



FY 2016

# EPA Budget in Brief



United States Environmental Protection Agency  
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# Budget in Brief

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## Overview

### Mission

*The mission of the Environmental Protection Agency (EPA) is to protect human health and the environment.*

### Budget in Brief Overview

The mission of the Environmental Protection Agency (EPA) is to protect human health and the environment. We achieve this by keeping pollution out of the air we breathe and the water we drink, fish, and swim in; and harmful chemicals out of the food we eat and the lands where we build our homes and our communities. The agency's FY 2016 budget request of \$8.6 billion enables us to support a solid and focused dedication to carrying out our mission and to build upon the EPA's unwavering commitment to all our communities.

The FY 2016 budget request supports implementation of the EPA's priorities through efforts to develop and implement flexible, cost-effective, common sense and sustainable actions to address climate change, to make a visible difference in our communities, to make progress in meeting water infrastructure needs, to strengthen our partnerships in environmental protection, to protect public health, and to safeguard the environment. Today's environmental challenges require us to consider creative approaches to address the complex interaction of pollutants, ensure compliance with environmental laws, and efficiently utilize new tools that promote innovation, incentives and partnerships.

Cutting carbon pollution is essential to reducing the impact of climate change but it is one of the greatest economic opportunities of the 21st century. Investments in pollution-reducing technologies as well as proven energy efficiency and clean energy solutions are investments in American jobs, American industries, and Americans' health. The EPA's Clean Power Plan will help cut carbon pollution from our largest source, power plants. Investing now will lead to health and climate benefits worth an estimated \$55 billion to \$93 billion in 2030, including avoiding 2,700 to 6,600 premature deaths and 140,000 to 150,000 asthma attacks in children now and in future generations. In conjunction with the Clean Power Plan, the Administration is proposing the Clean Power State Incentive Fund, which will provide up to \$4 billion for states choosing to go beyond minimum requirements in the Clean Power Plan. The Fund will enable states that accelerate their reductions from the power sector to receive resources for their heightened efforts. States could use funds for a range of activities that advance or complement the Clean Power Plan.

Recognizing the importance of on-the-ground work, the EPA will focus resources across all our programs to better support community environmental efforts, including those in rural communities. The EPA's FY 2016 budget strengthens the agency's long-standing focus on work that will benefit people's lives and the wellbeing of their communities, advances environmental justice, and ensures effective enforcement of environmental laws. Using an integrated and multi-faceted approach, the EPA will help communities address environmental concerns, take advantage of advances in technology to detect pollution in their air and water, and build capacity for follow-up activities that will visibly reduce pollution and improve community health and the environment. We will work to improve access for communities, individuals, businesses, and federal, state, local, and tribal governments to usable and understandable information so that they may participate more fully as partners in managing human health and environmental risks in their communities. EPA staff will be dedicated to work as a cross-agency, multi-media team to help communities identify the correct environmental program to address their needs. To further leverage our partnerships and to reach more communities, the EPA will work with non-governmental organizations (NGO), academic and other institutions to support "circuit riders" to provide technical assistance to multiple communities on a variety of issues, including climate resilience. A goal is to build and strengthen the adaptive capacity of communities,

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with a focus on those that are underserved, through tools, training, technical assistance, data, and information.

The EPA also will leverage existing grant programs like the Brownfields cooperative agreements and Tribal Grants to support communities in their efforts to return contaminated lands to use and to build sustainable communities and environmental programs tailored to fit community or tribal needs. The EPA is continuing work to improve the safety and security of chemical facilities and reduce the risks of hazardous chemicals to facility workers and operators, communities, and responders. Together with communities, states and federal partners, the agency is strengthening preparedness, data management, and coordination. Tools and technology will be an important part of ensuring that communities have the information they need to respond to the risks of pollution in their neighborhoods. The EPA will ensure that our decisions take into consideration the impacts on disadvantaged communities through increased analysis, better science, and enhanced community engagement.

Access to clean and safe drinking water, as well as a reliable and effective wastewater system, is important to every American. An aging water infrastructure system and the increasing impacts of climate change create opportunities and the need for innovation and a new approach. Water infrastructure includes the pipes, drains, and concrete that carry drinking water, wastewater, and stormwater and the systems are costly and investments from multiple sources are necessary to address these needs. Building on the strong funding level of \$2.3 billion provided through the Clean Water and Drinking Water State Revolving Funds, \$50 million is included for technical assistance, training, and other efforts to enhance the capacity of communities and states to plan and finance drinking water and wastewater infrastructure improvements. The EPA will work with states and communities to promote innovative practices that advance water system and community resiliency and sustainability. Dedicated funding through the Clean Water SRF will advance green infrastructure activities such as green roofs, rain gardens, and wetlands which can help cost-effectively meet Clean Water Act requirements and protect and restore the Nation's lakes and rivers. A new water investment center will focus efforts on issues such as financial planning for future public infrastructure investments; expanding work with states to identify financing opportunities for small communities; and enhancing partnership and collaboration with the U.S. Department of Agriculture on training, technical assistance, and funding opportunities in rural areas. The center is part of the President's Build America Investment Initiative – a government-wide effort to increase infrastructure investment and promote economic growth by creating opportunities for state and local governments and the private sector to collaborate on infrastructure development.

Effective environmental protection is a joint effort and a priority of the EPA and its state and tribal partners. The complex environmental challenges of today and the future require a true partnership of co-regulators, with the perspective of an integrated “environmental protection enterprise” for the country, as our shared responsibility. In FY 2016, we are setting a high bar for continuing our partnership efforts with states and tribes. Recognizing the increasing demands on limited federal, state, and tribal resources, the budget provides \$1.2 billion in categorical State and Tribal Assistance Grant funding, an increase of \$108 million, and opportunities for closer collaboration and targeted joint planning and governance processes. One example of this focus is the commitment by the governmental co-regulators in the national environmental protection enterprise to work collaboratively to streamline, reform, and integrate our shared business processes and practices through the E-Enterprise approach. Joint governance serves to organize the partnership, elevate its visibility, boost the capacity to coordinate, and help ensure the inclusiveness and effectiveness of shared process and management improvements, which will yield the benefits of increased transparency, efficiency, and burden reduction for communities, businesses, and government agencies when implemented. Additionally, the Clean Power Plan implementation propels the extensive and unprecedented work with states, tribes, and territories to develop necessary infrastructure, provide

technical assistance, and build capacity. Success will result from states using the significant flexibility they have to tailor their plans using a variety of approaches, such as through energy efficiency and renewable energy measures and through multi-state plans.

The EPA is an accountable steward of taxpayer resources and strives to deliver environmental protection in the most efficient way. The EPA continues to implement business process changes designed to create greater programmatic effectiveness and efficiency in collaboration with our state and tribal partners. The EPA's work is guided by the best possible scientific information and a commitment to transparency and accountability.

To learn more about how the agency accomplishes its mission, including information on the organizational structure and regional offices, see: <http://www.epa.gov/aboutepa/>.

### **FY 2016 Annual Performance Plan**

The EPA's FY 2016 Annual Performance Plan and Budget of \$8.6 billion is \$452 million above the FY 2015 Enacted Budget of \$8.2 billion<sup>1</sup>. The FY 2016 budget proposes carefully selected investments and steady implementation that build on the foundation laid by earlier choices and the discipline imposed. To provide an impetus towards a renewed focus on top priorities, the agency has positioned our programs and partners to most efficiently utilize critical resources to positively impact the American economy, local, state and tribal communities. In FY 2016, we remain focused on our priorities in: addressing climate change and improving air quality; taking action on toxics and chemical safety; protecting water; maintaining core enforcement strength; supporting state, tribal and local partnerships; strengthening the EPA as a high performing organization; and working toward a sustainable future. The agency requests 15,034 appropriated FTE in FY 2016 to support our highest priorities and our critical mission.

The EPA's FY 2014-2018 Strategic Plan guides this budget and the choices made reflect performance results and related data. The EPA's FY 2014 performance information is highlighted throughout the budget.

### **FY 2014 – 2015 Agency Priority Goals**

This budget highlights EPA's six FY 2014-2015 Agency Priority Goals that advance the agency priorities and the agency's Strategic Plan. Additional information on the EPA's Agency Priority Goals can be found at [www.performance.gov](http://www.performance.gov) and in subsequent chapters in this document.

#### **Reduce greenhouse gas emissions from cars and trucks**

Through September 30, 2015, EPA, in coordination with Department of Transportation's fuel economy standards program, will be implementing vehicle and truck greenhouse gas (GHG) standards that are projected to reduce GHG emissions by 6 billion metric tons and reduce oil consumption by about 12 billion barrels over the lifetime of the affected vehicles and trucks.

#### **Clean up contaminated sites to enhance the livability and economic vitality of communities**

By September 30, 2015, an additional 18,970 sites will be made ready for anticipated use, protecting Americans and the environment one community at a time.

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<sup>1</sup> FY 2015 Enacted includes a \$40 million rescission to State and Tribal Assistance Grants

**Assess and reduce risks posed by chemicals and promote the use of safer chemicals in commerce**

By September 30, 2015, EPA will have completed more than 250 assessments of pesticides and other commercially available chemicals to evaluate risks they may pose to human health and the environment, including the potential for some of these chemicals to disrupt endocrine systems. These assessments are essential in determining whether products containing these chemicals can be used safely for commercial, agricultural, and/or industrial uses.

**Improve environmental outcomes and enhance service to the regulated community and the public**

By September 30, 2015 reduce EPA reporting requirements by one million hours through streamlined regulations, providing real-time environmental data to at least two communities, and establish a new portal to service the regulated community and public.

**Improve, restore, and maintain water quality by enhancing nonpoint source program leveraging, accountability, and on-the-ground effectiveness to address the nation's largest sources of pollution**

By September 30, 2015, 100 percent of the states will have updated nonpoint source management programs that comport with the new Section 319 grant guidelines that will result in better targeting of resources through prioritization and increased coordination with USDA.

**Improve public health protection for persons served by small drinking water systems, which account for more than 97% of public water systems in the U.S., by strengthening the technical, managerial, and financial capacity of those systems**

By September 30, 2015, EPA will engage with an additional ten states (for 30 total states) and three tribes to improve small drinking water system capability to provide safe drinking water, an invaluable resource.

**FY 2016 Funding Priorities**

Addressing Climate Change and Improving Air Quality

One of the most significant challenges for this and future generations is the threat from a changing climate. The FY 2016 budget prioritizes climate change and reflects the President's 2013 Climate Action Plan. On June 2, 2014, the EPA proposed the Clean Power Plan establishing carbon pollution standards for existing power plants. The Clean Power Plan is President Obama's top priority for the EPA and the central element of the US domestic climate mitigation agenda. These proposed standards reflect the EPA's extensive outreach to and listening sessions with its stakeholders — the regulations will reflect innovative approaches and flexibility for achieving solutions. The flexibility reflects extensive and unprecedented work with states, tribes, and territories to develop necessary infrastructure, provide technical assistance, and build capacity to ensure successful plan implementation. In support of the critical role of the states, \$25 million is provided in grants to help build capacity to assist in this vital effort.

While EPA is making significant progress addressing greenhouse gas (GHG) emissions, further efforts are required to put the country on an emissions trajectory consistent with the President's long-term climate goals. There are significant non-regulatory opportunities for GHG mitigation that can be achieved by leveraging synergies across existing EPA voluntary climate mitigation activities in waste and water. In addition to GHG reductions, these efforts can create jobs, increase tax revenue, and reduce energy demand and to enhance these existing efforts, the agency is providing \$2.2 million. These efforts will generate substantial GHG reductions and result in significant related benefits such as waste reduction and water savings. Activities will include accelerating the recycling rate of municipal solid waste (MSW), and expanding results driven programs such as Water Sense, E3 (Economy, Energy, Environment), and Green



## Overview

Chemistry. For example, MSW recycling is a cost-effective GHG reduction strategy that results in job and tax revenue creation. To date, WaterSense has helped consumers save nearly 800 billion gallons of water and over \$14 billion in water/energy bills. These funds are in addition to \$5 million provided for states in the wetlands program for work on Blue Carbon capture.

Since the passage of the Clean Air Act Amendments in 1990, nationwide air quality has improved significantly. Air rules have the highest estimated benefits across the federal government. Addressing state implementation plans (SIPs), permitting needs, state permit oversight, enforcement, and new demands from climate work results is a significant workload. As required by the Clean Air Act, the EPA also regularly reviews the National Ambient Air Quality Standards (NAAQS) and the science on which they are based and each standard that is updated requires on the ground work. To reduce air pollution, the EPA also sets standards for industrial categories and establishes national emission standards for vehicles. To avoid creating delays in the permit process and to address the SIP backlog, the agency is focusing additional FTE on base air regulatory implementation work to meet the increasing workload.

### Making a Visible Difference in Communities across the Country

Many communities are facing multiple pollution problems and are looking for integrated or holistic solutions. To improve the health of American families and protect the environment across the country, the EPA has been focusing the work of diverse programs across the agency at the community level for several years. This work is a priority and a key element of our coordination with other federal agencies, states, tribes, and stakeholders. Recognizing how important this integrated, on-the-ground approach is to communities, the EPA is allocating over \$41 million in extramural funding to a multifaceted effort enabling communities – including small, disadvantaged, and rural communities – to find needed assistance and support for capacity building, planning, and implementation. Efforts will help communities adopt green infrastructure, provide technical assistance for building resilience and adapting to climate change, and empower communities to understand and address environmental impacts through advanced monitoring technology and smart tools. In response to feedback from communities, this budget proposes to bolster the agency's cross-program capacity and expertise to more comprehensively enable communities facing multiple problems to find assistance and support from the EPA and other partners to help them reduce pollution and improve community health and the environment.

Adaptation and resiliency to the effects of climate change constitute a significant emerging challenge for communities. Local leaders make many decisions to address climate change impacts. However, many small communities lack the capacity to build resilience to climate change and have expressed a need for technical assistance to integrate climate adaptation planning into their work. While the EPA does not have the capacity to provide technical assistance to every community, EPA is proposing to build a cadre of "circuit riders" through NGOs, academia and other organizations to provide this assistance, working cross-media with a focus on improving adaptation and resiliency. In FY 2016, the EPA dedicates \$2.0 million to create this network of "circuit riders" to provide on the ground assistance, with the ultimate goal to build and strengthen the adaptive capacity of communities through the provision of tools, training, technical assistance, data, and information.

The EPA currently provides a range of resources to communities including grants, contracts, and tools, along with numerous community-focused programs in areas such as planning, infrastructure, remediation, and land-use. We recognize that the EPA's program-specific organizational structure may make it difficult for communities – especially those that are smaller, rural, and/or overburdened – to understand, access, and utilize the wide range of resources and expertise that are available to support them and help them

## Overview

develop their own solutions. To address this concern, in FY 2016, the EPA proposes to provide each EPA regional office with two cross-agency, multi-media Community Resource Coordinators (20 FTE total) along with \$5 million in resources to assist communities. These coordinators will work as a multi-media team to facilitate access to EPA programs and resources for overburdened and vulnerable communities.

Various factors, such as a large number of pollution sources in overburdened communities, may create significant environmental and human health issues. For example, hazardous and non-hazardous wastes on land can migrate to air, groundwater, and surface water, contaminating drinking water supplies, causing acute illnesses and chronic diseases, and threatening ecosystems. In FY 2016, the EPA will direct \$4.5 million and 12 FTE in an Advanced Monitoring technology investment that will provide communities with monitors and greater access to environmental data. This investment recognizes that monitoring technology must often be combined with capacity building within communities, data sharing, and appropriate follow up activities to fully empower communities to take action to improve their health and environment by reducing and mitigating the risks from pollution.

The EPA has made significant investments in tools to support its expansive work in communities and share best practices. For example, the EPA will allocate \$1.175 million to support the advancement of tools that can help communities make decisions about green infrastructure in a way that realizes multiple environmental and community benefits. These tools will ultimately improve data and information to assist the EPA with comprehensive information about communities, local decision-making and locally driven actions. These tools will also complement other proposed community assistance efforts by reaching a much broader range of communities than is feasible with direct technical assistance. In FY 2016, the EPA will continue supporting all communities through work to assess, cleanup and restore land through all its cleanup programs.

### Leveraging Technology

The EPA is at the beginning of a transformative stage in information management, where there will be new and enhanced tools and technologies that will greatly improve the EPA's internal analytic capability and transparency of projects – with the added benefit of allowing the public to do much more with the EPA's data. This is not an effort just to save money; the EPA is looking toward the future for ways to serve the American people better. These efforts include new and enhanced ways to gather data, conduct analysis, perform data visualization and use “big data” to explore and address environmental, business, and public policy challenges. EPA has allocated \$5 million and 2 FTE to continue pilot projects to explore the benefits of large-scale data analytics initiatives. By looking at environmental problems and opportunities in a holistic manner, EPA can identify cross media impacts, leading to creative and more efficient solutions.

E-Enterprise supports agency priorities and \$15.7 million is provided for state grants to support their role in this important effort to modernize and reduce burden. The EPA is allocating \$5.3 million and 4 FTE to provide inspectors with modern mobile tools, greatly increasing efficiency that will allow them to prepare, perform, and analyze the results of inspections on site. Leveraging technology will enable the agency to move from a paper-based evidence gathering process to a digitally based rapid electronic process that will assist in identification of patterns of problems, compile inspection results in a more timely way, increase transparency on compliance status, and allow for quicker responses where appropriate. The EPA will work with our state partners to identify the most promising opportunities to leverage system improvements.

### Maintaining a Forward Looking and Adaptive EPA

In FY 2016, the Agency will continue to seek opportunities to develop and enhance the EPA's workforce and business processes. Declining resources and a shrinking workforce make it imperative that the EPA continue to transform itself through improved business practices, more effectively utilizing technology, and ensuring its workforce is properly equipped and trained. It is especially important to promote and instill a culture of continuous business process improvement using tools like Lean principles. EPA is equipping employees to use Lean methods to streamline processes across all agency programs. Lean efforts to date have resulted in weeks and months of time as well as resources saved through changes to internal administrative functions and in EPA-State processes.

The Agency also continues to review space needs and is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. In just the last couple of years, the EPA released over 225 thousand square feet of space at headquarters and facilities nationwide, resulting in annual rent avoidance of \$8.3 million. The FY 2016 Budget doubles down on this success with a \$15 million package of investments in select consolidation projects across EPA's program offices and laboratory facilities. These projects will capture significant cost savings and help to offset EPA's escalating rent and security costs.

Another key component of EPA's effort to enhance agency effectiveness as a forward looking organization is legal support. Expanding legal workload have overloaded the legal counselling staff in the regional and general counsel offices. Over the last five years, the number of lawsuits EPA counselling attorneys have handled during a year has more than doubled, increasing from approximately 240 in 2009 to well over 500 in 2013. In addition to the increase in the number of cases, the complexity of the cases – and the risks to the agency's efforts to protect human health and the environment – have steadily increased. In FY 2016, the EPA is dedicating 23.8 FTE, including 17 in the regional offices to manage growing legal workload and be more responsive to requests from states, facilities seeking permits, and citizens. Additional FTE allow attorneys to improve the timeliness of counselling, to devote more time to non-litigation counselling efforts, and to work to improve the defensibility of EPA's actions.

### Taking Action on Toxics and Chemical Safety

Chemicals and toxic substances are ubiquitous in our everyday lives and products. We use them in the production of everything from our homes and cars to the cell phones we carry and the food we eat. Chemicals often are released into the environment as a result of their manufacture, processing, use, and disposal. Vulnerable populations, including low-income, minority, and indigenous populations, as well as children, may be disproportionately affected by, and thus particularly at risk from, exposure to chemicals. Keeping communities safe and healthy requires action to reduce risks associated with exposure to chemicals in commerce, our indoor and outdoor environments, and products and food. The EPA will also continue to implement its Enhanced Chemicals Management approach, which expands and enhances the amount, accessibility, and usefulness of chemical safety information, improving the ability of the EPA, other regulators, and the public to assess chemical hazards and potential exposures, identify potential risks, and take appropriate risk management action. Continuing to oversee the introduction and use of pesticides, improve our Integrated Risk Information System (IRIS) program, conduct risk assessments for chemicals already in commerce, expand the use of computational toxicology and other computer-based solutions, identify and address children's health risks in schools and homes, and improve chemical management

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practices will remain of central relevance to the EPA's mission, including maintaining incentive-based efforts and research to promote green chemistry.

### Protecting Water

While much progress to improve water quality has been made over the last two decades, America's waters remain imperiled from increased demand, land use practices, population growth, aging infrastructure, and the impacts of climate change. Preserving and restoring the integrity of these waters is critical not only for protecting human health and the environment but also for property values, tourism, recreational and commercial fishing, hunting, and other economic considerations. The EPA will continue its partnerships with other federal agencies, states, tribes, municipalities, and private parties to address these complex challenges through a combination of traditional and innovated strategies, such as promoting green infrastructure and sustainable solutions, building resiliency, developing new targeting tools, developing and implementing nutrient limits, along with our core water quality work.

In FY 2016, the agency is requesting \$2.3 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs), continuing the funding levels provided in FY 2015. Since their inception, the SRFs have been capitalized by over \$61 billion, and over \$25 billion since 2009. Building on the strong funding level for the SRFs, \$50 million is included for technical assistance, training, and other efforts to enhance the capacity of communities and states to plan and finance drinking water and wastewater infrastructure improvements.

The surface water program will refocus our work to support the agency priorities of protecting communities and addressing climate change. The FY 2016 investment in the EPA's multimedia greenhouse gas mitigation strategy, for example, will expand the successful WaterSense program, a voluntary partnership program that labels high-performing, water-efficient products. The WaterSense program has, to date, saved nearly 800 billion gallons of water and over \$14 billion in water/energy bills. In addition, \$5 million in state grant funding is provided in the wetlands program for grants awarded competitively for efforts to increase climate resilience by protecting and enhancing coastal wetlands FY 2016.

### Launching a New Era of State, Tribal, and Local Partnerships

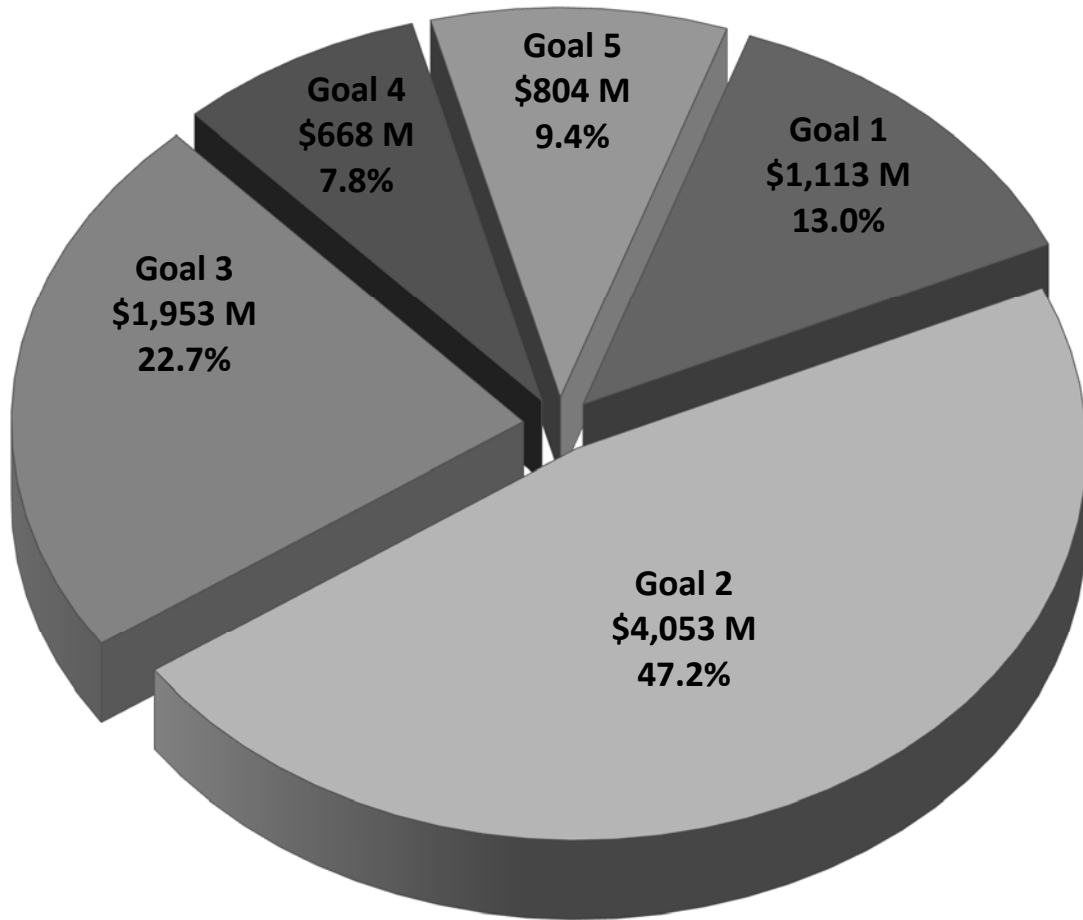
Supporting our state and tribal partners, the primary implementers of environmental programs on the ground, is a long-held priority of the EPA. Funding to states and tribes in the State and Tribal Assistance Grants (STAG) account continues to be the largest percentage of the EPA's budget request, at 42 percent in FY 2016. The FY 2016 Budget provides a \$108 million increase to funding levels for Categorical grants compared to the FY 2015 Enacted Budget. This increase recognizes the critical needs of our partners and the need to leverage our limited resources to deliver environmental protection to all Americans.

## **Eliminated Programs**

The EPA continues to examine its programs to find those that have served their purpose and accomplished their mission. The FY 2016 President's Budget eliminates a number of programs totaling nearly \$44.4 million including Beaches Protection categorical grants, State Indoor Radon grants, Targeted Airshed grants, and Water Quality Research and Support grants. Details are found in the appendix to the EPA FY 2016 Congressional Justification.

## **Environmental Protection Agency's FY 2016 Budget by Goal**

**Total Agency: \$8,592 Million**

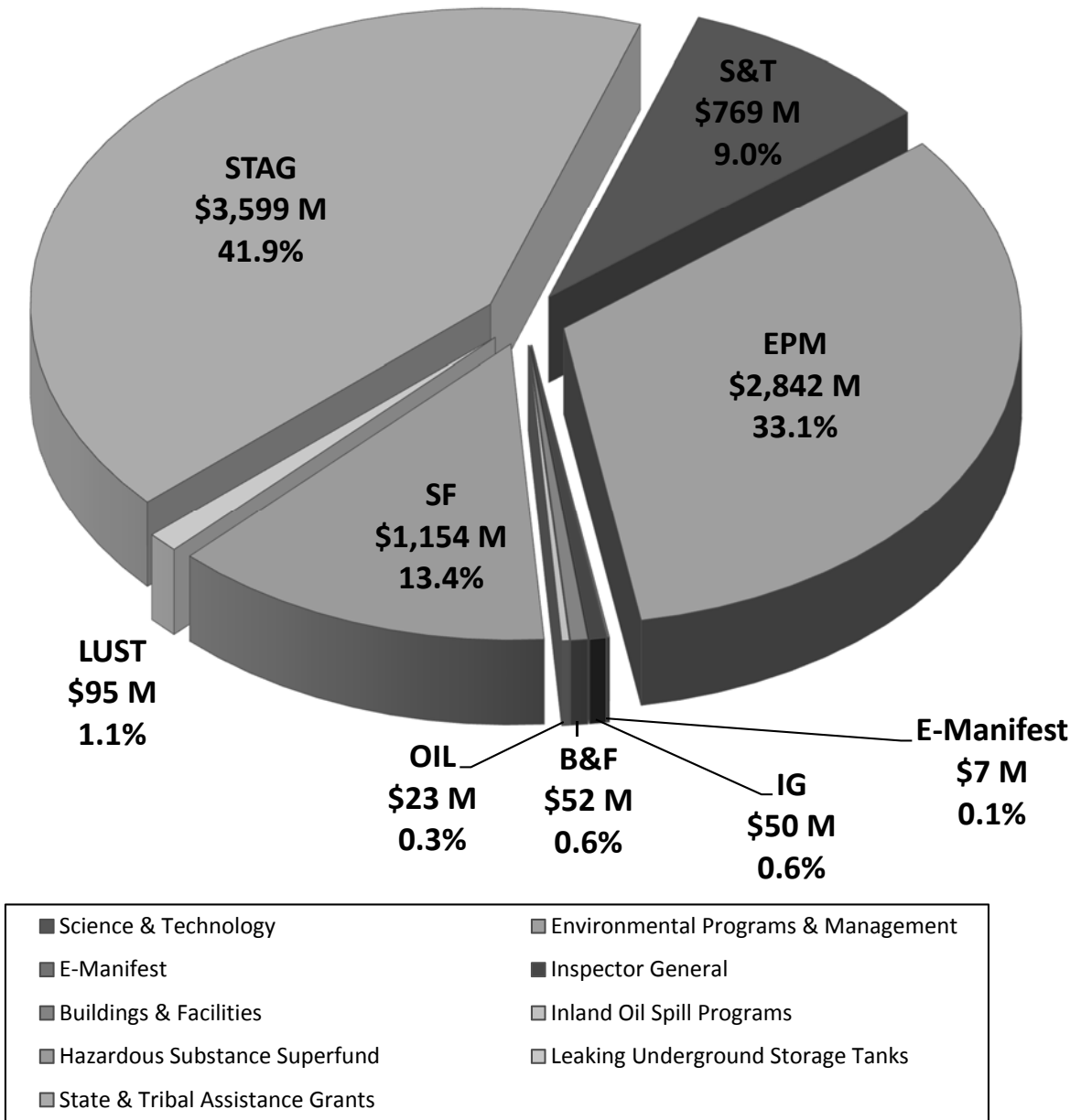


- Goal 1: Addressing Climate Change and Improving Air Quality
- Goal 2: Protecting America's Waters
- Goal 3: Cleaning Up Communities and Advancing Sustainable Development
- Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution
- Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance

Notes: Totals may not add due to rounding.

## Environmental Protection Agency's FY 2016 Budget by Appropriation

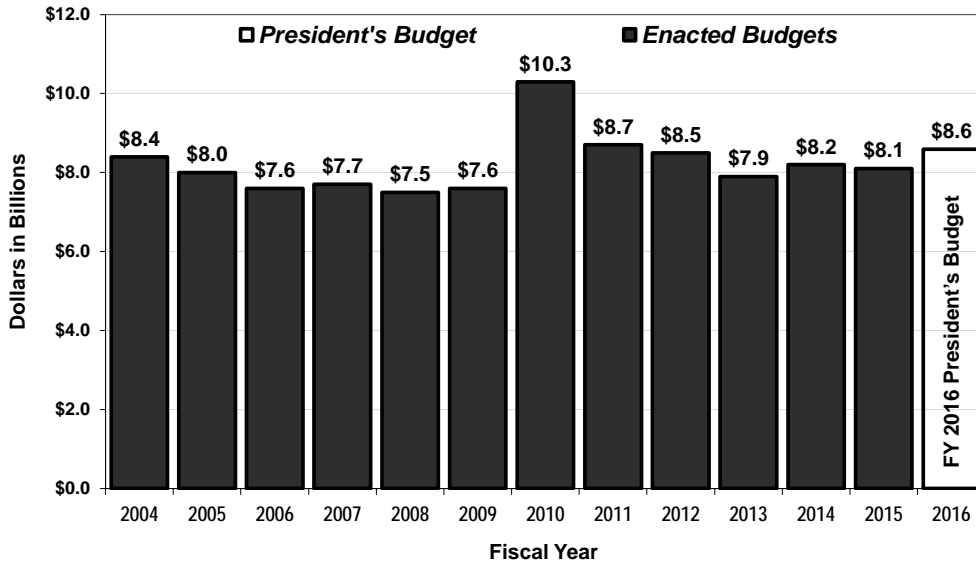
**Total Agency: \$8,592 Million**



Notes: Totals may not add due to rounding.

## EPA's Enacted Budget FY 2004 to 2016

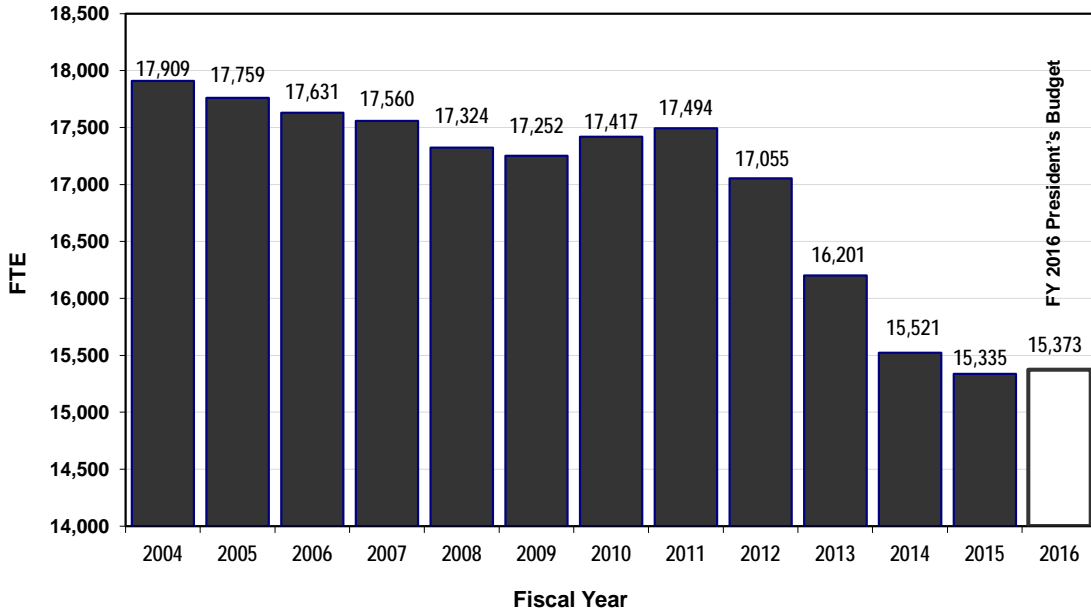
(Dollars in Billions)



Notes:

All agency totals include applicable rescission.  
 FY 2006 Enacted excludes Hurricane Katrina Relief supplemental funding.  
 FY 2009 Enacted excludes ARRA funding.  
 FY 2013 Enacted excludes Hurricane Sandy Relief supplemental funding.

## EPA's FTE\* Ceiling History

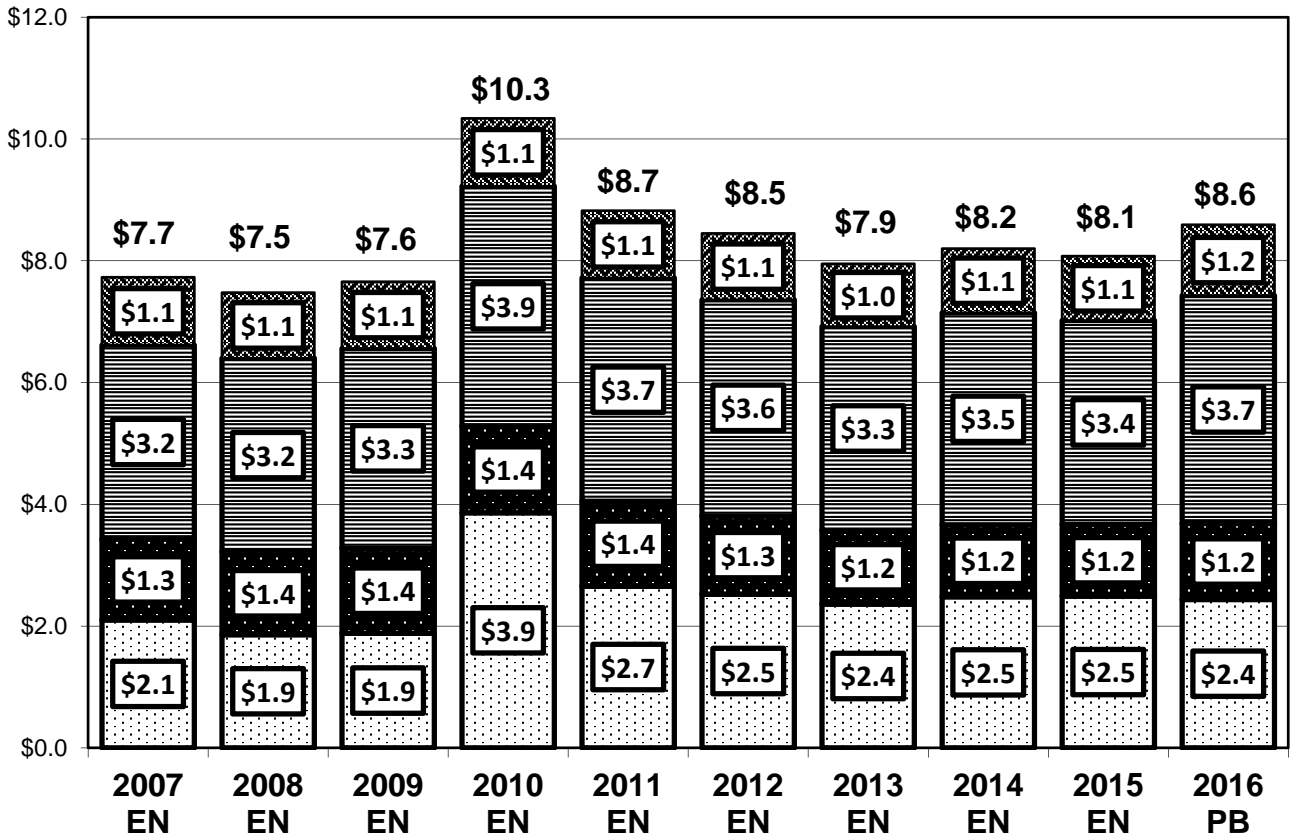


\* FTE (Full Time Equivalent) = one employee working full time for a full year (52 weeks X 40 hours = 2,080 hours), or the equivalent number of hours worked by several part-time or temporary employees.

