,212</b>	<b>\$12,935</b>	<b>\$66,147</b>	<b>301.0</b>

NPM	Major Office	FY 2021 Enacted Budget				FY 2022 President's Budget			
		Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE	Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE
OITA	Immediate Office	\$844	\$46	\$890	4.5	\$953	\$81	\$1,034	5.0
	Office of International Affairs	\$6,781	\$2,570	\$9,350	36.0	\$8,383	\$2,770	\$11,153	44.0
	Office of Management and International Services	\$2,064	\$448	\$2,512	11.0	\$2,439	\$710	\$3,149	12.8
	American Indian Environmental Office	\$3,090	\$468	\$3,558	16.6	\$3,677	\$400	\$4,077	19.3
	Regional Resources	\$10,807	\$66,902	\$77,709	67.6	\$13,052	\$78,351	\$91,403	78.6
	<b>OITA TOTAL</b>	<b>\$23,586</b>	<b>\$70,433</b>	<b>\$94,019</b>	<b>135.7</b>	<b>\$28,504</b>	<b>\$82,312</b>	<b>\$110,816</b>	<b>159.7</b>
OLEM	Immediate Office	\$8,315	\$5,260	\$13,574	40.8	\$8,383	\$5,181	\$13,564	40.8
	Federal Facilities Restoration and Reuse Office	\$2,528	\$672	\$3,200	13.2	\$2,558	\$707	\$3,265	13.2
	Office of Communication, Partnership, and Analysis	\$2,417	\$1,570	\$3,987	13.8	\$2,437	\$1,555	\$3,992	13.8
	Office of Superfund Remediation and Technology Innovation	\$25,860	\$69,871	\$95,731	144.3	\$25,907	\$116,289	\$142,196	144.3
	Office of Resource Conservation and Recovery	\$24,837	\$20,192	\$45,029	140.7	\$25,131	\$30,709	\$55,840	140.7
	Office of Underground Storage Tanks	\$3,708	\$2,921	\$6,630	21.6	\$3,755	\$3,098	\$6,853	21.6
	Office of Brownfields and Land Revitalization	\$2,811	\$9,526	\$12,337	16.6	\$2,844	\$13,217	\$16,061	16.6
	Office of Emergency Management	\$12,314	\$28,748	\$41,062	64.2	\$12,458	\$29,410	\$41,868	64.2
	Office of Mountains, Deserts, and Plains	\$840	\$0	\$840	4.0	\$846	\$0	\$846	4.0
	Regional Resources	\$268,269	\$832,301	\$1,100,570	1,610.9	\$270,068	\$1,120,410	\$1,390,478	1,610.9
		<b>OLEM TOTAL</b>	<b>\$351,899</b>	<b>\$971,061</b>	<b>\$1,322,960</b>	<b>2,070.1</b>	<b>\$354,387</b>	<b>\$1,320,575</b>	<b>\$1,674,962</b>
OMS	Immediate Office	\$10,698	\$32,604	\$43,302	22.6	\$4,970	\$37,125	\$42,095	26.6
	Environmental Appeals Board	\$3,046	\$14	\$3,060	14.0	\$3,269	\$163	\$3,432	15.0
	Administrative Law Judges	\$1,950	\$12	\$1,962	10.0	\$2,167	\$161	\$2,329	11.0
	Office of Resources and Business Operations	\$9,974	\$2,720	\$12,694	62.0	\$10,323	\$7,484	\$17,807	63.0
	Office of Human Resources	\$18,923	\$7,321	\$26,244	80.7	\$20,948	\$5,903	\$26,851	89.7
	OARM - Research Triangle Park	\$14,047	\$30,962	\$45,008	95.0	\$15,245	\$29,472	\$44,717	100.0
	Office of Grants and Debarment	\$11,949	\$4,257	\$16,205	67.0	\$13,633	\$4,219	\$17,852	76.0
	OARM - Cincinnati	\$9,702	\$8,527	\$18,229	66.0	\$10,614	\$10,619	\$21,233	70.0
	Office of Administration	\$16,831	\$310,785	\$327,615	87.5	\$19,599	\$353,186	\$372,785	87.5
	Office of Acquisition Solutions	\$32,211	\$6,601	\$38,812	193.0	\$40,014	\$6,512	\$46,525	233.0
	Office of Enterprise Information Programs	\$7,612	\$7,856	\$15,468	40.1	\$7,718	\$7,818	\$15,536	40.1
	Office of Information Management	\$11,040	\$27,767	\$38,807	58.7	\$11,197	\$27,988	\$39,185	58.7
	Office of Digital Services & Technical Architecture	\$4,243	\$1,671	\$5,915	23.0	\$4,297	\$1,655	\$5,952	23.0
	Office of Customer Advocacy, Policy & Portfolio Management	\$5,567	\$2,093	\$7,659	31.0	\$5,638	\$2,076	\$7,714	31.0
	Office of Information Security & Privacy	\$2,660	\$6,162	\$8,821	14.1	\$2,694	\$16,980	\$19,675	14.1
Office of Information Technology Operations	\$1,947	\$4,489	\$6,436	9.7	\$1,972	\$4,474	\$6,446	9.7	
Regional Resources	\$76,143	\$50,473	\$126,616	464.9	\$84,035	\$52,215	\$136,250	479.4	
	<b>OMS TOTAL</b>	<b>\$238,540</b>	<b>\$504,313</b>	<b>\$742,853</b>	<b>1,339.3</b>	<b>\$258,333</b>	<b>\$568,051</b>	<b>\$826,384</b>	<b>1,427.8</b>

NPM	Major Office	FY 2021 Enacted Budget				FY 2022 President's Budget				
		Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE	Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE	
ORD	ORD Headquarters	\$43,869	\$77,554	\$121,423	256.2	\$44,440	\$105,808	\$150,248	256.2	
	Center for Computational Toxicology & Exposure	\$41,139	\$28,445	\$69,584	239.9	\$45,358	\$34,814	\$80,172	261.5	
	Center for Environmental Measurements & Modeling	\$60,773	\$36,883	\$97,656	354.4	\$66,795	\$44,786	\$111,581	385.1	
	Center for Public Health & Environmental Assessment	\$60,807	\$36,662	\$97,470	352.6	\$66,828	\$44,150	\$110,978	383.3	
	Center for Environmental Solutions & Emergencies	\$42,030	\$28,013	\$70,044	245.1	\$46,260	\$34,346	\$80,606	266.7	
	Office of Science Advisor, Policy and Engagement	\$11,266	\$58,695	\$69,961	65.7	\$12,973	\$51,161	\$64,134	74.8	
	Regional Resources	\$31,632	\$16,321	\$47,953	199.5	\$31,866	\$16,715	\$48,581	199.5	
	<b>ORD TOTAL</b>	<b>\$291,518</b>	<b>\$282,573</b>	<b>\$574,091</b>	<b>1,713.4</b>	<b>\$314,520</b>	<b>\$331,780</b>	<b>\$646,300</b>	<b>1,827.1</b>	
	OW	Immediate Office	\$11,554	\$5,790	\$17,343	59.4	\$12,391	\$6,102	\$18,493	63.5
		Office of Ground Water and Drinking Water	\$29,818	\$69,242	\$99,060	167.6	\$34,229	\$61,500	\$95,729	191.3
Office of Science and Technology		\$20,507	\$15,388	\$35,895	106.8	\$21,925	\$16,592	\$38,517	113.6	
Office of Wastewater Management		\$24,087	\$134,593	\$158,680	131.7	\$27,326	\$169,195	\$196,521	148.6	
Office of Wetlands, Oceans and Watersheds		\$19,427	\$23,895	\$43,322	103.8	\$21,420	\$26,859	\$48,279	114.3	
Regional Resources		\$190,031	\$3,987,728	\$4,177,759	1,177.2	\$206,243	\$4,587,620	\$4,793,863	1,262.8	
<b>OW TOTAL</b>		<b>\$295,424</b>	<b>\$4,236,636</b>	<b>\$4,532,060</b>	<b>1,746.5</b>	<b>\$323,534</b>	<b>\$4,867,868</b>	<b>\$5,191,402</b>	<b>1,894.1</b>	
<b>Subtotal Agency Resources</b>		<b>\$2,370,218</b>	<b>\$6,894,926</b>	<b>\$9,265,144</b>	<b>13,831.8</b>	<b>\$2,598,453</b>	<b>\$8,634,826</b>	<b>\$11,233,279</b>	<b>14,858.6</b>	
Less Rescission of Prior Year Funds				(\$27,991)				\$0		
Reimbursable FTE					465.5				465.5	
<b>Total Agency Resources</b>	<b>\$2,370,218</b>	<b>\$6,894,926</b>	<b>\$9,237,153</b>	<b>14,297.3</b>	<b>\$2,598,453</b>	<b>\$8,634,826</b>	<b>\$11,233,279</b>	<b>15,324.1</b>		

## **S. 2276 – Good Accounting Obligation in Government Act**

**Public Law No: 115-414, January 3, 2019**

In accordance with the reporting requirements of the Good Accounting Obligation in Government Act, Agencies are to submit reports on outstanding recommendations in the annual budget submitted to Congress.

For the FY 2022 budget justification, EPA developed a report listing each open public recommendation for corrective action from the Office of the Inspector General, along with the implementation status of each recommendation.

EPA also developed a report listing the status of each open or closed as unimplemented public recommendation from the Government Accountability Office (GAO).

The Agency's GAO-IG Act Report will be available at the following link:  
<https://www.epa.gov/cj>.



**EPA OIG Open Recommendations and Corrective Actions**

<b>FY Audit Number</b>	<b>Recommendations and Corrective Actions</b>	<b>Report Date</b>
18-P00240-1	<p>Recommendation: Establish a strategic vision and objectives for managing the use of citizen science that identifies:</p> <ul style="list-style-type: none"> <li>a. Linkage to the Agency’s strategic goals,</li> <li>b. Roles and responsibilities for implementation, and</li> <li>c. Resources to maintain and build upon existing agency expertise</li> </ul>	9/5/18
	<p>Corrective Action: The Agency concurs with this recommendation and will establish an agencywide work group to establish a more formal strategic vision and objectives for managing the use of citizen science, including policies, procedures and clear objectives for how to collect, manage and use citizen science to support the Agency's mission. <i>Planned: 12/31/20, Status: Delayed</i></p>	
	<p>Recommendation: Through appropriate EPA offices, direct completion of an assessment to identify the data management requirements for using citizen science data and an action plan for addressing those requirements, including those on sharing and using data, data format/standards, and data testing/validation.</p>	
	<p>Corrective Action: The Agency concurs with this recommendation and will complete an assessment and action plan to identify and address data management requirements for citizen science. <i>Planned: 12/31/20, Status: Delayed</i></p>	
20-P00062-1	<p>Recommendation: Revise EPA's Crisis Communication Plan to include a communication process to inform affected communities about the resolution of community concerns raised during an emergency.</p>	12/16/19
	<p>Corrective Action: Revise EPA's Crisis Communication process to inform affected communities about the resolution of community concerns raised during an emergency. <i>Planned: 12/30/20, Status: Delayed</i></p>	
20-N00128-1	<p>Recommendation: Improve and continue to implement ongoing risk communication efforts by promptly providing residents in all communities near the 25 ethylene oxide-emitting facilities identified as high-priority by EPA with a forum for an interactive exchange of information with EPA or the states regarding health concerns related to exposure to ethylene oxide.</p>	3/31/20
	<p>Corrective Action: EPA will post quarterly status reports of outreach activities to the Agency's/Region’s Ethylene Oxide website beginning September 30, 2020. <i>Planned: 09/30/20, Status: Dispute Resolution</i></p>	
20-P00083-4	<p>Recommendation: Develop performance measures to track progress toward the Border 2020 Program goals and objectives.</p>	2/18/20