Reimbursable FTE are included.

## Environmental Protection Agency's Resources by Major Category (Dollars in Billions)

- Infrastructure Financing
- Trust Funds
- Operating Budget
- Categorical Grants



**Notes:**

Totals may not add due to rounding

The Operating Budget includes funding provided for the Great Lakes Restoration Initiative

FY 2008 Enacted includes a 1.56% rescission and \$5 M rescission to prior year funds

FY 2009 Enacted reflects a \$10 M rescission to prior year funds

FY 2009 Enacted excludes ARRA funding

FY 2010 Enacted reflects a \$40 M rescission to prior year funds

FY 2011 Enacted reflects a 0.2% rescission and \$140 M rescission to prior year funds

FY 2012 Enacted reflects a 0.16% rescission and \$50 M rescission to prior year funds

FY 2013 Enacted reflects operating levels after sequestration and excludes Hurricane Sandy Relief supplemental appropriation of \$608 M

Reflects a 0.2% rescission and \$50 M rescission to prior year funds

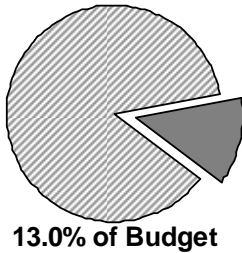
FY 2014 Enacted does not have a rescission

FY 2015 Enacted reflects a \$40M rescission to prior year funds



**Goal 1: Addressing Climate Change and Improving Air Quality**

**Strategic Goal:** Reduce greenhouse gas emissions and develop adaptation strategies to address climate change, and protect and improve air quality.



**Resource Summary**

(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 Enacted	FY 2016 President's Budget	Difference FY 2015 EN to FY 2016 PresBud
1 - Address Climate Change	\$189,470	\$190,665	\$279,470	\$88,805
2 - Improve Air Quality	\$744,419	\$751,499	\$777,206	\$25,707
3 - Restore and Protect the Ozone Layer	\$16,799	\$16,694	\$17,180	\$486
4 - Minimize Exposure to Radiation	\$34,365	\$33,841	\$39,015	\$5,174
<b>Goal 1 Total</b>	<b>\$985,053</b>	<b>\$992,698</b>	<b>\$1,112,870</b>	<b>\$120,172</b>
<b>Workyears</b>	2,526	2,501	2,606	105

NOTE: Numbers may not add due to rounding.

**Introduction**

To protect public health and the environment, the EPA is dedicated to protecting and improving the quality of the nation's air. Significant air pollution concerns include climate change, outdoor and indoor air quality, stratospheric ozone depletion, and radiation exposure. To address these concerns, the agency continues to partner with states, tribes, and local governments to implement programs and standards.

Scientific consensus shows that as a result of human activities, greenhouse gas concentrations in the atmosphere are at record high levels. Data show that the Earth has been warming over the past 100 years with the steepest increase in warming evident in recent decades.<sup>1</sup> Consequences of human-induced climate change pose immediate and significant concerns, including rising sea levels that threaten coastal cities in the U.S. and around the world, increasing ocean temperatures, acidification, which affects the oceans' ability to sustain life, and changing precipitation patterns which can lead to more intense droughts and greater numbers of wildfires. Severe heat waves and extreme weather events are projected to intensify and occur more frequently leading to mortalities and sickness. Eventually, more Americans are likely to be affected by certain diseases that thrive in areas with higher temperatures and greater precipitation, including pest-borne diseases, as well as food and water-borne pathogens. The costs of

<sup>1</sup> US EPA. 2014 Climate Change Indicators in the United States, 2014  
<http://www.epa.gov/climatechange/pdfs/climateindicators-full-2014.pdf>

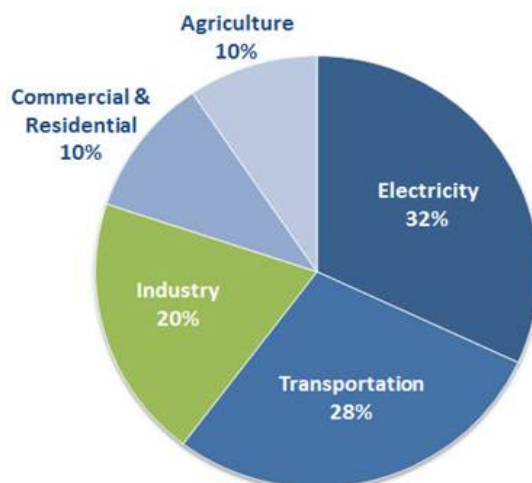
*Goal 1: Addressing Climate Change and Improving Air Quality*

these climate change impacts include increased hospital visits, respiratory and cardiovascular diseases, and even premature death – especially for certain vulnerable populations like the elderly, and children.

Since passage of the Clean Air Act Amendments (CAAA) in 1990, nationwide air quality has improved significantly. From 2003 to 2012, population-weighted ambient concentrations of fine particulate matter and ozone have decreased 26 percent and 13 percent, respectively. However, even with this progress, in 2012, approximately 45 percent of the U.S. population lived in counties with air that did not meet health-based standards for at least one pollutant. 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. Short-term exposure to elevated levels of certain air pollutants can exacerbate asthma and lead to other adverse health effects and economic costs, such as missed workdays.

The air issues of highest importance facing the agency over the next few years will continue to be greenhouse gas (GHG) mitigation and climate change adaptation, ozone, and particulate air pollution. The EPA uses a variety of approaches to address these challenges including traditional regulatory tools; innovative market-based techniques; public- and private-sector partnerships; community-based approaches; and programs that encourage adoption of cost-effective technologies and practices. For example, in FY 2014 the agency convened its first ever National Ports Summit, attracting over 200 participants, including Environmental Justice community representatives, to identify actions the agency can take to protect community air quality while supporting economic growth. This forum provided the opportunity for professionals, experts and stakeholders to share ideas on how to address the challenges faced by our nation’s ports and neighboring communities. Also, in FY 2014 the agency issued its first-ever tribes-only Diesel Emissions Reduction Act (DERA) Request for Proposals for funding to lower diesel exhaust exposure on Tribal lands. This dedicated source of additional funding will provide immediate health benefits to Tribal communities.

The EPA will continue to address the impacts of climate change through careful, cost-effective rulemaking and partnership programs that focus on the largest entities and encourage businesses and consumers to limit unnecessary greenhouse gas emissions. The President’s Climate Action Plan frames the EPA’s strategies to address climate change, and, among other initiatives, tasks the EPA with addressing GHGs from power plants. On June 2, 2014, the EPA proposed state-specific goals to lower carbon pollution from existing fossil fuel-fired power plants and guidelines to help the states develop their plans for meeting the goals. The standards for existing sources will result in carbon pollution from the power sector that is 30 percent lower by 2030 (compared to 2005 emission levels).<sup>2</sup> In 2012, the electricity sector was the largest source of U.S. greenhouse gas emissions, accounting for about one-third of the U.S. total.



*Figure 1: 2012 Total U.S. Greenhouse Gas Emissions by Sector*

<sup>2</sup> 79 FR 34832 (June 18, 2014)

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The rules and guidelines are to be finalized in the summer of 2015 and the EPA will continue to engage in intensive and extensive outreach to states, stakeholders, and the public and provide essential technical guidance to the states as they develop their plans. The EPA is also undertaking rulemakings to set carbon standards for new and modified fossil fuel power plants.

The transportation sector is the second largest source of greenhouse gases, and the EPA has made great progress creating a foundation for continuous improvement in emissions reduction technology. Working with the National Highway Transportation Safety Administration (NHTSA), the agency is developing Phase 2 GHG and fuel efficiency standards for heavy-duty vehicles, which will be proposed in March 2015 and are expected to be finalized in March 2016. The EPA, also in coordination with NHTSA, supports implementation and compliance with the GHG emission standards for light-duty and heavy-duty vehicles including the NHTSA Corporate Average Fuel Economy (CAFE) standards that have already been adopted. The national program of fuel economy and GHG standards for model year 2012 through 2025 light-duty vehicles will save approximately 12 billion barrels of oil and prevent 6 billion metric tons of GHG emissions over the lifetimes of the vehicles sold through model year 2025, one of the Agency Priority Goals. In model year 2025, the EPA and NHTSA standards will require average fuel economy for cars and light trucks of approximately 54.5 miles to the gallon, a significant increase from current average vehicle fuel efficiency.<sup>3</sup> The EPA also will continue to implement the Renewable Fuels program, which requires an increasing percentage of vehicle fuel sold in the U.S. to be from renewable sources.

The EPA also will promote the use of low global warming potential (GWP) alternatives to hydrofluorocarbons (HFCs) through application of the Significant New Alternatives Policy (SNAP) program. Specifically, the EPA will use authority under section 612 of the Clean Air Act (CAA) to list more environmentally friendly alternatives with lower GWPs, and review existing SNAP listings to consider whether any change to the status of currently acceptable higher-GWP alternatives is appropriate.

Industry, commercial and residential and agriculture sectors also offer opportunities for GHG reductions. The EPA will continue to implement non-regulatory climate change programs that work with key industry sectors to reduce greenhouse gases and facilitate energy-efficiency improvements. As an example, in 2013, the ENERGY STAR program upgraded its Portfolio Manager tool, the industry-leading benchmarking tool used by more than 325,000 commercial buildings—nearly 40% of the nation's building space—to measure, track, assess and report on energy and water consumption. By the end of 2013, more than 23,000 buildings and plants representing more than 3 billion square feet of space had earned the ENERGY STAR label. These top performers demonstrate that it is possible to emit 35% fewer GHG emissions than typical facilities while delivering financial value to an organization. At the community level, Claiborne Elementary School in Baton Rouge, Louisiana, won the 2014 annual ENERGY STAR National Building Competition: *Battle of the Buildings*. Teams from more than 3,000 buildings across the country spent the past year competing to obtain the greatest reduction in energy use, the Baton Rouge school won by cutting its energy use nearly in half.

The EPA also operates several voluntary programs that promote cost-effective reductions of methane, an especially potent greenhouse gas when released into the atmosphere. The AgSTAR program is a collaboration between the EPA and the Department of Agriculture that focuses on methane emission reductions from livestock waste management operations through biogas recovery systems. The Natural Gas STAR Program spurs the adoption of cost-effective technologies and practices that reduce methane emissions from the oil and natural gas sector through a collaborative partnership with companies. The EPA also will develop regulatory approaches to cost-effectively reduce methane from the oil and gas production sector, as part of the methane strategy under the President's Climate Action Plan and helping to achieve the Administrations' goal of reducing methane emissions from the oil and gas sector by 40-45 percent from 2012 levels by 2025.

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<sup>3</sup> US EPA. Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975-2013  
<http://www.epa.gov/otaq/fetrends.htm>

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The agency also improves ambient air quality through its programs that address criteria pollutants, including ground-level ozone and particulate matter. As required by the CAA, the EPA periodically reviews the National Ambient Air Quality Standards (NAAQS) and the science on which they are based. The EPA also sets standards for industrial categories that cause, or significantly contribute to, air pollution that may endanger public health or welfare.

At the local level, ozone or particulate matter (PM<sub>2.5</sub>) exceedances of the EPA's air quality standards can sometimes cause "code red," or unhealthy air quality, days to occur. During code red days, outside activity for sensitive populations should be curtailed. The EPA's air quality standards have helped reduce these occurrences on a local level. As an example, air quality has improved in the DC area, which had zero code red days in 2014 – down from a high of 20 in 1998.<sup>4</sup>

The EPA's air toxic control programs are critical to continued progress in reducing public health risks and improving the quality of the environment. The EPA will continue to focus efforts on communities with greater levels of industrial and mobile source activity (e.g., near ports or distribution areas), which, according to the 2005 National-Scale Air Toxics Assessment (NATA), often have greater cumulative exposure to air toxics than non-industrial areas. The air toxics emissions standards must be reviewed every eight years to determine if additional emission control technologies exist, and the EPA has a number of rulemakings underway to propose more effective emission control technologies based on the reviews. This past year the agency published an Advance Notice of Proposed Rulemaking to update air toxics standards for petroleum refineries, which included first-ever proposed requirements for fence-line monitoring. This common sense approach allows the agency and local communities to better understand the risks to neighborhoods located near refineries. If finalized, this rule will ensure that proposed standards are being met and that neighboring communities are not being exposed to unintended emissions.

The EPA continues to implement its indoor air quality and radiation programs. Because people spend much of their lives indoors, the quality of indoor air is a major concern. For example, indoor allergens and irritants play a significant role in making asthma worse and triggering asthma attacks. Over 25 million Americans currently have asthma, which annually accounts for over 500,000 hospitalizations, more than 10 million missed school days, and over \$50 billion in economic costs.<sup>5</sup> In addition, radon, a naturally occurring yet toxic gas when it accumulates in indoor areas, causes an estimated 21,000 lung cancer deaths annually in the U.S.<sup>6</sup> The agency works with its non-governmental, federal, state, and local partners to educate, encourage, and equip individuals, schools, industry, the health care community, and others to take action to reduce health risks from poor indoor air quality, especially as they relate to asthma triggers and radon. This past year the agency completed a 10-year effort to build capacity at national, state, and local levels to address environmental asthma management by directly training 45,700 healthcare professionals. These professionals now possess greater expertise and awareness of environmental factors that trigger asthma and will be better able to address this major problem in our nation's communities.

In addition, the agency measures and monitors ambient radiation and radioactive materials and assesses radioactive contamination in the environment. The agency also supports federal radiological emergency response and recovery operations under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

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<sup>4</sup> Washington Post, October 3, 2014. See <http://www.washingtonpost.com/blogs/capital-weather-gang/wp/2014/10/03/d-c-air-quality-just-keeps-getting-better-zero-code-red-days-in-2014/>

<sup>5</sup> Centers for Disease Control and Prevention (2011, May). Asthma in the U.S. Vital Signs. Retrieved from <http://cdc.gov/vitalsigns/asthma>.

<sup>6</sup> U.S. EPA, 2003. EPA's Assessment of Risks from Radon in Homes. EPA 402-R-03-003. Available at <http://www.epa.gov/radiation/docs/assessment/402-r-03-003.pdf>.

## *Goal 1: Addressing Climate Change and Improving Air Quality*

### **Major FY 2016 Changes**

Goal 1 resources and FTE have been targeted to address climate change and enhance ongoing air quality and radiation work, building on progress to date to advance priorities in FY 2016. In implementing these changes, we will increase effectiveness and efficiency while advancing environmental and public health protection. While continuing the EPA's ongoing commitment to science, the rule of law, and transparency, the agency has updated and refined its current research direction to maximize its utility and guide the agenda in the months and years ahead.

#### *Address Climate Change*

The FY 2016 budget prioritizes climate action and reflects our commitment to implementing the President's 2013 Climate Action Plan. The broad based plan will cut greenhouse gas pollution that contributes to climate change and affects public health, and support activities to facilitate necessary adaptation to the impacts of climate change.

Key elements of the Climate Action Plan that the EPA's work supports include:

- Cutting carbon pollution from new and existing power plants
- Establishing CO<sub>2</sub> emission standards and supporting increased fuel economy standards for heavy-duty vehicles
- Cutting energy waste in homes, businesses, and factories
- Reducing methane and HFC emissions
- Helping to prepare the country to address the impacts of climate change
- Leading international efforts to address climate change, including supporting efforts to control HFCs under the Montreal Protocol

Power plants are the largest source of carbon dioxide emissions in the United States, making up roughly one-third of all domestic GHG emissions. On June 2, 2014, the EPA proposed the Clean Power Plan, which will establish carbon pollution standards for existing power plants. The Clean Power Plan provides states with significant flexibility to tailor their carbon pollution reduction plans to their own unique circumstances using a variety of approaches, such as energy efficiency and renewable energy measures, as well as multi-state plans that build on cooperation and innovation. As a result, state plan development, review and approval will be complex. In FY 2016, the agency will focus existing resources and invest new resources to support states as they develop their plans. Resources will be focused both in the regional offices to provide tailored, state-specific assistance and in headquarters where technical experts will develop guidance and other resources that are sector-wide in scope and address questions that affect overall implementation of the plan. In addition to increased resources for EPA activities, the agency is requesting an increase in categorical grants to states as they work toward deliverables in FY 2016 and beyond.

In conjunction with the Clean Power Plan, the Administration is proposing the Clean Power State Incentive Fund, which will provide up to \$4 billion states that commit to exceed minimum requirements established in the Clean Power Plan for the timing and extent of carbon pollution reductions from the power sector. The Fund will enable states that accelerate their reductions and go beyond the Clean Power Plan to receive funds for, but not limited to, efforts that advance carbon pollution reductions. Efforts may include providing assistance to businesses to expand energy efficiency, renewable energy, and combined heat and power through, for example, low-interest loans and infrastructure investments. Efforts could also include mitigation or adaptation support to address environmental pollution in low income and underserved communities.

In FY 2016, consistent with the President's Climate Action Plan, the EPA plans to finalize a second phase of GHG standards for post Model Year 2018 medium- and heavy-duty vehicles. This second phase of regulations will build upon the success of the first phase and will offer further opportunities to reduce greenhouse gas emissions, decrease the nation's oil use, and benefit consumers and business by

## Goal 1: Addressing Climate Change and Improving Air Quality

reducing the cost of transporting goods while spurring job growth and innovation in the clean energy technology sector. The agency also committed to perform, in coordination with NHTSA and the California Air Resources Board (CARB), a Midterm Evaluation of the Model Year 2022-2025 light-duty GHG standards. To support the Midterm Evaluation, in FY 2016 the agency is performing a comprehensive feasibility evaluation of advanced technologies.

As the nation prepares for and responds to the impacts of a changing climate, communities face a host of challenges such as rising sea levels, droughts, wildfires, and extreme weather events. Local communities will need substantial support and guidance in order to adapt to these new realities. In FY 2016, the agency will be supported by 20 FTE serving as Community Resource Coordinators working cross-media to provide on-the-ground technical assistance to multiple communities, including working with external partners such as local colleges, universities, non-governmental organizations and others to provide help to local communities as they begin to assess vulnerabilities, plan for climate change, and implement actions to increase resilience to climate impacts.

### *Improve Air Quality*

In FY 2016 the agency will focus additional resources to address regulatory implementation across the air program. An additional 25.0 FTE for regional air programs are requested to address state implementation plans (SIPs) awaiting processing, permitting needs, and air quality monitoring and analysis. These FTE will help provide states and industry with greater certainty about how to move forward with addressing air pollutants of concern. At a national level, the agency is requesting additional FTE to provide support in targeted areas including regulatory reviews that are statutorily mandated under the Clean Air Act and under legal deadlines, rules and guidance needed by states and industry to implement planning and permitting requirements, implementation of the motor vehicle and engine certification and compliance program, and indoor air technical guidance development.

As highlighted, national standards have a big impact on the quality of the life in local communities. In FY 2016, the agency also continues a strong emphasis on supporting communities in their efforts to combat localized effects of air pollution. Communities do not always have sufficient air quality data at the-local level to understand and act upon existing risks. In FY 2016, the EPA will invest \$1.6 million and 2.5 FTE in funding for advanced monitoring technical support and tools to help communities detect, monitor, understand, and act upon their local air quality risks.

### **Agency Priority Goals**

As part of the EPA's FY 2014-2018 Strategic Plan, the EPA established FY 2014-2015 Agency Priority Goals. The Goal 1 includes APG highlights the EPA's efforts to reduce greenhouse gas emissions from cars and trucks as follows:

*Reduce greenhouse gas emissions from cars and trucks. Through September 30, 2015, EPA, in coordination with Department of Transportation's fuel economy standards program, will be implementing vehicle and truck greenhouse gas standards that are projected to reduce greenhouse gas (GHG) emissions by 6 billion metric tons and reduce oil consumption by about 12 billion barrels over the lifetime of the affected vehicles and trucks.*

Additional information on the EPA's Agency Priority Goals can be found at [www.performance.gov](http://www.performance.gov).

### **FY 2016 Activities**

***Objective 1: Address Climate Change.*** *Minimize the threats posed by climate change by reducing greenhouse gas emissions and taking actions that help to protect human health and help communities and ecosystems become more sustainable and resilient to the effects of climate change.*

The EPA's strategy to address climate change supports the President's GHG reduction goals. Climate change poses risks to public health, the environment, cultural resources, the economy, and quality of life.

## *Goal 1: Addressing Climate Change and Improving Air Quality*

Many impacts of climate change are already evident and will intensify in the future. NOAA/NASA announced on January 16, 2015 on nasa.gov that 2014 was the hottest year on record.

The agency's budget includes \$214 million to support regulatory activities and partnership programs to reduce GHG emissions domestically and internationally. In FY 2016, the agency will focus on a number of significant activities including:

- Working with states to implement the Clean Power Plan carbon dioxide (CO<sub>2</sub>) emission standards for existing power plants, including direct technical assistance and funding to support development of state plans.
- Finalizing a second phase of heavy-duty vehicle GHG regulations that incorporates a wider range of advanced technologies, including hybrid vehicle drive trains, and also exploring options to reduce emissions from a wide range of nonroad equipment, locomotives, aircraft, and transportation fuels.
- Prioritizing and reviewing low GWP options for use in consumer and industrial use sectors under SNAP, while considering existing listings that may require reassessment based on the advent of new, more environmentally friendly options. Work in FY 2016 will involve continued SNAP listings, rulemakings, and technical support for stakeholders and innovative firms with new alternatives.
- Working with stakeholders on measures that will reduce emissions of GHG from the oil and gas production industry.
- Supporting reporting and verification in the GHG Reporting Program of emissions across 41 industry sectors and emission sources and approximately 8,000 reporters.
- Leading the Global Methane Initiative (GMI) and enhancing public-private sector cooperation to reduce global methane emissions and deliver clean energy to markets.
- Implementing the ENERGY STAR program and other greenhouse gas reduction partnership programs such as SmartWay Transport across the residential, commercial, industrial, and transportation sectors.
- Overseeing compliance with the revised vehicle fuel economy labeling requirements, which provide consumers with GHG as well as fuel economy information. The new label enables consumers to compare the energy and environmental impacts of both traditionally- and alternatively-fueled vehicles, including those using renewable fuels, gaseous fuels, and electricity.
- Continuing to implement the new Renewable Fuel Standards (RFS2) program and carrying out other actions required by the Energy Policy Act (EPA) of 2005 and the Energy Independence and Security Act (EISA) of 2007.
- Supporting implementation and compliance with GHG emission standards for light-duty and heavy-duty vehicles and the National Highway and Transportation Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) standards. Under the CAA and the Energy Policy Act, the EPA is responsible for issuing certificates and ensuring compliance with both the GHG and CAFE standards.

***Objective 2: Improve Air Quality.*** *Achieve and maintain health and welfare based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants.*

### *Clean Air*

In FY 2016, the EPA will continue its CAA prescribed responsibilities to administer the National Ambient Air Quality Standards (NAAQS). The NAAQS help improve air quality and reduce related health and welfare impacts and their costs to the nation. The EPA will continue to implement a strategy that, where appropriate, supports the development and evaluation of multiple pollutant measurements.

In FY 2016, the EPA will continue its reviews of the NAAQS in accordance with the statutory mandate to review the standards every five years, and make revisions, as appropriate. In particular, the EPA will finalize its review of the ozone NAAQS in early FY 2016. The EPA will provide technical and policy assistance to states and tribes developing or revising attainment SIPs and Tribal Implementation Plans (TIPs) and will designate areas as attainment or nonattainment, as appropriate. The agency also will continue efforts to reduce the number of backlogged SIPs and to act on incoming SIPs within the Clean Air Act Amendments of 1990 (CAAA) mandated timeframe.

## *Goal 1: Addressing Climate Change and Improving Air Quality*

The EPA will continue to partner with states, tribes, and local governments to ensure progress toward air quality improvement objectives, including consideration of environmental justice issues. The budget includes robust funding levels for state and local air quality management grants to support core state workload for implementing NAAQS, reducing exposure to air toxics to ensure improved air quality in communities, and for additional air monitors required by revised NAAQS. The EPA will provide technical and policy assistance to states developing or revising SIPs or regional haze implementation plans and will continue to review and act on SIP submissions in accordance with the CAAA. Ongoing technical assistance to state, Tribal and local agencies to support these objectives includes source characterization analyses, emission inventories, quality assurance protocols, improved testing and monitoring techniques, and air quality modeling. The EPA also will work with the states to address the interstate transport of pollution that contributes to nonattainment or interferes with maintaining ozone and/or PM NAAQS in other areas.

In FY 2016, the EPA will use its upgraded vehicle, engine, and fuel testing capabilities at the National Vehicle and Fuel Emissions Laboratory (NVFEL) to increase testing and certification capacity to ensure that new vehicles, engines, and fuels are in compliance with new vehicle and fuel standards. The agency is responsible for establishing test procedures to estimate the fuel economy of new vehicles and for verifying car manufacturers' data on fuel economy. The EPA anticipates reviewing and approving more than 5,000 vehicle and engine emissions certification requests for over 4,100 different types of engines – a workload that has quadrupled over the past decade. The EPA's workload will continue to grow as the agency begins to implement new, and more stringent, GHG emission standards promulgated in 2012 and 2013 for additional classes of vehicles and engines.

### *Air Toxics*

The agency will continue to work with state, tribal, and local air pollution control agencies and community groups to assess and address air toxics emissions in areas of greatest concern.

One of the top priorities for the air toxics program is to eliminate unacceptable health risks and exposures to air toxics in affected communities and to fulfill its CAAA and court-ordered obligations. The CAAA requires that all technology-based emission standards be reviewed and updated as necessary every eight years. In FY 2016, the EPA will continue to conduct technology reviews and risk assessments to determine whether the technology-based rules appropriately protect public health to comply with legal deadlines.

The EPA will continue development of its multi-pollutant efforts by constructing and organizing analyses around industrial sectors. By addressing individual sectors' emissions comprehensively and prioritizing regulatory efforts on the pollutants of greatest concern, the EPA will continue to identify ways to take advantage of the co-benefits of pollution control. In developing sector and multi-pollutant approaches, the agency seeks innovative solutions that address pollutants in the various sectors and minimize costs to the EPA, states, tribes, local governments and the regulated community.

The EPA will continue to improve the dissemination of information to state, tribal, and local governments, and the public, using analytical tools such as the National Air Toxics Assessments (NATA), enhancing quantitative assessment tools such as BenMAP, and improving emission inventory estimates for toxic air pollutants. The EPA anticipates that these improvements will increase the agency's ability to meet aggressive court-ordered schedules to complete rulemaking activities, especially in the air toxics program.

### *Indoor Air*

The EPA will continue to build the capacity of community-based organizations to promote comprehensive asthma care that integrates management of environmental asthma triggers and health care services. The EPA will place a particular emphasis on improving asthma health outcomes for vulnerable populations, including children, and low-income and minority populations as well as improving indoor air quality (IAQ) in homes and schools. Over the past four years, at least 16,000 health care professionals, including school nurses and primary care physicians, have been trained by the EPA and its partners on environmental management of asthma triggers. Additionally, approximately one third of our nation's



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schools now have effective indoor air quality management programs in place, helping to ensure asthma-friendly school environments. The EPA will continue to co-lead the implementation of the Coordinated Federal Action Plan to Reduce Racial and Ethnic Asthma Disparities, an initiative under the auspices of the President's Taskforce on Environmental Health Risks and Safety Risks to Children.

The EPA will deliver clear and verifiable protocols and specifications to ensure good indoor air quality in homes and schools. This effort will be accomplished through the Indoor airPLUS program and protocols that protect IAQ during energy upgrades. The EPA will collaborate with public and private organizations to integrate these protocols and specifications into existing energy-efficiency, green-building and health-related programs and initiatives. FY 2016 activities include equipping the affordable housing sector with training and guidance to promote adoption of these best practices with the aim of creating healthier, more energy-efficient homes for low income families.

In FY 2016, the EPA will continue its leadership role and collaborate with other federal agencies to advance action on radon risk reduction, and will continue to implement its own multi-pronged radon program. The EPA will drive action at the national level to reduce radon risk in homes and schools using partnerships with the private sector and public health groups, 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 standards (e.g., mitigation and construction protocols) for adoption by states and the radon industry.

***Objective 3: Restore and Protect the Ozone Layer.*** *Restore and protect the earth's stratospheric ozone layer and protect the public from the harmful effects of ultraviolet (UV) radiation.*

### *Restore the Ozone Layer*

The stratospheric ozone program implements the provisions of the CAAA and the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol). Under the CAAA and the Montreal Protocol, the EPA is authorized to control and reduce ozone depleting substances (ODS) in the U.S., and to contribute to the Montreal Protocol Multilateral Fund. As of January 1, 2015, ODS production and imports will be capped at 1,524 ODP-weighted metric tons, which is 10 percent of the U.S. baseline under the Montreal Protocol. In 2020, all production and import will be phased out except for exempted amounts. As ODS and many of their substitutes are potent GHGs, appropriate control and reduction of these substances also provides significant benefits for climate 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 its terms domestically. In FY 2016, the EPA will focus its work to ensure that ODS production and import caps under the Montreal Protocol and CAAA continue to be met.

During the course of its high level strategic review of the agency's 13 strategic objectives in FY 2014, the EPA, in consultation with the Office of Management and Budget, identified this objective as making noteworthy progress. While the EPA has been successful in reaching its targets under this objective, much work remains to be done – importantly, balancing the need for flexibility and specific tailored solutions to unique situations with the obligation to completely phase out entire classes of widely used chemicals.

***Objective 4: Minimize Exposure to Radiation.*** *Minimize releases of radioactive material and be prepared to minimize exposure through response and recovery actions should unavoidable releases occur.*

In FY 2016, the EPA's Radiation program, in cooperation with federal agencies, states, tribes, and international radiation protection organizations, will develop and use voluntary and regulatory programs, public information, and training to protect the public from unnecessary exposures to radiation. The EPA expects to complete its review of the public comment received on the 2016 proposed revisions to the Agency's Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings (40 CFR 192), last reviewed in 1995. The Agency also expects to issue its final rule for the related Hazardous Air

## *Goal 1: Addressing Climate Change and Improving Air Quality*

Pollutants, Subpart W Standard for Radon Emissions from Operating Uranium Mill Tailings (40 CFR 61) and will work to ensure that the nation has broad based, non-site-specific standards that protect public health and the environment from risks associated with subsurface disposal of high-level radioactive waste.

The EPA's Radiological Emergency Response Team will maintain and improve the level of readiness to support federal radiological emergency response and recovery operations under the National Response Framework and the National Oil and Hazardous Substances Pollution Contingency Plan in FY 2016. RadNet, the agency's national ambient radiation air monitoring system, will continue to provide data from the country's 100 most populous cities to assist in protective action determinations. The EPA will continue to support waste site characterization and clean-up by providing field and fixed laboratory environmental radioanalytical data and technical support, delivering radioanalytical training to state and federal partners, and developing improved radioanalytical methods.

In FY 2016, the EPA will continue to implement its regulatory oversight responsibilities for Department of Energy (DOE) activities at the Waste Isolation Pilot Plant (WIPP) facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. This includes conducting inspections of waste generator facilities and evaluating DOE's compliance with the EPA's standards and applicable environmental laws and regulations to ensure the permanent and safe disposal of all radioactive waste shipped to WIPP.

### **Research**

Environmental challenges in the 21<sup>st</sup> century are complex. These challenges are complicated by the interplay between air quality, climate change, and emerging energy options, and they require different thinking and solutions than those used in the past. These solutions require research that transcends disciplinary lines and includes all stakeholders in the process -- the EPA's regional and program offices, states and communities -- that rely on the EPA's research.

The Air, Climate and Energy (ACE) research program, funded at \$100.3 million for FY 2016, conducts high priority research on environmental and human health impacts related to air pollution, climate change, and biofuels. This work directly supports the EPA's goal of addressing climate change and improving air quality.

Human exposure to an evolving array of air pollutants is a considerable challenge. By integrating air, climate, and energy research, the EPA can better understand, define, and address the complexity of these interactions. The agency will provide models and tools necessary for communities and decision makers at all levels of government to make the best decisions.

The ACE research program will continue to address critical science questions under three major research themes.

*Theme 1: Assess Air Quality and Climate Impacts* – Assess human and ecosystem exposures and effects associated with air pollutants and climate change. Evaluate the effects of air pollution and climate change on individuals, ecosystems, communities, and regions.

*Theme 2: Prevent and Reduce Emissions* – Provide the science needed to develop and evaluate approaches to preventing and reducing harmful air emissions. Decision makers and other stakeholders need such data and methods to determine which energy choices are most environmentally and economically appropriate.

*Theme 3: Respond to Changes in Climate and Air Quality* – Provide modeling and monitoring tools, metrics, and information on air pollution exposure. Individuals, communities, and governmental agencies will use these tools and information to make public health decisions related to air quality and climate change.

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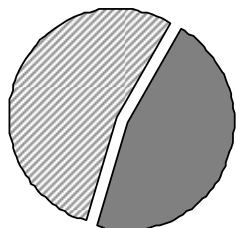
In FY 2016, the ACE program will continue to develop and evaluate source and ambient air monitoring methods required to support implementation of regulations. Demand for improved air monitoring data is growing while budgets for state and local air monitoring organizations are shrinking. The EPA also is working with the National Aeronautics and Space Administration (NASA) to examine how satellites may be used to improve air quality management activities.

In addition, in 2012, the EPA signed a Memorandum of Agreement (MOA) with the DOE and DOI to develop a multi-agency program to focus on timely, policy relevant science to support sound policy decisions by state and federal agencies for ensuring the prudent development of energy sources while protecting human health and the environment. Additional goals include minimizing potential risks in developing these energy resources, maximizing each agency's particular strength, and reducing interagency overlap.



## Goal 2: Protecting America's Waters

**Strategic Goal:** *Protect and restore our waters to ensure that drinking water is safe and sustainably managed, and that aquatic ecosystems sustain fish, plants, wildlife, and other biota, as well as economic, recreational, and subsistence activities.*



47.2% of Budget

### Resource Summary

(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 Enacted	FY 2016 President's Budget	Difference FY 2015 EN to FY 2016 PresBud
1 - Protect Human Health	\$1,273,076	1,268,812	1,573,251	\$304,439
2 - Protect and Restore Watersheds and Aquatic Ecosystems	\$2,771,692	\$2,784,487	\$2,480,117	(\$304,370)
<b>Goal 2 Total</b>	<b>4,044,768</b>	<b>\$4,053,298</b>	<b>\$4,053,368</b>	<b>\$70</b>
<b>Workyears</b>	3,190	3,161	3,156	(5)

NOTE: Numbers may not add due to rounding.

### Introduction

As we work to protect the nation's water, new approaches and new partnerships are needed to make and sustain improvements. While much progress in water quality has been made over the last two decades, America's waters remain imperiled. Increased demands, land use practices, population growth, aging infrastructure, and the impacts of climate change pose serious challenges to our nation's water resources. The National Coastal Condition Report IV shows that although improvement has taken place since 1990, the overall condition of the nation's coastal resources continues to be rated fair<sup>1</sup>. In addition, the latest national assessments<sup>2</sup> confirm that America's waters are stressed by nutrient pollution, excess sedimentation, and degradation of shoreline vegetation, which affect more than 50 percent of our lakes and streams. The rate at which new waters are listed for water quality impairments exceeds the pace at which restored waters are removed from the list. For many years, nonpoint source pollution—principally nitrogen, phosphorus, and sediments—has been recognized as the largest remaining impediment to improving water quality, and it is difficult to address the varied and widespread sources of this pollution. Pollution discharged from industrial, municipal, and other point sources continue to cause a decline in the

<sup>1</sup> U.S. EPA. 2012. *National Coastal Condition Report IV*. EPA-842-R-10-003. Available at <http://water.epa.gov/type/oceb/assessmonitor/nccr/upload/NCCR4-Report.pdf>.

<sup>2</sup> U.S. EPA, 2006. *Wadeable Streams Assessment: A Collaborative Survey of the Nation's Streams*. EPA 841-B-06-002. Available at <http://www.epa.gov/owow/streamsurvey>. See also EPA, 2010. *National Lakes Assessment: A Collaborative Survey of the Nation's Lakes*. EPA 841-R-09-001. Available at [http://www.epa.gov/lakessurvey/pdf/nla\\_chapter0.pdf](http://www.epa.gov/lakessurvey/pdf/nla_chapter0.pdf).

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quality of our waters. Other significant contributors to degraded water quality include: loss of habitat; habitat fragmentation; and changes in the way water is infiltrated into soils, runs off the land, and flows down streams (hydrologic alteration).

We can no longer rely on traditional tools and approaches to protect our waters in urban and rural settings. We are focusing on developing new targeting tools, promoting green infrastructure and sustainable solutions and building resiliency to deal with the impacts from climate change, and strengthening our partnerships with federal agencies, non-government organizations and private companies committed to supporting local efforts to improve and protect waterways. From nutrient loadings and stormwater runoff, to invasive species, energy extraction, and drinking water contaminants, water quality programs face complex challenges that can be addressed effectively only through a combination of traditional and innovative strategies. The EPA will continue to work hand-in-hand with states and tribes to develop and implement nutrient limits and intensify our work to restore and protect the quality of the nation's streams, rivers, lakes, bays, oceans, and aquifers. We will continue the increased focus on urban and rural communities, particularly those disadvantaged communities facing disproportionate impacts, or that have been historically underserved. We also will use our authority to protect and restore threatened natural treasures such as the Great Lakes, the Chesapeake Bay, and the Gulf of Mexico; address our neglected urban rivers; ensure safe drinking water; and reduce pollution from nonpoint and industrial discharges. The EPA will continue to address post-construction runoff, water-quality impairments, and drinking water contamination.

As part of the agency's long-term strategy, the EPA is implementing a Sustainable Water Infrastructure Policy<sup>3</sup> that focuses on working with states and communities to significantly expand more effective management and enhance technical, managerial and financial capacity within the drinking water and wastewater sectors. Important to the enhanced technical capacity will be alternatives analyses to expand green infrastructure options and their multiple benefits. Federal dollars provided through the State Revolving Funds will act as a catalyst for efficient system-wide planning and ongoing management of sustainable water infrastructure.

The EPA will strengthen instrumental partnerships across the Federal government to leverage resources and avoid duplication of efforts. The EPA and USDA continue to enhance existing coordination efforts in reducing nonpoint source pollution. The EPA, DOI, and DOE are working together to research the impacts of hydraulic fracturing activities to support the state and Federal agencies that oversee this growing energy extraction method.

### **Major FY 2016 Changes**

Goal 2 resources include over \$3.4 billion in extramural resources and 2,324.9 FTE. Resources and FTE have been targeted to build on progress to date and advance the Agency priorities in FY 2016. Funding for the categorical grants to states to support core environmental programs in Goal 2 is \$554 million, a \$27 million increase over the FY 2015 Enacted Budget<sup>4</sup>. In FY 2016, the agency is requesting \$2.3 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs), a decrease of \$54 million in funding from FY 2015 enacted levels, but supported by additional funding through EPA's surface water and drinking water programs as described below.

In Goal 2 the FY 2016 President's Budget includes resources in three major investment areas: Sustainable Water Systems, Climate Mitigation and Communities.

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<sup>3</sup> <http://water.epa.gov/infrastructure/sustain/upload/Sustainability-Policy.pdf>

<sup>4</sup> \$5.6 million increase for Nonpoint Source (Sec. 319); \$7.7 million increase for Public Water System Supervision; \$18.4 million increase for Pollution Control (Section 106); \$5.0 million increase for Wetlands Program Development grants; \$9.6 million reduction for Beaches categorical grants.

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### *Sustainable Water Systems*

In FY 2016, the agency's budget includes \$50 million in technical assistance, training, and other efforts to enhance the capacity of communities and states to plan and finance drinking water and wastewater infrastructure improvements. EPA will work with states and communities to promote innovative practices that advance water system and community resiliency and sustainability. These resources will build the technical, managerial, and financial capabilities of systems, to promote a healthy and effective network of drinking water and wastewater infrastructure.

The Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) authorizes an innovative financing mechanism for water-related infrastructure of national or regional significance and authorizes the EPA to provide federal credit assistance to eligible entities. In FY 2016, the agency budget includes \$5 million to begin developing the information necessary to lay the groundwork for a WIFIA program. WIFIA creates a 5-year pilot program for water infrastructure investment and provides low-interest loans to eligible entities for large water and wastewater projects. In addition to the existing State Revolving Fund programs, WIFIA will provide an additional source of low cost capital to help meet the United States' water infrastructure needs and address key priorities. Beginning in FY 2015 and continuing into FY 2016, the EPA will conduct the significant work of developing a WIFIA program. The Agency's FY 2016 budget request will continue the development and start-up of the program.

### ***Community Highlight: Douglas, AZ***

To mitigate increasing energy costs, the City of Douglas obtained a \$1.3 million loan (June 2014) from Arizona's SRF Program to design and install a 300 kW solar system to power their wastewater treatment plant. The solar array is projected to generate nearly 520,000 kilowatt hours of electricity per year, or 50% of the plant's electric requirements. Once installed, Douglas estimates they will save \$32,000 per year in energy costs and \$640,000 over the next 20 years.

### *Climate Mitigation*

Recent improvements in scientific measurement of carbon sequestered in coastal wetlands indicate that preservation and restoration of coastal wetlands can have significant greenhouse gas reduction benefits<sup>5</sup>, while also reducing storm impacts on coastal areas and enhancing habitat and water quality. The existing National Estuary Programs are excellent candidates for developing these "blue carbon" opportunities. The EPA will work with NEPs to identify and support key coastal restoration projects that can serve as pilot projects featuring different natural features and characteristics to study and enhance coastal resilience.

### *Communities*

Goal 2 will be supported by EPA's new Community Resource Coordinators. These Coordinators are a team of 20 FTE who will work cross-media to provide on the ground technical assistance to multiple communities, including helping to improve community adaptation and resiliency in the face of climate change and extreme weather events.

The agency also provides \$1.1 million and 2.5 FTE for Advanced Monitoring to assist communities through the use of monitoring technology by providing technical assistance and support through existing mechanisms and by building partnerships with external organizations to support environmental education and citizen science. Communities are increasingly asking questions about the health of their waterways and what they can do to improve them. By developing interactive web tools that describe water quality monitoring data using understandable indicators, this proposal will help demonstration communities answer these questions and enhance their understanding of how they can better protect their waters.

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<sup>5</sup> Crooks, S., Rybczyk, J., O'Connell, K., Devier, D.L., Poppe, K., Emmett-Mattox, S. 2014. *Coastal Blue Carbon Opportunity Assessment for the Snohomish Estuary: The Climate Benefits of Estuary Restoration*. Report by Environmental Science Associates, Western Washington University, EarthCorps, and Restore America's Estuaries. February 2014.

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The investments in Community activities focus resources and programs to better support the efforts of environmentally overburdened, underserved, and economically distressed communities. These efforts will proactively address endemic and emerging environmental challenges in ways that build a community's long-term sustainability. The EPA will deliver information and on-going support in ways that maximize alignment and leverage scarce resources to make a visible difference in communities as they address environmental challenges, especially those exacerbated by climate change.

### **Agency Priority Goals**

In FY 2016, the EPA will continue to build on progress under FY 2014-2015, Agency Priority Goals for the Water program that advance the agency priorities and the agency's Strategic Plan. The EPA's two Priority Goals to improve water quality are:

*Improve, restore, and maintain water quality by enhancing nonpoint source program leveraging, accountability, and on-the-ground effectiveness to address the nation's largest sources of pollution. By September 30, 2015, 100 percent of the states will have updated nonpoint source management programs that comport with the new Section 319 grant guidelines that will result in better targeting of resources through prioritization and increased coordination with USDA.*

*Improve public health protection for persons served by small drinking water systems, which account for more than 97% of public water systems in the U.S., by strengthening the technical, managerial, and financial capacity of those systems. By September 30, 2015, EPA will engage with an additional ten states (for a total of 30 states) and three tribes to improve small drinking water system capability to provide safe drinking water, an invaluable resource.*

Additional information on the EPA's Agency Priority Goals can be found at [www.performance.gov](http://www.performance.gov).

### **FY 2016 Activities**

The EPA will continue to emphasize watershed stewardship, watershed-based approaches, water efficiencies, and best practices. In addition, the EPA will continue to implement its core water programs to maximize efficiencies and environmental results.

**Objective 1: Protect Human Health.** *Achieve and maintain standards and guidelines protective of human health in drinking water supplies, fish, shellfish, and recreational waters and protect and sustainably manage drinking water resources.*

#### *Drinking Water*

To help achieve the agency's priority to protect America's waters, in FY 2016 the EPA will continue to implement its Drinking Water Strategy, an approach to expanding public health protection for drinking water. The EPA's goal is to streamline decision-making, expand protection under existing laws, and promote cost-effective new technologies to meet the needs of rural, urban and other water-stressed communities. The agency will focus on regulating groups of drinking water contaminants, improving water treatment technology and expanding communication with states, tribes and urban and rural communities.

In FY 2016, the EPA will continue to provide Public Water System Supervision (PWSS) grants to augment state and tribal efforts to assist water systems in meeting existing drinking water regulations and prepare for implementation of new regulations, including the Revised Total Coliform Rule. States and tribes will work to support systems to acquire and maintain basic implementation capabilities and to conduct sanitary surveys according to required schedules. These resources also will be used by states and tribes as they provide technical assistance and training to help meet the continued needs of the small water systems. The grants have been successful in helping public water systems achieve compliance with standards, as well as decreasing the number of small systems that have repeat health-based violations of standards. As of the end of FY 2014, 93 percent of the population served by community water systems (CWSs) received drinking water that met all applicable health-based drinking water standards, which exceeded the performance target of 92 percent.



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To help ensure water is safe to drink and to address the nation's aging drinking water infrastructure, \$1,186 million for the Drinking Water State Revolving Fund will support new infrastructure improvement projects for public drinking water systems in FY 2016 and beyond. Getting these funds to where they are most needed in a timely manner is important. In FY 2016, appropriated DWSRF funds will again be allocated to the states in accordance with each state's proportion of total drinking water infrastructure need based on the 2011 Needs Survey which was reported to Congress in April 2013<sup>6</sup>. The EPA also published data concerning the drinking water infrastructure needs of water systems serving tribes and Alaskan Native Villages as a special focus of this survey.

These funds have been utilized effectively by the states. Since FY 2006, the fund utilization rate<sup>7</sup> for the DWSRF has surpassed its performance target, and most recently in FY 2014, the DWSRF utilization rate of 92 percent exceeded the EPA's target of 89 percent. In concert with the states, the EPA will focus this affordable, flexible financial assistance to support utility compliance with safe drinking water standards. The EPA has requested a funding floor for assistance provided to Tribes, and will reserve the greater of \$20 million or 2% of appropriated funds for the Indian Tribes and Alaska Native Villages. The EPA also will work with utilities to promote technical, financial, and managerial capacity as a critical means to meeting infrastructure needs and enhancing program performance and efficiency.

The responsibility for communities and public water systems to continuously provide safe drinking water is a key component of the nation's health and well-being. The delivery of safe drinking water is often taken for granted and is extremely undervalued. More than 156,000 public water systems provide drinking water to the approximately 320 million persons in the U.S. More than 97% of these public water systems serve fewer than 10,000 persons. While most small systems consistently provide safe, reliable drinking water to their customers, many small systems are facing a number of significant challenges in their ability to achieve and maintain system sustainability. These challenges include aging infrastructure, increased regulatory requirements, workforce shortages/high-turnover, increasing costs, and declining rate bases.

The EPA is focusing attention to the needs of these small communities/systems while balancing current fiscal realities as the state grant and state assistance programs are implemented. In FY 2012, the EPA re-energized its small systems focus by working more closely with state programs to improve public water system sustainability and public health protection for persons served by small water systems as part of an Agency Priority Goal. During FY 2014-2015, the EPA built on its successful efforts to strengthen small system technical, managerial and financial capability through the implementation of the Capacity Development Program, the Operator Certification Program, the Public Water System Supervision state grant program and the Drinking Water State Revolving Fund. The Capacity Development Program establishes a framework within which states and water systems can work together to help these small systems achieve the Safe Drinking Water Act's (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 Drinking Water State Revolving Fund. Since the 1996 SDWA Amendments, states have implemented a variety of activities to assist small systems with their compliance challenges and enhance their technical, managerial, and financial capacity. In FY 2016, the EPA will continue to reinforce with states and tribes the concepts developed during implementation of the FY 2012-2013 and FY 2014-2015 drinking water Agency Priority Goal activities.

### *Fish Consumption*

The EPA continues to increase public awareness of the risks to human health associated with the consumption of fish contaminated with mercury, an effort directly linked to the agency's mission to protect human health. EPA analysis of data from the Centers for Disease Control and Prevention's (CDC's)

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<sup>6</sup> Drinking Water Infrastructure Needs Survey and Assessment. April 2013.  
[http://water.epa.gov/grants\\_funding/dwsrf/upload/epa816r13006.pdf](http://water.epa.gov/grants_funding/dwsrf/upload/epa816r13006.pdf)

<sup>7</sup> Utilization rate is the cumulative dollar amount of loan agreements divided by cumulative funds available for projects. Cumulative funds available include the federal capitalization grant portion and everything that is in the SRF (state match, interest payments, etc.).

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National Health and Nutrition Examination Survey (NHANES) show that the geometric mean of blood mercury levels decreased by 34 percent in women of childbearing age between the first survey cycle (1999 – 2000) and second survey cycle (2001-2002), and then remained fairly constant between 2003 and 2010. The study also found that there was a 65 percent decrease in the number of women of childbearing age with blood levels of mercury above the level of concern between the first and second survey cycles of NHANES. While the data do not indicate that women are consuming less fish, the analysis suggests that women have reduced their consumption of the types of fish that have higher mercury concentrations. Further information is available in the EPA study published in June 2013 entitled *Trends in Blood Mercury Concentrations and Fish Consumption among U.S. Women of Childbearing Age*.<sup>8</sup>

**Objective 2: Protect and Restore Watersheds and Aquatic Ecosystems:** *Protect, restore, and sustain the quality of rivers, lakes, streams, and wetlands on a watershed basis, and sustainably manage and protect coastal and ocean resources and ecosystems.*

### Clean Water

In FY 2016, the EPA will continue to collaborate with states and tribes to make progress toward the EPA's clean water goals. Programs for controlling nonpoint sources of pollution are a key to reducing the number of impaired waters nationwide. The programs provide a multi-faceted approach to the problem, using innovative development strategies to help leverage traditional tools. The EPA will support efforts of states, tribes, other federal agencies, and local communities to develop watershed-based plans to achieve water quality standards. Working with states, the revolving fund capitalization grants will help build, revive, and "green" our aging infrastructure. In FY 2016, funding in categorical grants for clean water programs will enable the EPA, states, and tribes to implement core clean water programs and promising innovations on a watershed basis to accelerate water quality improvements.

In FY 2016, the EPA will continually to forge and strengthen strategic partnerships with other federal agency programs, particular with the USDA's 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 2016, the EPA will partner with USDA to focus federal resources on agricultural sources of pollution in select watersheds in every state. As part of our joint work, in FY 2014, 174 priority watersheds

**Community Highlight: Salmon Falls, ME and NH**  
EPA participates in the national Source Water Collaborative, a group of 25 national organizations which in 2010 sponsored the Salmon Falls Watershed Collaborative in Maine and New Hampshire. Between 2012 and 2014, the Salmon Falls Collaborative leveraged support from USDA's Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentive Program (WHIP) to achieve the following:

- 5,919 private working lands were treated in the Salmon Falls river watershed
- 37 contracts were awarded to private landowners to implement conservation practices with USDA's Natural Resources Conservation Service (NRCS)
- 130 conservation practices were implemented

The land uses targeted for treatment in the Salmon Falls Watershed included cropland, forestland, pasture and hay land addressing many resource concerns including: erosion and sediment control, groundwater and surface water quality protection, grazing benefits, livestock water needs, nutrient management, healthy forests and invasive treatments, and fish and wildlife habitats.

<sup>8</sup><http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/upload/Trends-in-Blood-Mercury-Concentrations-and-Fish-Consumption-Among-U-S-Women-of-Childbearing-Age-NHANES-1999-2010.pdf>

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were selected in 51 states and areas for targeted USDA conservation investments. In FY 2016, the EPA will work with states to assess water quality progress from implemented conservation practices. Progress made under the FY 2014-2015 Agency Priority Goal is important for targeting Section 319 funds (along with state match and other funds) towards the most pressing nonpoint source problems.

Building on over 30 years of clean water successes, the EPA, in conjunction with states and tribes, will address the requirements of the Clean Water Act by focusing on two primary tools: Total Maximum Daily Loads<sup>9</sup> (TMDLs) and National Pollutant Discharge Elimination System (NPDES) permits, built upon scientifically sound water quality standards and technology-based pollutant discharge limits. In FY 2016, the CWA 303(d) Listing and TMDL Program will continue to engage with states to implement the new 10-year vision for the program. As part of this effort, the EPA will continue to encourage states to develop a process for setting priorities, and through the use of that process address impairments with TMDLs and other appropriate tools as expeditiously as practical. The EPA will work with states and other partners to develop and implement watershed plans to restore their impaired waters.

The EPA also will work with states and other partners to improve our ability to identify and protect healthy waters/watersheds, and to pursue integration and application of core program tools. An important part of restoring impaired waters is reliable and timely data. As part of an agency-wide effort for modernization, resources have been provided to accelerate implementation of electronic-reporting, which will minimize burden for data entry and error resolution, reduce effort in responding to public requests for data, establish consistent requirements for e-reporting across all states, and allow more timely access to NPDES program data in an electronic format for the EPA, states, regulated entities, and the public.

The EPA will continue to work with states to structure the permit program to better support comprehensive protection of water quality on a waterbody and a watershed basis. Progress has been steady in improving water quality conditions in impaired watersheds nationwide. Reductions in nutrient levels in sources of drinking water reduce treatment costs while strengthening public health protection. In 2008, there were only 60 watersheds that experienced improved water quality conditions, as identified by removal of one or more causes of impairment in 2002. By FY 2014, this number had risen to 411, exceeding the target of 408. Water quality conditions remain a significant challenge, with approximately 42,400 known impaired water bodies nationwide in January 2015. In FY 2016, the EPA will invest in a new approach for measuring local improvements in water quality, resulting in a more transparent and efficient measure of progress and facilitating cross-program integration. This approach will use the USGS National Hydrography Dataset Plus (NHDPlus) to calculate watershed area to describe previously impaired waters where actions are being implemented and are now attaining water quality standards.

In addition, in FY 2016, the EPA will focus on: promoting the use of green infrastructure and water quality-based effluent limits in stormwater permits; controlling discharges from concentrated animal feeding operations; and addressing issues of permitting for new waste streams, such as shale gas extraction and for steam electric power plants. To combat stormwater as a main contributor of nutrients and sediments, the agency issued a final 2012 NPDES general permit for stormwater discharges from large and small construction activities. The general permit strengthens requirements for stormwater discharges from, at minimum, eligible existing and new construction projects in all areas of the country where the EPA is the NPDES permitting authority.

The EPA budget includes \$1.116 billion in capitalization to the Clean Water State Revolving Fund (CWSRF). As of June 2014, the CWSRF has offered nearly 35,000 assistance agreements to local communities, providing over \$105 billion in affordable financing for wastewater infrastructure, nonpoint source pollution control, and estuary management projects.

In FY 2016, the agency requests a Tribal set-aside of two percent, or \$30 million, whichever is greatest, of the funds appropriated from the CWSRF. The agency requests the establishment of a funding floor for

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<sup>9</sup> For more information, visit: <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/index.cfm>.

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the Tribes. Resources will provide much needed assistance to these communities where sanitation infrastructure lags behind the rest of the country and may cause significant public health concerns.

The Section 106 Categorical State Grant Program supports prevention and control measures that improve water quality. In F Y 2016, the agency proposes an \$18.4 million increase for the Section 106 program over the FY 2015 Enacted Budget level. This increase is for states and tribes to implement water pollution control programs and strengthen their nutrient management efforts consistent with the EPA's 2011 Framework for state nutrient reduction.

Through the Monitoring and Assessment Partnership, the EPA will work with states to develop and apply innovative and efficient monitoring tools and techniques to optimize availability of high-quality data to support Clean Water Act program needs. This partnership also will expand the use of monitoring data and geospatial tools for water resource protection to set priorities and evaluate effectiveness of water protection. The EPA, states, and tribes will collaborate to conduct field sampling for the 2016 National Wetlands Condition Assessment. In FY 2016, the EPA and states will release the 2013/2014 National Rivers and Streams Assessment for partner and external peer review. The EPA and states will initiate data analysis of the National Coastal Condition Assessment 2015 report. Additionally, in FY 2016, the EPA/State Steering Committee for the National Lakes Assessment will be planning the third lakes survey which will be in the field in calendar year 2017.<sup>10</sup>

The EPA, in cooperation with federal, state and tribal governments and other stakeholders, will continue to make progress toward achieving the national goal of no net loss of wetlands under the Clean Water Act Section 404 regulatory program. In FY 2016, the agency is providing \$19.7 million for Wetlands Program Development Grants, including \$5 million for climate resilience efforts as mentioned below. In addition, in FY 2016, the EPA will be working with other federal and state partners to maximize the effectiveness of resources provided through the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act) and supporting the Natural Resource Damage Assessment associated with the Deepwater Horizon oil spill to restore the Gulf of Mexico.

Since 2002, approximately 1.4 million acres of habitat have been protected or restored within National Estuary Program study areas. The agency's FY 2016 budget requests \$27.3 million for National Estuaries Programs and Coastal Waterways that will enable the protection or restoration of one hundred thousand habitat acres.

In FY 2016, the agency will continue to assist communities, particularly underserved communities, to support local efforts to restore and protect the quality of their urban waters. The EPA will implement its Urban Waters program and will continue to co-lead the Urban Waters Federal Partnership. The Urban Water Federal Partnership will provide technical assistance to the 19 Partnership locations and will continue to align federal resources from the EPA, DOI, USDA and other partners to meet local needs more effectively and advance shared multi-agency priorities. For example, the partnership will help address storm water management and promote green infrastructure to improve water quality through identification and transfer of best practices and successful local approaches. The Partnership will continue to identify and champion innovative approaches to making the delivery of Federal resources to communities more effective and integrated.

As part of these efforts, the EPA will assist communities in restoring and revitalizing urban waterways and the surrounding land through partnerships with governmental, business, community organizations and other local partners. Areas of focus may include: water quality restoration as a driver for economic development, human health and related risk communication, climate resiliency efforts such as green infrastructure solutions to integrate water quality and community development goals, youth engagement, education and outreach, planning for sustainable financing, technical support, and training. In FY 2016, the EPA will support place-based work by providing small grants and targeted technical assistance to support innovative community-driven solutions that accelerate measurable improvements in water quality

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<sup>10</sup> National Water Quality Assessment Report. [http://www.epa.gov/waters/ir/about\\_integrated.html](http://www.epa.gov/waters/ir/about_integrated.html)

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and continuing to provide technical assistance and networking support through the EPA's Urban Waters Learning Network.

- Providing small grants and targeted technical assistance to support innovative community-driven solutions that accelerate measurable improvements in water quality. Projects may include: community greening and green infrastructure, community-driven water quality monitoring and data collection, and community planning and visioning.
- Continuing to provide technical assistance and networking support through the EPA's Urban Waters Learning Network, a peer-to-peer network of urban waters practitioners across the country. Resources developed through this network will be made available nationally, thus effectively up scaling EPA's activities with communities and leveraging the program's place-based efforts for greater national impact.

### *Climate Change- Management of Sustainable Resources*

Climate change contributes to changes in water quality and poses significant challenges to water resource managers. Impacts of climate change include too little water in some places and too much water in others, while some locations are subject to both of these conditions during different times of the year. Water cycle changes are expected to continue and will adversely affect energy production and use, human health, transportation, agriculture, and ecosystems. In 2012, the National Water Program published the second *National Water Program 2012 Strategy: Response to Climate Change*, which describes a set of long-term goals for the management of sustainable water resources for future generations in light of climate change and charts the key "building blocks" that will need to be taken to achieve those goals. It also reflects the wider context of climate change-related activity that is underway throughout the nation. The *2012 Strategy* is intended to be a roadmap to guide future programmatic planning.

WaterSense, Climate Ready Estuaries, Climate Ready Water Utilities, and Green Infrastructure are examples of programs that will help stakeholders adapt to climate change in FY 2016. The Climate Ready Water Utilities initiative will help water systems of all sizes integrate climate variability considerations into their long-range planning. Efforts to incorporate climate change considerations into key programs will help protect water quality and the nation's investment in drinking water and wastewater treatment infrastructure. In FY 2016, the EPA has requested an additional \$5 million for grants awarded competitively for efforts to increase climate resilience by protecting and enhancing wetlands.

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. Based on the number of water-conserving products shipped through the end of 2013 (the most recent year for which there is data), the program has contributed to cumulative savings in excess of 757 billion gallons of water – enough water to supply all the homes in the United States for 26 days – and \$14.2 billion in water, sewer, and energy bills. The energy savings associated with reducing the need to move, treat, and heat that water is equivalent to 37 MMTCO<sub>2</sub>E of greenhouse gas reductions.

### *Geographic Water Programs*

The Administration has expanded and enhanced numerous cross-agency efforts to promote collaboration and coordination among agencies, which include a suite of large aquatic ecosystem restoration efforts. Four prominent examples of cross-agency restoration efforts are the Puget Sound, the Great Lakes, the Chesapeake Bay, and the Gulf of Mexico. Working with its partners and stakeholders, the EPA implements special programs to protect and restore each of these unique natural resources.

The EPA's ecosystem protection programs encompass a wide range of approaches that address specific at-risk regional areas and larger categories of threatened systems, such as urban waters, estuaries, and wetlands. Locally generated pollution, combined with pollution carried by rivers and streams and through air deposition, can accumulate in these ecosystems and degrade them over time. The EPA and its federal partners, along with states, tribes, municipalities, and private parties, will continue efforts to restore the integrity of these waters.

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### *Puget Sound*

The Puget Sound program's FY 2016 budget request of \$30.0 million will allow the EPA to continue supporting efforts to protect and restore the Puget Sound by implementing the Puget Sound Action Agenda. The Action Agenda emphasizes three areas: shellfish, stormwater, and habitat. The goal is for the estuary to support balanced indigenous populations of shellfish, fish and wildlife, and the extensive list of recognized uses of the Puget Sound, as well as to meet obligations under federal tribal treaties.

In 2016, the Puget Sound program will focus federal resources to accelerate the protection and restoration of riparian areas that are important habitat for endangered salmon stocks. The EPA provides leadership for the Puget Sound Federal Caucus and co-chairs the overall federal effort to address Treaty Rights at Risk<sup>11</sup>. The EPA addresses its obligations under federal Tribal treaties by funding Puget Sound projects that support treaty-protected resources such as indigenous populations of shellfish, fish and other wildlife. The EPA's emphasis on these areas in implementing its actions in the Federal Habitat Plan and participating in the Tribal-Federal Habitat Forum demonstrate its commitment to Tribal concerns in Puget Sound. In 2016, the EPA will coordinate closely with the National Oceanic and Atmospheric Administration and USDA's Natural Resources Conservation Service to accelerate riparian protection and restoration. Additionally, the EPA will continue to provide leadership for the Puget Sound Federal Caucus, facilitating coordination of Puget Sound work among the larger group of federal agencies in the Puget Sound basin.

### *Great Lakes*

In FY 2016, \$250 million in funding for the EPA-led Great Lakes Restoration Initiative will address priority environmental issues (e.g., toxic substances, nonpoint source pollution, habitat degradation and loss, and invasive species) in the largest freshwater system in the world. This carefully coordinated interagency effort involves the cooperation of 16 federal agency partners and continues efforts under the second year of a new action plan. This effort has contributed to the removal of 42 Beneficial Use Impairments at 17 different Great Lakes Areas of Concern – four times the number of Beneficial Use Impairments removed in the preceding 22 years.

The EPA will continue progress towards public and environmental health through both federal projects and projects conducted in collaboration with states, tribes, municipalities, universities, and other organizations. The EPA will continue remediating and restoring Areas of Concern, preventing and controlling invasive species, protecting nearshore areas and addressing nonpoint sources of pollution, protecting and restoring habitats and species, and addressing other issues, such as implementing a science-based adaptive management framework and incorporating climate resiliency criteria in project selection processes.

The EPA will place a priority on: 1) cleaning up and de-listing Areas of Concern; 2) reducing phosphorus contributions from agricultural and urban lands that contribute to harmful algal blooms and other water quality impairments; and 3) invasive species prevention. Expected outcomes include completing management actions at additional Areas of Concern and delisting one or more Areas of Concern; reduction or control of terrestrial invasive species on an additional 10,000 acres; phosphorus reductions from targeting sources of excess nutrients in sub-watersheds of the western basin of Lake Erie, Saginaw Bay on Lake Huron, and Green Bay on Lake Michigan; and protection or restoration of 28,000 acres of Great Lakes habitats.

### *Chesapeake Bay*

The Chesapeake Bay Program is funded in FY 2016 at \$70 million which will allow the EPA-led interagency Federal Leadership Committee to continue to implement the President's Executive Order (EO) on Chesapeake Bay Protection and Restoration, to meet the EPA's broad responsibilities under Clean Water Act Section 117. Most of the EPA's direct efforts will focus on development and implementation of the management strategies under the new Bay Watershed Agreement, which was signed in June 2014 and which builds on previous coordination under the EO. The agreement establishes 10 goals and 29 outcomes for sustainable fisheries, water quality, vital habitats, climate change, toxic contaminants, and

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<sup>11</sup>For more information, visit: <http://nwifc.org/w/wp-content/uploads/downloads/2011/08/whitepaper628finalpdf.pdf>

## *Goal 2: Protecting America's Waters*

other areas consistent with the EO. The EPA and its federal partners will work with the Bay watershed jurisdictions to develop and implement management strategies for all of the outcomes. The EPA will also continue its oversight of the Chesapeake Bay Total Maximum Daily Load (TMDL) and its support for the Bay watershed jurisdictions as they implement their Watershed Implementation Plans (WIPs). The EPA will continue its close work with the jurisdictions and thousands of local governments by providing financial support and technical guidance to effectively implement the TMDL. The EPA also will continue implementation of a basin-wide Best Management Practice verification framework. In addition, the EPA will continue refining and improving the publicly available web-based accountability tools ChesapeakeStat and the Bay Tracking and Accounting System (BayTAS).

FY 2016 continued implementation of the compliance and enforcement strategy for the Bay watershed will target sources of pollution impairing the Bay in the watershed and airshed. The program met its FY 2014 targets for pollution controls for sediment and phosphorus, but not for nitrogen. By FY 2016, the program expects to achieve 45 percent of its goals for implementing nitrogen, phosphorus and sediment reduction actions to achieve final TMDL allocations (the FY 2010 baseline is 0 percent, and the long term goal is 100 percent goal achievement by 2025).

The EPA will continue its broad range of grant programs, and will prioritize funding for jurisdictions, local governments and watershed organizations based on their proven ability to reduce nutrient and sediment loads from key sectors such as urban development and agriculture. The EPA also is working to ensure that the states provide support to local governments for on the ground actions necessary to achieve the goals of the Bay TMDL. In FY 2016, the EPA will continue to provide assistance to Bay watershed jurisdictions working to improve the viability and integrity of their water quality offset and trading programs. Several of the Bay watershed jurisdictions have established or expanded water quality trading programs to support the goals of their WIPs and other milestones.

### *Gulf of Mexico Program*

The Gulf of Mexico Program's FY 2016 budget request of \$3.9 million will allow the EPA to continue its support for Gulf restoration work, such as improved water quality, habitat conservation and replenishment, environmental education/outreach and protection of coastal and marine resources. During FY 2016, funding will support (through the competitive federal process) the development and implementation of comprehensive, stakeholder-informed coastal improvement projects and tools. The focus will be projects and activities which directly support "community-based" restoration and enhancement of habitat, improvement of water quality, education on climate change and coastal resiliency issues, and critical environmental outreach and education opportunities for the general public. This program will also help to serve the underserved and under-represented communities of the Coast). The EPA will continue to coordinate with the U.S. Department of Agriculture, the U. S. Department of Commerce, other federal agencies, the Gulf States, and other partners to leverage resources toward projects within the Gulf of Mexico region and the Mississippi River Basin.

### ***Homeland Security***

In FY 2016, the EPA will carry out a national training program for water systems on recently completed guidance and electronic tools to design and deploy a Water Quality Surveillance and Response System. Deployment of a Water Quality Surveillance and Response System can allow a water utility to rapidly detect and respond to water quality problems like contamination in the distribution system in order to reduce public health and economic consequences. The EPA also will continue to support the Water Alliance for Threat Reduction to protect the nation's critical water infrastructure and oversee the national laboratory network that forms the Water Laboratory Alliance. The Water Laboratory Alliance enables the water sector to rapidly analyze a surge of laboratory samples during a significant contamination event.

In FY 2016, the EPA will continue to fulfill its obligations under Executive Order (EO) 13636 – Improving Critical Infrastructure Cybersecurity – which designates the EPA as the lead agency responsible for cybersecurity in the water sector. Recent assessments by the Department of Homeland Security have supported the widespread concern that the primary threat to the nation's critical infrastructure is cyber-attack on Industrial Control Systems (ICS). Both drinking water and wastewater systems rely heavily on



## Goal 2: Protecting America's Waters

ICS that were designed in many cases decades ago with little or no consideration of cyber security. Any interruption of a clean and safe water supply will erode public confidence and could produce significant public health and economic consequences.

In FY 2016, the EPA will continue to build its capacity to identify and respond to threats to the nation's critical water infrastructure. The EPA's wastewater and drinking water security efforts will continue to support the water sector by providing access to information-sharing tools and mechanisms that provide timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols, and laboratory capabilities for use in responding to a water contamination event.

### **Research**

The Safe and Sustainable Water Resources (SSWR) research program, funded at \$111.0 million in FY 2016, conducts research and provides the information and tools to EPA, water resource managers, and other decision makers at all levels of government. Research integrates social, economic, and environmental sciences to support the nation's range of growing water-use and ecological requirements.

The overarching watershed approach of the SSWR program's drinking water, wastewater, stormwater and ecosystems research recognizes the dynamic 'one water' hydrologic cycle. Integrated throughout the program are the goals of a sustainable environment, economy and society and the overarching drivers of changing climate, extreme events, land use, energy, agriculture and demographic scenarios.

In order to better achieve these goals in FY 2016 and beyond, the SSWR program will be reorganized around four interrelated topics:

- **Watershed Sustainability:** Gathering, synthesizing, and mapping the necessary environmental, economic, and social information of watersheds, from local to national scales, to determine the condition, future prospects, and restoration potential of the Nation's watersheds;
- **Nutrients and Harmful Algal Blooms (HABs):** Conducting EPA nitrogen and co-pollutant research efforts for multiple types of water bodies and coordinating across media (water, land and air) and various temporal and spatial scales, including support for developing numeric nutrient criteria, decision-support tools, and cost-effective approaches to nutrient reduction.;
- **Green Infrastructure and Stormwater:** Developing innovative tools, technologies, and strategies for managing water resources (including stormwater) today and over the long term as the climate and other conditions change; and
- **Water Systems:** Developing tools and technologies for the sustainable treatment of water and wastewater, and promoting the economic recovery of water, energy, and nutrient resources through innovative municipal water services and whole system assessment tools. This area focuses on small water systems and can be scaled up to larger systems.

Hydraulic fracturing for oil and gas has the potential to impact surface and subsurface water resources. EPA research will assist decision makers (Federal, state, tribal, and local; industry and energy sectors; and the public) in making environmentally-responsible energy extraction and processing decisions. In particular, research devoted to unconventional oil and gas activities, including hydraulic fracturing, will focus on understanding and preventing potential impacts on water resources (including drinking water).

To help achieve this goal, in FY 2016, the EPA will respond to peer review comments from the Agency's Science Advisory Board (SAB) in order to finalize the *Study of Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*. This report will provide a synthesis of the state of the science, including the results of research focused on whether hydraulic fracturing impacts drinking water resources, and if so, will identify the driving factors.