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>Corrective Action: OITA will work with NPM's and Regional Border Offices to identify performance measures for Border 2025 goals and objectives, in line with the Agency LEAN effort and Bowling Charts. <i>Planned: 12/31/20, Status: Delayed</i></p>	
	<p>Recommendation: Establish and implement management controls to determine how and when Policy Forum action plans will be developed.</p>	
	<p>Corrective Action: Border 2020 Policy Fora did not require action plans. Policy Fora Action/Activities are being considered in the Accountability of the Border 2025 framework and will be reflected or include in the regional action plans, if required. <i>Planned: 12/31/20, Status: Delayed</i></p>	
	<p>Recommendation: Establish and implement management controls to increase reliability of the Border 2020 Program action plans by standardizing the action plan format to include key data such as the relevant goal, objective, sub-objective, requests for proposal, grant amount and project status.</p>	
	<p>Corrective Action: OITA does recognize the advantage toward Action Plans Format standardization. OITA will work with NPM's and Regional Border Offices to standardize the Border 2025 Action Plans to the extent that it allows flexibility within RWG' s and Task Forces in the spirit of fomenting bottom up work as each region may have differences. <i>Planned: 12/31/20, Status: Delayed</i></p>	
	<p>Recommendation: Establish and implement management controls to increase transparency of the Border 2020 Program by providing stakeholder and public access, as appropriate, to the program's funded products such as studies, reports, and videos on EPA's Border 2020 Program website.</p>	
	<p>Corrective Action: OITA is a NADB Board Member and will work with the NADB to ensure that project information/products are made available to the public, in line with grants polices and regulations. Once this is achieved, EPA can link from the Border 2025 website to those materials on NADB ' s website. <i>Planned: 12/31/20, Status: Delayed</i></p>	
	<p>Recommendation: Establish and implement management controls to increase transparency of the Border 2020 Program by sharing NADB sub-grantee fact sheets on EPA's Border 2020 Program website.</p>	
	<p>Corrective Action: OITA will work with the NAD B to ensure that Border 2025 project information/products are made available to the public, in line grants polices and regulations. Once this is achieved, EPA can link the Border 2025 website to those</p>	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	materials on NADB' s website. <i>Planned: 12/31/20, Status: Delayed</i>	
17-F00046-130	<p>Recommendation: Work with the Compass Financials service provider to establish controls for creating and locking administrative accounts.</p> <p>Corrective Action: The Agency will work with the service provider to analyze alternatives for controls and establish an action plan. <i>Planned: 9/30/21, Status: Adhering</i></p> <p>Recommendation: Work with the Compass Financials service provider to develop and implement a methodology to monitor accounts with administrative capabilities.</p> <p>Corrective Action: The Agency will work with the service provider to analyze alternative methodologies and establish an action plan. <i>Planned: 9/30/21, Status: Adhering</i></p>	11/15/16
20-F00033-130	<p>Recommendation: We recommend that the Chief Financial Officer evaluate and improve EPA's process for preparing financial statements, including the resources assigned.</p> <p>Corrective Action: 1.0 - The Agency makes every effort to continually review and improve its processes for financial statement reporting, including the implementation of new financial statements preparation software in FY 2019. The Agency will continue to review its processes for preparing financial statements and identify process improvements to further strengthen the preparation process.</p> <p>Recommendation: We recommend that the Chief Financial Officer establish accounting models to properly classify and record interest, fines, penalties and fees.</p> <p>Corrective Action: 3.0 - OCFO will work with the Office of Land and Emergency Management to review the business process for e-Manifest financial activities and develop a plan for recording the related activities at the transactional level. <i>Planned: 9/30/21, Status: Adhering</i></p> <p>Recommendation: We recommend that the Chief Financial Officer establish accounting models to properly record e-Manifest account receivables and recognize earned revenue at the transaction level.</p> <p>Corrective Action: 4.0 - OCFO will work with the Office of Land and Emergency Management to review the business process for e-Manifest financial activities and develop a plan for recording the related activities at the transactional level. <i>Planned: 9/30/21, Status: Adhering</i></p> <p>Recommendation: We recommend that the Chief Financial Officer establish accounting models to properly record</p>	11/19/19

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>receivables, collections and earned revenue from federal versus nonfederal vendors.</p> <p>Corrective Action: 5.0 - OCFO will work with the Office of Land and Emergency Management to review the business process for e-Manifest financial activities and develop a plan for recording the related activities at the transactional level. <i>Planned: 9/30/21, Status: Adhering</i></p> <p>Recommendation: We recommend that the Chief Financial Officer update the accounting models to properly record collections and not reduce an account receivable account.</p> <p>Corrective Action: 6.0 - OCFO will work with the Office of Land and Emergency Management to review the business process for e-Manifest financial activities and develop a plan for recording the related activities at the transactional level. <i>Planned: 9/30/21, Status: Adhering</i></p>	
16-P00275-140	<p>Recommendation: We recommend that the Assistant Administrator for Air and Radiation: Determine whether additional action is needed to mitigate any adverse air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act.</p> <p>Corrective Action: 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. <i>Planned: 9/30/24, Status: Adhering</i></p> <p>Recommendation: We recommend that the Assistant Administrator for Air and Radiation: Complete the anti-backsliding study on the air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act.</p> <p>Corrective Action: OAR agrees with this recommendation, and we acknowledge the statutory obligation for an anti-backsliding study under Clean Air Act section 211(v) (as amended by EISA section 209). EPA has already taken a number of time-consuming and resource-intensive steps that are important prerequisites for the anti-backsliding study. For example, OAR conducted a vehicle emissions test program designed to evaluate the impacts of gasoline properties (including aromatics and ethanol concentration) on vehicle exhaust emissions, <a href="https://www3.epa.gov/otaq/models/moves/epact.htm">https://www3.epa.gov/otaq/models/moves/epact.htm</a>. This study is the largest, most comprehensive, and most carefully designed and implemented study to date on the impacts of fuel changes on</p>	8/18/16

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>emissions from recent model year gasoline vehicles. Using the data from this study, OAR then updated the fuel effects model in its tool for estimating motor vehicle emissions, the Motor Vehicle Emissions Simulator (MOVES). This update was released in 2014. However, as the OIG report correctly notes, there are multiple intermediate research steps that still need to be completed before OAR can plan, fund, and conduct a comprehensive anti-backsliding study. These steps include development of baseline, current, and projected scenarios for how renewable fuels have and might be produced, distributed, and used to fulfill the RFS requirements, generation of emissions inventories, and air quality modeling, all of which are time-consuming and resource-intensive. Furthermore, this work must be conducted on top of other statutorily required actions under the RFS Program, many of which are carried out by the same group of staff and managers.</p> <p><i>Planned: 9/30/24, Status: Adhering</i></p>	
18-P00181-140	<p>Recommendation: Define performance measures to assess the performance of EPA’s light-duty vehicle compliance program.</p> <p>Corrective Action: OAR agrees with this recommendation. OAR currently uses in-use vehicle emissions testing data to track light-duty emissions compliance over time. OAR will develop additional performance measures to better monitor emissions compliance and program success. OAR will implement this recommendation in four phases: 1) develop the performance measures; 2) implement, gather data, and evaluate; 3) revise measures as informed by evaluation, then fully implement measures; and 4) use those measures to inform program management moving forward. We project that this will be a three-year process. Step one will be completed by the end of Q2, FY2019. Step two will be completed at the end of Q2, FY2020, and step three will be completed at the end of Q2, FY2021. Step 4 is ongoing.</p> <p><i>Planned: 3/31/21, Status: Delayed</i></p>	5/15/18
19-P00168-140	<p>Recommendation: Define performance measures to assess the performance of EPA’s on-road heavy-duty vehicle and engine compliance program.</p> <p>Corrective Action: OAR agrees with this recommendation. OAR currently uses in-use vehicle emissions testing data to track heavy-duty emissions compliance over time. OAR will develop additional performance measures to better monitor emissions compliance and program success. <i>Planned: 9/30/22, Status: Adhering</i></p>	6/3/19