This work aligns with a Memorandum of Agreement (MOA) EPA signed in 2012 with DOE and DOI to develop a multi-agency program to focus on timely, policy relevant science to support sound policy decisions by state and Federal agencies for ensuring the prudent development of energy sources while



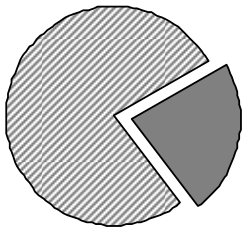
## Goal 2: Protecting America's Waters

protecting human health and the environment. Additional goals include minimizing potential risks in developing these resources, maximizing each agency's particular strength, and reducing interagency overlap. In particular, the EPA's Air, Climate and Energy (ACE) and the Safe and Sustainable Water (SSWR) research programs, will undertake a coordinated effort to study the potential impacts of hydraulic fracturing on air, water quality, and ecosystems. In FY 2016, the EPA will respond to peer review comments from the Agency's Science Advisory Board (SAB) in order to finalize the *Study of Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*. This report will provide a synthesis of the state of the science, including the results of research focused on whether hydraulic fracturing affects drinking water resources, and if so, will identify the driving factors.



**Goal 3: Cleaning Up Communities and Advancing Sustainable Development**

**Strategic Goal:** Clean up communities, advance sustainable development, and protect disproportionately impacted low-income and minority communities. Prevent releases of harmful substances and clean up and restore contaminated areas.



22.7% of Budget

**Resource Summary**

(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 Enacted	FY 2016 President's Budget	Difference FY 2015 EN to FY 2016 PresBud
1 - Promote Sustainable and Livable Communities	\$455,794	\$441,440	\$504,572	\$63,132
2 - Preserve Land	\$226,932	\$221,654	\$238,863	\$17,209
3 - Restore Land	\$1,018,489	\$1,025,551	\$1,089,006	\$63,455
4 - Strengthen Human Health and Environmental Protection in Indian Country	\$86,687	\$86,908	\$121,038	\$34,130
<b>Goal 3 Total</b>	<b>\$1,787,902</b>	<b>\$1,775,553</b>	<b>\$1,953,479</b>	<b>\$177,926</b>
<b>Workyears</b>	3,890	3,871	3,820	(51)

NOTE: Numbers may not add due to rounding.

**Introduction**

The EPA has made it a priority to collaborate closely with and effectively leverage efforts of other federal agencies, states, tribes and local communities to improve the health of American families and protect the environment one community at a time, all across the country. Resources in Goal 3 will expand the work we do to enhance the livability and economic vitality of neighborhoods in and around brownfields sites and take into consideration the impacts of our decisions on communities with an emphasis on disadvantaged, overburdened and underserved communities. Requested resources will support improvements in oversight of chemical storage and manufacturing facilities, carried out by the EPA in coordination with our interagency partners. In FY 2016, the EPA will continue to work to implement enhance the tracking and management of hazardous waste through modern electronic Manifest (e-Manifest) tracking system.

The EPA strives to protect and restore land, by cleaning up communities to create a safer environment for all Americans. Hazardous and non-hazardous wastes on land can migrate to air, groundwater and surface water, contaminating drinking water supplies, causing acute illnesses and chronic diseases, and threatening healthy ecosystems. Local land use and infrastructure investments also can generate unanticipated environmental consequences, such as increased stormwater runoff, loss of open space, and increased greenhouse gas emissions. By cleaning up contaminated sites and returning them to communities for reuse, assisting

### *Goal 3: Cleaning Up Communities and Advancing Sustainable Development*

communities to use existing infrastructure and plan for more efficient and livable communities, and encouraging the minimization of environmental impacts throughout the full life cycle of materials, EPA programs promote sustainability. The EPA leads efforts to preserve, restore, and protect our land, for both current and future generations. We will continue our work to prevent and reduce exposure to contaminants, accelerate the pace of cleanups, and reduce the environmental impacts associated with land use across the country. The EPA works collaboratively with international, state, Tribal, and local partners to achieve these aims. In addition, the EPA will continue to work with communities to address risks posed by intentional and accidental releases of hazardous substances into the environment and ensure that communities have an opportunity to participate in environmental decisions that affect them. Our efforts are guided by scientific data, tools, and research that alert us to emerging issues and inform decisions on managing materials and addressing contaminated properties.

In FY 2016, the EPA will partner with state and tribes to prevent and reduce exposure to contaminants. For example, improved compliance at high-risk oil and chemical facilities through inspections will help prevent exposure and lower the risk of accidents. For example, in June 2014, OSHA advised Region 2 of the EPA of a facility potentially out of compliance. The EPA inspected the facility and found significant corrosion at the facility which indicated that an unplanned release of ammonia was possibly imminent. The EPA immediately notified and worked closely with the local fire department, the EPA's emergency response program and company representatives to address and avert the potential dangerous release of ammonia.

The EPA and its key state, Tribal, and local partners, including affected communities, have matured in our collaborative approaches to identifying and cleaning up contaminated sites and putting these sites back into productive use for communities. The EPA's Integrated Cleanup Initiative (ICI) leverages the full range of the agency's land cleanup authorities to accelerate the pace of cleanups, address a greater number of contaminated sites, and put these sites back into productive use while protecting human health and the environment. The agency will continue to apply lessons learned which includes practices that better integrate the remedial design and remedial action phases of site cleanup.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) and the Resource Conservation and Recovery Act (RCRA) provide legal authority for the EPA's work to protect and restore the land. The agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites, allowing land to be returned to productive use. Under RCRA, the EPA works in partnership with states and tribes to address risks associated with processes that generate, recycle, transport, treat, store, or dispose of waste.

Many communities across the country regularly face risks posed by intentional and accidental releases of hazardous substances into the environment. Approximately 156 million people (roughly 51 percent of the U.S. population) live within 3 miles of a Superfund, RCRA Corrective Action, or Brownfields site that received EPA funding. This population is more likely to be minority, lower income, and linguistically isolated, and less likely to have a high school education than the U.S. population as a whole.<sup>1</sup> In FY 2016, the agency is investing over \$1.29 billion to continue to apply the most effective approaches to preserve and restore land by developing and implementing prevention programs, improving response capabilities, and maximizing the effectiveness of response and cleanup actions under RCRA, Superfund, Leaking Underground Storage Tanks (LUST) and other authorities. This strategy will help ensure that human health and the environment are protected and that land is returned to beneficial use in the most effective way.

In FY 2016, scientific data, research, and cost-effective tools will support addressing needed improvements to land cleanup programs (e.g., Superfund, Brownfields, RCRA Corrective Action, and LUST). The EPA is making significant progress in assuring that in advance of the full cleanup process, unacceptable human

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<sup>1</sup> Data collected includes: site information as of the end of FY11 from CERCLIS, RCRAInfo, and ACRES and census data from the 2007-2011 American Community Survey. Data from FY11 was chosen to correspond most closely to the census data in the 2007-2011 American Community Survey. In FY11 this included 1,393 Superfund sites, 3,689 RCRA Corrective Action sites and 11,568 Brownfields sites. This universe of sites is not the same universe as in Figure 6. A circular site boundary, equal to the site acreage, was modeled around the latitude/longitude for each site and then a 3 mile buffer ring was placed around the site boundary. Census data was then collected for each block group whose centroid fell within the three mile area.

### *Goal 3: Cleaning Up Communities and Advancing Sustainable Development*

exposures are eliminated or controlled as soon as possible. The RCRA Corrective Action and Superfund programs have made significant progress in stabilizing exposure, while longer-term cleanup moves forward. Across all cleanup programs, the EPA will continue to take action to address any unacceptable exposures and eliminate acute risks while also pursuing long-term, permanent cleanups. This approach is exemplified by the EPA's goal to control contaminated groundwater migration at 1,149 final and deleted NPL sites and non-NPL sites through Superfund Alternative Approach (SAA) agreements; and to control human exposures to contamination at 1,447 final and deleted NPL sites and non-NPL sites through SAA agreements by the end of FY 2016. As of the end of FY 2014, the EPA controlled human exposures and groundwater migration at 1,429 and 1,123 final and deleted NPL sites, respectively.

The EPA also will continue to implement its Community Engagement Initiative to ensure transparent and accessible decision-making processes, deliver information that communities can use to participate meaningfully, and help the EPA produce outcomes that are responsive to community perspectives and that ensure timely cleanup decisions.

Under federal environmental statutes, the EPA has responsibility for protecting human health and the environment in Indian country. Under the EPA's 1984 Indian Policy, the agency works with tribes on a government-to-government basis in recognition of the federal government's trust responsibility to federally-recognized tribes and that the "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."

#### **Major FY 2016 Changes**

The FY 2016 request funds top priority work under Goal 3, specifically focused on communities, accident prevention, hazardous substance cleanup, sustainability, and building a High Performing Environmental Protection Enterprise. Four key investments critical to advancing core program work and FY 2016 priorities are discussed below.

#### **Circuit Riders**

Many communities lack the capacity and expertise for environmental decision-making—for example, to build resilience to climate change into their decision-making—and have expressed a strong need for technical assistance. The EPA, however, does not have the resources to directly provide technical assistance to every community. In FY 2016, EPA will fund a cadre of non-EPA "circuit riders" in every region who can partner with the EPA Regional Offices to provide on-the-ground support to multiple communities through the provision of tools, training, technical assistance, data, and information.

#### *Regional Community Resource Coordinators:*

In FY 2016, the EPA will provide each EPA Regional Office FTE for cross-agency, multi-media Community Resource Coordinators to focus on climate, sustainability, and communities. These coordinators will help ensure that EPA resources and expertise meet community needs in a more holistic way. These coordinators also will work as a cross-agency, cross-goal, multi-media team to facilitate access for overburdened and vulnerable communities to leverage the wide range of EPA programmatic expertise and resources, in order to develop their own solutions.

#### *Multi-media GHG Mitigation:*

In addition, the EPA will direct a total of \$1.3 million to support the EPA's commitment in climate mitigation through waste program activities to reduce greenhouse gas emissions (GHG). The Air Program is making excellent progress addressing GHG emissions from power plants, vehicles, oil, and gas operations. However, further efforts are required to put the country on an emissions trajectory consistent with the President's long-term climate goals. This work will leverage synergies across climate mitigation activities in the Waste and Water programs to generate substantial GHG reductions, resulting in significant co-benefits in non-GHG reduction program areas (e.g., waste reduction, water savings, and job creation).

### *Goal 3: Cleaning Up Communities and Advancing Sustainable Development*

#### *Environmental Justice*

In FY 2016, the EPA will enhance its ability to engage communities to support their ability to be full partners in agency programs that make a visible difference in their community by working to provide holistic central mechanisms to support, assist, and engage with overburdened communities and vulnerable populations, including Tribal populations, rural communities and children. The goal is to provide communities with the support needed in order to leverage and work in conjunction with existing agency programs such as Brownfields, Urban Waters, Sustainable Communities, and Area Wide Planning, as well as with other federal programs. This approach is in keeping with the EJ program's overall emphasis of fostering greater collaboration and leveraging of resources across EPA and the rest of the federal family. Supporting the creation of such collaborations in vulnerable and overburdened communities will ensure that communities attain the necessary capacity and skills to fully benefit from specialized agency programs. With a focus on peer-to-peer learning and collaboration, the EPA will make critical use of the successful support and engagement that these programs have achieved, by leveraging those community experiences in a broader yet more focused manner. This approach is also consistent with feedback received through discussions with community leaders. Within the EJ program, the agency will redirect \$5.0 million to build community capacity and will provide \$1.0 million for technical assistance and training to overburdened and vulnerable communities for technical assistance and training on how to use air and water sensors.

#### **Agency Priority Goals**

As part of the development of EPA's FY 2014-2018 Strategic Plan, the EPA established FY 2014-2015 Agency Priority Goals (APGs). During FY 2015, the agency will establish the next round of APGs for FY 2016-2017. The APG that supports Goal 3 is:

Clean up contaminated sites to enhance the livability and economic vitality of communities. By September 30, 2015, an additional 18,970 sites will be made ready for anticipated use protecting Americans and the environment one community at a time.

All of OSWER's cleanup programs (Superfund, RCRA Corrective Action, Brownfields, and LUST) contribute to this APG and take positive action to protect human health and the environment through the cleanup and revitalization of contaminated properties.

Additional information on the EPA's APGs can be found at [www.performance.gov](http://www.performance.gov).

#### **FY 2016 Activities**

In FY 2016, the EPA will work to preserve and restore the nation's land by ensuring proper management of waste and petroleum products, reducing waste generation, increasing recycling and by supporting its cleanup programs and oversight of oil and chemical facilities. These efforts are integrated with the agency's efforts to promote sustainable and livable communities. Work under Goal 3 supports four objectives: 1) Promote Sustainable and Livable Communities, 2) Preserve Land; 3) Restore Land; and 4) Strengthen Human Health and Environmental Protection in Indian Country.

***Objective 1: Promote Sustainable and Livable Communities.*** Support sustainable, resilient, and livable communities by working with local, state, Tribal, and federal partners to promote smart growth, emergency preparedness and recovery planning, redevelopment and reuse of contaminated and formerly contaminated sites, and the equitable distribution of environmental benefits.

The EPA supports the goals of urban, suburban and rural communities to grow in ways that improve the environment, human health and quality of life for their residents. With the support of partners across all levels of government, communities can grow in ways that also strengthen the economy, help them adapt to climate change, improve their resiliency to disasters, use public resources more efficiently, revitalize neighborhoods, and improve access to jobs and amenities. By making sustainable infrastructure investments, communities can successfully build innovative and functional systems on neighborhood streets and sidewalks to deal with the run-off from stormwater and still provide easy access for pedestrians, bicyclists, on-street parking and other beneficial uses. Under local planning and zoning codes that account for the environmental impacts of

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development, the private sector can more easily construct market-ready “green” buildings serving a range of housing needs. Communities also can benefit from tools, technology and research that better engage citizens and inform local decision making to support smart and sustainable growth.

In FY 2016, the EPA will continue to use several approaches to promote sustainable, healthier communities and protect vulnerable populations and disproportionately impacted low-income, minority, and Tribal communities. The agency is concerned about threats to sensitive populations, such as children, the elderly, and individuals with chronic diseases.

#### *Brownfields*

The EPA’s Brownfields program is funded at nearly \$189 million, contributing significantly to the agency’s Smart Growth activities. This program supports states, local communities, and Tribes in their efforts to assess and cleanup sites that may be contaminated within their jurisdiction and return them to productive reuse. The Brownfields program also helps address climate change by ensuring that potential impacts are taken fully into account when brownfield cleanups are planned and implemented. The Brownfields program works closely with communities like Waterbury, Connecticut, where grants to redevelop brownfields resulted in the completion of a new public park, an urban garden and greenhouse facility, and the creation of an industrial commons which brought new manufacturing jobs into the city. Many of these projects in EPA’s Region 1 have also helped employ local workers trained through the EPA’s Brownfields job training program.

In FY 2016, the EPA plans to award approximately 151 assessment grants, and 18 Environmental Workforce Development and Job Training grants. The agency will award 64 direct cleanup cooperative agreements of up to \$200 thousand per site to eligible entities and non-profits, as authorized under CERCLA 104(k)(3). The EPA will continue to focus on area-wide planning (AWP) grants and provide technical assistance through Targeted Brownfield Assessments, cooperative agreements, interagency agreements, and/or contracts to support area wide planning activities. The FY 2016 funding request includes an estimated \$5.1 million to perform Targeted Brownfields Assessments for 51 communities. These grants support the EPA’s targeted effort to achieve 1,200 assessments each year and, in FY 2014, the EPA surpassed its goal, completing 1,659 assessments.

Funding also will support assessment and cleanup of abandoned underground storage tanks (USTs) and other petroleum contamination found on brownfields properties (estimated at \$27.5 million) for up to approximately ten Targeted Brownfields Assessments and approximately 132 Brownfields assessment, Revolving Loan Fund and cleanup cooperative agreements, as authorized under CERCLA 104(k)(2) and CERCLA 104(k)(3). Funding also will support additional training, research, technical assistance, and support for Area Wide Planning communities through cooperative agreements, interagency agreements, and direct services from contractors (estimated at \$5.4 million), as authorized under CERCLA 104(k)(6).

The next grant competition for Revolving Loan Fund (RLF) cooperative agreements will occur in FY 2016. Funding will support the capitalization of approximately six revolving loan fund cooperative agreements (estimated at \$4.9 million) to enable eligible entities to make loans and sub-grants to clean up brownfield properties. The EPA will also provide an estimated \$7.8 million in supplemental funding to existing high performing RLF recipients.

#### *Chemical Facility Safety*

In FY 2016, the EPA is providing \$27.8 million for the State and Local Prevention and Preparedness program, to support efforts to improve chemical facility safety through stakeholder outreach, emergency planning assistance, high-risk chemical facility inspections, and other activities related to the President’s Executive Order on Improving Chemical Facility Safety and Security<sup>2</sup>. There is a critical need for the agency to continue efforts to prevent and respond to accidental releases of harmful substances by developing clear authorities and training personnel. Accidents reported to the EPA since 2005 by the current universe of Risk Management Program facilities have resulted in approximately 60 worker and public deaths, over 1,300

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<sup>2</sup>See, Executive Order 13650: Improving Chemical Facility Safety and Security issued August 1, 2013 and Actions to Improve Chemical Facility Safety and Security – a Shared Commitment report issued May 2014.

### *Goal 3: Cleaning Up Communities and Advancing Sustainable Development*

injuries, nearly 200 thousand people sheltered in place, and more than \$1.6 billion in on-site and off-site damages. States and communities often lack the capacity needed to prepare for and/or respond to these emergencies or to prevent them from happening in the first place. The EPA's Region 2 worked in collaboration with states and tribes to develop standard operating procedures for a unified federal, state, and local approach for identifying and responding to risks at chemical facilities and a plan to improve operational coordination. These procedures are now being used as a model for all other of the EPA's Regional Offices. The increased funding level requested for the State and Local Prevention and Preparedness program will build off of these efforts and provide further avenues and opportunities to assist communities and bring together a variety of stakeholders to improve operational safety and response capabilities.

#### *Smart Growth*

The Smart Growth program helps community and government leaders protect the environment and public health, build the economy, and improve the quality of people's everyday lives by making smart growth and sustainable design practices commonplace. Also, through the Partnership for Sustainable Communities, in its fifth year, EPA's Smart Growth program works with the U.S. Department of Transportation (DOT) and the U.S. Department of Housing and Urban Development (HUD) to align housing, transportation, and infrastructure investments and policies, and build capacity in communities to grow in a more sustainable and resilient manner. The agency's Smart Growth program works across the EPA and with other federal agencies to help communities strengthen their economies and protect the environment through use of resilient, and sustainable design approaches. This program focuses on streamlining, concentrating, and leveraging state and federal assistance in urban, suburban, and rural communities that offer the greatest opportunity for development that will deliver environmental and economic benefits, and offer protection against the impacts of climate change.

In FY 2016, the Smart Growth program will continue work to help community and government leaders meet environmental standards through sustainable community and building development, design, policies, and infrastructure investment strategies. The program does this by: providing technical assistance to states, Regional Offices, and local and Tribal governments; conducting research and developing tools that help communities see the connection between development and the environment, the economy, and public health; and, engaging, leveraging and aligning community-based activities and allotments with other federal agencies. The program will continue to innovate and use new mechanisms to address the growing demand from communities for more direct technical assistance, including in rural areas, in areas that are disadvantaged, or in areas that have been adversely affected by contamination and environmental degradation.

#### *Environmental Justice*

The EPA is committed to fostering public health in communities disproportionately burdened by pollution by integrating and addressing issues of environmental justice (EJ) in the EPA's programs and policies as part of its day-to-day business. The EPA's EJ program promotes accountability for compliance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The EPA's program offices implement the EPA's strategic plan on Environmental Justice, Plan EJ 2014 and its successor plan which will be finalized in 2015.<sup>3</sup> The EJ program facilitates this implementation by: (1) supporting and promoting the agency's efforts to address environmental justice issues; (2) supporting the EPA's outreach to other federal agencies through the interagency working group on environmental justice; and, (3) promoting opportunities for communities to be heard and meaningfully engage with the federal government on environmental justice issues. In FY 2016, EPA is requesting \$6.0 million to provide overburdened and vulnerable communities to build capacity and to provide technical assistance and training to help address local environmental and public health issues. In FY 2016, the proposed budget for Environmental Justice is \$14.6 million.

**Objective 2: Preserve Land.** *Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.*

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<sup>3</sup> Plan EJ 2014 can be found at <http://www.epa.gov/compliance/environmentaljustice/plan-ej/index.html>



### *Goal 3: Cleaning Up Communities and Advancing Sustainable Development*

#### *RCRA Waste Management*

The FY 2016 budget provides \$70.8 million to the RCRA Waste Management program. The RCRA program is critical to comprehensive and protective management of solid and hazardous materials for the entire lifecycle. Resources for state implementation are provided through the Hazardous Waste Financial Assistance categorical grant. In FY 2016, RCRA permits for approximately 20,000 hazardous waste units (such as incinerators and landfills) at 6,600 treatment, storage, and disposal facilities permits will be issued, updated or maintained. The EPA provides leadership, work-sharing, and support to the states and territories authorized to implement the permitting program and directly implements the entire RCRA program in Iowa and Alaska.<sup>4</sup> The EPA is facing an increasing amount of implementation support responsibility at the request of states, including addressing complex regulatory and statutory interpretation issues. Requests for this type of support are expected to continue through FY 2016. The EPA's long-term goal is to ensure 500 additional facilities receive new or updated controls, which is described in the Agency's FY 2014–2018 Strategic Plan. In FY 2014, the EPA completed 129 accomplishments and since FY 2009, due to EPA's work, 745 facilities received new or updated controls.

The agency is bolstering the RCRA Tribal program by directing a total of \$3 million in extramural funds to support and advance two of the agency's priorities - Making a Visible Difference in Communities across the Country and Launching a New Era of State, Tribal and Local Partnerships. This shift will be accompanied by the introduction of a new RCRA performance measure of EPA technical assistance provided to tribes.

The agency also will support national polychlorinated biphenyl (PCB) cleanup and disposal activities by: assessing emerging technologies and issuing approvals (no states can be authorized for PCBs); and evaluating PCB wastes against the criteria specified in the Toxic Substance Control Act (TSCA). This effort will be tracked by a performance measure that was implemented in FY 2014 to track all approvals (i.e., cleanup, storage and disposal activities) issued by the EPA under TSCA. The EPA estimates approximately 20 disposal and storage approvals and 130 cleanup approvals are issued per year. The annual target for both FY 2015 and 2016 for the comprehensive measure for cleanups, disposal, and storage activities is 200. The EPA issued 927 approvals between FY 2009 and FY 2014.

#### *Hazardous Waste Electronic Manifest*

On October 5, 2012, the President signed the Hazardous Waste Electronic Manifest Establishment Act, requiring the EPA to develop and maintain a hazardous waste electronic manifest system. The system will be designed to, among other functions, assemble and maintain the information contained in the estimated five million forms accompanying hazardous waste shipments across the nation. In FY 2013, the EPA initiated the effort to develop a program that provided for the submission of information electronically, as well as in paper form. This commitment at the federal level will significantly reduce the time and costs for state regulators and regulated entities associated with submitting, maintaining, processing, and publishing data from hazardous waste manifests. When fully implemented, the electronic hazardous waste manifest (e-Manifest) program will reduce the reporting burden for firms regulated under RCRA's hazardous waste provisions by approximately \$75 million annually.

In FY 2016, the EPA is providing a total of \$7.8 million within the RCRA Waste Management program for the e-Manifest account, to continue work on the e-Manifest system. This increase in contract funding is necessary to keep on schedule for system completion. This funding will allow development of the e-Manifest IT system to continue during FY 2016 in order to produce the system scheduled for completion in FY 2018. In FY 2016, the EPA plans to perform the following key activities:

Continue the development of the e-Manifest IT system using an agile strategy that involves the rollout testing of key system components as they are developed;

Complete the proposed User Fee rule in mid-FY 2016, including the economic models supporting this rule;

- Analyze and select the accounting and financial reporting structures needed to collect and manage user fees;
- Establish the e-Manifest Advisory Board, consisting of state and industry stakeholders and IT experts, to provide input on system performance and user fee adjustments; and

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<sup>4</sup> <http://www.epa.gov/wastes/hazard/tsd/permit/pgprprpt.htm>

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- Coordinate with the agency's E-Enterprise effort to incorporate relevant concepts, approaches, and tools during system development. E-Manifest remains a key component of the E-Enterprise business model.

In 2014, the EPA completed the regulation that authorizes the electronic transmittal of manifests, began work under a new contract for development of the technical architecture of the system, and began work on the user fee rule. Once this system is in place, the legislation provides that fees collected through the program will be used to fund the operation of the program and reimburse system development costs.

#### *Sustainable Materials Management (SMM)*

In FY 2016, the EPA will continue to advance SMM practices and a cradle-to-cradle perspective representing an important emphasis shift from waste management to materials management. The agency's approach to SMM integrates the safe reuse of materials with economic opportunity. In FY 2016, the EPA will utilize SMM to offset the use of virgin resources by 9,450,000 tons of materials and products. The target for FY 2015 was increased from previous years due to results realized through the new SMM programs and improvements in recovery reported in FY 2012 where 9,002,588 tons were offset. In FY 2016, the EPA will continue to promote the SMM approach in high priority areas (e.g., Sustainable Food Management, Used Electronics, and Federal Government), which are selected based on an analysis of opportunities for reducing environmental impacts in *Sustainable Materials Management: The Road Ahead*.<sup>5</sup> In FY 2016, the EPA will continue to lead by example, and will help other federal agencies adopt SMM approaches and promote the reduction of greenhouse gas emissions, which furthers the goals of Executive Order 13514 ("Federal Leadership in Environmental, Energy, and Economic Performance"), and also save money. For example, the EPA estimates that the national implementation of the Federal Green Challenge has saved the taxpayers more than \$10 million by the end of FY 2014. The EPA also will explore the application of the SMM approach into other high priority sectors, based on lessons learned from the first two years of the national SMM program and re-evaluation of *The Road Ahead*.

In FY 2016, the EPA proposes to provide Regional Offices with five additional FTE in the waste program to support multi-media Community Resource Coordinators that will partner with states, tribes, and local governments to strengthen capacity to adapt to a changing climate, increase resiliency in communities, and increase collaboration. In addition, the EPA will increase extramural funding to support the EPA's work in climate mitigation through waste program activities to reduce greenhouse gas emissions (GHG). These funds can be used to focus on: increasing the recycling rates for containers and packaging; enhancing and expanding results-driven materials recovery programs; working with the public and private sectors to provide funding to assist state and local governments and NGOs focused on materials recovery infrastructure development and behavior change; and providing technical assistance to recycling programs.

#### *LUST Prevention*

There is a strong relationship between LUST clean up success and reducing the number of new releases through the prevention program. Since 2007, the EPA has placed an increased emphasis on monitoring compliance through increased frequency of inspections and other Energy Policy Act (EPAct) provisions. During this time, compliance rates have increased by 6.5 percent and there has been a significant decrease in new confirmed releases. The continued reduction in confirmed releases will remain a critical component in backlog reduction (which is at the lowest level since 1990), but maintaining cleanup progress is essential as well. In FY 2014, the EPA increased to 72.5 percent the number of UST facilities that were in significant operational compliance with leak prevention and detection requirements. The collaboration between the EPA and states and tribes contributes to this success and supports the cross-agency strategy for A New Era of State, Local, Tribal, and International Partnerships.

In FY 2016, the EPA will provide \$28.9 million to continue assisting states in complying with release prevention activities authorized by the EPAct. States rely primarily on federally funded assistance agreements to maintain inspection frequency and ensure compliance which will help prevent future confirmed releases. States may use money from LUST assistance agreements for inspections, other

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<sup>5</sup> U.S. EPA OSWER ORCR. Sustainable Materials Management: The Road Ahead. June 2009  
<http://www.epa.gov/epawaste/conserva/smm/pdf/vision2.pdf>.

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release prevention and compliance assurance activities for federally-regulated USTs, and enforcement activities related to release prevention.

**Objective 3: Restore Land.** *Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse.*

#### *Land Cleanup and Revitalization*

In addition to promoting sustainable and livable communities, the EPA's cleanup programs (e.g., Superfund Remedial, Superfund Federal Facilities Response, Superfund Emergency Response and Removal, RCRA Corrective Action, Brownfields, the Toxic Substances Control Act, PCB Cleanup and Disposal, and LUST Cooperative Agreements) and its partners are taking proactive steps to facilitate the cleanup and revitalization of contaminated properties. To support the Land Revitalization Initiative, in 2004 the EPA created the Land Revitalization Agenda<sup>6</sup> to integrate reuse into EPA's cleanup programs, establish partnerships, and help make land revitalization part of EPA's organizational culture.

Superfund properties are often reused as commercial facilities, retail centers, government offices, residential areas, industrial and manufacturing operations, and parks and recreational areas. In the EPA's Region 4, on-site businesses and organizations on current and former Superfund sites provide over 6,200 jobs and contribute an estimated \$334 million in annual employment income for residents across the Southeast. Restored on-site properties in Region 4 generate about \$4.4 million in annual property tax revenues for local governments.

In FY 2016, the agency will continue to help communities clean up and revitalize these once productive properties by: removing contamination; helping limit urban sprawl; fostering ecologic habitat enhancements; enabling economic development; taking advantage of existing infrastructure; and maintaining or improving quality of life. There are multiple benefits associated with cleaning up contaminated sites: reducing mortality and morbidity risk; preventing and reducing human exposure to contaminants; making land available for commercial, residential, industrial, or recreational reuse; and promoting community economic development. A 2011 study suggests that Superfund cleanups reduce the incidence of congenital anomalies in infants by roughly 20-25 percent to mothers living within 2,000 meters of a site.<sup>7</sup> A 2013 study found that when sites are cleaned up and deleted from the National Priorities List (NPL), properties within three miles of the sites experience an 18.6 to 24.5 percent increase in value.<sup>8</sup>

A cumulative total of 1,707 sites have been listed on the Superfund National Priorities List (NPL), including 385 which have now been deleted. Sites are placed on the NPL when the presence of contamination, often from complex chemical mixtures of hazardous substances, has impacted groundwater, surface water, and/or soil. The precise impact of many contaminant mixtures on human health remains uncertain; however, substances commonly found at Superfund sites have been linked to a variety of human health problems, such as birth defects, infertility, cancer, and changes in neurobehavioral functions. By the end of FY 2016, the agency plans to achieve control of all identified unacceptable human exposures at 18 additional sites (compared to FY 2014 accomplishments), bringing the program's cumulative total of Human Exposure Under Control (HEUC) sites to 1,447. Additionally, the agency expects to achieve Groundwater Migration Under Control (GMUC) at 26 additional sites by the end of FY 2016 (compared to FY 2014 accomplishments), bringing the program's cumulative total to 1,149 sites.

The FY 2016 budget provides \$190.7 million for the Superfund Emergency Response and Removal program. The agency will continue to support all emergency actions and focus on encouraging viable Potentially Responsible Parties (PRPs), when available, to conduct removal actions. In FY 2016, the EPA

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<sup>6</sup> Additional information on this agenda can be found on [http://www.epa.gov/landrevitalization/agenda\\_full.htm](http://www.epa.gov/landrevitalization/agenda_full.htm)

<sup>7</sup> Currie, Janet; Michael Greenstone, and Enrico Moretti. 2011. "Superfund Cleanups and Infant Health." *American Economic Review*, 101(3): 435-41.

<sup>8</sup> S. Gamper-Rabindran, C. Timmins. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," *Journal of Environmental Economics and Management*.

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will complete or oversee a total of 275 Superfund-lead and PRP-lead removal actions (including voluntary, Administrative Order on Consent, and Unilateral Administrative Order actions).

The Superfund Remedial program is funded at \$539.6 million in FY 2016. The agency will continue to give priority to completing projects at various stages in the response process, such as investigation, remedial design, and remedy construction. This strategy will help support community revitalization and economic redevelopment and will provide funding to initiate cleanup construction work at several construction projects. The targets for remedial action completions, human exposure under control, groundwater migration under control and site-wide ready for anticipated use will remain at FY 2015 levels at 105, 9, 13, and 45 respectively.

#### *RCRA Corrective Action*

The FY 2016 budget provides \$37 million for the RCRA Corrective Action program. The EPA works in partnership with states, having authorized 44 states and territories to directly implement the corrective action program.<sup>9</sup> Resources for state implementation are provided through Hazardous Waste Financial Assistance categorical grants. This program is responsible for overseeing and managing cleanups that protect human health and the environment at active RCRA sites. The agency provides leadership and support to its state partners and serves as lead regulator at a significant, and increasing, number of facilities. States have been challenged in the cleanup area due to downsizing and are looking to the federal program for assistance. As a result and at the request of states, the EPA has resumed, where resources allow, work previously agreed to by states under work-sharing agreements. This trend has been increasing, particularly for sites that have complex issues<sup>10</sup> or for more specialized tasks such as ecological risk assessments.

Through its RCRA Corrective Action program, the EPA and its state partners will issue, update, or maintain RCRA permits for 3,779 hazardous waste facilities. The facilities are a subset of approximately 6,000 sites with corrective action obligations and include some of the most highly contaminated, technically challenging, and potentially threatening sites the EPA confronts in any of its cleanup programs.<sup>11</sup> As of the end of FY 2014, there remains a significant workload to be addressed. Only 25 percent of the 3,779 facilities have reached the end goal of completing cleanup, so this leaves over 2,800 facilities still needing oversight and technical support to reach their final goal of completing site-wide cleanup objectives. Through FY 2014, the EPA controlled human exposures and groundwater migration at 87.3 and 79 percent of RCRA corrective action facilities respectively. A critical aspect of the program is to implement final remedies and in Region 3 over 40 remedies were implemented, enabling 6,500 acres to be ready for reuse. The sites are now being used for a new 22-story office tower, a casino and a potential multi-billion dollar economic development for the Sparrows Point facility.

In FY 2016, the EPA will focus resources on those sites that present the highest risk to human health and the environment and implement actions to end or reduce these threats. The EPA will also place additional focus on identifying facilities where the corrective action process can be considered completed (i.e., where cleanup performance standards have been met, or no further cleanup action is necessary). These activities will be consistent with the programmatic response developed by the agency after a 2011 GAO report on the RCRA corrective action program, which also is reflected in revisions to targets for three RCRA Corrective Action performance measures.

#### *LUST Cleanup*

The EPA's goal is to prevent future releases of wastes in the environment. Accidents can happen but proper prevention leads to fewer and fewer releases. In FY 2016, the UST program will primarily focus on: inspections; technical assistance; financial assurance mechanisms; safe transition to alternative fuels;

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<sup>9</sup> State implementation of the CA Program is funded through the STAG (Program Project 11) and matching State contributions.

<sup>10</sup> For example, vapor intrusion, wetlands contamination or extensive groundwater issues.

<sup>11</sup> There are additional facilities that have corrective action obligations that the EPA does not track under GPRA, as they are typically smaller, less significant facilities or sites. The EPA recognizes that the total universe of such facilities or sites "subject to" corrective action universe is between five and six thousand facilities or sites.

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implementation in Indian country; bringing petroleum brownfields properties into productive use, and implementing the revised UST regulations.

The LUST program has achieved significant success in closing releases since the beginning of the program. End of year FY 2014 data show that, of the approximately 521,000 releases reported since the beginning of the UST program in 1988, 447,323 (or 85.8 percent) have been cleaned up. This means approximately 74,000 releases remain that have not reached cleanup completion. The LUST program continues to make progress decreasing the overall backlog; however, the pace of cleanups is declining. In FY 2014, the program completed 10,393 LUST cleanups. Achieving these cleanup rates in the future will be more challenging due to the complexity of remaining sites, an increased state workload, a decrease in available state resources and the increasing costs of cleanups. In FY 2011, the LUST program completed a study of its cleanup backlog. The EPA's backlog study helped identify potential strategies to address the remaining UST releases<sup>12</sup>. The EPA is working with states to develop and implement specific strategies and activities applicable to their particular sites to reduce the UST releases remaining to be cleaned up.

#### *Oil Spill Prevention*

The discharge of oil into U.S. waters can threaten human health, cause severe environmental damage, and create financial loss to businesses and the public. The Oil Spill program helps protect U.S. waters by effectively preventing, preparing for, responding to, and monitoring oil spills. The EPA serves as the lead responder for cleanup of all inland zone spills, including transportation-related spills from pipelines, trucks, and other transportation systems, and provides technical assistance and support to the U.S. Coast Guard for coastal and maritime oil spills. In FY 2016, the EPA will continue to focus efforts on oil spill prevention, preparedness, compliance assistance, and enforcement activities associated with the more than 600 thousand non-transportation-related oil storage facilities that the EPA regulates through its Spill Prevention Control and Countermeasure (SPCC) Program. In addition, the agency will finalize development and begin implementation of the National Oil Database including identifying requirements for electronic submission of Facility Response Plans (FRP) in order to create reporting efficiencies for the agency, states, local government and industry.

In FY 2016, the EPA is providing a total of \$18.5 million for the Oil Spill Prevention, Preparedness and Response program. The EPA will perform inspections of regulated high-risk oil facilities to better implement prevention approaches and to bring 60 percent of SPCC and FRP inspected facilities found to be non-compliant during the FY 2010 through FY 2015 inspection cycle into compliance. The EPA will emphasize emergency preparedness, particularly through the use of unannounced drills and exercises, to ensure facilities and responders can effectively implement response plans. In FY 2014, the EPA was able to bring 79 percent of FRP and 72 percent of SPCC facilities into compliance due to the development of improved guidance and procedures. The program will focus resources on bringing non-compliant facilities into compliance.

#### *Homeland Security*

The EPA's Homeland Security work is an important component of the agency's prevention, protection, and response activities. The FY 2016 budget submission includes \$31.5 million to: maintain its capability to respond effectively to incidents that may involve harmful chemical, biological, and radiological (CBR) substances; maintain the Environmental Response Laboratory Network (ERLN); develop and maintain agency expertise and operational readiness for all phases of consequential management following a CBR incident, specifically environmental characterization, decontamination, laboratory analyses and clearance; maintain the Emergency Management Portal (EMP); and conduct CBR training for agency responders to improve CBR preparedness.

***Objective 4: Strengthen Human Health and Environmental Protection in Indian Country. Directly implement federal environmental programs in Indian country and support federal program delegation to***

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<sup>12</sup> For more information, please see *The National LUST Cleanup Backlog: A Study of Opportunities* at <http://www.epa.gov/swerust1/cat/backlog.html>

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*tribes. Provide tribes with technical assistance and support capacity development for the establishment and implementation of sustainable environmental programs in Indian country.*

Few tribes have sought federal environmental program implementation authorities. Small and understaffed Tribal environmental departments, a lack of quality baseline data, and the nuances of Indian law all present challenges to greater environmental protection in Indian Country. The EPA Tribal General Assistance Program (GAP) is the primary resource available to Tribes to assist with capacity building and the development of environmental protection programs in Indian Country. In 2016, the EPA will increase significantly its support for environmental protection in Indian Country by providing \$96 million under the Tribal GAP, a \$31 million increase from 2015. The increased investment in Tribal environmental protection addresses long-standing challenges to recruit and retain qualified environmental professionals to remote locations in Indian Country, and recognizes the need for increased resources as Tribes approach the implementation of environmental regulatory programs.

Tribal GAP funding enables Tribal governments to recruit committed people to help build environmental programs. Examples of activities eligible for funding include conducting environmental education, performing assessments of indoor air quality or household pesticide usage, developing media-specific (e.g., solid waste, air, water) environmental protection plans, drafting environmental regulations, and assessing baseline environmental conditions.

The EPA will continue to support the success of the Tribal GAP by continuing to implement new Tribal GAP guidance and indicators, working with Tribes to complete long-range EPA-Tribal Environmental Plans (ETEP) to serve as the basis for shorter-term Tribal GAP work plans, and developing new performance measures to better track the effectiveness of EPA's technical assistance and other support to Tribes as well as to monitor the progress of Tribes to develop their own environmental programs. The magnitude of Tribal environmental and human health challenges reinforces the importance of the EPA's commitment to maintaining strong environmental protections in Indian Country.

The EPA also works under two important Tribal infrastructure Memoranda of Understandings (MOU) among five federal agencies<sup>13</sup>. The EPA, the Department of the Interior, the Department of Health and Human Services, the Department of Agriculture, and the Department of Housing and Urban Development work as partners to improve infrastructure on Tribal lands and currently focus efforts on providing access to safe drinking water and basic wastewater facilities to tribes.

The first, or umbrella MOU, promotes coordination among federal Tribal infrastructure programs, including financial services, while allowing federal programs to retain their unique advantages. Under the umbrella MOU, for the first time, five federal departments joined together and agreed to work across traditional program boundaries on Tribal infrastructure issues. The efficiencies and partnerships resulting from this collaboration will directly assist tribes with their infrastructure needs. The second MOU, addressing a specific infrastructure issue, was created under the umbrella authority and addresses the issue of access to safe drinking water and wastewater facilities on Tribal lands. Currently, the five federal agencies are working together to develop solutions for specific geographic areas of concern (Alaska and the Southwest), engaging in coordination of funding, and promoting cross-agency efficiency. These activities are completed in coordination with federally recognized tribes. Additionally, the EPA has entered into a MOU<sup>14</sup> with the Department of Energy and the Department of the Interior and formed an interagency work group to understand the implications of hydraulic fracturing on Tribal lands. For more information, please see the web link: <http://www.epa.gov/tribalportal/mous.htm>.

The EPA continues to work closely with other federal agencies as well as the Domestic Policy Council to implement the President's directive regarding the Tribal consultation process. The President's November 5<sup>th</sup>, 2009 Memorandum directs each executive department to develop a detailed plan to implement

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<sup>13</sup> <http://www.epa.gov/tribal/trprograms/2013-itf-memorandum-of-understanding.pdf>

<sup>14</sup> [http://unconventional.energy.gov/pdf/oil\\_and\\_gas\\_research\\_mou.pdf](http://unconventional.energy.gov/pdf/oil_and_gas_research_mou.pdf)



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Executive Order (EO) 13175, “Consultation and Coordination with Indian Tribal Governments<sup>15</sup>.” Under EO 13175, “...all departments and agencies are charged with engaging in regular and meaningful consultation and collaboration with Tribal officials in the development of federal policies that have Tribal implications, and are responsible for strengthening the government-to-government relationship between the United States and Indian tribes.” On May 4, 2011, the EPA released its final policy on consultation and coordination with Indian tribes. The EPA is among the first of the federal agencies to finalize its consultation policy in response to President Obama’s first Tribal leaders summit in November 2009 and, following the issuance of Executive Order 13175, to establish regular and meaningful consultation and collaboration with Tribal officials in the development of Federal policies that have Tribal implications.

#### **Research**

In FY 2016, the Sustainable and Healthy Communities (SHC) research program, funded at \$152.3 million, will continue to support the EPA’s program offices, state, and Tribal partners in protecting and restoring land, and providing community decision makers with decision tools to support community health. The work of the SHC research program falls into four inter-related themes:

- *Decision Support and Innovation* will use decision science, interactive social media, spatial analyses, and sustainability assessment methods to provide communities with tools to frame their decision options, outcomes and potential costs and benefits.
- *Community Well-being: Public Health and Ecosystem Goods and Services* will utilize the sciences of ecosystem services and human health to enable communities to assess how the natural and built environment affects the health and well-being of their residents. This research will address impacts in all communities including communities and tribes that are at risk for disproportionate environmental and health impacts;
- *Sustainable Approaches for Contaminated Sites and Materials Management* will build upon federal, regional and state experiences. This research aims to improve the efficiency and effectiveness of mechanisms that address land and groundwater contamination, including preventing and cleaning up fuel and oil spills. This research also will review and characterize innovative approaches that communities can use to:
  - Reduce new sources of contamination,
  - Enable recovery of energy, materials, and nutrients from waste, and
  - Enable brownfields sites to be put to new, economically productive uses that benefit communities; and
  - Apply waste management and contaminated sediments remediation technologies in specific geographic locations.
- *Integrated Solutions for Sustainable Outcomes* research will develop methods and data that will allow communities to consider the full costs and benefits of their decisions. For example, SHC will review and characterize systems modeling approaches that communities can use to account for the linkage among:
  - Waste and materials management,
  - Building codes and zoning for land use planning,
  - Transportation options, and
  - Provision of infrastructure, including water and energy.

The SHC research program will continue ongoing research to develop models, data bases, metrics and other decision-support tools that will empower communities to make decisions regarding sustainable approaches to environmental protection. This research will provide community based decision support tools which consider ecosystem goods and services, contaminated sites, multimedia pollutants within environmental justice communities, and the beneficial use of sustainable materials.

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<sup>15</sup> <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2010/m10-33.pdf>

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Consistent with Administration priorities, EPA's Science to Achieve Results (STAR) and the Greater Research Opportunities (GRO) fellowship programs, and all funds, will be reorganized across the government as part of a comprehensive reorganization to facilitate a cohesive national strategy of STEM education programs to increase the impact of Federal investment in four areas: K-12 instructions; undergraduate education; fellowships and scholarships; and information education.

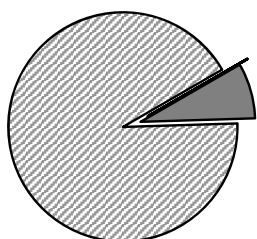
The SHC research program will continue to address many facets of site contamination and cleanup. This includes source elimination of contaminated ground water and migration at Superfund sites and plume management to reduce exposures via drinking water. This science will be used to develop guidance on site assessment, remedial investigations, and to provide technical support resources to agency programs and Regional Offices.

The SHC research program will continue to develop or revise protocols to test oil spill control agents or products for listing on the National Contingency Plan Product Schedule, including dispersants' performance and behavior in deep water. Additional research outcomes include improved characterization and remediation methods for fuels released from leaking underground storage tanks.



## Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution

**Strategic Goal:** Reduce the risk and increase the safety of chemicals and prevent pollution at the source.



### Resource Summary

(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 Enacted	FY 2016 President's Budget	Difference FY 2015 EN to FY 2016 PresBud
1 - Ensure Chemical Safety	\$578,592	\$569,955	\$614,440	\$44,485
2 - Promote Pollution Prevention	\$51,797	\$50,537	\$53,481	\$2,944
<b>Goal 4 Total</b>	<b>\$630,388</b>	<b>\$620,492</b>	<b>\$667,921</b>	<b>\$47,429</b>

Workyears	2,412	2,411	2,389	(22)
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NOTE: Numbers may not add due to rounding.

### Introduction

Chemicals are ubiquitous in our everyday lives and products. They are used in the production of everything from our homes and cars to the cell phones we carry and the food we eat. Chemicals often are released into the environment as a result of their manufacture, import, processing, use, and disposal. Vulnerable populations, including low-income, minority, and indigenous populations, may be disproportionately impacted by, and thus particularly at risk from, exposure to chemicals.<sup>1,2,3</sup> In addition, research shows that children receive greater relative exposures to chemicals because they inhale or ingest more air, food, and water on a body-weight basis than adults do.<sup>4,5,6,7</sup> The FY 2016 funding level for Ensuring the Safety of Chemicals and Preventing Pollution is \$667.9 million, an increase of \$47.4 million over the FY 2015 Enacted Budget.

<sup>1</sup> Holistic Risk-based Environmental Decision Making: a Native Perspective

(<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241171>)

<sup>2</sup> Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

<sup>3</sup> Interim Guidance on Considering Environmental Justice During the Development of an Action

(<http://www.epa.gov/compliance/ej/resources/policy/considering-ej-in-rulemaking-guide-07-2010.pdf>)

<sup>4</sup> Guide to Considering Children's Health When Developing EPA Actions: Implementing Executive Order 13045 and EPA's Policy on Evaluating Health Risks to Children

([http://yosemite.epa.gov/oachpweb.nsf/content/ADPguide.htm/\\$File/EPA\\_ADG\\_Guide\\_508.pdf](http://yosemite.epa.gov/oachpweb.nsf/content/ADPguide.htm/$File/EPA_ADG_Guide_508.pdf))

<sup>5</sup> Holistic Risk-based Environmental Decision Making: A native Perspective

(<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241171>)

<sup>6</sup> Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

<sup>7</sup> Guide to Considering Children's Health When Developing EPA Actions: Implementing Executive Order 13045 and EPA's Policy on Evaluating Health Risks to Children

([http://yosemite.epa.gov/oachpweb.nsf/content/ADPguide.htm/\\$File/EPA\\_ADG\\_Guide\\_508.pdf](http://yosemite.epa.gov/oachpweb.nsf/content/ADPguide.htm/$File/EPA_ADG_Guide_508.pdf))

#### *Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution*

Under existing Toxic Substances Control Act (TSCA) authorization, the EPA is charged with the responsibility of assessing the safety of commercial chemicals and to act upon those chemicals if they pose significant risks to human health or the environment. The \$56.3 million provided in FY 2016 for the Chemical Risk Review and Reduction Program will allow the EPA to sustain its efforts to assess the potential risks from existing chemicals in commerce and review and manage the potential risks of new chemicals entering commerce. In FY 2016, the EPA will continue to implement its Enhanced Chemicals Management approach, which seeks to expand and enhance the quantity, accessibility and usefulness of chemical safety information, thereby strengthening the capability of the EPA, other regulators and the public to assess chemical hazards and potential exposures, identify potential risks to human health and the environment and take appropriate risk management action.

In FY 2016, the EPA's pesticide licensing program will continue to evaluate new pesticides before they reach the market and ensure that pesticides already in commerce are safe when used in accordance with the label. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), and the Food Quality Protection Act (FQPA). The EPA will register pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. The EPA also will review potential impacts on the environment, with particular attention to endangered species and the effects of pesticides on honey bees and pollinators.

The EPA has a long history of collaboration to address a wide range of domestic and global environmental issues. The EPA envisions that environmental progress in cooperation with international partners can catalyze even greater progress toward protecting our domestic environment. Examples include: ensuring that trade-related activities sustain environmental protection, enhancing the ability of our trading partners to protect their environments and develop in a sustainable manner, enhancing opportunities through effective consultation and collaboration related to environmental issues of mutual interest. To advance all of these efforts, the EPA continues to focus on the following international priorities: building strong environmental institutions and legal structures, climate change adaptation and mitigation, improving air quality, expanding access to clean water, reducing exposure to toxic chemicals, and cleaning up e-waste.

Pollution prevention (P2) is central to the EPA's sustainability strategies. In FY 2016 the EPA will continue to foster the development of P2 solutions to environmental problems that eliminate or reduce pollution, waste and risks at the source. This includes: cleaner production processes and technologies, safer "greener" materials and products, and promoting the adoption, use and market penetration of those solutions by providing technical assistance and demonstrating the benefits of P2 solutions.

The National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act require the EPA to review Environmental Impact Statements (EISs). Under NEPA, an EIS is required for major federal actions significantly affecting the human environment. The review of each EIS includes assessing options for avoiding or mitigating environmental impacts, while making agency comments available to the public and allowing for public input. In FY 2016, in support of its mission, the program will continue to foster cooperation among federal agencies to ensure compliance with applicable environmental statutes, promote better integration of pollution prevention and ecological risk assessment elements into federal programs, and provide technical assistance in developing projects that prevent adverse environmental impacts.

#### **Major FY 2016 Changes**

To meet the FY 2016 performance targets and provide support to our top priorities, we will make fundamental changes to our long-standing business practices in contracts, grants and oversight of delegated programs, among others. Implementing these changes requires realigning resources and personnel to ensure that we increase effectiveness without undermining vital protections or quality and good financial management. The Agency will rely on new efficiencies and approaches from the High Performing Organization initiative to achieve success. In Goal 4, resources are focused on Taking Action on Toxics and Chemical Safety; Sustainability; and Building a High Performing Environmental Protection Enterprise. While continuing EPA's ongoing commitment to science, the rule of law and transparency, we have updated and refined our current direction to maximize our effectiveness and guide our agenda in the months and years ahead.

## Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution

### *Taking Action on Toxics and Chemical Safety*

The FY 2016 budget in this area reflects the completion of several multi-year projects and anticipated efficiencies in the assessment of chemical risk. A portion of these savings, \$1.8 million, will be from the Chemical Risk Review and Reduction (CRRR) program. CRRR resources will be prioritized for the assessment and management of TSCA Work Plan existing chemicals and new chemicals entering commerce.

In 2016, the EPA's Endocrine Disruptor Screening Program (EDSP) will increase its use of alternative testing methodologies (*i.e.*, high-throughput assays and computational tools) to prioritize and screen chemicals based on potential endocrine bioactivity and exposure, in particular, the estrogen, androgen, or thyroid hormone pathways in humans and wildlife. The increased use of alternative testing methodologies will reduce the workload in developing new assays. This effort will help to save roughly \$3.3 million compared to FY 2015 Enacted levels

### **Agency Priority Goals**

The EPA has developed FY 2014-2015 Agency Priority Goals that advance the agency priorities and the agency's Strategic Plan. EPA's Priority Goal to help reduce the risk and increase the safety of chemicals is:

*Assess and reduce risks posed by chemicals and promote the use of safer chemicals in commerce. By September 30, 2015, EPA will have completed more than 250 assessments of pesticides and other commercially available chemicals to evaluate risks they may pose to human health and the environment, including the potential for some of these chemicals to disrupt endocrine systems. These assessments are essential in determining whether products containing these chemicals can be used safely for commercial, agricultural and/or industrial uses.*

Additional information on the EPA's Agency Priority Goals can be found at [www.performance.gov](http://www.performance.gov).

### **FY 2016 Activities**

***Objective 1: Ensure Chemical Safety.*** *Reduce the risk and increase the safety of chemicals that enter our products, our environment and our bodies.*

The TSCA chemical management program addresses new chemicals, existing chemicals and legacy chemicals. The major activity of the new chemicals program is premanufacture notices review and management, which addresses the potential risks from approximately 1,000 chemicals (including products of biotechnology and new chemical nanoscale materials) received annually and prior to their entry into the U.S. marketplace. In FY 2016, the EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of unsafe new chemicals into commerce.

The greatest challenge is to address existing chemicals already in use but where available information is limited. Existing chemicals activities fall into three major categories: 1) obtaining, managing, and making chemical information public; 2) screening and assessing chemical risks; and 3) taking action to manage chemical risks. In FY 2016, progress will be made to assess existing chemicals already in commerce by continuing to aggressively pursue EPA's FY 2018 Strategic Measure target to assess all chemicals from the first TSCA Work Plan Chemicals list by 2018, including completing 10 risk assessments in FY 2016. In FY 2014, EPA announced the release of final risk assessments for four of these Work Plan Chemicals Trichloroethylene (TCE), Methylene Chloride (DCM), Antimony Trioxide (ATO) and Hexahydro Hexamethylcyclopenta Benzopyran (HHCB) – exceeding the FY 2014 performance target calling for three final risk assessments for TSCA chemicals.

In FY 2016, the agency will continue to implement the chemicals risk management program to further eliminate risks from high-risk "legacy" chemicals. The EPA will continue to maintain a base resource level to enable the agency to meet any continuing obligations under statutes associated with PCBs and other

Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution

long-standing chemical risks. This budget request sustains the Lead program at steady levels. Outreach to educate the public about the risks of elevated blood lead levels and to encourage testing for children at risk will continue. There are still areas of contamination that require action. For instance, a FY 2014 enforcement settlement for TSCA lead paint violations will provide \$50,000 to fund blood lead testing for 350 children and provide blood lead analysis equipment to three community health clinics that serve low income and homeless residents. As illustrated in the figure below (Figure 1), the EPA will build on the successful national effort to reduce childhood blood lead levels and continue ongoing implementation of the Lead Renovation, Repair and Painting (RRP) Rule. Outreach efforts and targeted activities will support renovator certifications, including recertifying any previously certified firms that seek to retain their certified status. As of December 31, 2014, more than 140,000 firms are actively certified to perform Lead RRP work.

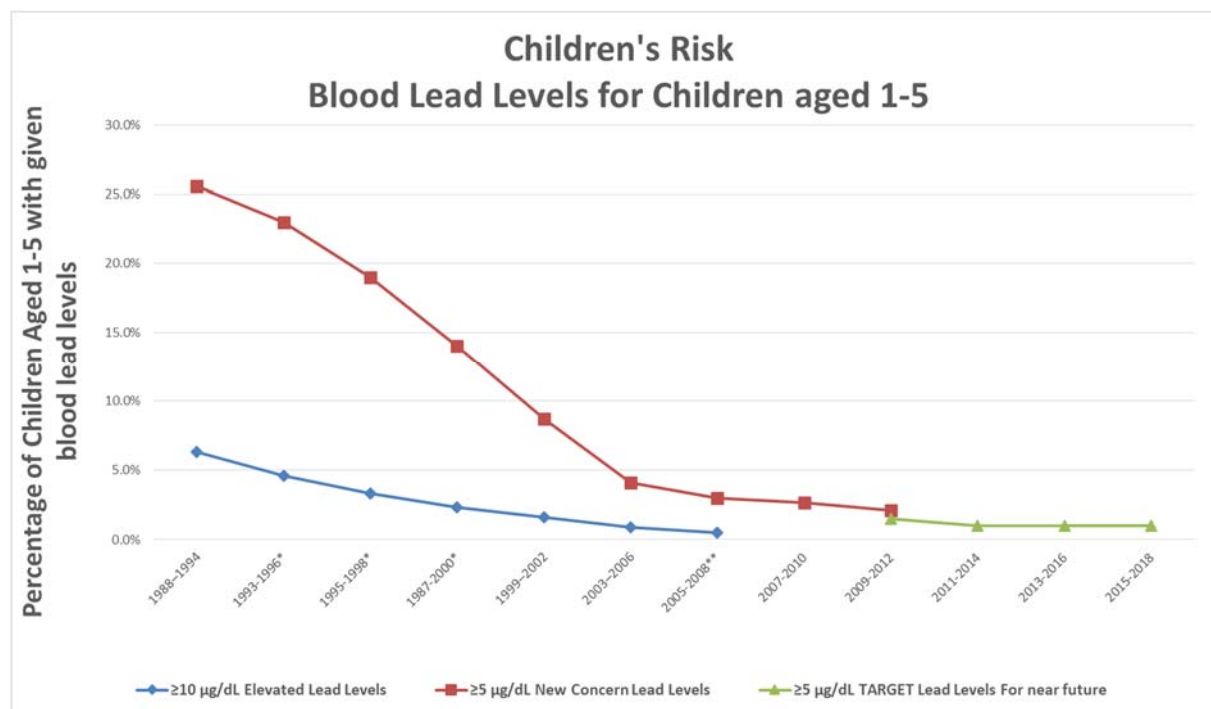


Figure 1: Percentage of Children Aged 1-5 with Given Blood Lead Levels (PM 008)\* **Values are not CDC data; interpolated for graphical display only**  
**\*\* ≥10 µg/dL estimate is considered unreliable (relative standard error greater than 40 percent).**

The agency also will continue to collaborate with international partners, through the Organization for Economic Cooperation and Development (OECD), to maximize the efficiency of the EPA's resource use and promote adoption of internationally harmonized test methods for identifying endocrine disrupting chemicals. The EPA represents the U.S. as either the lead or a participant in OECD projects involving the improvement of assay systems including the development of non-animal prioritization and screening methods.

Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy depend are integral to ensuring environmental and human safety. Chemical and biological pesticides help meet national and global demands for food. They provide effective pest control for homes, schools, gardens, highways, utility lines, hospitals, and drinking water treatment facilities, while also controlling vectors of disease. The program ensures that the pesticides available in the U.S. are safe when used as directed. The program is increasing its focus on pollinator health as well, working with other federal partners, states, and private stakeholder groups to stem pollinator declines and increase pollinator habitat. In addition, the program places priority on reduced risk pesticides that, once registered, will result in increased societal benefits.

#### *Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution*

In FY 2016, \$131.1 million is provided to support the EPA pesticide applications review and registration program. The EPA will invest substantial resources to improve the compliance of pesticide registrations with the Endangered Species Act. A portion of the funding will ensure that pesticides are correctly registered and applied in a manner that protects water quality. The EPA will continue registration and reregistration requirements for antimicrobial pesticides. Together, these programs will minimize exposure to pesticides, maintain a safe and affordable food supply, address public health issues, and minimize property damage that can occur from insects, pests and microbes. The agency's worker protection, certification, and training programs will encourage safe application practices. The EPA will also continue to emphasize the protection of potentially sensitive groups, such as children, by reducing exposures from pesticides used in and around homes, schools, and other public areas. In FY 2014, Regional Offices in Denver and Seattle collaborated with state partners and other federal agencies to produce a "Sensible Steps" webinar series to introduce manageable, low- or no-cost steps communities can take to improve the health of their school environments. Topics included integrated pest management, chemical safety, mold and moisture control, energy efficiency, and reducing PCB exposure.

The EPA's FY 2016 budget for the Office of Pesticides Program includes an increase of approximately \$1.5 million above FY 2015. This increase will fund agency work to improve pollinator health by performing laboratory research and technical analysis on pollinators (e.g., honeybees, monarch butterflies) and related resources (e.g., hive structures), improving our scientific understanding to promote pollinator health through the regulatory processes. The FY 2016 budget also includes a \$0.5 million increase over the FY 2015 budget to supplement existing resources available to states and tribes to develop pollinator protection plans.

***Objective 2: Promote Pollution Prevention.*** *Conserve and protect natural resources by promoting pollution prevention and the adoption of other sustainability practices by companies, communities, governmental organizations, and individuals.*

In FY 2016, EPA's Pollution Prevention (P2) program (EPM and STAG combined) is funded at \$18.2 million. The P2 program is one of the EPA's primary tools for advancing environmental stewardship and sustainability by federal, state and tribal governments; businesses; communities and individuals. The P2 program seeks to alleviate environmental problems by achieving significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use or inefficient use of hazardous materials; reductions in the generation of greenhouse gases; and reductions in the use of water. At the same time, the P2 Program helps businesses and others reduce costs as a result of implementing these preventative approaches. The P2 program's efforts advance the agency's priorities to pursue sustainability, take action on climate change, make a visible difference in communities, and ensure chemical safety.

The P2 program accomplishes its mission by fostering the development of solutions to environmental problems that are designed to eliminate or reduce pollution, waste and risks at the source, such as cleaner production processes and technologies and safer, "greener" materials and products. The program also promotes the adoption, use and market penetration of those solutions through such activities as providing technical assistance and demonstrating the benefits of P2 solutions. For example, the P2 program works with a diverse set of stakeholders to develop voluntary consensus standards for greener products, such as computers, televisions, and imaging equipment, and to increase the use of these products in the federal government through federal green purchasing requirements, leading to significant environmental benefits from the reduction of hazardous materials in these products, increased product lifespan, and improved energy efficiency.

The EPA will continue to support the Green Suppliers Network (GSN) and the Economy, Energy, and Environment (E3) Partnership among federal agencies, local governments, and manufacturers to promote energy efficiency, job creation, and environmental improvement. In FY 2016, the EPA will continue to work with its federal partners and state pollution prevention programs to conduct facility-specific assessments for small and medium-sized suppliers to help them reduce business costs, improve productivity and efficiency, and promote sustainability. In FY 2016, the E3 Initiative and GSN are expected to grow to include more than 35 state partners by leveraging existing resources across the E3 federal agency partners. In FY 2016, the EPA also will leverage expertise from other programs to enhance sustainability and pollution

## *Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution*

prevention education and outreach resources. Through an intra-agency working group, each program office will disseminate educational resources and information to the public. In FY 2016, EPA regional offices, as well as states, tribes and other grantees, will focus on the implementation of the following P2 national emphasis areas: climate change mitigation, food manufacturing, and community level hazardous materials source reduction.

In FY 2016, the EPA will continue to work with other federal agencies to streamline, modernize, and improve the NEPA process by encouraging early involvement in the project scoping process and promoting approaches for working collaboratively with federal, state, local and Tribal partners on project proposals. The agency will continue to participate in the effort to implement the May 2014 Interagency “Implementation Plan for the Presidential Memorandum on Modernizing Infrastructure Permitting” to meet the goal of reducing permitting and review timelines, while improving environmental and community outcomes. This will include participating in coordinated reviews, developing innovative mitigation approaches, and promoting the use of IT tools. As a component of this effort, the program will continue to use and promote *NEPAssist*, a geographic information system (GIS) tool developed to assist users (the EPA, other federal agencies, and the public) with environmental reviews.<sup>8</sup> In FY 2016, the proposed budget for NEPA is \$17.6 million.

### ***International Priorities***

To achieve our domestic environmental and human health goals, international partnerships are essential, including those with the business community, entrepreneurs and other members of society. Pollution is often carried by winds and water across national boundaries, posing risks to human health and ecosystems many hundreds and thousands of miles away.

Through these partnerships, the EPA will maintain focus on several priorities. In FY 2016, the EPA will work with other nations to build strong environmental institutions and legal structures with the goal of combating climate change by limiting pollutants and improving air quality in the U.S. and around the world. The EPA will work to expand access to clean water, and protect vulnerable communities from toxic pollution that impacts North America and nations worldwide. Through joint efforts with partners from around the world, the EPA is working to facilitate commerce, promote chemical safety, further sustainable development, protect vulnerable populations and engage in environmental issues, such as reducing risks from exposure to mercury and lead-based paint. The agency’s international priorities will guide collaboration with the Commission on Environmental Cooperation (CEC) and all international partners.

In FY 2016, the EPA will enhance sustainability principles through expanded partnership efforts in multilateral forums and in key bilateral relationships. In addition, we will strengthen existing and build new international partnerships to encourage increased international commitment to sustainability goals and to promote a new era of global environmental stewardship based on common interests, shared values, and mutual respect. And finally, the EPA will continue to focus on technical and policy support for global and regional efforts such as strengthening the EPA leadership in the Arctic Council and with other governments to improve policies and implement cooperative projects that address climate change and reduce contamination of the arctic.

### ***Research***

The EPA research program’s Chemical Safety and Sustainability (CSS), Human Health Risk Assessment (HHRA), and Homeland Security underpin the analysis of risks and potential health impacts across the broad spectrum of EPA programs and provide the scientific foundation for chemical safety and pollution prevention. In FY 2016, the EPA will further strengthen its planning and delivery of science by continuing an integrated research approach that tackles problems systematically.

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<sup>8</sup> For more information, refer to: [www.epa.gov/oecaerth/nepa/nepassist-mapping.html](http://www.epa.gov/oecaerth/nepa/nepassist-mapping.html)

#### *Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution*

In FY 2016, the EPA will continue the multi-year transition away from the traditional assays used in the endocrine disruptor screening program, transitioning instead to use of alternative testing methodologies (*i.e.*, high-throughput assays and computational tools) to prioritize and screen chemicals based on potential endocrine bioactivity and exposure, in particular, the estrogen, androgen, or thyroid hormone pathways in humans and wildlife. This will allow the agency to more quickly, efficiently, and cost-effectively assess potential chemical toxicity. In FY 2016, the EPA will continue to evaluate endocrine-relevant high throughput ToxCast assays; this will increase our knowledge of adverse outcome pathways (AOP)—the chain of events that occur at a molecular level when toxic chemicals disrupt the functioning of otherwise healthy elements of the endocrine system.

Increases in FY 2016 for the CSS research program are critical to efforts begun in FY 2015 to develop computational models to integrate 21st-Century exposure research with ToxCast and Tox21 data. This effort will significantly advance risk-based decision making in support of the Agency's goal of keeping communities safe and healthy. The CSS program also will invest in FY 2016 to expand the breadth of the CompTox research program to include more representative models of biological systems of interest, including the thyroid, improve ways to estimate human exposure to individual and multiple chemicals, and better integrate human and ecological risk evaluations. Specific FY 2016 actions include: (1) modeling and generating exposure data through ExpoCast, a state-of-the art chemical screening tool that provides rapid and cost-efficient high throughput exposure information; (2) evaluating background exposure levels and the relevance of different environmental exposures for human health; and (3) enhancing the CSS Dashboard for fit-for-purpose risk-based prioritization. These applications complement efforts of the agency's Chemical Safety and Pollution Prevention program to apply high-throughput and other 21<sup>st</sup> Century exposure information to TSCA chemical prioritization.

This support is critical to enhancing and accelerating our understanding of chemical risks and exposure. Overall, this increase will significantly enhance the predictive capacity of the computational models and generate new data both for evaluating the impact of existing chemicals as well as for selecting safer alternatives. In addition, \$1.5 million of an overall \$14 million increase in the CSS budget compared to FY 2015 will support engagement with the stakeholder community to build confidence in the relevance of Comptox data and provide guidance about the application of that data for decisions by government, industry, and the public about the safety of chemicals.

The CSS program also will continue to apply computational and knowledge-driven approaches to amplify the impact of its research on engineered nanomaterials (ENMs). Evaluation of emerging safer chemical alternatives is another focus in FY 2016.

In FY 2016, the Agency's Human Health Risk Assessment Research Program will continue to develop assessments and scientific products that are used extensively by EPA program and regional offices and the risk management community to estimate the potential risk to human health from exposure to environmental contaminants. These include:

- Integrated Risk Information System health hazard and dose-response assessments;
- Integrated Science Assessments of criteria air pollutants;
- Community Risk and Technical Support; and
- Methods, models, and approaches to modernize risk assessment for the 21<sup>st</sup> Century.

The Homeland Security Research Program (HSRP) will continue to enhance the nation's preparedness, response, and recovery capabilities for homeland security incidents and other hazards by providing stakeholders and partners with valuable detection and response analytics for incidents involving chemical, biological, or radiological agents. The program will continue to emphasize the research needed to support response and recovery from wide-area attacks involving radiological agents, nuclear agents, and bioterror agents such as anthrax.

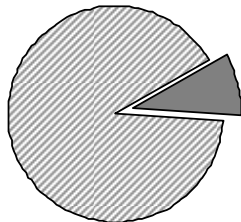
The EPA will allocate \$164.7 million to the Chemical Safety and Sustainability, Human Health Risk Assessment, and Homeland Security Research programs in FY 2016.





## **Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance**

**Strategic Goal:** *Protect human health and the environment through vigorous and targeted civil and criminal enforcement. Use Next Generation Compliance strategies and tools to improve compliance with environmental laws.*



9.4% of Budget

### **Resource Summary**

(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 Enacted	FY 2016 President's Budget	Difference FY 2015 EN to FY 2016 PresBud
1 - Enforce Environmental Laws to Achieve Compliance	\$751,889	\$737,846	\$804,080	\$66,234
<b>Goal 5 Total</b>	<b>\$751,889</b>	<b>\$737,846</b>	<b>\$804,080</b>	<b>\$66,234</b>

<b>Workyears</b>	3,503	3,391	3,402	11
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NOTE: Numbers may not add due to rounding

### **Introduction**

The EPA's civil and criminal enforcement programs assure compliance with our nation's environmental laws. A strong and effective enforcement program is essential to ensuring compliance with our laws and regulations, maintaining a level economic playing field, and realizing the public health and environmental protections our federal statutes were created to achieve. As a key part of our enforcement program, the EPA is committed to supporting public health in communities disproportionately burdened by pollution by integrating and addressing issues of environmental justice (EJ) in the EPA's programs and policies as part of its day-to-day business. The EPA's EJ program promotes accountability for compliance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."

On January 18, 2011, President Obama issued a Presidential Memoranda titled "Regulatory Compliance"<sup>1</sup> which reaffirms the importance of effective enforcement and compliance with regulations. It states "[s]ound regulatory enforcement promotes the welfare of Americans in many ways, by increasing public safety, improving working conditions, and protecting the air we breathe and the water we drink. Consistent regulatory enforcement also levels the playing field among regulated entities, ensuring that those that fail to comply with the law do not have an unfair advantage over their law-abiding competitors."

In FY 2016, the EPA seeks to maintain the strength of its core national enforcement and compliance assurance program. Recognizing the challenging fiscal climate at both the federal and state level, the agency will implement strategies that use resources more efficiently and find opportunities to focus and

<sup>1</sup> Please see: <http://www.whitehouse.gov/the-press-office/2011/01/18/presidential-memoranda-regulatory-compliance>

## *Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance*

leverage efforts to assure compliance with environmental laws. Our objective is to pursue vigorous civil and criminal enforcement that targets the most serious water, air, and chemical hazards in communities; assure strong, consistent, and effective enforcement of federal environmental laws nationwide; and use modern, streamlined techniques, strategies and tools to improve targeting and transparency and increase compliance with environmental laws. The EPA will continue to focus resources on the most important environmental problems where noncompliance is having a significant impact. This strategy means EPA's top enforcement priority will be pursuing higher impact cases, including large, complex cases that require significant investment and a long-term commitment.

The EPA has achieved impressive pollution control and health benefits through vigorous compliance monitoring and enforcement activities. However, enforcement alone will not address all non-compliance problems. The sheer number of regulated facilities, the contributions of large numbers of smaller sources to environmental problems, and limited resources mean the EPA cannot rely solely on the traditional single facility inspection and enforcement approach to ensure widespread compliance.<sup>2</sup> In FY 2016, the agency will continue to implement new and innovative methods to reduce pollution and increase compliance nationwide over the long term.

Towards this end, in FY 2016, the agency proposes to accelerate its Next Generation Compliance approaches to harness state-of-the-art technology to make our efforts more efficient and effective. This approach, formalized in the agency's 2014-2018 Strategic Plan, aims to increase compliance with environmental regulations by capitalizing on advances in information technology and advanced pollutant detection technology. There are five main components to Next Generation Compliance: 1) structuring our regulations to be easier to implement and contain self-enforcing compliance mechanisms to achieve higher compliance; 2) using advanced pollutant detection technology to find out about pollution as it happens in real-time; 3) moving from paper to electronic reporting to enhance government efficiency and reduce paperwork burden; 4) making pollution and compliance information more accessible, user-friendly, and available to the public to support community awareness and promote facility accountability; and 5) using innovative approaches to enforcement to focus limited resources on the biggest pollution problems.