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>Recommendation: Conduct and document a risk assessment for the on-road heavy-duty vehicle and engine compliance program that prioritizes risk and links specific control activities to specific risks. Update the risk assessment on a scheduled and periodic basis.</p>	
	<p>Corrective Action: OAR agrees with this recommendation. OAR currently conducts an informal risk assessment of its heavy-duty vehicle compliance program and started implementing and documenting a formal process for both light-and heavy-duty sectors in 2018 in response to OIG’s recommendation for the light-duty program. OAR will continue to expand and formalize this process and will develop protocols for its implementation and documentation. <i>Planned: 6/30/21, Status: Adhering</i></p>	
	<p>Recommendation: Address the following risks as part of the on-road heavy-duty vehicle and engine compliance program risk assessment, in addition to other risks that EPA identifies:</p> <ul style="list-style-type: none"> <li>a. Non-criteria pollutants not being measured.</li> <li>b. Level of heavy-duty sector testing throughout the compliance life cycle.</li> <li>c. Marketplace ambiguity over regulatory treatment of rebuilt versus remanufactured engines.</li> <li>d. Different compliance challenges for heavy-duty compression-ignition and spark-ignition engines.</li> <li>e. Lack of laboratory test cell and in-house testing capacity for heavy-duty spark-ignition engines.</li> </ul>	
	<p>Corrective Action: OAR agrees with this recommendation and will address each of these areas:</p> <ul style="list-style-type: none"> <li>• Non-criteria pollutants not being measured Response: Under the Clean Air Act, manufacturers are responsible for measuring and reporting emissions of nonregulated pollutants. OTAQ does not routinely measure noncriteria pollutants, but we will work to enhance manufacturer reporting by establishing a new document type in our Engine and Vehicle Compliance Information System (EV-CIS) to collect the manufacturer reports; updating our guidance to announce the new EV-CIS capacity and to remind manufacturers of their reporting obligation; and then reviewing and considering the reported information as part of our ongoing risk assessment process. Planned Completion Date: End of Q4 2021.</li> <li>• Level of heavy-duty sector testing throughout the compliance life cycle Response: OTAQ will continue to prioritize testing for all vehicle and engine sectors, including the HD highway sector, as</li> </ul>	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>resources allow. We will formally document and periodically reassess the level of testing as part of our periodic risk assessment. Planned Completion Date: End of Q3 2021.</p> <ul style="list-style-type: none"> <li>Marketplace ambiguity over regulatory treatment of rebuilt versus remanufactured engines</li> </ul> <p>Response: OTAQ believes the regulations are clear on this issue so we will engage stakeholders to improve understanding of nomenclature and expectations, and we will work to educate manufacturers about ambiguity resulting from their inappropriate use of terminology. Planned Completion Date: End of Q1 2021.</p> <ul style="list-style-type: none"> <li>Different compliance challenges for heavy-duty compression-ignition and spark-ignition engines</li> </ul> <p>Response: This recommendation concerns the technical differences between SI and CI engines, and the resulting different challenges and tradeoffs in controlling emissions for the two types of technology. We will formally document and periodically reassess concerns about different compliance incentives as part of our periodic risk assessment.</p> <p>Planned Completion Date: End of Q3 2021.</p> <ul style="list-style-type: none"> <li>Lack of laboratory test cell and in-house testing capacity for heavy-duty spark-ignition engines</li> </ul> <p>Response: Heavy-duty spark-ignition (HDSI) engines represent less than 4% of heavy-duty highway production. NVFEL is able to test all the other sectors and can use contract laboratories or portable emissions measurement systems to test HDSI engines if necessary. Therefore, investment in HDSI testing capacity has not been a priority to date.</p> <p>Going forward, we will formally document and periodically reassess decisions about investments in laboratory capacity as part of a periodic risk assessment. Planned Completion Date: End of Q3 2021.</p> <p><i>Planned: 9/30/21, Status: Adhering</i></p> <hr/> <p>Recommendation: Evaluate the following issues, which may require regulatory or programmatic action, as part of (1) the on-road heavy-duty vehicle and engine emission control program risk assessment and (2) EPA’s annual regulatory agenda development process:</p> <ol style="list-style-type: none"> <li>Regulatory definition of on-road heavy-duty engine useful life may not reflect actual useful life.</li> <li>Not-to-Exceed standard may not reflect real-world operating conditions, especially for certain applications.</li> <li>In-use testing requirements for heavy-duty spark-ignition engines may be needed.</li> </ol>	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>d. A particle number standard may more accurately control particulate matter emissions that impact human health.</p> <p>Corrective Action: OAR agrees with this recommendation. We will consider the first three issues as part of the CTI rulemaking process. We also will commit to considering approaches to best control particulate matter emissions that affect public health and will continue to work toward improving ultrafine particulate matter measurement techniques. <i>Planned: 9/30/22, Status: Adhering</i></p>	
19-P00207-140	<p>Recommendation: Develop and implement electronic checks in EPA’s Emissions Collection and Monitoring Plan System or through an alternative mechanism to retroactively evaluate emissions and quality assurance data in instances where monitoring plan changes are submitted after the emissions and quality assurance data have already been accepted by EPA.</p> <p>Corrective Action: The Office of Air and Radiation agrees with this recommendation. As OIG acknowledged in its report, CAMD has already addressed this issue by implementing a post-submission data check that is run at the end of each reporting period. The new check identifies any monitoring plan submissions containing changes to monitoring span records that occur prior to the current emissions reporting period. If any changes were made, the check recalculates quality assurance tests that were submitted prior to the span change and verifies the pass/fail status of each test. If the status of any test changes, CAMD analysts will contact the affected facility and request the correction and resubmission of the impacted data. As of February 2019, CAMD had insured that the discrepancies in the data used in OIG’s review were resolved and resubmitted.</p> <p>In the long term, CAMD will implement an additional check in the ECMPS forcing retroactive span record changes to require the reevaluation and resubmission of any affected quality assurance tests and hourly emissions records. CAMD has initiated the process of re-engineering ECMPS. In order to minimize additional expenditures on the current version of ECMPS, CAMD will focus on adding the check to the new version of ECMPS. <i>Planned: 9/30/22, Status: Adhering</i></p>	6/27/19
19-P00251-140	<p>Recommendation: Assess the training needs of the EPA regions and state, local and tribal agencies concerning stack test plans and report reviews and EPA test methods, and develop and publish a plan to address any training shortfalls.</p> <p>Corrective Action: OAR will implement the following corrective action. OAR’s Office of Air Quality Planning and Standards</p>	7/30/19



FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>(OAQPS) will work with the EPA regions and state, local and tribal air agencies to review currently available materials and assess training needs with respect to approval of stack test plans, review of stack test reports, and conduct of EPA test methods, with respect to particulate matter compliance testing. OAQPS will work with EPA regional, state, local and tribal agencies to identify current training shortfalls and develop a plan to address these shortfalls. We anticipate two and one-half years to assess the training needs, prepare a training plan, and begin enacting the plan. <i>Planned: 3/31/22, Status: Adhering</i></p> <p>Recommendation: Develop stack test report checklists for EPA Method 5 and other frequently used EPA methods to assist state, local and tribal agencies in their reviews of stack test plans and reports.</p> <p>Corrective Action: OAR will implement the following corrective action. OAQPS will work with the EPA regions, state, local and tribal air agencies to develop checklists useful for review of stack test plans, and stack test reports for EPA Method 1, Method 2, Method 3, Method 4, Method 5, Method 7E, and Method 10. OAQPS will provide this content as informational and not to be used as official Regulatory Guidance. We anticipate that it will take approximately 18 months for these checklists to be finalized. <i>Planned: 6/30/21, Status: Adhering</i></p>	
17-P00053-164	<p>Recommendation: 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.</p> <p>Corrective Action: Within two years of the final report, by November 30, 2018, OCSPP will validate and implement new device clearance guidance. <i>Planned: 11/30/18, Status: Delayed</i></p>	12/12/16
17-P00395-164	<p>Recommendation: Develop and implement a plan to reduce excess Pesticides Reregistration and Expedited Processing Fund and Pesticide Registration Fund balances within the established target range.</p> <p>Corrective Action: 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. <i>Planned: 12/31/21, Status: Adhering</i></p>	9/18/17
18-P00080-164	<p>Recommendation 1: The Assistant Administrator for Chemical Safety and Pollution Prevention, in coordination with the Office of Enforcement and Compliance Assurance: 1. Develop and implement a methodology to evaluate the impact of the revised</p>	2/15/18

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>Agricultural Worker Protection Standard on pesticide exposure incidents among target populations.</p> <p>Corrective Action 1-1: CA 1 -- OCSPP will: (1) collect and review data related to the extent to which agricultural workers obtain knowledge through trainings; (2) collect and review incident data; and (3) after reviewing training and incident data, analyze the need to collect additional information to help evaluate the impact of the revised Worker Protection Standard. These efforts, as well as a detailed timeline for completion of specific milestones, are described in the Agency's 2/25/19 Response to the OIG's Final Report. After reviewing training and incident data, OCSPP will consider the need to collect additional information to help evaluate the impact of the revised Worker Protection Standard. EPA will examine the potential for additional sources of information that might contribute to a better understanding of the rule's impact by December 2022. Target Completion Date: OCSPP will complete a Final Report on the three efforts described below by December 31, 2022. <i>Planned: 12/31/22, Status: Adhering</i></p>	
19-P00195-164	<p>Recommendation: Complete the actions and milestones identified in the Office of Pesticide Programs' PRIA Maintenance Fee Risk Assessment document and associated plan regarding the fee payment and refund posting processes.</p> <p>Corrective Action: OCSPP/OPP will complete the actions and milestones identified in the Office of Pesticide Programs' PRIA Maintenance Fee Risk Assessment document and associated plan regarding the fee payment and refund posting processes by 12/31/2020. <i>Planned: 12/31/20, Status: Delayed</i></p>	6/21/19
19-P00275-164	<p>Recommendation: Determine how EPA can use the Managed Pollinator Protection Plan survey results to advance its National Program Manager Guidance goals and its regulatory mission.</p> <p>Corrective Action: OCSPP accepts the recommendation to utilize the AAPCO/SFIREG survey results to advance the Program's National Program Management Goals (NPMG1). OCSPP will use the information provided from the AAPCO/SFIREG survey to revise applicable NPMGs at the next available opportunity in the cycle of NPMG planning. OCSPP projects this task will be completed in June 2021. <i>Planned: 6/30/21, Status: Adhering</i></p>	8/15/19
18-P00240-166	<p>Recommendation: Build capacity for managing the use of citizen science, and expand awareness of citizen science resources, by:</p> <p>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;</p>	9/5/18

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>b. Conducting training and/or marketing on EPA’s citizen science intranet site for program and regional staff in developing projects; and</p> <p>c. Finalizing and distributing materials highlighting project successes and how EPA has used results of its investment in citizen science.</p> <p>Corrective Action: 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. <i>Planned: 12/31/20, Status: Delayed</i></p>	
13-P00178-167	<p>Recommendation: 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.</p> <p>Corrective Action: OSWER and OECA are working with the Regions to identify key components of a repository of inspection reports in order to better ensure and assess the quality of RMP inspections. This repository system will be developed by the end of FY2014.</p> <p>May 2018 Update: The OLEM Acting AA approved the revision of this milestone date from February 28, 2020 to June 30, 2023. The new date is based on the completion date of RMP Reconsideration rule. OLEM will need at least 3 years after its completion to start the development of an on-line system for the Regions to file/submit each of their inspection reports. This system must allow for quality control and the ability to not only assess the quality of the inspection reports but identify trends and issues at RMP facilities in order to better target our inspection efforts. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This action will take approximately one year to complete following the completion of the guidance in corrective action 1-1 above. Therefore, this action item should be delayed until after the completion of that work. (The OLEM Acting AA notified the OIG via email dated May 15, 2018.)</p> <p>For recommendation #2: July 2017 Update: The OLEM Acting AA approved the revision of this milestone date from September</p>	3/21/13

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	<p>30, 2019 to February 2020. This action requires the development of an on-line system for the Regions to file/submit each of their inspection reports. This system must allow for quality control and the ability to not only assess the quality of the inspection reports but identify trends and issues at RMP facilities in order to better target our inspection efforts. Recently, EPA published a final rule extending the effective date on the January 2017 revised RMP rule to February 2019. For the next 20 months, EPA will be engaged in drafting and publishing a proposed and final rule. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This action will take approximately one year to complete following the completion of the guidance in corrective action 1-1 above. Therefore, this action item should be delayed until after the completion of that work. (The OLEM Acting AA notified the OIG AIG, Carolyn Copper, via email on 07/07/2017.)</p> <p>March 2016 Update: The OLEM AA approved to revise the corrective action milestone date from March 30, 2017, to September 30, 2019. This action requires the development on an on-line system for the Regions to file/submit each of their inspection reports. This system must allow for quality control and the ability to not only assess the quality of the inspection reports but identify trends and issues at RMP facilities in order to better target our inspection efforts. Currently the Administration's priority is to complete a final RMP regulation by late 2016/early 2017. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This effort will take 2-3 years and must be completed in that timeframe to give facilities time to review the guidance and comply with the new requirements under the RMP Program. Therefore, this OIG action item must be delayed until after the completion of that work. This action will take approximately one year to complete following the completion of the guidance in corrective action 1-1 above. (The OIG was notified via an email from the OLEM AA to Art Elkins on 03/11/2016.)</p> <p>July 2014 Update: The OSWER AA approved to revise the corrective action date from 09/30/14 to 03/31/17. This corrective action has been overtaken by actions and deadlines associated with implementation of Executive Order 13650, Improving Chemical Facility Safety and Security, which lays out a</p>	