The use of new detection technologies, combined with a focus on designing rules and permits that are easier to implement, will improve compliance, expand transparency, and protect communities while reducing costs for states, territories, tribes, and regulated facilities. In particular, the burden of monitoring and compliance reporting will be reduced for states, the EPA and others by investing in state-of-the-art monitoring technology and supporting electronic reporting and interaction with the regulated community. This will allow the EPA and states to more effectively deploy inspection resources. For example, in July 2013, the EPA proposed to convert the National Pollutant Discharge Elimination System (NPDES) paper based reporting systems to a more effective and efficient national electronic system. The final rule, expected in FY 2015 with implementation beginning in FY 2016, will benefit the public, regulated facilities, states, and the EPA by providing high quality, complete, and timely data for the NPDES program. EPA's cost-benefit analysis for the proposed rule estimated that the overall reporting burden will be reduced by 900,000<sup>3</sup> hours when the rule is fully implemented.

Efforts already underway have shown that these approaches will have meaningful benefits. For example, the EPA's Region 6 implemented the first federal General Permit in the nation that required electronic submission of data through the EPA's electronic reporting tools. Implemented for the Offshore Oil & Gas NPDES General Permit program, this effort uses electronic reporting to reduce reporting burden on permitted entities and the EPA, while allowing for automated tracking of permit limits and reporting requirements, enhancing data quality, and increasing transparency for regulators and the public. The agency estimates that without deployment of the electronic reporting tools, data entry alone would have cost the agency approximately \$2.6 million over a five year permit cycle. In combination with the experience from other programs that use electronic reporting such as Ohio's NPDES program and the EPA's TRI program, this provides another example of how the benefits are likely to grow as electronic

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<sup>2</sup> [www.epa.gov/compliance/resources/policies/civil/cwa/actionplan101409.pdf](http://www.epa.gov/compliance/resources/policies/civil/cwa/actionplan101409.pdf)

<sup>3</sup> For more information, see "Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Proposed Rule" [DCN 0040] at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OECA-2009-0274-0135>

## *Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance*

reporting becomes the norm.

The EPA's National Enforcement and Compliance Assurance program will continue its efforts to implement these Next Generation Compliance approaches to achieve the EPA's goals more efficiently and effectively as part of the agency's work to remain forward-looking and adaptive. The Next Generation Compliance initiative is aligned with the larger EPA E-Enterprise business strategy (E-Enterprise), which is jointly managed with the states. E-Enterprise is a transformative 21st century strategy for rethinking how government agencies deliver environmental protection in the United States. A partnership of EPA, states, and tribes, E-Enterprise is collaboratively modernizing business processes and driving innovations across the EPA and states' environmental organizations. <sup>4</sup> These changes will improve environmental results by making government more efficient and enhancing services to the regulated community and the public.

E-Enterprise resources in the Enforcement and Compliance Assurance program will support a variety of projects, including: 1) partnering with states to develop and implement fillable e-forms for electronically reporting NPDES information; 2) supporting NPDES e-reporting rule development and program evaluation; 3) purchasing advanced monitoring equipment; and 4) supporting transparency through modernization of Enforcement and Compliance History Online (ECHO) and the Air Facility System (AFS). Another focus will be developing a field collection, evidence management, and reporting system for conducting compliance monitoring inspections which will be guided by ongoing pilots and scoping to determine how much can be done in tandem with the states.

Data transparency is a key foundation of ECHO and the EPA believes making compliance information publicly available allows the American people to be better informed about environmental activities and compliance in their communities and provides an incentive to achieve greater compliance with environmental laws. ECHO is the EPA's premier web-based tool that provides public access to compliance and enforcement information for approximately 800,000 EPA-regulated facilities. The EPA, state and local environmental agencies collect/report data from facilities and from their own activities and submit that data to EPA databases. ECHO usage has grown to more than 2 million queries per year.

### **Major FY 2016 Changes**

The FY 2016 request maintains FTE at a reduction from pre-FY 2010 levels, but includes funding that allows EPA to support those staff so they can identify and address noncompliance, through investments in data analysis and systems, lab support, equipment for front line enforcement personnel, inspector training, and case support such as expert witnesses and document management services. These resources will allow our staff to be more efficient and effective at protecting public health and keeping a level playing field for companies that play by the rules, by assuring compliance with environmental laws.

In FY 2016<sup>5</sup>, key changes to the enforcement and compliance budget reflect changes in programmatic direction and efficiencies gained from modernizing our business processes. The EPA is accelerating its efforts to improve its business processes under both the E-Enterprise business strategy and Next Generation Compliance based on advances in pollutant monitoring and information technology. In addition to the resources supporting the EPA as a High Performing Environmental Protection Enterprise, resources across Goal 5 will be focused on advancing efforts in the agency's priorities: Addressing Climate Change and Improving Air Quality, Protecting America's Waters, Cleaning up Our Communities and Advancing Sustainable Development.

#### *Addressing Climate Change and Improving Air Quality*

In FY 2016, the EPA will help improve air quality in communities by targeting large pollution sources,

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<sup>4</sup> <http://www.exchangenetwork.net/wp-content/uploads/2014/01/EEnterpriseConceptualBlueprint-013114-FINAL-Executive-Summary.pdf>

<sup>5</sup> EPA is providing a total of \$597 million for the National Enforcement and Compliance Assurance program. There are additional resources for the program under Goals 2, 3 and 4.

## *Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance*

especially in the coal-fired utility, acid, cement, glass and natural gas exploration and production industries that are not complying with environmental laws and regulations. Where the EPA finds non-compliance, the agency will take action to bring them into compliance, which may include requiring facilities to install controls that will benefit communities and/or improve emission monitoring. Enforcement activities which cut toxic air pollution in communities will improve the health of residents, particularly those overburdened by pollution. In FY 2016, the agency's budget provides resources to improve the quality and efficiency of compliance inspections, to develop an advanced monitoring equipment program, and to support air regulation implementation. The inspection effort includes the development of tools to allow inspectors to record field observations and transmit inspection reports electronically. Leveraging technology to move to a digitally based process will assist in identification of patterns of problems, compile inspection results in a more timely way, increase transparency on compliance status, and allow for quicker responses where appropriate. The focus of the advanced monitoring program will be on providing communities with monitors, along with technical assistance and training, to allow them to better understand the state of their environment and help local decision-makers consider actions that will reduce the risks from pollution. This work will support both the Air and Water programs.

### *Protecting America's Waters*

In FY 2016, the EPA will work with states to use compliance and enforcement approaches which more effectively and efficiently address the most important water pollution problems. Our focus will include getting raw sewage out of water, cutting pollution related to animal waste, and reducing pollution from stormwater runoff. The EPA also will continue to promote an integrated planning strategy for addressing municipal sewage and stormwater challenges, including the use of lower cost and innovative approaches such as incorporating green infrastructure into enforcement remedies where appropriate. In addition, through its enforcement agreements, EPA works closely with communities to get the most important work for protecting health accomplished in the most cost effective way, and on a schedule that is practical and affordable. These efforts will help to clean up great waters like the Chesapeake Bay and will focus on revitalizing urban communities by protecting and restoring urban waters. These options are proving attractive to communities that need to make changes to their CSO programs. Enforcement efforts also will support the goal of assuring clean drinking water for all communities, including small systems and in Indian country, and improving the quality of Safe Drinking Water Act data reported by states to ensure compliance. In FY 2016, the agency's budget directs resources to improve the quality and efficiency of compliance inspections, develop an advanced monitoring equipment program, and test and pilot advanced monitoring technologies, which will support both air and water programs.

### *Cleaning up Our Communities and Advancing Sustainable Development*

In FY 2016, the EPA will continue to protect communities by ensuring that responsible parties conduct Superfund and other cleanups, saving federal dollars for sites where there are no viable contributing parties. Ensuring that responsible parties clean up the sites also reduces direct human exposure to hazardous pollutants and contaminants, provides for long-term human health protection, and ultimately makes contaminated properties available for reuse. The EPA will continue to integrate environmental justice (EJ) considerations into the site remediation enforcement program by using EJ criteria when enforcing RCRA corrective action requirements to meet RCRA 2020 goals and ensuring that institutional controls are implemented at sites with potential environmental justice concerns.

In FY 2016, the agency's budget provides resources to make comprehensive community-based information available on the Geoplatform ensuring that the EPA community investments are mapped and easily accessible to EPA staff. FY 2016 resources also support communities and ensure that ongoing EPA program work is more effectively leveraged. This program will provide financial assistance to eligible organizations working on projects to address local environmental and public health issues in overburdened and vulnerable communities. The funds will be used to build partnerships, assist communities to identify environmental and health problems, implement solutions, and to train experts to address specific environmental justice needs.

### **Agency Priority Goals**

The EPA has developed FY 2014-2015 agency Priority Goals that advance the agency's priorities and the agency's Strategic Plan. EPA's Priority Goal for enforcing laws and ensuring compliance is:

*To improve environmental outcomes and enhance service to the regulated community and the public. By September 30, 2015 reduce reporting burdens to EPA by one million hours through streamlined regulations, provide real-time environmental data to at least two communities, and establish a new portal to service the regulated community and public.*

To support this Goal, EPA seeks to transform the way business is conducted through its E-Enterprise strategy, a partnership of States, the EPA, and tribes, and is collaboratively modernizing business processes and driving innovations across agencies and programs. A State-EPA E-Enterprise leadership council has been convened and is actively working to prioritize and consolidate projects to maximize the benefits. The priority goal is housed in Goal 5, but E-Enterprise work will occur in a number of agency programs that interact with states, tribes, and industry.

Next Generation Compliance activities contribute to the burden reduction goal. For example, the e-NPDES reporting rule is estimated to reduce burden by approximately 900,000 hours.<sup>6</sup> Additional information on the EPA's agency Priority Goals can be found at:

[www.performance.gov](http://www.performance.gov)

### **FY 2016 Activities**

**Objective 1: Enforce Environmental Laws.** *Pursue vigorous civil and criminal enforcement that targets the most serious water, air, and chemical hazards in communities to achieve compliance. Assure strong, consistent, and effective enforcement of federal environmental laws nationwide. Use Next Generation Compliance strategies and tools to increase compliance with environmental laws.*

The EPA continually assesses priorities and embraces new approaches that can help achieve the agency's goals more efficiently and effectively. The EPA's FY 2016 budget submission for the Enforcement and Compliance Assurance program continues to invest resources in high priority areas with the greatest impact on public health, while reducing resources where we have made significant progress (and therefore no longer require as active an enforcement presence), or that, while important, do not address the most substantial impacts to human health. The EPA carefully evaluates program activities and directs limited resources to where they can best protect public health, especially in disadvantaged communities; support core work of state and Tribal partners; and focus on the largest pollution problems. The EPA will continue to examine new enforcement approaches through Next Generation Compliance to make the program more efficient and effective.

The agency remains committed to implementing a strong enforcement and compliance program focused on identifying and reducing non-compliance and deterring future violations. To meet this commitment, the program employs a variety of activities, including data collection and analysis, compliance monitoring, assistance, civil and criminal enforcement efforts and innovative and evidence-based problem-solving approaches to identify and address the most significant environmental issues. In FY 2016, these efforts will be enhanced through Next Generation Compliance approaches that rely on modern reporting and monitoring tools to advance implementation of the agency's priorities and core program work.

Furthermore, in designing and implementing Compliance Monitoring program activities, the EPA tracks and assesses recent studies and evaluations regarding the effectiveness and limits of compliance monitoring and enforcement in promoting compliance and deterrence. The evidence in the literature consistently demonstrates that strong and active compliance monitoring and enforcement increases

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<sup>6</sup> For more information, see "Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Proposed Rule" [DCN 0040] at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OECA-2009-0274-0135>

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compliance and reduces pollution.<sup>7</sup> The EPA's Compliance Research Literature web page references many of these studies and reports.<sup>8</sup>

### Compliance Monitoring - Targeting the Most Serious Hazards in Communities

The EPA's compliance monitoring program reviews and evaluates the activities of the regulated community to determine compliance with applicable laws, regulations, permit conditions and settlement agreements. The program also determines whether conditions exist at facilities that present imminent and substantial endangerment.

In FY 2016, the EPA's compliance monitoring activities will be both environmental media-based and sector-based. The EPA's media-based inspections complement those performed by states and Tribes, and are a key part of the strategy for meeting the long-term and annual goals established for the air, water, pesticides, toxic substances and hazardous waste programs. The EPA will target its inspections to the highest priority areas and coordinate inspection activity with states and tribes to better leverage resources and enhance collaboration. In FY 2014, the EPA conducted more than 15,600 federal inspections and evaluations.

In FY 2016, as part of Next Generation Compliance, the agency will continue to enhance the efficiency and effectiveness of the compliance monitoring program by leveraging electronic reporting to reduce paperwork burden, increasing transparency by enhancing systems to report, synthesize, utilize, and disseminate monitoring data, designing analytic tools to help understand and utilize data and deploying state of the art monitoring equipment to the field. Synchronizing data systems to utilize electronic transmissions from regulated facilities will benefit the compliance monitoring program by allowing the EPA to better apply evidence-based approaches to the program and determine what strategies achieve the best results.

Compliance monitoring includes the EPA's management and use of data systems to oversee its compliance and enforcement programs under the various statutes and programs that the agency enforces. In FY 2016, the EPA will accelerate the process of enhancing its data systems to integrate with E-Enterprise and to support electronic interaction with regulated facilities, providing more comprehensive, accessible data to the public and improving integration of environmental information with health data and other pertinent data sources from other federal agencies and private entities. The third and final phase of the upgrade to the system that supports both compliance monitoring and civil enforcement, the Integrated Compliance Information System (ICIS), will be completed in FY 2017. Ongoing work in FY 2016 will provide additional functionality to support the agency's Next Generation and E-Enterprise business strategy goals.

In addition, the EPA plans to continue work toward improving transparency and analysis through enhancements of the modernized Enforcement and Compliance History Online (ECHO) in alignment with the E-Enterprise business strategy. Specifically, in FY16, the EPA will continue to enhance its analytical capabilities for analyzing large data sets and displaying the results in a geospatial platform (e.g., EPA's Geoplatform) to support better targeting of areas of most environmental concern. Currently, ECHO includes State Performance dashboards for the Clean Water Act (CWA), Clean Air Act (CAA) and Resource Conservation and Recovery Act (RCRA) to allow users to assess each state's performance in enforcing the various environmental statutes, as well as integrate facility information across media specific data systems. Through ECHO and its reports, users can now view this data in a comprehensive and organized manner, including a search function. ECHO reports provide a snapshot of a facility's environmental record, showing dates and types of violations, as well as the state or federal government's response. The system allows the public to monitor environmental compliance in communities, corporations to monitor compliance across facilities they own, and investors to more easily factor

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<sup>7</sup> For example: R. Hanna & P. Oliva; *The Impact of Inspections on Plant-Level Air Emissions under the Clean Air Act*; 10 B.E Journal of Economic Analysis and Policy 1 (2010). And J. Shimshack & M. Ward, *Enforcement and Over-Compliance*, J. Environ. Econ. 55(1): 90-105 (2008)

<sup>8</sup> For more information, refer to: <http://www.epa.gov/Compliance/resources/reports/compliance/research/index.html>



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environmental performance into their decisions. These features will be enhanced to continue to expand public access to more transparent EPA multimedia enforcement and compliance data.

In FY 2016, the proposed compliance monitoring budget is nearly \$123.6 million.

### Assuring Strong, Consistent, and Effective Enforcement

#### *Civil Enforcement*

The Civil Enforcement program's overarching goal is to assure compliance with the nation's environmental laws and regulations in order to protect human health and the environment. The program collaborates with the Department of Justice, states, local agencies and Tribal governments to ensure consistent and fair enforcement of all environmental laws and regulations. The program seeks to protect public health and the environment and ensure a level playing field by strengthening partnerships with co-implementers in the states, encouraging regulated entities to rapidly correct their own violations, ensuring that violators do not realize an economic benefit from noncompliance and pursuing enforcement to deter future violations.

The Civil Enforcement program develops, litigates and settles administrative and civil judicial cases against serious violators of environmental laws. In FY 2014, the EPA's enforcement actions required regulated entities to invest more than \$9.7 billion in actions and equipment to control pollution (injunctive relief). Also in FY 2014, the enforcement program obtained a total of \$100 million in federal administrative and civil judicial penalties. The EPA's enforcement actions required regulated entities to reduce pollution by an estimated 500 million pounds and treat, minimize, or properly dispose of 711 million pounds of hazardous waste. Sustained and focused enforcement attention to the Safe Drinking Water Act (SDWA) resulted in a 75 percent reduction in the number of public water systems with serious unresolved violations in the past five years, this was the result of combination of federal and state enforcement actions and improved prioritization and tracking processes.

In FY 2016, the EPA's civil enforcement program will focus on the national enforcement initiatives, including in communities that may be disproportionately exposed to risks and harm from pollutants in their environment. The National Enforcement Initiatives were selected for FY 2014-2016 through a collaborative selection process completed in FY 2013. These national initiatives address problems that remain complex and challenging. Current initiatives keep raw sewage and contaminated stormwater out of our nation's waters, prevent animal waste from contaminating surface and ground waters, and address violations of the Clean Air Act New Source Review/Prevention of Significant Deterioration requirements and Air Toxics regulations, RCRA violations at mineral processing facilities, and multi-media problems resulting from energy extraction activities. Information on initiatives, regulatory requirements, enforcement alerts and EPA results will be made available to the public and the regulated community through websites.<sup>9</sup>

As with the compliance monitoring program, the EPA's enforcement program will benefit from synchronizing data systems to receive electronic transmissions from regulated facilities and by having more complete and timely data to better evaluate which enforcement approaches are most effective. This utilizes the transformative information system-based work of the larger E-Enterprise business strategy. The EPA and states will be able to better prioritize enforcement resources in those areas where they are most needed such as complex industrial operations requiring physical inspection, repeat violators, cases involving significant harm to human health or the environment, or potential criminal violations.

The Civil Enforcement program also will focus on how tools, such as fence line monitoring, can be applied in enforcement settlements, such as in the 2014 CAA settlement with Flint Hills Resources Port Arthur, LLC, in order to make more data available, as well as using independent third parties to monitor compliance with the settlement (e.g., as required in the BP Deepwater Horizon Settlement (DOJ Press release, November 15, 2012).

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<sup>9</sup> For more information, refer to <http://www.epa.gov/compliance/monitoring/index.html>

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Fence line monitoring can be used to monitor the environment immediately surrounding a regulated entity, thereby providing the community with information about local emissions. In 2014, EPA reduced dangerous air toxics released from industrial flares at refineries and chemical plants by requiring companies to implement monitoring and pollution control technologies. These efforts are providing minority and low-income communities with monitoring data, while reducing toxic air pollution for residents living near the facilities.

The Civil Enforcement program also provides support for other priority programs, including the Environmental Justice program and the Chesapeake Bay program. For example, in FY 2014, 36 percent of the enforcement cases initiated by the EPA addressed violations that had occurred in locations with potential environmental justice concerns and many other cases reduced pollution to the benefit of those communities. In addition, the civil enforcement program is helping to implement a compliance and enforcement strategy for the Chesapeake Bay, providing strong oversight to ensure existing regulations are complied with consistently and in a timely manner, and making data on government and facility performance in the Bay watershed accessible and understandable to the public.

In FY 2016, the proposed budget for civil enforcement is \$188.8 million.

### *Criminal Enforcement*

Criminal enforcement underlies the EPA's commitment to pursuing the most serious pollution violations. The EPA's criminal enforcement program investigates and helps prosecute environmental violations that involve intentional, deliberate, or criminal behavior on the part of the violator. The Criminal Enforcement program deters violations of environmental laws and regulations by demonstrating that the regulated community will be held accountable through jail sentences and criminal fines. Bringing criminal cases to court sends a strong deterrence message to potential violators, enhances aggregate compliance with laws and regulations, and protects communities at risk. In FY 2014, the conviction rate for criminal defendants was 95 percent.

To efficiently maximize resources, in FY 2016 the program will reduce case work in lower priority areas and will use its special agent capacity to identify and investigate cases with the most significant environmental, human health and deterrence impact. The EPA's criminal enforcement program will target cases across all media that involve serious harm or injury; hazardous or toxic releases; ongoing, repetitive, or multiple releases; serious documented exposure to pollutants; and violators with significant repeat or chronic noncompliance or prior criminal conviction.

In FY 2016, the proposed budget for Criminal Enforcement is \$59.6 million.

### *Forensics Support*

The Forensics Support program provides specialized scientific and technical support for the nation's most complex civil and criminal enforcement cases, as well as technical expertise for agency compliance efforts. The work of the EPA's National Enforcement Investigations Center (NEIC) is critical to determining non-compliance and building viable enforcement cases. The NEIC maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with a wide range of environmental scientific expertise. In FY 2016, NEIC will continue to function under rigorous International Standards Organization 17025 requirements for environmental data measurements to maintain its accreditation.

In FY 2016, the proposed budget for Forensics Support is \$15.5 million.

### *Superfund Enforcement*

The EPA's Superfund Enforcement program protects communities by ensuring that responsible parties conduct or pay for cleanups of hazardous waste sites, preserving federal dollars for sites where there are no viable contributing parties. Superfund enforcement uses an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups in both the remedial and removal programs. The EPA will focus Superfund enforcement resources to support



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Potentially Responsible Party (PRP) searches, cleanup settlements, and cost recovery. Similarly, the Superfund Federal Facilities enforcement program will take action to ensure that federal agencies actively and appropriately manage their own cleanup efforts with the legally-required EPA oversight. The agency will continually assess its priorities and embrace new approaches that can help achieve its goals more efficiently and effectively.

Enforcement authorities play a unique role under the Superfund program. The authorities are used to ensure that responsible parties conduct a majority of the cleanup actions and reimburse the federal government for cleanups financed by federal resources. In tandem with this approach, various reforms have been implemented to increase fairness, reduce transaction costs, promote economic development and make sites available for appropriate reuse. Ensuring that responsible parties cleanup sites ultimately reduces direct human exposures to hazardous pollutants and contaminants, provides for long-term human health protections and makes contaminated properties available for reuse.

The Department of Justice supports the EPA's Superfund enforcement program through negotiations and judicial actions to compel PRP cleanup and litigation to recover Trust Fund monies. The agency will provide \$21.8 million to the Department of Justice through an Interagency Agreement. This partnership to ensure polluters pay has been very effective. In FY 2014, the Superfund Enforcement program secured private party commitments exceeding \$600 million. This amount includes three components: PRPs who committed to perform future response work with an estimated value of more than \$454 million; who agreed to reimburse the agency for \$58 million in past costs; and who were billed by the EPA for \$89 million in oversight costs. The EPA also works to ensure that required legally enforceable institutional controls and financial assurance instruments are in place and adhered to at Superfund sites and at facilities subject to RCRA Corrective Action to ensure the long-term protectiveness of cleanup actions.

In FY 2016 the proposed budget for the Superfund and Federal Facilities enforcement programs is \$163.9 million.

### *Partnering with States and Tribes*

In FY 2016, the Enforcement and Compliance Assurance program will sustain its environmental enforcement partnerships with states and tribes and work to strengthen their ability to address environmental and public health threats. In FY 2016, the Enforcement and Compliance Assurance program will provide \$23.0 million in grants to the states and tribes to assist in the implementation of compliance and enforcement provisions of the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These grants support state and tribal compliance activities to protect human health and the environment from harmful chemicals and pesticides. Under the Pesticides Enforcement Grant program, the EPA will continue to provide resources to states and Indian Tribes to conduct FIFRA compliance inspections and take appropriate enforcement actions. The Toxic Substances Compliance Grants protect the public and the environment from PCBs, asbestos, and lead-based paint.



# *Appendices*



**Environmental Protection Agency  
FY 2016 Annual Performance Plan and Congressional Justification**

**PROGRAM PROJECTS BY PROGRAM AREA  
(Dollars in Thousands)**

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
<b>Science &amp; Technology</b>				
<b>Clean Air and Climate</b>				
Clean Air Allowance Trading Programs	\$8,220.0	\$8,298.0	\$7,808.0	(\$490.0)
Climate Protection Program	\$11,794.6	\$8,018.0	\$8,124.0	\$106.0
Federal Support for Air Quality Management	\$5,689.7	\$6,923.0	\$8,493.0	\$1,570.0
Federal Vehicle and Fuels Standards and Certification	\$84,638.8	\$93,302.0	\$100,419.0	\$7,117.0
<b>Subtotal, Clean Air and Climate</b>	<b>\$110,343.1</b>	<b>\$116,541.0</b>	<b>\$124,844.0</b>	<b>\$8,303.0</b>
<b>Indoor Air and Radiation</b>				
Indoor Air: Radon Program	\$219.3	\$198.0	\$0.0	(\$198.0)
Radiation: Protection	\$2,586.6	\$1,984.0	\$2,160.0	\$176.0
Radiation: Response Preparedness	\$4,162.2	\$3,526.0	\$4,043.0	\$517.0
Reduce Risks from Indoor Air	\$245.5	\$289.0	\$412.0	\$123.0
<b>Subtotal, Indoor Air and Radiation</b>	<b>\$7,213.6</b>	<b>\$5,997.0</b>	<b>\$6,615.0</b>	<b>\$618.0</b>
<b>Enforcement</b>				
Forensics Support	\$14,088.7	\$13,669.0	\$14,398.0	\$729.0
<b>Homeland Security</b>				
Homeland Security: Critical Infrastructure Protection	\$10,207.3	\$10,324.0	\$11,871.0	\$1,547.0
Homeland Security: Preparedness, Response, and Recovery	\$27,840.5	\$26,256.0	\$25,674.0	(\$582.0)
Homeland Security: Protection of EPA Personnel and Infrastructure	\$545.0	\$542.0	\$605.0	\$63.0
<b>Subtotal, Homeland Security</b>	<b>\$38,592.8</b>	<b>\$37,122.0</b>	<b>\$38,150.0</b>	<b>\$1,028.0</b>
<b>IT / Data Management / Security</b>				
IT / Data Management	\$3,860.8	\$3,089.0	\$3,196.0	\$107.0
<b>Operations and Administration</b>				
Facilities Infrastructure and Operations	\$75,013.3	\$68,339.0	\$79,170.0	\$10,831.0
<b>Pesticides Licensing</b>				
Pesticides: Protect Human Health from Pesticide Risk	\$3,660.5	\$3,197.0	\$3,266.0	\$69.0
Pesticides: Protect the Environment from Pesticide Risk	\$1,960.5	\$2,316.0	\$3,896.0	\$1,580.0
Pesticides: Realize the Value of Pesticide Availability	\$517.2	\$514.0	\$529.0	\$15.0

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
<b>Subtotal, Pesticides Licensing</b>	<b>\$6,138.2</b>	<b>\$6,027.0</b>	<b>\$7,691.0</b>	<b>\$1,664.0</b>
<b>Research: Air, Climate and Energy</b>				
Research: Air, Climate and Energy	\$99,429.8	\$91,906.0	\$100,342.0	\$8,436.0
<b>Research: Safe and Sustainable Water Resources</b>				
Research: Safe and Sustainable Water Resources	\$120,085.3	\$107,434.0	\$111,022.0	\$3,588.0
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$160,800.7	\$149,975.0	\$139,172.0	(\$10,803.0)
<b>Research: Chemical Safety and Sustainability</b>				
Human Health Risk Assessment	\$37,813.5	\$39,423.0	\$39,277.0	(\$146.0)
Research: Chemical Safety and Sustainability				
<i>Endocrine Disruptors</i>	\$15,833.3	\$16,253.0	\$15,417.0	(\$836.0)
<i>Computational Toxicology</i>	\$29,481.1	\$21,409.0	\$33,775.0	\$12,366.0
<i>Research: Chemical Safety and Sustainability (other activities)</i>	\$54,153.8	\$49,845.0	\$52,253.0	\$2,408.0
Subtotal, Research: Chemical Safety and Sustainability	\$99,468.2	\$87,507.0	\$101,445.0	\$13,938.0
<b>Subtotal, Research: Chemical Safety and Sustainability</b>	<b>\$137,281.7</b>	<b>\$126,930.0</b>	<b>\$140,722.0</b>	<b>\$13,792.0</b>
<b>Water: Human Health Protection</b>				
Drinking Water Programs	\$3,750.9	\$3,519.0	\$3,766.0	\$247.0
<b>Congressional Priorities</b>				
Water Quality Research and Support Grants	\$2,450.1	\$4,100.0	\$0.0	(\$4,100.0)
<b>Total, Science &amp; Technology</b>	<b>\$779,049.0</b>	<b>\$734,648.0</b>	<b>\$769,088.0</b>	<b>\$34,440.0</b>
 <b>Environmental Program &amp; Management</b>				
<b>Clean Air and Climate</b>				
Clean Air Allowance Trading Programs	\$18,756.3	\$18,231.0	\$18,378.0	\$147.0
Climate Protection Program	\$90,702.3	\$95,436.0	\$109,625.0	\$14,189.0
Federal Stationary Source Regulations	\$26,777.0	\$25,000.0	\$37,545.0	\$12,545.0
Federal Support for Air Quality Management	\$121,018.7	\$120,572.0	\$157,339.0	\$36,767.0
Stratospheric Ozone: Domestic Programs	\$5,121.6	\$4,941.0	\$4,963.0	\$22.0
Stratospheric Ozone: Multilateral Fund	\$8,901.0	\$8,928.0	\$9,057.0	\$129.0
<b>Subtotal, Clean Air and Climate</b>	<b>\$271,276.9</b>	<b>\$273,108.0</b>	<b>\$336,907.0</b>	<b>\$63,799.0</b>
<b>Indoor Air and Radiation</b>				
Indoor Air: Radon Program	\$1,790.0	\$3,055.0	\$3,386.0	\$331.0
Radiation: Protection	\$8,945.8	\$8,576.0	\$9,517.0	\$941.0

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
Radiation: Response Preparedness	\$2,844.2	\$2,454.0	\$3,317.0	\$863.0
Reduce Risks from Indoor Air	\$12,437.0	\$13,552.0	\$14,057.0	\$505.0
<b>Subtotal, Indoor Air and Radiation</b>	<b>\$26,017.0</b>	<b>\$27,637.0</b>	<b>\$30,277.0</b>	<b>\$2,640.0</b>
<b>Brownfields</b>				
Brownfields	\$23,372.2	\$25,593.0	\$29,599.0	\$4,006.0
<b>Compliance</b>				
Compliance Monitoring	\$101,883.5	\$101,665.0	\$122,424.0	\$20,759.0
<b>Enforcement</b>				
Civil Enforcement	\$173,835.8	\$170,854.0	\$185,756.0	\$14,902.0
Criminal Enforcement	\$48,136.0	\$46,745.0	\$51,917.0	\$5,172.0
Environmental Justice	\$6,636.8	\$6,737.0	\$13,971.0	\$7,234.0
NEPA Implementation	\$15,869.1	\$16,301.0	\$17,612.0	\$1,311.0
<b>Subtotal, Enforcement</b>	<b>\$244,477.7</b>	<b>\$240,637.0</b>	<b>\$269,256.0</b>	<b>\$28,619.0</b>
<b>Geographic Programs</b>				
Geographic Program: Chesapeake Bay	\$61,335.5	\$73,000.0	\$70,000.0	(\$3,000.0)
Geographic Program: Gulf of Mexico	\$5,424.2	\$4,482.0	\$3,908.0	(\$574.0)
Geographic Program: Lake Champlain	\$1,399.0	\$4,399.0	\$1,399.0	(\$3,000.0)
Geographic Program: Long Island Sound	\$3,944.9	\$3,940.0	\$2,893.0	(\$1,047.0)
Geographic Program: Other				
<i>Lake Pontchartrain</i>	\$948.0	\$948.0	\$948.0	\$0.0
<i>S.New England Estuary (SNEE)</i>	\$2,000.0	\$5,000.0	\$5,000.0	\$0.0
<i>Geographic Program: Other (other activities)</i>	\$1,426.7	\$1,445.0	\$939.0	(\$506.0)
Subtotal, Geographic Program: Other	\$4,374.7	\$7,393.0	\$6,887.0	(\$506.0)
Great Lakes Restoration	\$288,870.0	\$300,000.0	\$250,000.0	(\$50,000.0)
Geographic Program: South Florida	\$2,343.5	\$1,704.0	\$1,340.0	(\$364.0)
Geographic Program: San Francisco Bay	\$5,312.4	\$4,819.0	\$3,988.0	(\$831.0)
Geographic Program: Puget Sound	\$25,009.8	\$28,000.0	\$29,998.0	\$1,998.0
<b>Subtotal, Geographic Programs</b>	<b>\$398,014.0</b>	<b>\$427,737.0</b>	<b>\$370,413.0</b>	<b>(\$57,324.0)</b>
<b>Homeland Security</b>				
Homeland Security: Communication and Information	\$4,073.4	\$3,771.0	\$4,142.0	\$371.0
Homeland Security: Critical Infrastructure Protection	\$648.0	\$964.0	\$1,014.0	\$50.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$4,805.0	\$5,460.0	\$5,118.0	(\$342.0)
<b>Subtotal, Homeland Security</b>	<b>\$9,526.4</b>	<b>\$10,195.0</b>	<b>\$10,274.0</b>	<b>\$79.0</b>
<b>Information Exchange / Outreach</b>				

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
State and Local Prevention and Preparedness	\$13,802.7	\$15,666.0	\$27,783.0	\$12,117.0
TRI / Right to Know	\$13,765.0	\$14,616.0	\$14,691.0	\$75.0
Tribal - Capacity Building	\$13,749.5	\$14,063.0	\$15,600.0	\$1,537.0
Executive Management and Operations	\$47,471.0	\$46,276.0	\$48,972.0	\$2,696.0
Environmental Education	\$7,520.3	\$8,702.0	\$10,969.0	\$2,267.0
Exchange Network	\$19,602.1	\$16,995.0	\$25,361.0	\$8,366.0
Small Minority Business Assistance	\$1,766.8	\$1,641.0	\$1,971.0	\$330.0
Small Business Ombudsman	\$1,604.0	\$2,031.0	\$2,296.0	\$265.0
Children and Other Sensitive Populations: Agency Coordination	\$5,888.0	\$6,548.0	\$8,035.0	\$1,487.0
<b>Subtotal, Information Exchange / Outreach</b>	<b>\$125,169.4</b>	<b>\$126,538.0</b>	<b>\$155,678.0</b>	<b>\$29,140.0</b>
<b>International Programs</b>				
US Mexico Border	\$3,607.7	\$2,978.0	\$3,307.0	\$329.0
International Sources of Pollution	\$6,673.7	\$6,938.0	\$7,245.0	\$307.0
Trade and Governance	\$5,761.3	\$5,484.0	\$6,009.0	\$525.0
<b>Subtotal, International Programs</b>	<b>\$16,042.7</b>	<b>\$15,400.0</b>	<b>\$16,561.0</b>	<b>\$1,161.0</b>
<b>IT / Data Management / Security</b>				
Information Security	\$5,861.0	\$6,309.0	\$6,666.0	\$357.0
IT / Data Management	\$90,118.6	\$84,227.0	\$96,395.0	\$12,168.0
<b>Subtotal, IT / Data Management / Security</b>	<b>\$95,979.6</b>	<b>\$90,536.0</b>	<b>\$103,061.0</b>	<b>\$12,525.0</b>
<b>Legal / Science / Regulatory / Economic Review</b>				
Integrated Environmental Strategies	\$14,012.7	\$12,724.0	\$21,937.0	\$9,213.0
Administrative Law	\$4,321.0	\$5,120.0	\$5,039.0	(\$81.0)
Alternative Dispute Resolution	\$1,262.4	\$1,397.0	\$1,452.0	\$55.0
Civil Rights / Title VI Compliance	\$9,315.3	\$11,070.0	\$11,793.0	\$723.0
Legal Advice: Environmental Program	\$42,816.4	\$42,027.0	\$52,411.0	\$10,384.0
Legal Advice: Support Program	\$14,231.3	\$16,907.0	\$18,662.0	\$1,755.0
Regional Science and Technology	\$2,338.2	\$2,176.0	\$2,941.0	\$765.0
Science Advisory Board	\$4,685.1	\$5,110.0	\$6,072.0	\$962.0
Regulatory/Economic-Management and Analysis	\$14,408.3	\$14,883.0	\$18,479.0	\$3,596.0
<b>Subtotal, Legal / Science / Regulatory / Economic Review</b>	<b>\$107,390.7</b>	<b>\$111,414.0</b>	<b>\$138,786.0</b>	<b>\$27,372.0</b>
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$73,721.3	\$72,851.0	\$76,057.0	\$3,206.0
Facilities Infrastructure and Operations	\$305,366.3	\$310,399.0	\$312,180.0	\$1,781.0
Acquisition Management	\$34,537.6	\$30,761.0	\$37,974.0	\$7,213.0
Human Resources Management	\$39,052.3	\$43,843.0	\$51,344.0	\$7,501.0
Financial Assistance Grants / IAG Management	\$23,371.7	\$24,897.0	\$27,847.0	\$2,950.0



	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
<b>Subtotal, Operations and Administration</b>	<b>\$476,049.2</b>	<b>\$482,751.0</b>	<b>\$505,402.0</b>	<b>\$22,651.0</b>
<b>Pesticides Licensing</b>				
Science Policy and Biotechnology	\$1,532.7	\$1,400.0	\$1,532.0	\$132.0
Pesticides: Protect Human Health from Pesticide Risk	\$50,633.7	\$55,698.0	\$60,019.0	\$4,321.0
Pesticides: Protect the Environment from Pesticide Risk	\$36,085.1	\$35,470.0	\$39,805.0	\$4,335.0
Pesticides: Realize the Value of Pesticide Availability	\$10,175.5	\$9,795.0	\$10,409.0	\$614.0
<b>Subtotal, Pesticides Licensing</b>	<b>\$98,427.0</b>	<b>\$102,363.0</b>	<b>\$111,765.0</b>	<b>\$9,402.0</b>
<b>Resource Conservation and Recovery Act (RCRA)</b>				
RCRA: Corrective Action	\$36,578.7	\$36,438.0	\$37,048.0	\$610.0
RCRA: Waste Management	\$58,104.9	\$59,958.0	\$63,413.0	\$3,455.0
RCRA: Waste Minimization & Recycling	\$9,213.5	\$8,481.0	\$10,781.0	\$2,300.0
<b>Subtotal, Resource Conservation and Recovery Act (RCRA)</b>	<b>\$103,897.1</b>	<b>\$104,877.0</b>	<b>\$111,242.0</b>	<b>\$6,365.0</b>
<b>Toxics Risk Review and Prevention</b>				
Endocrine Disruptors	\$5,638.5	\$7,553.0	\$4,259.0	(\$3,294.0)
Pollution Prevention Program	\$15,056.4	\$13,114.0	\$13,416.0	\$302.0
Toxic Substances: Chemical Risk Management	\$209.2	\$0.0	\$0.0	\$0.0
Toxic Substances: Chemical Risk Review and Reduction	\$56,133.9	\$58,135.0	\$56,304.0	(\$1,831.0)
Toxic Substances: Lead Risk Reduction Program	\$14,648.9	\$13,719.0	\$13,726.0	\$7.0
<b>Subtotal, Toxics Risk Review and Prevention</b>	<b>\$91,686.9</b>	<b>\$92,521.0</b>	<b>\$87,705.0</b>	<b>(\$4,816.0)</b>
<b>Underground Storage Tanks (LUST / UST)</b>				
LUST / UST	\$11,979.2	\$11,295.0	\$11,657.0	\$362.0
<b>Water: Ecosystems</b>				
National Estuary Program / Coastal Waterways	\$24,385.2	\$26,723.0	\$27,310.0	\$587.0
Wetlands	\$20,629.1	\$21,065.0	\$23,334.0	\$2,269.0
<b>Subtotal, Water: Ecosystems</b>	<b>\$45,014.3</b>	<b>\$47,788.0</b>	<b>\$50,644.0</b>	<b>\$2,856.0</b>
<b>Water: Human Health Protection</b>				
Beach / Fish Programs	\$1,505.4	\$2,015.0	\$750.0	(\$1,265.0)
Drinking Water Programs	\$95,283.5	\$96,492.0	\$125,018.0	\$28,526.0
<b>Subtotal, Water: Human Health Protection</b>	<b>\$96,788.9</b>	<b>\$98,507.0</b>	<b>\$125,768.0</b>	<b>\$27,261.0</b>
<b>Water Quality Protection</b>				
Marine Pollution	\$11,877.3	\$10,628.0	\$10,481.0	(\$147.0)
Surface Water Protection	\$198,879.2	\$199,789.0	\$238,818.0	\$39,029.0

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
Water Infrastructure Finance and Innovation	\$0.0	\$0.0	\$5,000.0	\$5,000.0
<b>Subtotal, Water Quality Protection</b>	<b>\$210,756.5</b>	<b>\$210,417.0</b>	<b>\$254,299.0</b>	<b>\$43,882.0</b>
<b>Congressional Priorities</b>				
Water Quality Research and Support Grants	\$12,700.0	\$12,700.0	\$0.0	(\$12,700.0)
<b>Total, Environmental Program &amp; Management</b>	<b>\$2,566,449.2</b>	<b>\$2,613,679.0</b>	<b>\$2,841,718.0</b>	<b>\$228,039.0</b>
<b>Inspector General</b>				
<b>Audits, Evaluations, and Investigations</b>				
Audits, Evaluations, and Investigations	\$41,448.0	\$41,489.0	\$50,099.0	\$8,610.0
<b>Total, Inspector General</b>	<b>\$41,448.0</b>	<b>\$41,489.0</b>	<b>\$50,099.0</b>	<b>\$8,610.0</b>
<b>Building and Facilities</b>				
<b>Homeland Security</b>				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$4,158.7	\$6,676.0	\$7,875.0	\$1,199.0
<b>Operations and Administration</b>				
Facilities Infrastructure and Operations	\$23,532.6	\$35,641.0	\$43,632.0	\$7,991.0
<b>Total, Building and Facilities</b>	<b>\$27,691.3</b>	<b>\$42,317.0</b>	<b>\$51,507.0</b>	<b>\$9,190.0</b>
<b>Hazardous Substance Superfund</b>				
<b>Indoor Air and Radiation</b>				
Radiation: Protection	\$1,992.1	\$1,985.0	\$2,180.0	\$195.0
<b>Audits, Evaluations, and Investigations</b>				
Audits, Evaluations, and Investigations	\$9,435.9	\$9,939.0	\$8,459.0	(\$1,480.0)
<b>Compliance</b>				
Compliance Monitoring	\$1,014.9	\$995.0	\$1,067.0	\$72.0
<b>Enforcement</b>				
Criminal Enforcement	\$7,430.4	\$7,243.0	\$7,643.0	\$400.0
Environmental Justice	\$609.1	\$581.0	\$609.0	\$28.0
Forensics Support	\$2,291.2	\$1,083.0	\$1,124.0	\$41.0
Superfund: Enforcement	\$161,712.6	\$150,257.0	\$156,539.0	\$6,282.0
Superfund: Federal Facilities Enforcement	\$7,536.8	\$7,211.0	\$7,348.0	\$137.0
<b>Subtotal, Enforcement</b>	<b>\$179,580.1</b>	<b>\$166,375.0</b>	<b>\$173,263.0</b>	<b>\$6,888.0</b>
<b>Homeland Security</b>				

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
Homeland Security: Preparedness, Response, and Recovery	\$35,513.6	\$35,265.0	\$32,654.0	(\$2,611.0)
Homeland Security: Protection of EPA Personnel and Infrastructure	\$1,057.1	\$1,097.0	\$1,113.0	\$16.0
<b>Subtotal, Homeland Security</b>	<b>\$36,570.7</b>	<b>\$36,362.0</b>	<b>\$33,767.0</b>	<b>(\$2,595.0)</b>
<b>Information Exchange / Outreach</b>				
Exchange Network	\$1,383.0	\$1,328.0	\$1,366.0	\$38.0
<b>IT / Data Management / Security</b>				
Information Security	\$705.1	\$683.0	\$704.0	\$21.0
IT / Data Management	\$15,129.1	\$13,802.0	\$14,938.0	\$1,136.0
<b>Subtotal, IT / Data Management / Security</b>	<b>\$15,834.2</b>	<b>\$14,485.0</b>	<b>\$15,642.0</b>	<b>\$1,157.0</b>
<b>Legal / Science / Regulatory / Economic Review</b>				
Alternative Dispute Resolution	\$888.0	\$750.0	\$774.0	\$24.0
Legal Advice: Environmental Program	\$506.3	\$503.0	\$467.0	(\$36.0)
<b>Subtotal, Legal / Science / Regulatory / Economic Review</b>	<b>\$1,394.3</b>	<b>\$1,253.0</b>	<b>\$1,241.0</b>	<b>(\$12.0)</b>
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$21,723.1	\$22,352.0	\$24,277.0	\$1,925.0
Facilities Infrastructure and Operations	\$70,445.1	\$75,055.0	\$78,160.0	\$3,105.0
Acquisition Management	\$23,499.7	\$21,989.0	\$23,923.0	\$1,934.0
Human Resources Management	\$6,590.7	\$5,984.0	\$7,953.0	\$1,969.0
Financial Assistance Grants / IAG Management	\$3,221.4	\$2,725.0	\$3,027.0	\$302.0
<b>Subtotal, Operations and Administration</b>	<b>\$125,480.0</b>	<b>\$128,105.0</b>	<b>\$137,340.0</b>	<b>\$9,235.0</b>
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$14,450.2	\$14,032.0	\$12,220.0	(\$1,812.0)
<b>Research: Chemical Safety and Sustainability</b>				
Human Health Risk Assessment	\$3,113.9	\$2,843.0	\$2,831.0	(\$12.0)
<b>Superfund Cleanup</b>				
Superfund: Emergency Response and Removal	\$190,290.6	\$181,306.0	\$190,732.0	\$9,426.0
Superfund: EPA Emergency Preparedness	\$7,710.2	\$7,636.0	\$7,843.0	\$207.0
Superfund: Federal Facilities	\$23,610.5	\$21,125.0	\$26,265.0	\$5,140.0
Superfund: Remedial	\$555,236.7	\$501,000.0	\$539,618.0	\$38,618.0
<b>Subtotal, Superfund Cleanup</b>	<b>\$776,848.0</b>	<b>\$711,067.0</b>	<b>\$764,458.0</b>	<b>\$53,391.0</b>
<b>Total, Hazardous Substance Superfund</b>	<b>\$1,167,097.3</b>	<b>\$1,088,769.0</b>	<b>\$1,153,834.0</b>	<b>\$65,065.0</b>

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
<b>Leaking Underground Storage Tanks</b>				
<b>Enforcement</b>				
Civil Enforcement	\$642.4	\$620.0	\$627.0	\$7.0
<b>Operations and Administration</b>				
Central Planning, Budgeting, and Finance	\$677.0	\$421.0	\$440.0	\$19.0
Facilities Infrastructure and Operations	\$797.4	\$792.0	\$1,103.0	\$311.0
Acquisition Management	\$147.4	\$139.0	\$138.0	(\$1.0)
<b>Subtotal, Operations and Administration</b>	<b>\$1,621.8</b>	<b>\$1,352.0</b>	<b>\$1,681.0</b>	<b>\$329.0</b>
<b>Underground Storage Tanks (LUST / UST)</b>				
LUST / UST	\$10,031.9	\$9,240.0	\$9,409.0	\$169.0
LUST Cooperative Agreements	\$56,874.7	\$55,040.0	\$54,402.0	(\$638.0)
LUST Prevention	\$26,175.3	\$25,369.0	\$28,859.0	\$3,490.0
<b>Subtotal, Underground Storage Tanks (LUST / UST)</b>	<b>\$93,081.9</b>	<b>\$89,649.0</b>	<b>\$92,670.0</b>	<b>\$3,021.0</b>
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$327.7	\$320.0	\$348.0	\$28.0
<b>Total, Leaking Underground Storage Tanks</b>	<b>\$95,673.8</b>	<b>\$91,941.0</b>	<b>\$95,326.0</b>	<b>\$3,385.0</b>
<b>Inland Oil Spill Programs</b>				
<b>Compliance</b>				
Compliance Monitoring	\$143.9	\$139.0	\$155.0	\$16.0
<b>Enforcement</b>				
Civil Enforcement	\$2,396.9	\$2,413.0	\$2,424.0	\$11.0
<b>Oil</b>				
Oil Spill: Prevention, Preparedness and Response	\$13,620.3	\$14,409.0	\$18,524.0	\$4,115.0
<b>Operations and Administration</b>				
Facilities Infrastructure and Operations	\$456.9	\$584.0	\$1,762.0	\$1,178.0
<b>Research: Sustainable Communities</b>				
Research: Sustainable and Healthy Communities	\$285.1	\$664.0	\$513.0	(\$151.0)
<b>Total, Inland Oil Spill Programs</b>	<b>\$16,903.1</b>	<b>\$18,209.0</b>	<b>\$23,378.0</b>	<b>\$5,169.0</b>
<b>State and Tribal Assistance Grants</b>				
<b>State and Tribal Assistance Grants (STAG)</b>				
Infrastructure Assistance: Alaska Native Villages	\$10,070.9	\$10,000.0	\$10,000.0	\$0.0

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
Brownfields Projects	\$97,731.5	\$80,000.0	\$110,000.0	\$30,000.0
Infrastructure Assistance: Clean Water SRF	\$1,547,252.7	\$1,448,887.0	\$1,116,000.0	(\$332,887.0)
Infrastructure Assistance: Drinking Water SRF	\$892,647.9	\$906,896.0	\$1,186,000.0	\$279,104.0
Infrastructure Assistance: Mexico Border	\$5,000.0	\$5,000.0	\$5,000.0	\$0.0
Diesel Emissions Reduction Grant Program	\$20,674.3	\$30,000.0	\$10,000.0	(\$20,000.0)
Targeted Airshed Grants	\$0.0	\$10,000.0	\$0.0	(\$10,000.0)
<b>Subtotal, State and Tribal Assistance Grants (STAG)</b>	<b>\$2,573,377.3</b>	<b>\$2,490,783.0</b>	<b>\$2,437,000.0</b>	<b>(\$53,783.0)</b>
<b>Categorical Grants</b>				
Categorical Grant: Nonpoint Source (Sec. 319)	\$155,708.1	\$159,252.0	\$164,915.0	\$5,663.0
Categorical Grant: Public Water System Supervision (PWSS)	\$102,692.9	\$101,963.0	\$109,700.0	\$7,737.0
Categorical Grant: State and Local Air Quality Management	\$229,785.7	\$228,219.0	\$268,229.0	\$40,010.0
Categorical Grant: Radon	\$8,602.9	\$8,051.0	\$0.0	(\$8,051.0)
Categorical Grant: Pollution Control (Sec. 106)				
<i>Monitoring Grants</i>	\$18,270.3	\$17,848.0	\$18,500.0	\$652.0
<i>Categorical Grant: Pollution Control (Sec. 106) (other activities)</i>	\$215,338.3	\$212,958.0	\$230,664.0	\$17,706.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$233,608.6	\$230,806.0	\$249,164.0	\$18,358.0
Categorical Grant: Wetlands Program Development	\$12,290.5	\$14,661.0	\$19,661.0	\$5,000.0
Categorical Grant: Underground Injection Control (UIC)	\$10,470.6	\$10,506.0	\$10,506.0	\$0.0
Categorical Grant: Pesticides Program Implementation	\$13,665.6	\$12,701.0	\$13,201.0	\$500.0
Categorical Grant: Lead	\$13,878.6	\$14,049.0	\$14,049.0	\$0.0
Categorical Grant: Hazardous Waste Financial Assistance	\$98,153.1	\$99,693.0	\$99,693.0	\$0.0
Categorical Grant: Pesticides Enforcement	\$18,386.6	\$18,050.0	\$18,050.0	\$0.0
Categorical Grant: Pollution Prevention	\$4,853.4	\$4,765.0	\$4,765.0	\$0.0
Categorical Grant: Toxics Substances Compliance	\$4,951.7	\$4,919.0	\$4,919.0	\$0.0
Categorical Grant: Tribal General Assistance Program	\$68,241.1	\$65,476.0	\$96,375.0	\$30,899.0
Categorical Grant: Underground Storage Tanks	\$1,535.9	\$1,498.0	\$1,498.0	\$0.0
Categorical Grant: Tribal Air Quality Management	\$12,442.3	\$12,829.0	\$12,829.0	\$0.0
Categorical Grant: Environmental Information	\$12,453.0	\$9,646.0	\$25,346.0	\$15,700.0
Categorical Grant: Beaches Protection	\$9,628.6	\$9,549.0	\$0.0	(\$9,549.0)
Categorical Grant: Brownfields	\$47,622.6	\$47,745.0	\$49,500.0	\$1,755.0
<b>Subtotal, Categorical Grants</b>	<b>\$1,058,971.8</b>	<b>\$1,054,378.0</b>	<b>\$1,162,400.0</b>	<b>\$108,022.0</b>
<b>Congressional Priorities</b>				
Congressionally Mandated Projects	\$9,922.4	\$0.0	\$0.0	\$0.0
<b>Total, State and Tribal Assistance Grants</b>	<b>\$3,642,271.5</b>	<b>\$3,545,161.0</b>	<b>\$3,599,400.0</b>	<b>\$54,239.0</b>

	<b>FY 2014 Actuals</b>	<b>FY 2015 Enacted</b>	<b>FY 2016 Pres Bud</b>	<b>2016 Pres Bud vs. 2015 Enacted</b>
<b>Hazardous Waste Electronic Manifest System Fund</b>				
<b>Resource Conservation and Recovery Act (RCRA)</b>				
RCRA: Waste Management	\$2,626.5	\$3,674.0	\$7,368.0	\$3,694.0
<b>Total, Hazardous Waste Electronic Manifest System Fund</b>	<b>\$2,626.5</b>	<b>\$3,674.0</b>	<b>\$7,368.0</b>	<b>\$3,694.0</b>
<b>Rescission of Prior Year Funds</b>	<b>\$0.0</b>	<b>(\$40,000.0)</b>	<b>\$0.0</b>	<b>\$40,000.0</b>
<b>Hurricane Sandy Supplemental</b>	<b>\$570,086.7</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
<b>TOTAL, EPA</b>	<b>\$8,909,296.4</b>	<b>\$8,139,887.0</b>	<b>\$8,591,718.0</b>	<b>\$451,831.0</b>

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

## Summary of Agency Resources by Appropriation

(Dollars in Thousands)

Appropriation	FY 2014 Enacted	FY 2015 Enacted	FY 2016 PresBud	Delta FY 16 PB - FY 15 EN
Science & Technology (S&T)	\$759,156	\$734,648	\$769,088	\$34,440
Environmental Program & Management (EPM)	\$2,624,149	\$2,613,679	\$2,841,718	\$228,039
Inspector General (IG)	\$41,849	\$41,489	\$50,099	\$8,610
Building and Facilities (B&F)	\$34,467	\$42,317	\$51,507	\$9,190
Inland Oil Spill Programs (Oil)	\$18,209	\$18,209	\$23,378	\$5,169
Hazardous Substance Superfund (SF)	\$1,088,769	\$1,088,769	\$1,153,834	\$65,065
- <i>Superfund Program</i>	\$1,059,614	\$1,059,980	\$1,129,158	\$69,178
- <i>Inspector General Transfer</i>	\$9,939	\$9,939	\$8,459	(\$1,480)
- <i>Science &amp; Technology Transfer</i>	\$19,216	\$18,850	\$16,217	(\$2,633)
Leaking Underground Storage Tanks (LUST)	\$94,566	\$91,941	\$95,326	\$3,385
State and Tribal Assistance Grants (STAG)	\$3,535,161	\$3,545,161	\$3,599,400	\$54,239
- <i>Categorical Grants</i>	\$1,054,378	\$1,054,378	\$1,162,400	\$108,022
- <i>All Other STAG</i>	\$2,480,783	\$2,490,783	\$2,437,000	(\$53,783)
E-Manifest	\$3,674	\$3,674	\$7,368	\$3,694
Rescission of Prior Year Funds	\$0	(\$40,000)	\$0	\$40,000
<b>Agency Total</b>	<b>\$8,200,000</b>	<b>\$8,139,887</b>	<b>\$8,591,718</b>	<b>\$451,831</b>

Note: S&T and IG totals do not include Superfund transfers – see the Superfund line items or annual amounts.





# Categorical Program Grants (STAG)

## by National Program and State Grant

(Dollars in Thousands)

NPM / Grant	FY 2014 Actuals	FY 2015 Enacted	FY 2016 PresBud	Delta	% Change
				FY 2016 PB - FY 2015 EN	FY 2016 PB - FY 2015 EN
<b>Air &amp; Radiation</b>					
State and Local Air Quality Management	\$229,786	\$228,219	\$268,229	\$40,010	17.5%
Tribal Air Quality Management	\$12,442	\$12,829	\$12,829	\$0	0.0%
Radon	\$8,603	\$8,051	\$0	(\$8,051)	-100.0%
	<b>\$250,831</b>	<b>\$249,099</b>	<b>\$281,058</b>	<b>\$31,959</b>	<b>12.8%</b>
<b>Water</b>					
Pollution Control (Sec. 106)	\$233,609	\$230,806	\$249,164	\$18,358	8.0%
Beaches Protection	\$9,629	\$9,549	\$0	(\$9,549)	-100.0%
Nonpoint Source (Sec. 319)	\$155,708	\$159,252	\$164,915	\$5,663	3.6%
Wetlands Program Development	\$12,291	\$14,661	\$19,661	\$5,000	34.1%
	<b>\$411,236</b>	<b>\$414,268</b>	<b>\$433,740</b>	<b>\$19,472</b>	<b>4.7%</b>
<b>Drinking Water</b>					
Public Water System Supervision (PWSS)	\$102,693	\$101,963	\$109,700	\$7,737	7.6%
Underground Injection Control (UIC)	\$10,471	\$10,506	\$10,506	\$0	0.0%
	<b>\$113,164</b>	<b>\$112,469</b>	<b>\$120,206</b>	<b>\$7,737</b>	<b>6.9%</b>
<b>Hazardous Waste</b>					
Hazardous Waste Financial Assistance	\$98,153	\$99,693	\$99,693	\$0	0.0%
Brownfields	\$47,623	\$47,745	\$49,500	\$1,755	3.7%
Underground Storage Tanks	\$1,536	\$1,498	\$1,498	\$0	0.0%
	<b>\$147,312</b>	<b>\$148,936</b>	<b>\$150,691</b>	<b>\$1,755</b>	<b>1.2%</b>
<b>Pesticides &amp; Toxics</b>					
Pesticides Program Implementation	\$13,666	\$12,701	\$13,201	\$500	3.9%
Lead	\$13,879	\$14,049	\$14,049	\$0	0.0%
Toxics Substances Compliance	\$4,952	\$4,919	\$4,919	\$0	0.0%
Pesticides Enforcement	\$18,387	\$18,050	\$18,050	\$0	0.0%
	<b>\$50,883</b>	<b>\$49,719</b>	<b>\$50,219</b>	<b>\$500</b>	<b>1.0%</b>
<b>Multimedia</b>					
Environmental Information	\$12,453	\$9,646	\$25,346	\$15,700	162.8%
Pollution Prevention	\$4,853	\$4,765	\$4,765	\$0	0.0%
Tribal General Assistance Program	\$68,241	\$65,476	\$96,375	\$30,899	47.2%
	<b>\$85,548</b>	<b>\$79,887</b>	<b>\$126,486</b>	<b>\$46,599</b>	<b>58.3%</b>
<b>Total Categorical Grants</b>	<b>\$1,058,972</b>	<b>\$1,054,378</b>	<b>\$1,162,400</b>	<b>\$108,022</b>	<b>10.2%</b>

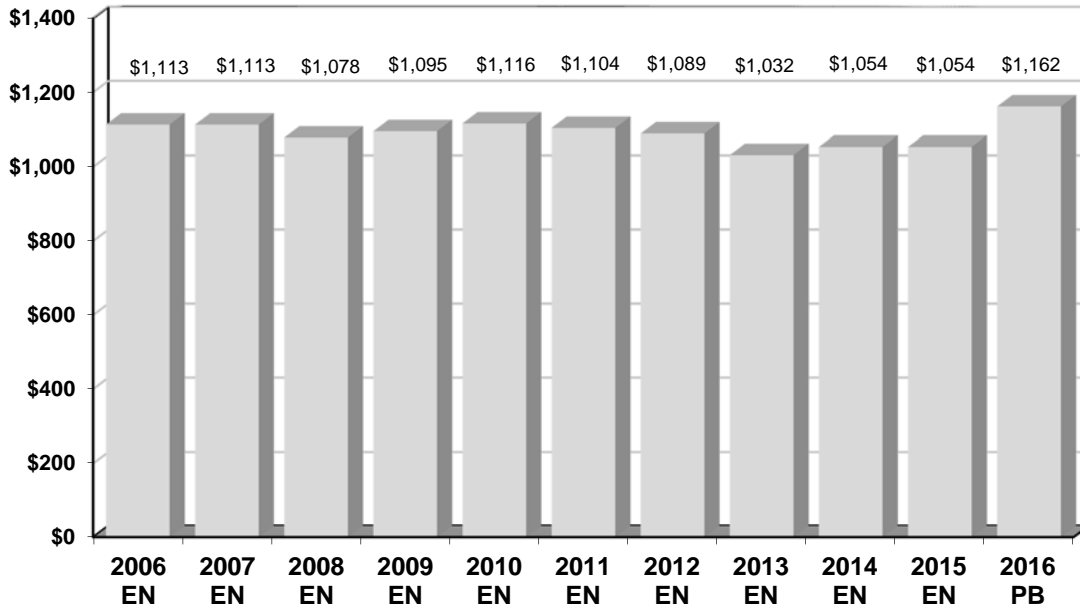
Notes 1) Actuals refer to actual obligations.

2) Totals may not add due to rounding.



## Categorical Grants Program (STAG)

(Dollars in millions)



\*EN – Enacted, PB – President's Budget

### Categorical Grants

In FY 2016, the EPA requests a total of \$1.162 billion for 17 “categorical” program grants for state, interstate organizations, non-profit organizations, intertribal consortia, and Tribal governments. This represents a \$108 million increase from the FY 2015 Enacted Budget. The EPA will continue to pursue its strategy of building and supporting state, local, and Tribal capacity to implement, operate, and enforce the nation’s environmental laws. Most environmental laws were designed with a decentralized nationwide structure to protect public health and the environment. In this way, environmental goals will ultimately be achieved through the actions, programs, and commitments of state, Tribal, and local governments, organizations, and citizens.

In FY 2016, the EPA will continue to offer flexibility to state and Tribal governments to manage their environmental programs as well as provide technical and financial assistance to achieve mutual environmental goals. First, the EPA and its state and Tribal partners will continue implementing the National Environmental Performance Partnership System (NEPPS). NEPPS is designed to allow states more flexibility to operate their programs, while increasing emphasis on measuring and reporting environmental improvements. Second, Performance Partnership Grants (PPGs) will continue to allow states and tribes funding flexibility to combine categorical program grants to address environmental priorities.

### **HIGHLIGHTS:**

#### **State & Local Air Quality Management, Radon, and Tribal Air Quality Management Grants**

The FY 2016 request includes \$281.1 million for grants to support state, local, and Tribal air management programs, an increase of \$40.0 million from the FY 2015 Enacted Budget. Grant funds for State and Local Air Quality Management and Tribal Air Quality Management are requested in the amounts of \$268.2 million and \$12.8 million, respectively. These funds provide resources to multi-state, state, local, and Tribal air pollution control agencies for the development and implementation of programs for the prevention and

## *Categorical Grants*

control of air pollution and for the implementation of National Ambient Air Quality Standards (NAAQS) set to protect public health and the environment. In FY 2016, the EPA will continue to work with state and local air pollution control agencies to develop or implement state implementation plans (SIPs) for NAAQS and also for regional haze. In addition, the EPA will continue to support state and local operation of the National Air Toxics Trends Stations network. In FY 2016, states with approved or delegated permitting programs will continue to implement greenhouse gas requirements as part of their permitting programs. Additionally, in FY 2016, the agency will work with states to implement their obligations under section 111 (b) and (d) of the Clean Air Act, with regard to GHG emissions from electric generating units. The FY 2016 request includes \$25 million for state plan development under section 111(d) of the Clean Air Act.

The EPA will work with federally-recognized Tribal governments nationwide to continue development and implementation of Tribal air quality management programs. Tribes are active in protection of air quality for the land over which they have sovereignty and work closely with the EPA to monitor and report air quality information. Lastly, the FY 2016 budget eliminates funding for the State Indoor Radon Grant (SIRG) program. The SIRG program was authorized in 1988 to provide financial assistance to states to develop, implement and enhance state capacity for reducing radon risk. Now that most states have indoor radon programs in place, EPA will narrow support to States to technical assistance alone and eliminate financial assistance provided under the SIRG program.

### ***Water Pollution Control (Clean Water Act Section 106) Grants***

The EPA FY 2016 request includes \$249.2 million for Water Pollution Control grants. The \$18.4 million increase will strengthen the state, interstate and Tribal water quality programs. These water quality programs assist state and Tribal efforts to restore and maintain the quality of the nation's waters by strengthening water quality standards, improving water quality monitoring and assessment, implementing Total Maximum Daily Loads (TMDLs) and other watershed-related plans, strengthening the National Pollutant Discharge Elimination System (NPDES) permit program and implementing practices to reduce pollution from all nonpoint sources. The EPA will work with states, interstate agencies and tribes to strengthen their nutrient management efforts consistent with the EPA Water Program guidance issued in March 2011, including the development of numeric nutrient criteria. The EPA will work with states to incorporate rules governing discharges and revise NPDES permits.

States and authorized tribes will continue to review and update their water quality standards as required by the Clean Water Act. The EPA's goal for FY 2016 is that 73.2 percent of states will have updated their standards to reflect the latest scientific information. In FY 2016, the EPA requests \$18.5 million of the Section 106 funding be provided to states and tribes that participate in collecting statistically valid water monitoring data and implement enhancements in their water monitoring programs.

### ***Wetlands Grants***

In FY 2016, the EPA request includes \$19.7 million for Wetlands Program grants, which provide technical and financial assistance to the states, tribes, and local governments. These grants support development of state and Tribal wetland programs that further the national goal of an overall increase in the acreage and condition of wetlands. The Wetland Program Development Grants are the EPA's primary resource for supporting state and Tribal wetland program development. Grants are used to develop new or refine existing state and Tribal wetland programs in one or more of the following areas: (1) monitoring and assessment; (2) voluntary restoration and protection; (3) regulatory programs including Section 401 certification; and (4) wetland water quality standards. The FY 2016 budget includes \$5 million for grants awarded competitively for efforts to increase climate resilience by protecting and enhancing wetlands.

### ***Public Water System Supervision Grants***

In FY 2016, the EPA requests \$109.7 million for Public Water System Supervision (PWSS) grants. These grants provide 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. This request includes an additional \$7.7 million to augment state and tribal efforts in meeting existing drinking water regulations and

## *Categorical Grants*

preparing for the implementation of the new Revised Total Coliform Rule. These resources also will be used by states and tribes as they provide technical assistance and training to help meet the continued needs of the small water systems such as providing operator training, taking compliance samples, and working with systems to address sanitary survey deficiencies. Many small water systems continue to face challenges to reliably provide safe drinking water. Additional grant funds will enable states to assist these systems through such activities as developing asset management programs and improved rate structures, planning for drought and floods, evaluating opportunities for greater water reuse, and facilitating system partnerships to achieve greater efficiencies.

### ***Underground Injection Control (UIC) Grants***

In FY 2016, the EPA requests \$10.5 million for the Underground Injection Control grants program. Ensuring safe underground injection of waste materials and other fluids is a main component of a comprehensive source water protection program. Grants are provided to states that have primary enforcement authority (primacy) to implement and maintain UIC programs. In December 2010, a rule was finalized which established a new class of underground injection well, Class VI, with new federal requirements to allow the injection of CO<sub>2</sub> for the purpose of Geologic Sequestration (GS). The EPA directly implements the Class VI geologic sequestration program, as no states have received approval for Class VI primacy either through a state UIC program revision or through a new application from states without any UIC primary enforcement authority. The EPA will continue to work with states interested in applying for Class VI primacy, and continue to carry out regulatory functions for Class VI geologic sequestration wells in most states, along with other classes of wells for which the EPA has direct implementation responsibility. In 2014, the EPA released guidance on hydraulic fracturing to help ensure the benefit of energy development while not jeopardizing precious drinking water resources and environmental quality. The EPA will work to help states and tribes review complex data typically contained in UIC applications for hydraulic fracturing using diesel fuels. States and the EPA also will process Underground Injection Control permits for other nontraditional injection streams such as desalination brines and treated waters injected for storage and recovered at a later time.

### ***Non-Point Source Program Grants (NPS – Clean Water Act Section 319)***

In FY 2016, the EPA requests \$164.9 million for Nonpoint Source Program grants to states, territories, and tribes. These grants enable states to use a range of tools to implement their programs including: both non-regulatory and regulatory programs, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects. The request also eliminates, for FY 2016, the statutory one-third of one-percent cap on Clean Water Act Section 319 Nonpoint Source Pollution grants that may be awarded to tribes, allowing the agency to provide Tribal funding at the agency's discretion in accordance with Tribal needs. In 2016, the EPA and the USDA will work collaboratively in high priority, focused watersheds to address agricultural nonpoint source pollution. The goal of our collaboration is to coordinate agency efforts, thereby increasing conservation on the ground to better protect water resources from nonpoint sources of pollution, including nitrogen and phosphorus.

### ***Tribal General Assistance Program Grants***

In FY 2016, the EPA requests \$96.4 million in General Assistance Program (GAP) grants to provide tribes with a stronger foundation to build their capacity to address environmental issues on Indian lands. It will further the EPA's partnership and collaboration with tribes to address a wider set of program responsibilities and challenges, Funding will improve long-standing issues related to recruitment and retention of qualified environmental tribal professionals. Resources will support activities to help tribes transition from capacity development to program implementation, and support activities to implement new grant conditions such as the development of EPA-Tribal Environmental Plans (ETEPs). . The grants will assist Tribal governments in building environmental capacity to assess environmental conditions, utilize available federal and other information, and build and administer environmental programs tailored to their needs. This additional funding will increase the average level of grants made to eligible tribes and focus on mutually agreed-upon concerns in Indian country.

### ***Pesticide Enforcement and Toxics Substances Compliance Grants***

The FY 2016 request includes \$22.9 million to build environmental enforcement partnerships with states and tribes and to strengthen their ability to address environmental and public health threats. The enforcement state grants request consists of \$18.0 million for Pesticides Enforcement and \$4.9 million for Toxic Substances Compliance Grants. The Toxic Substance Compliance Grants protect the public and the environment from PCBs, asbestos, and lead-based paint. State and Tribal enforcement grants will be awarded to assist in the implementation of compliance and enforcement provisions of the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These grants support state and Tribal compliance activities to protect the environment from harmful chemicals and pesticides.

Under the Pesticides Enforcement Grant program, the EPA provides resources to states and Indian tribes to conduct FIFRA compliance inspections and take appropriate enforcement actions and implement programs for farm worker protection. The program also sponsors training for state and Tribal inspectors through the Pesticide Inspector Residential Program (PIRT) and for state and Tribal managers through the Pesticide Regulatory Education Program (PREP). Under the Toxic Substances Compliance Grant program, "non-waiver" states inspect on behalf of the EPA and receive funding for compliance inspections of asbestos and polychlorinated biphenyls (PCBs) and "waiver" states inspect under their own regulations and receive funding for compliance inspections and enforcement of the asbestos program. States also receive funding for implementation of the state lead-based paint certification and training, abatement notification and work practice standards compliance and enforcement program. The funds will complement other federal program grants for building state capacity for lead abatement, and enhancing compliance with disclosure, certification, and training requirements.

### ***Pesticides Program Implementation Grants***

The FY 2016 request includes \$13.2 million for Pesticides Program Implementation grants. These resources will assist states, tribes, and partners with outreach, training, technical assistance and implementation of various pesticide programs and issues; this includes: pesticide worker safety, protection of endangered species and water sources, bed bug issues, pollinator protection, spray drift reduction and promotion of environmental stewardship approaches to pesticide use. The 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 using pesticides. The Pesticides Program Implementation grants help state programs stay current with changing requirements.

### ***Lead Grants***

The FY 2016 request includes \$14.0 million for lead grants. This funding will provide assistance to states, territories, the District of Columbia, and tribes to develop and implement authorized programs for the lead-based paint abatement program to operate in lieu of the federal program. Additionally, the program will provide support to those entities to develop and implement authorized Renovation, Repair and Painting (RRP) Programs. The EPA implements these programs in all areas of the country that are not authorized to do so. 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 as well as the general public.

### ***Pollution Prevention Grants***

The FY 2016 request includes \$4.8 million for Pollution Prevention grants. The program provides grant funds to deliver technical assistance to specific sectors and to address priority environmental problems aimed at reducing hazardous materials and hazardous pollution. The goal is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source. The program demonstrates that source reduction can be a cost-effective way of meeting or exceeding Federal and state regulatory requirements.