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	comprehensive set of actions to advance chemical facility safety and security, including federal coordination on inspections. We anticipate the repository will take 18 months to 2 years to complete once we start. (The OIG was notified of this delay via an email from the OSWER AA to the Inspector General dated 07/30/14). <i>Planned: 9/30/14, Status: Delayed</i>	
18-P00059-167	<p>Recommendation: 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.</p> <p>Corrective Action: 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.</p> <p>May 2019 Update: The OLEM Acting AA approved the revision of this milestone date from June 20, 2020 to September 30, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 09/30/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. <i>Planned: 6/30/20, Status: Delayed</i></p> <p>Recommendation: 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.</p> <p>Corrective Action: 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.</p> <p>May 2019 Update: The OLEM Acting AA approved the revision of this milestone date from June 20, 2020 to September 30, 2021 as a result of the delay in launching the RCRAInfo Financial</p>	12/22/17

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>Assurance module upgrade to version 6. New expected date delivery is 09/30/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. <i>Planned: 6/30/20, Status: Delayed</i></p> <p>Recommendation: 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.</p> <p>Corrective Action: 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.</p> <p>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.</p> <p>May 2019 Update: For corrective actions 5, 6 and 7, the OLEM Acting AA approved the revision of this milestone date from June 20, 2020 to September 30, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 09/30/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. <i>Planned: 6/30/20, Status: Delayed</i></p> <p>Recommendation: Train staff on the procedures and instructions developed for Recommendations 5 through 7.</p> <p>Corrective Action: 8. In the RCRA Program, EPA will hold webinar for the 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.</p> <p>May 2019 Update: the OLEM Acting AA approved the revision of this milestone date from September 30, 2020 to December 31, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 12/31/21. Acting OLEM AA, Barry Breen,</p>	

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	notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. <i>Planned: 9/30/20, Status: Delayed</i>	
20-P00066-167	<p>Recommendation: Maintain one official agencywide management and tracking system for homeland security and emergency response equipment that provides for the status, availability and acquisition costs of all equipment.</p> <p>Corrective Action: Establish AAMS as the agencywide system for tracking personal property. <i>Planned: 6/30/22, Status: Adhering</i></p>	1/30/20
10-P00224-168	<p>Recommendation: 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.</p> <p>Corrective Action: EPA has completed the review of all EPA-State MOAs. Ten authorized NPDES states were identified as being problematic. The EPA Regions and States have completed actions to update MOAs to satisfy concerns identified in the corrective action plan for three states: Iowa, Missouri, and Virginia. At this time, seven MOAs are still in the process of being corrected.</p> <p>OECA is requesting a six month extension to continue to work with the Office of Water and States on their MOAs to fulfill this corrective action. <i>Planned: 3/28/18, Status: Delayed</i></p>	9/14/10
19-P00002-168	<p>Recommendation: Issue updated and consistent guidance on biosolids fecal coliform sampling practices.</p> <p>Corrective Action: OW completed its work to address the corrective action on 12-16.20. The corrective actions will be published in an ORD document that is currently under review. The document will not meet the deadline for posting to the website by 12/30/2020. OST anticipates the updates will be publicly available by 5/31/2021. <i>Planned: 12/31/20, Status: Delayed</i></p> <p>Recommendation: Publish guidance on the methods for the biosolids pathogen alternatives 3 and 4.</p> <p>Corrective Action: OW completed its work to address the corrective action on 12-16.20. The corrective actions will be published in an ORD document that is currently under review. The document will not meet the deadline for posting to the website by 12/30/2020. OST anticipates the updates will be publicly available by 5/31/2021. <i>Planned: 12/31/20, Status: Delayed</i></p>	11/15/18

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	<p>Recommendation: Develop and implement a plan to obtain the additional data needed to complete risk assessments and finalize safety determinations on the 352 identified pollutants in biosolids and promulgate regulations as needed.</p> <p>Corrective Action: For Recommendation 4, EPA agreed with this recommendation. The initial corrective action did not fully address the intent of the recommendation. After our meeting on September 17, 2018, EPA provided acceptable corrective actions and a planned completion date. In addition to EPA’s work on improving the biennial review process, the Office of Water established a performance measure for biennial reviews. This recommendation is resolved with corrective actions pending. <i>Planned: 12/31/22, Status: Adhering</i></p> <p>Recommendation: Complete development of the probabilistic risk assessment tool and screening tool for biosolids land application scenarios.</p> <p>Corrective Action: For Recommendation 3, the Agency agreed with the recommendation and offered an acceptable corrective action but did not provide a specific completion date. After our meeting on September 17, 2018, the Office of Water provided an acceptable completion date. This recommendation is resolved with corrective actions pending. <i>Planned: 12/31/21, Status: Adhering</i></p>	
19-P00318-168	<p>Recommendation: Update and revise the 2010 Public Notification Handbooks to include:</p> <ul style="list-style-type: none"> <li>a. Public notice delivery methods that are consistent with regulations.</li> <li>b. Information on modern methods for delivery of public notice.</li> <li>c. Public notice requirements for the latest drinking water regulations.</li> <li>d. Procedures for public water systems to achieve compliance after violating a public notice regulation.</li> <li>e. Up-to-date references to compliance assistance tools.</li> <li>f. Additional resources for providing public notice in languages other than English.</li> </ul> <p>Corrective Action: EPA will revise the Public Notification Handbook per OJG’s. <i>Planned: 9/30/20, Status: Delayed</i></p> <p>Recommendation: Update and revise the 2010 Revised State Implementation Guidance for the Public Notification Rule to include:</p> <ul style="list-style-type: none"> <li>a. Public notice delivery methods that are consistent with regulations.</li> <li>b. Information on modern methods for delivery of public notice.</li> </ul>	9/25/19



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	<p>Corrective Action: EPA will revise the State Implementation Guidance per OIG's recommendation.  <i>Planned: 9/30/20, Status: Delayed</i></p>	
18-P00059-180	<p>Recommendation: Update standard operating procedures and data systems to accommodate the changes implemented for Recommendation 2.</p>	12/22/17
	<p>Corrective Action: OLEM, w/support from OECA, will update SOPs and data systems to accommodate the implemented risk management actions. <i>Planned: 9/30/21, Status: Adhering</i></p>	
	<p>Recommendation: Train staff on the changes implemented for Recommendation 2.</p>	
	<p>Corrective Action: OLEM, w/support from OECA, will train staff on the implemented risk management actions.  <i>Planned: 12/31/21, Status: Adhering</i></p>	
19-P00251-180	<p>Recommendation: Develop and implement a plan for improving the consistency of stack test reviews across the EPA regions and delegated agencies.</p>	7/30/19
	<p>Corrective Action: OECA will implement a plan, in coordination with OAR and consistent with the activities undertaken by OAR in addressing recommendations 2-3, for improving the consistency of stack test reviews across the EPA regions and delegated agencies. Such enhanced compliance monitoring will help ensure the tool of stack testing is being sufficiently and properly utilized.  <i>Planned: 3/31/22, Status: Adhering</i></p>	
19-P-00302-180	<p>Recommendation: Establish the Lead-Based Paint Renovation, Repair and Painting Rule Program's objectives, goals and measurable outcomes, such as measures to demonstrate the effectiveness of program contributions toward decreasing elevated blood lead levels.</p>	9/9/19
	<p>Corrective Action: OECA, in collaboration with the EPA Regions, will evaluate the Lead-Based Paint Renovation, Repair and Painting Rule compliance monitoring and enforcement program to determine appropriate refinements to existing program objectives to help OECA set enforcement goals and measurable outcomes for FY21, consistent with the OECA National Program Guidance.  <i>Planned: 7/1/21, Status: Adhering</i></p>	
	<p>Recommendation: Identify the regulated universe of Lead-Based Paint Renovation, Repair and Painting Rule firms in support of regional targeting strategies, in coordination with the Office of Chemical Safety and Pollution Prevention.</p>	
	<p>Corrective Action: OECA, in coordination with OCSPP, will develop a targeting strategy that will include a geospatial-based</p>	

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	<p>model to assist the Regions in identifying areas of concern for lead exposure in general along with any guidance on how to identify firms within this area.</p> <p><i>Planned: 12/31/21, Status: Adhering</i></p>	
19-P00318-180	<p>Recommendation: Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act’s public notice requirements.</p> <p>Corrective Action: Over the past two years, OECA has been working with the Regions and the Office of Water to refine the scope, the mechanism and the roll out for a drinking water enforcement review (DW ER). Such a review examines whether a primacy agency is taking appropriate and timely actions to address violations; is properly escalating enforcement and is ensuring a facility's return to compliance. OECA is working closely with our Regional offices to ensure that this review complements existing oversight efforts and, in particular, does not duplicate OW programmatic reviews.</p> <p>OECA is building this nationally consistent framework from activities and reviews that select Regions are already implementing. In particular, OECA has been working with Regions 4, 5 and 7, who are currently doing these types of reviews with their states and sharing their experience and lessons learned to help us build this national framework. Additional time in 2021 will allow these Regions the chance to perform additional enforcement reviews and allow OECA to coordinate and parallel its construction of a national framework as these reviews are undertaken.</p> <p>Once the pilot is completed, OECA will work across all its Regions and in partnership with the states to institutionalize this element of enforcement program oversight.</p> <p>OECA will pilot test a new framework for regional review of primacy agency response to violations, including whether public notice requirements are met. Upon completion of the pilot, OECA will review the results and, if the approach is effective, will finalize the framework and implement a national program for periodic regional reviews for primacy agencies. OECA will pilot test a new framework for regional review of primacy agency response to violations, including whether public notice requirements are met. Upon completion of the pilot, OECA will</p>	9/25/19

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	<p>review the results and, if the approach is effective, will finalize the framework and implement a national program for periodic regional reviews for primacy agencies.  <i>Planned: 12/31/20, Status: Delayed</i></p>	
20-P00012-180	<p>Recommendation: Require circuit riders to include the pesticide needs and risks of each tribe on their circuit in the development of their priority-setting plans, which are a required component of tribal pesticide enforcement cooperative agreements.</p> <p>Corrective Action: OECA agrees to develop guidance which will require circuit riders to include the needs and risks of each tribe on their circuit in the development of priority-setting plans, which are required component of tribal pesticide enforcement cooperative agreements.  (FINAL GUIDANCE). <i>Planned: 12/31/22, Status: Adhering</i></p> <p>Recommendation: Develop and implement tribal circuit rider guidance for pesticide inspectors that includes expectation-setting and communication with tribes that are being served under a tribal pesticide enforcement cooperative agreement.</p> <p>Corrective Action: OECA agrees to develop guidance which will require circuit riders to include the needs and risks of each tribe on their circuit in the development of priority-setting plans, which are required component of tribal pesticide enforcement cooperative agreements. (FINAL GUIDANCE). <i>Planned: 12/31/22, Status: Adhering</i></p> <p>Recommendation: Develop and implement regional processes to receive feedback directly from tribes using pesticide circuit riders.</p> <p>Corrective Action: OECA agrees to develop guidance which will require circuit riders to include the needs and risks of each tribe on their circuit in the development of priority-setting plans, which are required component of tribal pesticide enforcement cooperative agreements.  (FINAL GUIDANCE). <i>Planned: 12/31/22, Status: Adhering</i></p>	10/29/19
14-P00109-360	<p>Recommendation: Direct COs to require that the contractor adjust all its billings to reflect the application of the correct rate to team subcontract ODCs.</p> <p>Corrective Action: 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,</p>	2/4/14

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	the CO will be directed to defer past billing adjustments until the Defense Contract Audit Agency (DCAA) audits the indirect cost rates and the EPA Financial Administrative Contracting Officer (FACO) negotiates, approves and issues a Final Indirect Cost (ICR) Agreement for the past billing periods (i.e. Years 2007 to 2013). <i>Planned: 9/30/24, Status: Adhering</i>	
18-P00233-360	<p>Recommendation: We recommend that the EPA Regional Administrators, Regions 6 and 9: Fully develop and implement prioritization and resource allocation methodologies for the Tronox abandoned uranium mine sites on or near Navajo Nation lands.</p> <p>Corrective Action: Complete development and implementation of resource allocation methodology following the cost analysis of the preferred remedies. Complete prioritization list for funding by December 31, 2021. Establish a funding allocation strategy for the prioritized NAUM sites by December 31, 2021. Complete final resource allocations by May 31, 2022. <i>Planned: 12/31/21, Status: Adhering</i></p>	8/22/18
12-100560-380	<p>Recommendation: Ensure the grantee addresses the recommendations and recover questioned and unsupported costs.</p> <p>Corrective Action: 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.</p> <p>12/30/13: The Region is continuing to work with HQ and regional counsel on options for this recipient with a revised expected completion date of June 30,2014. The Region also will be looking to the new OMB Circular on cooperative audit resolution for some guidance.</p> <p>10/21/13: OGD and the Region are discussing contents of proposed Final Determination Letter. Projected completion date is December 30, 2013. <i>Status: Delayed</i></p>	9/24/07
18-P00233-390	<p>Recommendation: We recommend that the EPA Regional Administrators, Regions 6 and 9: Complete the necessary removal site evaluations and engineering evaluations/cost analyses.</p> <p>Corrective Action: Complete engineering evaluations/cost analyses. Region 6: COMPLETED 4 Draft Final EECAs for 18 Tronox NAUMs. Region 9: Draft 4 EE/CAs by September 30, 2021 at mines that are closest to residents, where exposure is higher, and human health risk is therefore potentially higher. Draft remaining</p>	8/22/18

FY Audit Number	Recommendations and Corrective Actions	Report Date
	<p>EE/CAs by December 31, 2021. <i>Planned: 12/31/20, Status: Delayed</i></p> <p>Recommendation: We recommend that the EPA Regional Administrators, Regions 6 and 9: Fully develop and implement prioritization and resource allocation methodologies for the Tronox abandoned uranium mine sites on or near Navajo Nation lands.</p> <p>Corrective Action: Complete development and implementation of resource allocation methodology following the cost analysis of the preferred remedies. Complete prioritization list for funding by December 31, 2021. Establish a funding allocation strategy for the prioritized NAUM sites by December 31, 2021. Complete final resource allocations by May 31, 2022. <i>Planned: 12/31/21, Status: Adhering</i></p>	
20-P-00063-451	<p>Recommendation: Evaluate and determine whether the improperly credited Travel Compensatory Time Off should have been forfeited as required by EPA's Pay Administration Manual and, if so, whether the time off or value of any time off used should be recovered.</p> <p>Corrective Action: OMS will review the travel compensatory time off cases and issue a determination on the findings. If recovery is warranted, OMS will notify the Office of Air and Radiation and the Office of the Chief Financial Officer so the process may be initiated. <i>Planned: 1/31/21, Status: Delayed</i></p>	12/19/19
20-P-00120-451	<p>Recommendation: Develop and maintain an up-to-date inventory of the software and associated licenses used within the organization.</p> <p>Corrective Action: Establishing License Entitlement Inventory. The Agency is developing and deploying an enterprise Software Asset and Configuration Management (SACM) capability that will align license entitlement data with software inventories to fully realize the goal of this recommendation. <i>Planned: 10/15/21, Status: Adhering</i></p>	3/25/20

**EPA GAO Open Recommendations and Recommendations Closed as Unimplemented**

<b>Report Number</b>	<b>Report Issue Date</b>	<b>Recommendation Text</b>	<b>Status Comments</b>
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. (1)	In recent years, EPA has taken the significant steps to protect the American public from elevated lead levels in drinking water. Examples of the Agency's actions include: Proposed regulations, updates to the Lead and Copper Rule, MOU's with federal partners to reduce lead in schools and childcare facilities, funding for states to test drinking water in schools, reviews and quality control evaluations of state data and files to improve accuracy of reporting, and modernization of EPA's Safe Drinking Water Information System (SDWIS) database.
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. (5)	EPA leadership is working to initiate the new cycle of strategic planning. With respect to proposed changes to the IRIS assessment process, the IRIS Program is revising the nomination process for FY22 to address issues identified by GAO. To date, the previous September 2020 request for FY21 nominations was re-administered in March 2021 using a modified process that better engages the Regions and other offices in EPA that do not oversee statutory decision making, i.e., Office of Children's Health Protection. Using the nomination process to understand the Agency's assessment needs is the starting point for making informed decisions on resources.

Report Number	Report Issue Date	Recommendation Text	Status Comments
GAO-11-381	2011-06-17	<p>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 drinking water data on health-based and monitoring violations that the states provide to EPA. These audits also should evaluate the quality of data on the enforcement actions that states and other primacy agencies have taken to correct violations. (1)</p>	<p>On September 30, 2020, OW submitted additional supporting documentation to promote closure of the open recommendations and hosted a follow up technical meeting on November 16, 2020.</p>
GAO-11-381	2011-06-17	<p>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 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. (2)</p>	<p>On September 30, 2020, OW submitted additional supporting documentation to promote closure of the open recommendations and hosted a follow up technical meeting on November 16, 2020.</p>

Report Number	Report Issue Date	Recommendation Text	Status Comments
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. (2)	As part of adjustments to the nomination process, the IRIS Program is soliciting information on context for the assessment and timelines under which the assessment is needed. These inputs will be considered as part of ORD's analysis of which nominations the IRIS Program can realistically commit to. Other key inputs are the anticipated complexity of the assessment and resourcing (i.e., contract support and/or availability of staff with the appropriate expertise). Nominations that are formally accepted by ORD are then communicated publicly in the IRIS Program Outlook, with time frame estimates for public engagement. EPA is evaluating how complexities in IRIS assessments are communicated.
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 annually publish the IRIS agenda in the Federal Register each fiscal year. (4)	IRIS Integrated Assessment Plans (IAPs) and Systematic Review Protocols (Protocols) document chemical-specific considerations which inform the timelines presented in the IRIS Program Outlook.
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	EPA has been rebuilding its Enterprise Architecture program. In FY20, the architecture program brought on senior expertise in network and security architecture, and has addressed needed stand-alone architecture tasks (e.g., initiating a baseline security architecture). The Architecture Program also has started building recurring programmatic elements (e.g., supporting deployment of DevSecOps capabilities) against which programmatic metrics can be



Report Number	Report Issue Date	Recommendation Text	Status Comments
		<p>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 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. (18)</p>	<p>applied. During FY21, as those programmatic elements mature, EPA will revisit the Gartner guidance referenced earlier and identify at least one metric for the architecture program.</p>
GAO-12-791	2012-09-26	<p>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 Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office</p>	<p>EPA has been rebuilding its Enterprise Architecture program. In FY20, the architecture program brought on senior expertise in network and security architecture, and has addressed needed stand-alone architecture tasks (e.g., initiating a baseline security architecture). The Architecture Program also has started building recurring programmatic elements (e.g., supporting deployment of DevSecOps capabilities) against which programmatic metrics can be applied. During FY21, as those programmatic elements mature, we will revisit the Gartner guidance referenced earlier and identify at least one metric for the architecture program.</p>

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		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. (42)	
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 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. (1)	EPA's Office of Pesticide Programs is providing status information on conditional registrations issued from 2000 through 2020 on the web at <a href="https://www.epa.gov/pesticide-registration/conditional-pesticide-registration">https://www.epa.gov/pesticide-registration/conditional-pesticide-registration</a> . IT modernization efforts enabling the Office of Pesticide Programs to track conditionally registered products electronically are targeted for completion in 2021.
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 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	OPPT completed its workforce analysis in December 2020. Over the past several years EPA has significantly increased its human capital resources to address the increased workload imposed by the amended TSCA. EPA requested that GAO close this pre-Lautenberg Act Report and declare all recommendations closed as implemented.

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		<p>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. (3)</p>	
GAO-13-369	2013-05-10	<p>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 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</p>	<p>IRIS program officials are building capacity for applying systematic review in chemical assessments. They are communicating more frequently with EPA program and regional offices about program and regional office needs and the IRIS program's ability to meet those needs. IRIS officials will convene coordination meetings twice a year with relevant EPA program offices to discuss chemical assessments to meet agency needs.</p>

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		available, applicable, or current. (3)	
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. (6)	In January 2017, EPA issued a final rule to modify its Risk Management Program (RMP) regulations. The Agency did not to propose any revisions to the list of regulated substances and does not plan to add ammonium nitrate to the RPM regulated program.
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. (87)	GAO informed EPA that they are in the process of closing this recommendation.
GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should employ a 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. (88)	In 2020, EPA developed an automated process to track software license deployment that is monitored through a centralized dashboard. The Agency is working towards central tracking and maintenance for Agency software records. Once established, the policy for procurement and management of that software will soon follow.
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. (19)	In December 2020, EPA provided the latest 2020 READ business function inventory. EPA believes the recommendation is implemented and requested closure.

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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. (20)	In December 2020, EPA provided documentary evidence supporting full implementation and requested closure.
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 services and strategic sourcing of end user computing to shared services as part of the OMB integrated data collection quarterly reporting until completed. (21)	Documentation of the print contract supporting this effort was provided in December 2020 with a request for closure.
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, complete plans to reinvest any resulting cost savings and avoidances from OMB-directed IT reform-related efforts. (19)	This is a long-standing project requiring substantial coordination as EPA reviews and defines "reinvest" which could have significant implications on IT budget reporting requirements.

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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. (2)	Based on an April 2021 meeting with EPA and GAO, auditors are in the process of closing this recommendation.
GAO-15-618	2015-08-17	The EPA Administrator should direct OGD to implement plans for adopting an up-to-date and comprehensive IT system by 2017 that will provide accurate and timely data on agencywide compliance with grants management directives. (3)	Based on an April 2021 meeting with EPA and GAO, auditors are reviewing EPA's request for closure.
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 other managed or wild, native bees. (4)	<p>Closed – Not Implemented</p> <p>EPA's plan for obtaining data on the effects of pesticides on nonhoney bees is to adhere to the existing process that the Agency follows for other taxonomic groups. More specifically, EPA routinely uses surrogate species to evaluate risks from pesticides and has used honey bees as a surrogate for nonhoney bee species. Ideally, risk evaluations would be made using as many species as would likely be exposed. However, doing so would be impractical on a routine basis. EPA maintains that existing data indicate that honey bees continue to represent a reasonable surrogate for nonhoney bee species.</p>
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	<p>Closed – Not implemented</p> <p>EPA conducted a pilot study to evaluate pesticide tank mixes used on almonds in California during bloom. Although the Agency was able to identify pesticide tank mixes applied during almond bloom, the number and variability in those combinations EPA concluded that is it not feasible to do so at a national level given the number of factors that influence such</p>

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		than the sum of the risks posed by the individual pesticides. (5)	combinations even within a relatively localized area.
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 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. (27)	Closed – Not Implemented  EPA initially agreed with this recommendation. However, in August 2016, the Office of Management and Budget (OMB) announced changes to the optimization metrics that analyzed in GAO's report. In June 2019, OMB issued new data center optimization guidance that removed the remaining two optimization metrics for agencies. As a result of OMB's changes, EPA decided not to implement this recommendation.

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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 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. (1)	Implementation of this recommendation is ongoing. In December 2020, EPA completed its migration to a new, comprehensive web-based IT application Next Generation Grants System (NGGS), which replaced the legacy grants management system. In addition, EPA launched an electronic grants file management system in March 2021, which will improve grants managers' access to performance information.
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. (3)	Implementation of this recommendation is ongoing. Following its adoption of a new IT system for budget performance data in December 2017, EPA began developing the capability for program offices to import data from their program-specific databases electronically, via a machine-readable template.
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. (4)	Implementation of this recommendation is ongoing. Specifically, EPA is in the process of revising guidance to clarify the factors project officers should consider when determining whether performance reports are consistent with EPA's environmental results directive.



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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 frames for completion, to all grants. (5)	Implementation of this recommendation is ongoing. In December 2020, EPA completed migration to a new, comprehensive web-based IT application Next Generation Grants System (NGGS), which replaced the legacy grants management system. EPA plans to assess and evaluate a web-based portal for collecting performance information from grantees as a post-deployment enhancement to the system, by the end of December 2021, and any solution developed will cover all grantees.
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. (6)	Implementation of this recommendation is ongoing. In December 2020, EPA completed its migration to a new, comprehensive web-based IT application Next Generation Grants System (NGGS), which replaced the legacy grants management system. EPA will assess and evaluate a web-based portal for collecting performance information from grantees as a post-deployment enhancement to the system, by December 31, 2021. Data quality standards—including those for submitting performance reports—will be established as part of the assessment of enhancements to NGGS.
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 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. (7)	EPA continues to carry out its sector-specific agency role and consult with the Water Sector Coordinating Council (WSCC), Department of Homeland Security, and National Institute of Standards and Technology (NIST), as appropriate, to promote cybersecurity and understand the use of the cybersecurity framework across the water sector consistent with statutory requirements. In December 2020 EPA provided final documentation and requested closure.

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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. (1)	EPA has initiated work to develop guidance for States and Water systems that will share best practices for preparing and updating Lead Service Line inventories. EPA promulgated requirements for states to report lead service line information to EPA under 40 CFR 142.15(c)(4)(iii)(D) in the LCRR published on January 15,2021.
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 Prime) database, in its upcoming revision of the LCR. (2)	EPA promulgated a requirement for states to report the 90th percentile sample results for each water system regardless of size to EPA under 40 CFR 142.15(c)(4)(iii)(A) as part of the LCRR published on January 15, 2021. Reporting to EPA will be done through the SDWIS database. EPA is currently developing a SDWIS-State module for state to use to oversee LCRR implementation.
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. (3)	EPA is currently working with state representatives to develop the modernized SDWIS. EPA works closely with state primacy agencies to gather reliable violations data. EPA also tracks Action Level Exceedances. Both violation and ALE data are provided to EPA's regional program and enforcement staff on a quarterly basis for review and discussion with states, and for decisions on needed technical assistance or enforcement actions. The use of the internal tool has benefited EPA's priority efforts to assist systems with lead contamination.

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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. (15)	EPA uses ScienceLogic's EM7 monitoring tool for measuring server utilization. EPA expects to expand use of the tool to DCOI-DC-45634 (NEIC) once the facility is completed (expected Q4 2021). Work is underway to close the data center footprint in DCOI-DC-45621 (PYD) which is expected to complete by Q4 2021.
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. (1)	In December 2020, EPA requested closure of this recommendation. EPA's Office of Enforcement and Compliance Assurance (OECA) developed the Clean Water Act inspection guidance documents highlighted in the recommendation.
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	EPA's Office of Mission Support, Environmental Information, Office of Customer Advocacy, Policy and Portfolio Management (PMD) acknowledges GAOs recommendations and commits to continuing to establish and execute the necessary steps to complete as well as implement agency-wide policy, procedures and processes for the CIO certification of major IT investments; and will ensure its major IT investments always demonstrate adequate use of incremental development and conform to OMB FITARA guidance.

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		certification will be documented; and a definition of incremental development and time frames for delivering functionality, consistent with OMB guidance. (11)	
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. (4)	EPA conducted training, webcasts, and outreach related to cybersecurity, including using the framework and tailoring its efforts to sector needs. EPA used the NIST framework to inform development of its cyber resources. EPA has been consulting with Federal partners to develop potential options for promoting and assessing adoption of the framework.
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. (8)	EPA's Office of Water submitted responses to GAO questions and documentation supporting implementation in November and December 2020 with a request for closure.
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 performance reporting. (1)	The Study is still on track to complete an online reporting and tracking system by mid-year 2021. Once the online tracking system is in place, EPA will consider this recommendation to be fully implemented.
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. (3)	The Study finalized the 2020-2024 implementation action update in October 2020 and is currently finalizing the technical supporting documents that accompany each of the implementation actions.
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. (1)	EPA continues to work with the leader of the management conference, the Puget Sound Partnership, on the effort to review and revise the Puget Sound recovery vital signs, including updating associated indicators and targets. Progress on this effort was presented at the May 2020 Ecosystem Coordination Board meeting. The effort is on schedule to be completed

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			for the 2022 Comprehensive Conservation and Management Plan (CCMP) update.
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. (1)	Closed – Not Implemented  EPA developed a program management plan for the implementation of the new CWA 320 authority and provided GAO with an updated program plan for FY21 and FY22 with program objectives, actions, and timelines for both the Working Group and grant program. In addition, the CRBRP successfully launched the first grant competition awarding \$2M in 14 grants (13 in R10 and 1 in R8) in September 2020 and held two formal Working Group meetings (virtually due to COVID) with over 100 attendees. Although it was not included in the FY20 budget process, EPA considers the intent of this recommendation to be met.
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 in the six areas we identified. (19)	EPA's OCAPPM is working on the Agency's IT management policies to address to role of the CIO for key responsibilities in the six areas that GAO identified. OCAPPM will provide an update on this initiative in mid- FY 21.
GAO-19-22	2019-03-20	The Administrator of the Environmental Protection Agency should develop a documented policy or clarify existing policy to implement the statutory requirement to consult with ANCs on the same basis as Indian tribes under Executive Order 13175. (2)	This recommendation is in progress and has not been fully implemented. Due to the COVID pandemic, tribal consultation was extended an additional three months to allow for more input. It is estimated that the project will be completed in 2021.
GAO-19-280	2019-07-08	The EPA Administrator should direct EPA officials responsible for appointing advisory committee members to follow a key step in its appointment process—developing and including draft membership grids in appointment packets with staff rationales for proposed	EPA continues to disagree with this recommendation. It is up to the EPA Administrator to develop policy for the Agency and as such, it is within the Administrator's authority to develop and/or alter policies to fit particular circumstances. In the cases cited by the GAO, the Administrator substituted the

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		membership— for all committees. (1)	creation of a membership grid with a series of briefings that enabled an in-depth discussion of the strengths and weaknesses of each potential candidate. EPA requested closure of this recommendation.
GAO-19-280	2019-07-08	EPA’s Designated Agency Ethics Official should direct EPA’s Ethics Office, as part of its periodic review of EPA’s ethics program, to evaluate—for example, through audits or spot-checks—the quality of financial disclosure reviews for special government employees appointed to EPA advisory committees. (2)	At the time of the GAO audit, EPA’s Ethics Office was understaffed. These staffing issues have been resolved and, as a result, EPA is now engaged in a full and thorough review of all employees’ (including special government employees engaged to work on EPA federal advisory committees) ethics forms to ensure that they meet all ethics requirements. EPA is on track to launch an electronic financial disclosure reporting system for special government employees in 2021.
GAO-19-384	2019-07-25	The Administrator of EPA should update the Agency's policies to require an organization-wide cybersecurity risk assessment. (39)	EPA updated policies and provided them to GAO in 2020. The Agency awaits closure of the recommendation.
GAO-19-384	2019-07-25	The Administrator of EPA should establish a process for conducting an organization-wide cybersecurity risk assessment. (40)	EPA is collaborating internally with the Office of Customer Advocacy, Policy & Portfolio Management OCAPPM to have all relevant policies and procedures reviewed on a timely basis. OCAPPM has established an agency-wide process for reviewing, modifying, and re-issuing (after signatories) all policies and procedures. NIST published the latest revision of Special Publication 800-53, Revision 5 in September 2020. EPA is in the process of reviewing, modifying, and re-issuing all security policies/procedures per the OCAPPM review process.
GAO-19-384	2019-07-25	The Administrator of EPA should fully establish and document a process for coordination between cybersecurity risk management and enterprise risk management functions. (41)	EPA updated policies and provided them to GAO in 2020. The Agency awaits closure of the recommendation.

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GAO-19-391	2019-06-21	The Administrator of EPA should work with the Commissioner of FDA and Secretary of Agriculture to incorporate leading collaboration practices as they implement their interagency FLW reduction strategic plan, to include (1) agreeing on roles and responsibilities; (2) developing mechanisms to monitor, evaluate, and report on results; (3) clearly defining short- and long-term outcomes; (4) identifying how leadership commitment will be sustained; and (5) ensuring that the relevant stakeholders have been included in the collaborative effort.( 1)	EPA considers the recommendation parts 1, 2, 4 and 5 fully implemented. Parts 3 will continue with interagency coordination and engagement through 2021.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, should develop guidance for agencies on what they should include in their environmental justice strategic plans. (21)	EPA, as lead for the Environmental Justice Interagency Working Group (EJ IWG) continues to lead the coordination, along with the member agencies, the implementation of GAO's recommendations. EPA agreed with this recommendation and will work through the EJ IWG to review the Agency's actions and update this information.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, should develop guidance or create a committee of the working group to develop guidance on methods the agencies could use to assess progress toward their environmental justice goals. (22)	EPA, as lead for the Environmental Justice Interagency Working Group (EJ IWG) continues to lead the coordination, along with the member agencies, the implementation of GAO's recommendations. EPA agreed with this recommendation and will work through the EJ IWG to review the Agency's actions and update this information.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, and in consultation with the working group, should clearly establish, in its organizational documents, strategic goals for the federal	EPA, as lead for the Environmental Justice Interagency Working Group (EJ IWG) continues to lead the coordination, along with the member agencies, the implementation of GAO's recommendations. EPA agreed with this recommendation and will work through the

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		government's efforts to carry out the 1994 Executive Order. (23)	EJ IWG to review the Agency's actions and update this information.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, and in consultation with the other working group members, should update the 2011 Memorandum of Understanding and renew the agencies' commitments to participate in the interagency collaborative effort and the working group. (24)	EPA, as lead for the Environmental Justice Interagency Working Group (EJ IWG) continues to lead the coordination, along with the member agencies, the implementation of GAO's recommendations. EPA agreed with this recommendation and will work through the EJ IWG to review the Agency's actions and update this information.
GAO-20-126	2019-12-12	The Administrator of EPA should update security plan for the selected operational system to identify a description of security controls, and the individual reviewing and approving the plan and date of approval. (19)	EPA's Chief Information Security Officer will coordinate with agency Information Security Officers to ensure system security plans include all required information. The CISO will monitor all systems for compliance through the established Chief Information Officer Authorization to Operate process.
GAO-20-126	2019-12-12	The Administrator of EPA should update the security assessment report for the selected operational system to identify the summarized results of control effectiveness tests. (20)	EPA does not concur with this recommendation.
GAO-20-126	2019-12-12	The Administrator of EPA should update the list of corrective actions for the selected operational system to identify the specific weakness, estimated funding and anticipated source of funding, key remediation milestones with completion dates, changes to milestones and completion dates, and source of the weaknesses. (21)	EPA does not concur with this recommendation.
GAO-20-126	2019-12-12	The Administrator of EPA should prepare the letter authorizing the use of cloud service for the selected operational system and submit the letter to the FedRAMP program management office. (22)	EPA's Chief Information Security Officer will coordinate with agency Information Security Officers to ensure corrective actions have plans of actions and milestones as appropriate that include all required information. The CISO will monitor all systems for compliance through



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			the established Chief Information Officer Authorization to Operate process.
GAO-20-126	2019-12-12	The Administrator of EPA should develop guidance requiring that cloud service authorization letter be provided to the FedRAMP program management office. (23)	EPA disagrees with this recommendation. The Agency submits authorization documents to the FedRAMP Program management office (PMO). EPA will continue to follow, as appropriate, FedRAMP PMO guidance promulgated through the General Services Administration FedRAMP Website. EPA initiated outreach to the FedRAMP PMO to obtain additional information on reporting requirements. No additional guidance stipulating the need to report specific services authorized or updated templates to illustrate reporting specific services authorized has been provided.
GAO-20-129	2019-10-30	The Administrator of the Environmental Protection Agency should ensure that the Agency fully implements each of the eight key IT workforce planning activities it did not fully implement. (11)	EPA is working on key IT workforce planning activities as outlined in EPA's response to GAO's Final Report. EPA provided additional information and supporting documentation to GAO in December 2020 with a request for closure.
GAO-20-24	2020-01-16	The Director of Water Security of EPA, as Chair of the Water Sector Government Coordinating Council, should work with the council to identify existing technical assistance providers and engage these providers in a network to help drinking water and wastewater utilities incorporate climate resilience into their projects and planning on an ongoing basis. (1)	EPA continues to work across the water sector and with its established network to provide technical assistance, knowledge, financing, and other tools to ensure investments made in water infrastructure are sustainable and resilient in the long term. EPA works within an existing network of technical assistance providers and coordinates with its stakeholders to identify opportunities to provide technical assistance to wastewater and drinking water utilities, as resources are available.
GAO-20-299	2020-02-25	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 collect and report sector-wide improvements from	In October and December 2020, EPA's Office of Water provided additional supporting documentation to request closure of this recommendation.

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		use of the framework across its critical infrastructure sector using existing initiatives. (5)	
GAO-20-597	2020-09-28	The Assistant Administrator of the Office of Water should develop an agreement with HHS's Offices of Child Care and Head Start on their roles and responsibilities in implementing the Memorandum of Understanding on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities. For example, these agreements may include the ways in which guidance and information will be shared with states and Head Start grantees, such as through webinars or email, and how frequently. (3)	EPA disagrees with the need for this recommendation because the action requested is already being implemented in coordination with HHS and 13 other federal and non-federal partners committed to the reduction of lead levels in drinking water in schools
GAO-20-597	2020-09-28	The Assistant Administrator of the Office of Water should direct the Office of Water to specify how it will track progress toward the outcomes of the Memorandum of Understanding on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities and determine how it will regularly monitor and update the MOU. For example, the Office of Water could develop performance measures for each of the MOU's outcomes. In addition, the Office of Water could submit annual reports on progress toward achieving the MOU's outcomes or it could plan to update the agreement at specific intervals. (4)	EPA disagrees with the need for this recommendation because the action requested is already being implemented under the 2019 MOU and the WIIN Act grant programs.
GAO-20-73	2019-10-18	The Director of the Office of Superfund Remediation and Technology Innovation should establish a schedule for standardizing and improving	EPA convened a working group comprising Superfund and regional officials to collect and disseminate geospatial information for all NPL sites to help the Agency analyze, communicate,

Report Number	Report Issue Date	Recommendation Text	Status Comments
		information on the boundaries of nonfederal NPL sites. (1)	and respond to the impacts of natural disasters and weather.
GAO-20-73	2019-10-18	The Administrator of EPA should clarify how EPA's actions to manage risks to human health and the environment from the potential impacts of climate change effects at nonfederal NPL sites align with the Agency's current goals and objectives. (2)	EPA is reviewing its original response to this recommendation and will provide GAO with an update during the next scheduled response.
GAO-20-73	2019-10-18	The Director of the Office of Superfund Remediation and Technology Innovation should provide direction on how to integrate information on the potential impacts of climate change effects into risk assessments at nonfederal NPL sites. (3)	EPA drafted a memo providing direction on integrating information on the potential impacts of climate change effects into risk assessments at nonfederal NPL sites. The Agency anticipated issuance in summer 2021.
GAO-20-73	2019-10-18	The Director of the Office of Superfund Remediation and Technology Innovation should provide direction on how to integrate information on the potential impacts of climate change effects into risk response decisions at nonfederal NPL sites. (4)	EPA drafted a memo providing direction on integrating information on the potential impacts of climate change effects into risk assessments at nonfederal NPL sites. The Agency anticipated issuance in summer 2021.
GAO-20-81	2019-11-21	The Environmental Protection Agency Administrator should evaluate training needs for agency officials or others involved in reviewing the merits of researchers' data management plans and, if additional training is found to be warranted, develop and provide such training. (20)	The Agency fully implemented this recommendation and provided supporting documentation and a request for closure on 5/5/2021.

Report Number	Report Issue Date	Recommendation Text	Status Comments
GAO-20-95	2020-01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should clearly document in guidance to the regional offices how they should use the definition of informal enforcement actions to collect data on these actions. (1)	EPA is in the process of amending the September 2019 guidance to be consistent with the Executive Order and expects to finalize the amended guidance in spring 2021.
GAO-20-95	2020-01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should clearly document in guidance to the regional offices that they should collect data on compliance assistance activities and specify which mechanism to use to maintain the data, such as ICIS. (2)	As part of the NPDES SNC NCI strategy, guidance was provided to the regions about collecting compliance assistance data. OECA-HQ is collecting and maintaining the data the regions reported on their NCI templates.  EPA requested closure of this recommendation.
GAO-20-95	2020-01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should include the known limitations of data in its annual reports and provide information on the intended use of EPA's data. (3)	The list of known data limitations will be included for the FY20 Annual Results.  EPA requested closure of this recommendation.

**On-Site Inspections and Off-site Compliance Monitoring Compliance Activities from EPA’s Integrated Compliance Information System<sup>613</sup>**

The table below provides the numbers in EPA’s Integrated Compliance Information (ICIS) data system for on-site inspection and off-site compliance monitoring activities from fiscal years (FY) 2016-2020. We have a few critical caveats (listed below the chart) that should be kept in mind when reviewing or using these numbers.

<b>Fiscal Year (FY)</b>	<b>On-Site Inspections</b>	<b>Off-Site Compliance Monitoring Activities</b> <i>(EPA has not set separate targets for this category of activities)</i>	<b>Total Completed</b>
FY 2016 actual	9,300	4,500	13,800
FY 2017 actual	8,800	3,100	11,900
FY 2018 actual	7,900	2,900	10,800
FY 2019* actual	Target: 7,400 Actual: 8,100	2,200	10,329
FY 2020 actual	Target: not set** Actual: 3,600	4,900	8,500
FY 2021 projection	Target: not set** Actual: TBD		10,000
FY 2022 projection	Target: not set** Actual: TBD		10,000

\*2019 was the first year that EPA specifically set targets for on-site inspections only. Previous targets were for combination of on-site inspections and off-site compliance monitoring activities.

\*\*Targets were not set for on-site inspections in FY 2020 and FY 2021 due to travel restrictions and uncertainty resulting from COVID-19.

**Caveats:**

1. **Definitions:** Nationally consistent definitions of on-site inspections and off-site compliance monitoring activities did not exist for our compliance monitoring program until we issued guidance on April 24, 2020. As a result, earlier data may include mis-categorized activities. EPA’s April 24, 2020 memorandum provided definitions for both on-site and off-site compliance monitoring activities, which will create more consistency in each of the categories. These improvements are effective for all of FY 2020 for on-site inspections and from April 1, 2020, forward for off-site compliance monitoring.

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<sup>613</sup> The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to follow guidance as set forth in House Report 116-448. House Report 116-448 directs EPA to provide “separate targets for onsite inspections and offsite compliance monitoring activities, and separate target and actuals data for onsite and offsite compliance monitoring activities for the previous five fiscal years”. Please see page 80: <https://www.congress.gov/116/crpt/hrpt448/CRPT-116hrpt448.pdf>. This report fulfills this requirement.

2. Incomplete Data Entry: Given that EPA has not historically required most types of off-site compliance monitoring activities to be entered into an EPA database, these numbers are likely incomplete. EPA's April 24, 2020, guidance for reporting key off-site compliance monitoring activities establishes expectations for national reporting of these activities.
3. COVID-19: Restrictions on travel during the pandemic affected EPA's ability to conduct on-site inspections in FY 2020 and FY 2021. While on-site inspection numbers dropped substantially during much of FY 2020, EPA was able to increase its off-site compliance monitoring activities.
4. States Conduct Majority of Inspections: Most inspections are performed by authorized states. For example, states performed over 34,000 NPDES inspections - that is just one program.
5. Data Mining: With modern tools, EPA mines data from monitoring reports and manifests. EPA conducts off-site compliance monitoring to try to detect violations, including possible violations of emission and discharge limitations. EPA uses this information to target facilities for on-site inspections. The new April 2020 guidance will help EPA nationally focus and track this important off-site compliance monitoring work.
6. Totals More Reliable Than Subtotals: The sum of the two subtotals (on-site inspections + offsite compliance monitoring activities) is a more reliable value because it smooths out some of the variability in each subtotal. EPA believes that the April 2020 guidance finalizing definitions of on-site inspections and off-site compliance monitoring activities will help make the subtotal data more reliable going forward.
7. Staffing Levels: The number of inspections EPA completes each year generally correlates with our annual staffing levels. During the time period reported in the table, OECA's number of full-time equivalents (FTEs) has decreased from 2,880 in FY 2016 to 2,423 in FY 2020.

**Office of Enforcement Compliance Assurance (OECA) Travel Budget by Program Project FY 2016 - FY 2022<sup>1</sup>**

Appropriation	Program Project	FY 2016		FY 2017		FY 2018		FY 2019		FY 2020 <sup>2</sup>		FY 2021	FY 2022 <sup>3</sup>
		Enacted	Actuals <sup>4</sup>	Enacted	Actuals <sup>4</sup>	Enacted	Actuals <sup>4</sup>	Enacted	Actuals <sup>4</sup>	Enacted	Actuals <sup>4</sup>	Enacted	PresBud
<b>EPM</b>													
	Brownfields	\$16.0	\$1.0	\$16.0	\$3.6	\$16.0	\$10.4	\$16.0	\$4.2	\$16.0	\$18.2	\$16.0	\$16.0
	Civil Enforcement	\$2,247.0	\$2,221.8	\$2,148.0	\$1,882.4	\$2,148.0	\$1,860.9	\$2,216.0	\$1,942.2	\$2,197.0	\$886.2	\$2,197.0	\$2,197.0
	Compliance Monitoring	\$1,615.0	\$1,654.5	\$1,524.0	\$1,338.5	\$1,524.0	\$1,498.3	\$1,529.0	\$1,397.2	\$1,516.0	\$694.8	\$1,516.0	\$1,516.0
	Criminal Enforcement	\$1,522.0	\$1,465.3	\$1,522.0	\$1,337.3	\$1,522.0	\$1,385.7	\$1,522.0	\$1,458.1	\$1,522.0	\$748.4	\$1,522.0	\$1,522.0
	Environmental Justice	\$186.0	\$175.2	\$186.0	\$209.3	\$186.0	\$103.7	\$0.0	\$5.3	\$0.0	\$0.0	\$0.0	\$0.0
	Geographic Program: Chesapeake Bay	\$20.0	\$23.9	\$20.0	\$15.9	\$20.0	\$17.0	\$20.0	\$24.0	\$20.0	\$6.9	\$20.0	\$20.0
	NEPA Implementation <sup>4</sup>	\$571.0	\$340.4	\$505.0	\$251.6	\$505.0	\$251.1	\$0.0	\$70.5	\$0.0	\$0.0	\$0.0	\$0.0
	Facilities Infrastructure and Operations	\$238.0	\$324.8	\$238.0	\$643.7	\$238.0	\$503.4	\$238.0	\$234.5	\$238.0	\$204.4	\$238.0	\$238.0
	<b>TOTAL EPM</b>	<b>\$6,415.0</b>	<b>\$6,206.9</b>	<b>\$6,159.0</b>	<b>\$5,682.3</b>	<b>\$6,159.0</b>	<b>\$5,630.5</b>	<b>\$5,541.0</b>	<b>\$5,136.0</b>	<b>\$5,509.0</b>	<b>\$2,558.9</b>	<b>\$5,509.0</b>	<b>\$5,509.0</b>
<b>S&amp;T</b>													
	Forensics Support	\$260.0	\$256.5	\$260.0	\$144.8	\$260.0	\$157.8	\$260.0	\$193.1	\$260.0	\$115.0	\$260.0	\$260.0
	<b>TOTAL S&amp;T</b>	<b>\$260.0</b>	<b>\$256.5</b>	<b>\$260.0</b>	<b>\$144.8</b>	<b>\$260.0</b>	<b>\$157.8</b>	<b>\$260.0</b>	<b>\$193.1</b>	<b>\$260.0</b>	<b>\$115.0</b>	<b>\$260.0</b>	<b>\$141.0</b>
<b>LUST</b>													
	Civil Enforcement	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	<b>TOTAL LUST</b>	<b>\$0.0</b>	<b>\$0.1</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
<b>OIL</b>													
	Civil Enforcement	\$14.0	\$11.3	\$14.0	\$9.4	\$14.0	\$16.4	\$14.0	\$8.1	\$14.0	\$3.1	\$14.0	\$14.0
	Compliance Monitoring	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	<b>TOTAL OIL</b>	<b>\$14.0</b>	<b>\$11.3</b>	<b>\$14.0</b>	<b>\$9.4</b>	<b>\$14.0</b>	<b>\$16.4</b>	<b>\$14.0</b>	<b>\$8.1</b>	<b>\$14.0</b>	<b>\$3.1</b>	<b>\$14.0</b>	<b>\$14.0</b>
<b>SUPERFUND</b>													
	Compliance Monitoring	\$8.0	\$0.0	\$8.0	\$0.0	\$8.0	\$0.0	\$8.0	\$0.0	\$8.0	\$0.0	\$0.0	\$0.0
	Criminal Enforcement	\$472.0	\$239.6	\$468.0	\$216.8	\$468.0	\$237.4	\$468.0	\$236.7	\$468.0	\$125.8	\$468.0	\$468.0
	Forensics Support	\$50.0	\$41.2	\$50.0	\$36.4	\$50.0	\$25.5	\$50.0	\$32.9	\$50.0	\$17.2	\$50.0	\$50.0
	Superfund: Enforcement	\$1,221.0	\$996.8	\$1,135.0	\$904.9	\$1,135.0	\$798.7	\$1,145.0	\$995.7	\$1,143.0	\$445.0	\$1,143.0	\$1,143.0
	Superfund: Federal Facilities Enforcement	\$140.0	\$77.3	\$120.0	\$68.3	\$120.0	\$69.0	\$120.0	\$65.1	\$120.0	\$81.7	\$120.0	\$120.0
	<b>TOTAL SUPERFUND</b>	<b>\$1,891.0</b>	<b>\$1,354.9</b>	<b>\$1,781.0</b>	<b>\$1,226.4</b>	<b>\$1,781.0</b>	<b>\$1,130.6</b>	<b>\$1,791.0</b>	<b>\$1,330.4</b>	<b>\$1,789.0</b>	<b>\$669.7</b>	<b>\$1,781.0</b>	<b>\$1,781.0</b>
	<b>GRAND TOTAL</b>	<b>\$8,580.0</b>	<b>\$7,829.7</b>	<b>\$8,214.0</b>	<b>\$7,062.9</b>	<b>\$8,214.0</b>	<b>\$6,935.3</b>	<b>\$7,606.0</b>	<b>\$6,667.6</b>	<b>\$7,572.0</b>	<b>\$3,346.7</b>	<b>\$7,564.0</b>	<b>\$7,564.0</b>

<sup>1</sup> The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to provide "requested enforcement travel budget, and budgeted and actual enforcement travel spending for the previous five fiscal years". Please see page 228: <https://www.govinfo.gov/content/pkg/CREC-2020-12-21/pdf/CREC-2020-12-21-house-bk4.pdf>

<sup>2</sup> Restrictions on travel during the COVID-19 pandemic affected EPA's ability to conduct on-site inspections.

<sup>3</sup> The FY 2022 enforcement travel budget has been straight-lined from the FY 2021 Enacted Level. This level can be adjusted when the Agency develops its FY 2022 Enacted Budget.

<sup>4</sup> Actuals include final obligations of New Obligation Authority (NOA) and Carryover for OECA.

<sup>5</sup> While NEPA Implementation is in the Enforcement Program Area, OECA transitioned this program project to EPA's Office of Administrator.

## FY 2022 Administrator's Priorities

Funding for the Administrator's priorities are allocated by program project in the FY 2022 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 2022 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, Climate and Energy	\$50
S&T	Research: Chemical Safety and Sustainability	\$50
<b>Total</b>		<b>\$2,500</b>



FY 2022 Congressional Justification Estimated Resources and FTE for Environmental Justice Program <sup>1,2</sup>			
Dollar in Thousands			
Appropriation	Program Activities	FY 2022 CJ Estimated Resources <sup>3</sup>	FY 2022 CJ Estimated FTE
EPM	HQ Environmental Justice(EJ) Program Management and Coordination <sup>4</sup>	\$63,443.0	70.8
EPM	EJSCREEN	\$6,900.0	6.5
EPM	Environmental Justice Small Grants <sup>5</sup>	\$12,526.0	5.5
EPM	Environmental Justice Collaborative Problem-Solving Cooperative Agreements <sup>5</sup>	\$18,476.0	5.5
EPM	White House(WH) EJ Inter-Agency Council (formerly EJ IWG) Support and EJ coordination with Other Federal Agencies	\$3,607.0	5.5
EPM	National EJ Advisory Council/WHEJ Advisory Council Support, and Climate EJ Advisory Council	\$5,056.0	9.0
EPM	Environmental Justice Competitive Grant Program <sup>6</sup>	\$50,000.0	5.0
EPM	Environmental Justice Community Grant Program <sup>6</sup>	\$25,000.0	2.0
EPM	Environmental Justice State Grant Program <sup>6</sup>	\$25,000.0	2.0
EPM	Tribal Environmental Justice Grant Program <sup>6</sup>	\$25,000.0	2.0
EPM	Community-based Participatory Research Grant Program <sup>6</sup>	\$15,000.0	1.0
EPM	Environmental Justice Training Program <sup>6</sup>	\$10,000.0	3.0
EPM	Environmental Justice Clearinghouse	\$5,000.0	3.0
EPM	Environmental Justice Legal Support	\$4,000.0	3.0
EPM	Agency Technical Assistance, Research, Training, Education and Communication	\$1,739.0	5.5
EPM	Regional Outreach Centers	\$10,000.0	12.0
EPM	Regional Resources for Environmental Justice Program	\$13,115.0	65.1
<b>Subtotal of EPM Environmental Justice Resources and FTE</b>		<b>\$293,862.0</b>	<b>206.4</b>
Superfund	Superfund Environmental Justice Program Coordination	\$5,841.0	5.5
<b>Subtotal of Superfund Environmental Justice Resources and FTE</b>		<b>\$5,841.0</b>	<b>5.5</b>
<b>Total FY 2022 CJ Estimated Resources and FTE for Environmental Justice Program</b>		<b>\$299,703.0</b>	<b>211.9</b>
<sup>1</sup> The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to provide "allocations for each component of funding for environmental justice programs". Please see page 228: <a href="https://www.govinfo.gov/content/pkg/CREC-2020-12-21/pdf/CREC-2020-12-21-house-bk4.pdf">https://www.govinfo.gov/content/pkg/CREC-2020-12-21/pdf/CREC-2020-12-21-house-bk4.pdf</a> .			
<sup>2</sup> "The Accelerating Environmental and Economic Justice Initiative at EPA provides \$936 million in FY 2022 funding for established programs across the Agency that will contribute to securing environmental justice. This breakout details the portion of this Initiative's funding specifically within the Agency's EJ Program. Further details about the Initiative can be found throughout EPA's Congressional Justification."			
<sup>3</sup> Estimated program activity resources include both payroll and non-payroll resources.			
<sup>4</sup> EPA retains flexibility to adjust the distribution of resources into other program activities, as necessary.			
<sup>5</sup> Resources for Small Grants and EJ Collaborative Problem-Solving Cooperative Agreements will likely be reviewed based upon applications the Agency receives in FY 2021. This is considered a base level.			
<sup>6</sup> The FY 2022 Budget includes proposed authorization language to carry out \$140 million in new environmental justice grants aimed at reducing the disproportionate health impacts of environmental pollution and \$10 million to establish an Environmental Justice Training Program charged with increasing the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects.			

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