***Environmental Information Grants***

In FY 2016, the EPA requests \$25.3 million for the Environmental Information Exchange Network (EN) grant program. The EN grants provide funding to states, territories, federally recognized Indian tribes and tribal consortia to support their participation in the EN. These grants help EN partners acquire and develop the hardware and software needed to connect to the Network; use the EN to collect, report and access the data they need with greater efficiency; and integrate environmental data across programs. In collaboration with the EPA, the Environmental Council of the States accepts the EN as the standard approach for EPA and state data sharing. Tribes and territories have adopted it as well. The grant program provides the funding to make this approach a reality. Specifically, grants will be used to develop publishing services, develop desktop and mobile applications that can send and receive data via the network, expand the network to new priority data systems, transition network services to an EPA-hosted cloud-based node, increase data sharing among partners, bring electronic reporting into compliance with the Cross-Media Electronic Reporting Rule (CROMERR) using EPA hosted shared services as well as other priorities.

As part of the agency's E-Enterprise initiative, in FY 2016, the EPA request includes \$15.7 million in funding for our state, local and Tribal partners to achieve benefits that reach beyond the standardization and exchange of data. The grants will fund new efforts to streamline and harmonize environmental regulations and the services for implementing them, with a goal of enabling the public and the regulated community to seamlessly interact with the environmental protection enterprise in the United States. Specific efforts in FY 2016 will include participation in integrated project teams for regulatory analysis, business process reengineering, enterprise architecture analysis, performance measures, and communication efforts. Projects will include pilots for a single sign-on across federal and state programs with shared electronic credentials, scoping the transition to reusable shared solutions offered by the EPA, and the joint development of new shared services and components. The return on investment will be measured in the number of legacy systems that are converted to shared approaches, hours of reduced cumulative burden in paperwork and regulatory reporting, and costs avoided by preventing the redundant development and maintenance of technology services and infrastructure. This work will build on the successful state/EPA collaboration with the Environmental Information Exchange Network, a partnership which is enabling the exchange and sharing of critical environmental data, leading to enhanced analysis of environmental conditions and improved decision making.

***State and Tribal Underground Storage Tanks Program***

The FY 2016 request includes \$1.5 million for Underground Storage Tank (UST) grants. In FY 2015, the EPA awarded grants to states under Section 2007 of the Solid Waste Disposal Act, that supported core program activities as well as the leak prevention activities under Title XV, Subtitle B of the Energy Policy Act of 2005 (EPAAct).

In FY 2016, the EPA will continue to focus attention on the need to bring all UST systems into compliance with release detection and release prevention requirements and continue to implement the provisions of the EPAAct. States will continue to use the UST categorical grant funding to implement their leak prevention and detection programs. Specifically, with these UST categorical grants, states will fund such activities as: seeking state program approval to operate the UST program in lieu of the Federal program, approving specific technologies to detect leaks from tanks, ensuring that tank owners and operators are complying with notification and other requirements, ensuring equipment compatibility, conducting inspections, and implementing operator training.

***Hazardous Waste Financial Assistance Grants***

In FY 2016, the EPA requests \$99.7 million for Hazardous Waste Financial Assistance grants. Hazardous Waste Financial Assistance grants are used for the implementation of the Resource Conservation and Recovery Act (RCRA) hazardous waste program, which includes permitting, authorization, waste minimization, enforcement, and corrective action activities. In FY 2016, the EPA will work with states to meet the annual target of 115 hazardous waste facilities with new or updated controls.

### *Categorical Grants*

By the end of FY 2016, the EPA and the authorized states also will control human exposures to contamination at 92 percent of the 2020 Universe of 3,779 facilities that may need cleanup under the RCRA Corrective Action Program. The EPA also will control migration of contaminated groundwater at 82 percent of these facilities, complete the construction of final remedies at 64 percent of these facilities, and attain corrective action performance standards at 25 percent of these facilities.

#### ***Brownfields Grants***

In FY 2016, the EPA requests \$49.5 million for the Brownfields grant program that provides assistance to states and tribes to develop and enhance their state and Tribal Brownfields response programs. This funding will help states and tribes develop legislation, regulations, procedures, and guidance, to establish or enhance the administrative and legal structure of their response programs.



***Clean Water State Revolving Fund (CWSRF) Resources***

***Drinking Water State Revolving Fund (DWSRF) Resources***

**State-by-State distribution of Actual and Estimated Obligations**

Fiscal Years 2014 to 2016 – Dollars in Thousands

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

SRF Obligations by State

**Infrastructure Assistance:  
Clean Water State Revolving Fund (SRF)**  
(Dollars in Thousands)

STATE	FY 2014	FY 2015	FY 2016
	ACT. OBLIG.	EST. OBLIG.	EST. OBLIG.
Alabama	\$15,836	\$15,859	\$12,112
Alaska	\$8,476	\$8,488	\$6,483
American Samoa	\$7,693	\$7,693	\$5,884
Arizona	\$16,954	\$9,579	\$7,316
Arkansas	\$9,265	\$9,278	\$7,086
California	\$103,088	\$101,436	\$77,469
Colorado	\$11,216	\$11,345	\$8,664
Connecticut	\$17,350	\$17,375	\$13,270
Delaware	\$6,953	\$6,963	\$5,318
District of Columbia	\$7,141	\$6,963	\$5,318
Florida	\$48,341	\$47,875	\$36,563
Georgia	\$23,946	\$23,980	\$18,314
Guam	\$5,566	\$5,566	\$4,257
Hawaii	\$11,319	\$10,985	\$8,389
Idaho	\$6,953	\$6,963	\$5,318
Illinois	\$64,052	\$64,145	\$48,989
Indiana	\$34,131	\$34,181	\$26,105
Iowa	\$19,159	\$19,195	\$14,660
Kansas	\$12,784	\$12,802	\$9,777
Kentucky	\$18,025	\$18,051	\$13,786
Louisiana	\$15,569	\$15,591	\$11,907
Maine	\$10,963	\$10,979	\$8,385
Maryland	\$34,253	\$34,303	\$26,198
Massachusetts	\$48,084	\$48,154	\$36,776
Michigan	\$60,896	\$60,984	\$46,575
Minnesota	\$26,031	\$26,068	\$19,909
Mississippi	\$12,760	\$12,778	\$9,759
Missouri	\$39,261	\$39,318	\$30,028
Montana	\$7,066	\$6,963	\$5,318
Nebraska	\$7,263	\$7,254	\$5,540
Nevada	\$6,953	\$6,963	\$5,318
New Hampshire	\$14,153	\$14,174	\$10,825
New Jersey	\$57,911	\$57,958	\$44,263
New Jersey – Sandy Supplemental	\$191,100	\$0.0	\$0.0
New Mexico	\$8,828	\$6,963	\$5,318
New York	\$156,359	\$156,547	\$119,551
New York – Sandy Supplemental	\$283,100	\$0.0	\$0.0
North Carolina	\$25,560	\$25,597	\$19,549
North Dakota	\$6,971	\$6,963	\$5,318
Northern Mariana Islands	\$3,522	\$3,575	\$2,734
Ohio	\$79,729	\$79,844	\$60,978
Oklahoma	\$12,465	\$11,459	\$8,751
Oregon	\$15,999	\$16,022	\$12,236
Pennsylvania	\$56,100	\$56,181	\$42,906
Puerto Rico	\$18,871	\$18,498	\$14,128
Rhode Island	\$9,510	\$9,523	\$7,273
South Carolina	\$14,509	\$14,530	\$11,097
South Dakota	\$6,953	\$6,963	\$5,318
Tennessee	\$20,574	\$20,603	\$15,735
Texas	\$165,092	\$64,825	\$49,508
Utah	\$7,462	\$7,473	\$5,707
Vermont	\$6,953	\$6,963	\$5,318
Virgin Islands, U.S.	\$4,240	\$4,465	\$3,415
Virginia	\$50,840	\$29,026	\$22,168
Washington	\$24,629	\$24,665	\$18,837
West Virginia	\$221	\$22,109	\$16,885
Wisconsin	\$38,288	\$38,343	\$29,283
Wyoming	\$6,953	\$6,963	\$5,318
Tribal Resources	\$16,693	\$28,978	\$30,000
Undistributed National Resources	\$605 <sup>1</sup>	\$1,600 <sup>2</sup>	\$2,790 <sup>2</sup>
Undistributed National Resources – Sandy Supplemental	\$159 <sup>3</sup>	\$0.0	\$0.0
<b>TOTAL:</b>	<b>\$2,021,696</b>	<b>\$1,448,887</b>	<b>\$1,116,000</b>

**Notes:**

1. Includes \$373 thousand for American Iron and Steel Management and Oversight, \$223 thousand for the annual Missouri independent audits for the CWSRF, and \$9 thousand for a SEE employee supporting SRF activities in Region 7.
2. American Iron and Steel Management and Oversight.
3. Payroll attributed to the Disaster Relief Appropriations Act of 2013 (P.L.113-2).

SRF Obligations by State

**Infrastructure Assistance:  
Drinking Water State Revolving Fund (SRF)**  
(Dollars in Thousands)

STATE	FY 2014	FY 2015	FY 2016
	ACT. OBLIG.	EST. OBLIG.	EST. OBLIG.
Alabama	\$16,892	\$16,892	\$22,103
Alaska	\$8,845	\$8,845	\$11,573
American Samoa	\$1,542	\$1,542	\$1,769
Arizona	\$17,687	\$15,969	\$20,895
Arkansas	\$13,526	\$13,534	\$17,708
California	\$83,644	\$83,221	\$108,891
Colorado	\$15,394	\$15,394	\$20,143
Connecticut	\$8,962	\$8,962	\$11,727
Delaware	\$8,845	\$8,845	\$11,573
District of Columbia	\$8,845	\$8,845	\$11,573
Florida	\$32,350	\$32,350	\$42,329
Georgia	\$19,284	\$19,284	\$25,233
Guam	\$3,958	\$3,958	\$4,422
Hawaii	\$450	\$8,845	\$11,573
Idaho	\$8,845	\$8,845	\$11,573
Illinois	\$36,911	\$36,911	\$48,296
Indiana	\$14,348	\$14,348	\$18,773
Iowa	\$13,229	\$13,229	\$17,309
Kansas	\$10,080	\$10,080	\$13,190
Kentucky	\$13,770	\$13,770	\$18,017
Louisiana	\$12,127	\$12,127	\$15,867
Maine	\$8,845	\$8,845	\$11,574
Maryland	\$15,012	\$15,012	\$19,642
Massachusetts	\$16,441	\$16,441	\$21,512
Michigan	\$27,530	\$27,530	\$36,022
Minnesota	\$15,827	\$15,827	\$20,709
Mississippi	\$9,159	\$9,159	\$11,984
Missouri	\$17,855	\$17,855	\$23,363
Montana	\$8,845	\$8,845	\$11,573
Nebraska	\$8,958	\$8,845	\$11,573
Nevada	\$12,614	\$12,614	\$16,505
New Hampshire	\$8,845	\$8,845	\$11,573
New Jersey	\$16,817	\$16,828	\$22,019
New Jersey – Sandy Supplemental	\$38,200	\$0.0	\$0.0
New Mexico	\$8,845	\$8,845	\$11,573
New York	\$42,428	\$42,455	\$55,550
New York – Sandy Supplemental	\$56,600	\$0.0	\$0.0
North Carolina	\$20,695	\$20,695	\$27,078
North Dakota	\$8,845	\$8,845	\$11,573
Northern Mariana Islands	\$3,389	\$3,389	\$5,167
Ohio	\$24,586	\$24,586	\$32,170
Oklahoma	\$14,489	\$14,251	\$18,647
Oregon	\$12,563	\$12,563	\$16,438
Pennsylvania	\$28,280	\$28,280	\$37,004
Puerto Rico	\$8,845	\$8,845	\$11,573
Rhode Island	\$8,845	\$8,845	\$11,573
South Carolina	\$8,845	\$8,845	\$11,573
South Dakota	\$8,845	\$8,845	\$11,573
Tennessee	\$8,845	\$8,845	\$11,573
Texas	\$65,453	\$63,953	\$83,680
Utah	\$9,229	\$9,229	\$12,076
Vermont	\$8,845	\$8,845	\$11,573
Virgin Islands, U.S.	\$4,378	\$4,378	\$6,002
Virginia	\$14,654	\$14,654	\$19,174
Washington	\$19,741	\$19,741	\$25,830
West Virginia	\$8,913	\$8,845	\$11,573
Wisconsin	\$15,425	\$15,425	\$20,183
Wyoming	\$8,845	\$8,845	\$11,573
Tribal Resources	\$10,866	\$18,138	\$23,720
Undistributed National Resources	\$1,635 <sup>1</sup>	\$4,267 <sup>2</sup>	\$4,965 <sup>3</sup>
Undistributed National Resources – Sandy Supplemental	\$45 <sup>4</sup>	\$0.0	\$0.0
<b>TOTAL:</b>	<b>\$987,456</b>	<b>\$906,896</b>	<b>\$1,186,000</b>

**Notes:**

1. UCMR set aside,
2. Includes \$2 million in UCMR set aside, and \$2.267 million in Buy American Set Aside (P.L. 113-76).
3. Includes \$2 million in UCMR set aside, and \$2.965 million in Buy American Set Aside (P.L. 113-76).
4. Payroll attributed to the Disaster Relief Appropriations Act of 2013 (P.L.113-2).



**Infrastructure / STAG Project Financing**  
(Dollars in Thousands)

Type / Grant	FY 2014 Enacted	FY 2015 Enacted	FY 2016 PresBud	Delta FY 16 PB – FY 15 EN
Clean Water State Revolving Fund	\$1,448,887	\$1,448,887	\$1,116,000	(\$332,887)
Drinking Water State Revolving Fund	\$906,896	\$906,896	\$1,186,000	\$279,104
<b><u>State Revolving Funds</u></b>	<b>\$2,355,783</b>	<b>\$2,355,783</b>	<b>\$2,302,000</b>	<b>(\$53,783)</b>
Mexico Border	\$5,000	\$5,000	\$5,000	\$0
Alaska Native Villages	\$10,000	\$10,000	\$10,000	\$0
<b><u>Special Needs Projects</u></b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$0</b>
<b><u>Diesel Emissions Reduction Grant Program</u></b>	<b>\$20,000</b>	<b>\$30,000</b>	<b>\$10,000</b>	<b>(\$20,000)</b>
<b><u>Brownfields Projects</u></b>	<b>\$90,000</b>	<b>\$80,000</b>	<b>\$110,000</b>	<b>\$30,000</b>
<b><u>Targeted Airshed Grants</u></b>	<b>\$0</b>	<b>\$10,000</b>	<b>\$0</b>	<b>(\$10,000)</b>
<b><u>Infrastructure Assistance Total</u></b>	<b>\$2,480,783</b>	<b>\$2,490,783</b>	<b>\$2,437,000</b>	<b>(\$53,783)</b>

**Infrastructure and Special Projects Funds**

The FY 2016 President’s Budget includes a total of \$2.44 billion for the EPA’s Infrastructure programs, including the State Revolving Funds (SRFs), Mexico Border and Alaska Native Villages programs, and Brownfields Projects, in the State and Tribal Assistance Grant (STAG) account. This budget funds the SRFs at \$2.3 billion total.

With funds provided to the SRFs and funding through EPA’s operating programs in FY 2016, the EPA will augment its effort to build the capacity of local utilities, private investors, and existing state programs to expand their contribution to the array of funding options to meet future infrastructure needs. Infrastructure and targeted project funding under the STAG appropriation provides financial assistance to states, municipalities, interstates, and tribal governments to fund a variety of drinking water, wastewater, air, and brownfields environmental projects. These funds help fulfill the federal government’s commitment to help our state, tribal and local partners comply with federal environmental requirements and ensure public health and revitalize contaminated properties.

Providing STAG funds to capitalize SRF programs, the EPA works in partnership with the states to provide low-cost loans to municipalities for infrastructure construction. All drinking water and wastewater projects are funded based on state developed priority lists. Through SRF set-asides, grants are available to Indian tribes and U.S. territories for infrastructure projects.

The resources included in this budget will enable the agency, in conjunction with the EPA's state, local, and tribal partners, to achieve important goals. For example, 92 percent of the population served by community water systems will receive drinking water meeting all health-based standards.

***Capitalizing Clean Water and Drinking Water State Revolving Funds***

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

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

The EPA will continue to provide financial assistance for wastewater and other water projects through the Clean Water State Revolving Fund (CWSRF). CWSRF projects include nonpoint source, estuary, stormwater, and sewer overflow projects. The dramatic progress made in improving the quality of wastewater treatment since the 1970s is a national success. In 1972, only 78.2 million people were served by secondary or advanced wastewater treatment facilities. As of 2008 (from the most recent Clean Watersheds Needs Survey), over 99 percent of Publicly Owned Treatment Works, serving 222.6 million people, use secondary treatment or better. Water infrastructure projects supported by the program contribute to direct ecosystem improvements by lowering the amount of nutrients and toxic pollutants in all types of surface waters. While great progress has been made, many rivers, lakes and ocean/coastal areas still suffer a significant influx of pollutants after heavy rains resulting in beach closures, infected fish, and degradation of the ability of watersheds to sustain a healthy ecosystem.

The FY 2016 request includes \$1.116 billion in funding for the CWSRF. Total CWSRF funding available for loans from 1988 through June 2014 exceeds \$108 billion. This total reflects loan repayments, state match dollars, as well as other funding sources. The EPA estimates that for every federal dollar contributed, more than two dollars are provided to municipalities.

The FY 2016 request includes \$1.186 billion in funding for the DWSRF. Since its inception in 1997, the Drinking Water State Revolving Fund (DWSRF) program has made \$30.1 billion available to finance 11,448 infrastructure improvement projects nationwide, with an average of \$1.76 made available to localities for every \$1 of federal funds invested. As of June 30, 2014, \$16.6 billion in capitalization grants have been awarded, amounting to loans/assistance of \$27.9 billion. The DWSRF helps address the costs of ensuring safe drinking water supplies and assists small communities in meeting their responsibilities.

The EPA will work to target assistance to small and underserved communities with limited ability to repay loans. Through the new Water Infrastructure and Resiliency Finance Center, the EPA will work to promote public private collaboration, provide peer-to-peer learning and training workshops, develop public private partnership models and tools, and maintain an ongoing dialogue with the financial community to encourage investment in the water market as well as innovative financing and utilization of the green project reserve to increase climate resilient infrastructure projects.

Tribal communities are in great need of assistance given their sanitation and drinking water infrastructure lags behind the rest of the country causing significant public health concerns. To help address this situation,

## *Infrastructure Financing*

EPA is requesting a tribal funding floor of two percent, or \$30 million for the CWSRF or \$20 million for the DWSRF, whichever is greater, of the funds appropriated in FY16.

For FY 2016, the EPA requests that not less than 10 percent but not more than 20 percent of the CWSRF funds and not less than 20 percent but not more than 30 percent of the DWSRF funds be made available to each state to be used to provide additional subsidy to eligible recipients in the form of forgiveness of principle, negative interest loans, or grants (or a combination of these). The CWSRF additional subsidy would apply to the entire CWSRF appropriation. For FY 2016, the EPA will encourage states to utilize the subsidy to assist small drinking water systems with standards compliance. The EPA also is requesting, to the extent there are sufficient eligible project applications, that not less than 20 percent of a portion of a CWSRF capitalization grant be made available for green infrastructure or environmentally innovative projects that can promote water system and community resilience. Funds made available to each State for Drinking Water State Revolving Fund capitalization grants may, at the discretion of each State, be used for projects that address green infrastructure, water or energy efficiency improvements, or environmentally innovative activities.

As part of the Administration's Sustainable Water Infrastructure Policy, the EPA focuses on working with federal partners, states, and communities to develop systems that employ effective utility management practices to build and maintain the level of technical, financial, and managerial capacity necessary to ensure long-term sustainability. The policy emphasizes the need to build on existing efforts to promote sustainable water infrastructure and to employ robust, comprehensive planning processes to deliver projects that are cost effective over their life cycle, resource efficient, and consistent with community sustainability goals. Through this policy, the EPA is helping to ensure that federal investments, policies, and actions support water infrastructure in efficient and sustainable locations to best aid existing communities, enhance economic competitiveness, and promote affordable neighborhoods. The policy encourages that Federal dollars provided through the SRFs will act as a catalyst for efficient system-wide planning and ongoing management of sustainable water infrastructure.

### ***Alaska Native Villages***

The President's Budget requests \$10 million for Alaska native villages for the construction of wastewater and drinking water facilities to address serious sanitation problems. The EPA will continue to work with the Department of Health and Human Services' Indian Health Service, the State of Alaska, the Alaska Native Tribal Health Council, and local communities to provide needed financial and technical assistance.

### ***Diesel Emissions Reduction Grants***

The Diesel Emissions Reduction Act (DERA) authorizes funding to provide immediate, cost-effective emission reductions from existing diesel engines through engine retrofits, rebuilds, and replacements; switching to cleaner fuels; idling reduction strategies; and other clean diesel strategies. Retrofitting or replacing older diesel engines reduces particulate matter (PM) emissions up to 95 percent, smog-forming emissions, such as hydrocarbons (HC) and nitrogen oxide (NOx), up to 90 percent, and greenhouse gases up to 20 percent in the upgraded vehicles with engine replacements.

The FY 2016 President's Budget requests \$10 million in DERA funding through grants and rebates to continue to reduce diesel emissions in communities and areas of highly concentrated diesel pollution. EPA will also coordinate diesel emissions reduction efforts with the Department of Transportation and the Department of Energy.

### ***Brownfields Projects***

The President's Budget requests \$110 million for Brownfields projects. With the FY 2016 request, the EPA plans to fund at least 151 assessment cooperative agreements and approximately 64 direct cleanup cooperative agreements. The EPA also will support the assessment and cleanup of up to 142 sites contaminated by petroleum or petroleum products and award an estimated \$3.5 million in environmental workforce development and job training grants. In FY 2016, the funding provided is expected to result in

## *Infrastructure Financing*

the assessment of 1,300 brownfields properties, all of which are located in distressed communities. Using EPA grant dollars, the brownfields grantees will leverage 5,000 cleanup and redevelopment jobs and \$1.1 billion in cleanup and redevelopment funding, and 4,000 acres of Brownfields will be ready for reuse.

During FY 2016, the Brownfields program will continue to support the agency's ongoing brownfields area-wide planning efforts. The cooperative agreements and technical assistance provided for brownfields area-wide planning will assist communities affected by energy sector transition to explore new land use and economic development options by identifying viable reuses of brownfields properties, as well as planning activities associated with improvements to infrastructure and the environment, which may lead to site cleanup and community revitalization.

The EPA will continue to provide technical assistance for brownfields redevelopment in cities that are struggling to recover from structural changes in the U.S. manufacturing industry that resulted in significant impacts to their economies and has added to the communities' needs to address blight and brownfields properties. In FY 2016, the Brownfields program will continue to foster federal, state, local, and public/private partnerships to return properties to productive economic use in communities.

The EPA's Brownfields and Land Revitalization Programs are key participants in the HUD-DOT-EPA partnership promoting livability and sustainable development. The EPA Brownfields program also is partnering with the Department of Labor and NIEHS to support environmental workforce development and fund job training and placement programs in brownfield communities. The Brownfields and Land Revitalization programs are working with USDA, HHS, and ATSDR to identify ways in which federal programs can increase food access in all communities and ensure access to quality health care. The Brownfields and Land Revitalization programs also are partnering with the National Park Service and its River and Trails Program to support Groundwork USA and individual Groundwork teams in their efforts to engage youth in community revitalization.

### ***Mexico Border***

The President's Budget requests a total of \$5 million for water infrastructure projects along the U.S.-Mexico Border. The goal of this program is to reduce environmental and human health risks along the border. The EPA's U.S.-Mexico Border program provides funds to support the planning, design, and construction of high priority water and wastewater treatment projects. The agency's goal is to provide protection to people in the U.S.-Mexico border area from health risks by connecting homes to potable water supply and wastewater collection and treatment systems.



## **Trust Funds**

*(Dollars in Millions)*

Trust Funds Program	FY 2014 Enacted Budget <sup>1</sup>		FY 2015 Enacted Budget <sup>1</sup>		FY 2016 President's Budget <sup>1</sup>	
	\$	FTE	\$	FTE	\$	FTE
Superfund <sup>2</sup>	\$1,060	2,630	\$1,060	2,544	\$1,129	2,532
Inspector General (Transfers)	\$10	60	\$10	59	\$8	50
Research & Development (Transfers)	\$19	79	\$19	75	\$16	72
<b>Superfund Total</b>	<b>\$1,089</b>	<b>2,769</b>	<b>\$1,089</b>	<b>2,677</b>	<b>\$1,154</b>	<b>2,654</b>
<b>Base Realignment and Closure<sup>3</sup></b>	<b>\$0</b>	<b>14</b>	<b>\$0</b>	<b>9</b>	<b>\$0</b>	<b>9</b>
<b>LUST<sup>4</sup></b>	<b>\$95</b>	<b>55</b>	<b>\$92</b>	<b>55</b>	<b>\$95</b>	<b>54</b>
<b>Trust Funds Total<sup>5</sup>:</b>	<b>\$1,184</b>	<b>2,838</b>	<b>\$1,181</b>	<b>2,741</b>	<b>\$1,249</b>	<b>2,717</b>

<sup>1</sup> Totals may not add due to rounding.

<sup>2</sup> FTE numbers include all direct and reimbursable Superfund employees, excluding Base Realignment and Closure which is discussed below.

<sup>3</sup> Funding for reimbursable FTE provided by the Department of Defense via an Interagency Agreement.

<sup>4</sup> EPA Grants for Prevention activities are included in the FY 2014 Enacted, FY 2015 Enacted, and FY 2016 President's Budget.

<sup>5</sup> Trust Funds Total includes reimbursable FTE for Base Realignment and Closure as well as other Superfund reimbursable FTE.

### **Superfund**

In FY 2016, the President's Budget requests a total of \$1,154 million in discretionary budget authority and 2,654 FTE for Superfund. This funding level will address environmental and public health risks resulting from releases or threatened releases of hazardous substances associated with any emergency site, as well as the over 13,539 active Superfund National Priorities List (NPL) and non-NPL sites. It also provides funding to pursue responsible parties for cleanup costs, preserving federal dollars for sites where there are no viable contributing parties. As of January 2015, there are 1,707 sites on the NPL. 1,166 sites (68 percent) are construction completed or are deleted, 320 sites (19 percent) are undergoing cleanup construction, 221 sites (13 percent) are pending investigation or being investigated. The EPA will continue to give attention to all phases of the investigation and cleanup of NPL and non-NPL sites, including post-construction completion activities to ensure that Superfund response actions provide for the long-term protection of human health and the environment. A significant statutorily required post-construction activity is a Five-Year Review<sup>1</sup>, which generally is necessary when hazardous substances remain on-site above levels that permit unrestricted use and unlimited exposure. In FY 2016, the EPA plans to conduct approximately 245 Five-Year Reviews.

<sup>1</sup> Five-Year Reviews are used to evaluate the implementation and performance of all components of the implemented remedy and to determine whether the remedy remains protective of human health and the environment. The Five-Year Review includes not only the physical remedy itself, but also institutional controls necessary to manage the use of the site. The EPA develops an annual Report to Congress describing the protectiveness of remedies as found through Five-Year Reviews including those conducted by federal agencies and reviewed by the EPA through the Superfund Federal Facilities Response program.

## *Trust Funds*

Of the total funding requested for Superfund, \$764 million and 1,262<sup>2</sup> FTE are for Superfund cleanups which include the Superfund Remedial, Emergency Response and Removal, EPA Emergency Preparedness, and Federal Facilities programs. The Superfund program protects the American public and its resources by cleaning up sites which pose an imminent or long term risk of exposure and harm to human health and the environment. In FY 2016, the agency will continue to respond to emergency releases of hazardous substances, stabilizing sites and mitigating immediate threats to keep our communities safe and healthy. The Superfund Remedial program will continue to maintain focus on completing projects at various stages in the response process and maximizing the use of site-specific special accounts. The EPA and its partners will focus on completing construction activities at 13 site wide construction completions as well as 105 individual project completions by the end of FY 2016, while achieving human exposure and groundwater migration under control at 9 and 13 sites, respectively. The cumulative effect of funding constraints in recent years has slowed activity through all aspects of remedial action, causing backlogs and delays at several sites almost half of which pose environmental justice concerns.

Of the total funding requested, \$173 million and 852 FTE are for Superfund enforcement-related activities. One of the Superfund program's primary goals is to have responsible parties pay for and conduct cleanups at abandoned or uncontrolled hazardous waste sites. The agency focuses on maximizing all aspects of Potentially Responsible Party (PRP) participation; including reaching a settlement with or taking an enforcement action by the time of a Remedial Action start for at least 99 percent of non-federal Superfund sites that have viable, liable parties. The agency has reached a settlement or taken an enforcement action on 100 percent of non-federal Superfund sites with viable, liable parties in FY 2014.

CERCLA authorizes the agency to retain and use funds received pursuant to an agreement with a potentially responsible party (PRP) to carry out the purpose of that agreement. The EPA retains such funds in special accounts and uses them to finance site-specific CERCLA response actions in accordance with the settlement agreement, including, but not limited to, investigations, construction and implementation of the remedy, post-construction activities, and oversight of PRPs conducting the cleanup. Through the use of special accounts, the EPA pursues its "enforcement first" policy – ensuring responsible parties pay for cleanup – so that appropriated resources from the Superfund Trust Fund are conserved for sites where no viable or liable PRPs have been identified. Because response actions may take many years, and the use of special account funding is limited by the terms of the settlement agreements, the full use of special account funds may also take many years. Since the inception of special accounts through the end of FY 2014, the EPA has collected more than \$4.5 billion from PRPs and earned approximately \$428.3 million in interest. In addition, the EPA has transferred \$26.8 million to the Superfund Trust Fund. As of the end of FY 2014, over \$2.7 billion has been disbursed to finance site response actions and approximately \$300.4 million has been obligated but not yet disbursed. Of the special account funds made available through the end of FY 2014, approximately 61 percent have been disbursed or obligated for response actions at sites. Both special account resources and appropriated resources are critical to the Superfund program.

The EPA's Homeland Security work is an important component of the agency's prevention, protection, and response activities. The FY 2016 President's Budget requests \$31.5 million to: maintain its capability to respond effectively to incidents that may involve harmful chemical, biological, and radiological (CBR) substances; maintain the Environmental Response Laboratory Network (ERLN); develop and maintain agency expertise and operational readiness for all phases of consequential management following a CBR incident, specifically environmental characterization, decontamination, laboratory analyses and clearance; and conduct CBR training for agency responders to improve CBR preparedness.

The FY 2016 President's Budget also includes resources supporting agencywide resource management and control functions. This includes essential infrastructure, contract and grant administration, financial accounting, and other fiscal operations.

In addition, the agency provides funds for Superfund program research and for auditing. The President's Budget requests \$16 million and 72 FTE to be transferred to Research and Development. Research will

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<sup>2</sup> This includes 9 Superfund Federal Facility (non-BRAC) reimbursable FTE.

## *Trust Funds*

enable the EPA's Superfund program to accelerate scientifically defensible and cost-effective decisions for cleanup at complex contaminated Superfund sites and support the development of decontamination techniques for a wide-area CBR event. The Superfund research program is driven by program office needs to reduce the cost of cleaning up Superfund sites, improve the efficiency of characterizing and remediating sites, identify effective remediation technologies, and reduce the scientific uncertainties for improved decision-making at Superfund sites. The President's Budget also requests \$8 million and 50 FTE to be transferred to the Inspector General for program auditing.

There are still sites where no viable PRP has been identified and there are many activities that the EPA performs that are not otherwise reimbursed. For this reason, the FY 2016 Budget supports reinstatement of the Superfund tax. The Superfund tax on petroleum, chemical feedstock and corporate environmental income expired in 1995. Since the expiration of Superfund tax, Superfund program funding (the "Superfund appropriation") has been largely financed from General Revenue transfers to the Superfund Trust Fund, thus burdening the general public with the costs of cleaning up hazardous waste sites. Reinstating the Superfund taxes would provide a stable, dedicated source of revenue for the Superfund Trust Fund and restore the historic nexus that parties who benefit from the manufacture and sale of substances found in hazardous waste sites contribute to the cost of cleanup. The reinstated Superfund taxes are estimated to generate a revenue level of approximately \$1.8 billion in 2016 to more than \$2.6 billion annually by 2025. Total tax revenue over the period 2016 to 2025 is predicted to be \$23.9 billion. The revenues will be placed in the Superfund Trust Fund and would be available for appropriation from Congress to support the assessment and cleanup of the Nation's highest risk sites within the Superfund program.

### ***Base Realignment and Closure Act***

The FY 2016 President's Budget requests 9 reimbursable FTE to conduct the Base Realignment and Closure (BRAC) program (BRAC I-IV). The EPA's participation in the first four rounds of BRAC has been funded by an interagency agreement which is scheduled to expire on September 30, 2016. Since 1993, the EPA has worked with the Department of Defense (DOD) and state environmental programs to make property environmentally acceptable for transfer, while protecting human health and the environment at realigning or closing military installations. Between 1988 and 2005, over 500 major military installations representing the Army, Navy, Air Force, and Defense Logistics Agency have been slated for realignment or closure. Under the first four rounds of BRAC (BRAC I-IV), 107 of those sites were identified as requiring accelerated cleanup. The EPA provided critical environmental support to DOD and participated in the acceleration process of the first four rounds of BRAC. The accelerated cleanup process strives to make parcels available for reuse as quickly as possible, by transfer of uncontaminated or remediated parcels, lease of contaminated parcels where cleanup is underway, or "early transfer" of contaminated property undergoing cleanup. Seventy-two Federal facilities currently listed on the NPL were identified under the fifth round of BRAC (BRAC V) as closing, realigning, or gaining personnel.

The FY 2016 request does not include support for BRAC-related services to DOD at BRAC V facilities. Rather, the EPA services and resources to support the BRAC V installations may be requested from DOD, on an as-needed basis.

### ***Leaking Underground Storage Tanks***

The FY 2016 President's Budget requests \$95 million and 54 FTE for the Leaking Underground Storage Tank (LUST) Trust Fund program. The agency, working with states and tribes, addresses public health and environmental threats from releases through prevention and cleanup activities. As required by law (42 U.S.C. 6991c(f)), not less than 80 percent of LUST appropriated funds will be used for reasonable costs incurred under a cooperative agreements with any state to carry out specific purposes. The EPA will continue to work with the states to achieve more cleanups, and reduce the 74,000 cleanups not yet completed. Between 1986 and 2014, the LUST program addressed approximately 86 percent (447,000) of all reported releases. In FY 2016, working with state partners, the LUST program will strive to achieve 8,600

## *Trust Funds*

cleanups. The FY 2016 target reflects a variety of challenges including the complexity of remaining sites, an increased state workload, a decrease in available state resources, and the increasing cost of cleanups.

The LUST Trust Fund financing tax expired on March 30, 2012 and was extended by Public Law 112-141 through September 30, 2016. While tank owners and operators are liable for the cost of cleanups at sites for which they have responsibility, EPA and State regulatory agencies are not always able to identify responsible parties and sometimes responsible parties are no longer financially viable or have a limited ability to pay. In those cases, the cost of the cleanup is distributed among fuel users through the targeted fuel tax, which is available for appropriation from Congress to support the prevention and cleanup of sites within the LUST program. For FY 2014, the Trust Fund received more than \$172 million in tax receipts.

## Highlight of Major Budget Changes

### Climate Change and Air Quality

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#### Climate Protection Program

(FY 2016 PB: \$117.7 M, FY 2015 Enacted: \$103.5 M, FY 2016 Change: +\$14.3 M)

Significant changes include:

- +\$7.0 million increase to support the President's Climate Action Plan, including implementation of the Clean Power Plan, implementation of the President's Interagency Methane Strategy, and reducing emissions of hydro fluorocarbons (HFCs), under the Significant New Alternatives Policy (SNAP).
- +\$3.9 million in additional resources to maintain consumer confidence in the ENERGY STAR label through effective third-party certification of qualifying products, and the implementation of EPA's verification process for residential, commercial, and industrial buildings.

#### Diesel Emissions Reduction Grant Program

(FY 2016 PB: \$10.0 M, FY 2015 Enacted: \$30.0 M, FY 2016 Change: -\$20.0 M)

- -\$20.0 million decrease. Targets spending on grants and rebates toward communities most impacted by harmful diesel emissions.

#### Federal Stationary Source Regulations

(FY 2016 PB: \$37.5 M, FY 2015 Enacted: \$25.0 M, FY 2016 Change: +\$12.5 M)

Significant changes include:

- +\$11.4 million increase for the Clean Power Plan. Given the complexity of the existing power plant rulemaking, resources are needed for the agency to develop federal plans, review state plans, and address additional rulemaking activities.

#### Federal Support for Air Quality Management

(FY 2016 PB: \$165.8 M, FY 2015 Enacted: \$127.5 M, FY 2016 Change: +\$38.3 M)

Significant changes include:

- +\$15.2 million increase in technical support for the Clean Power Plan. Given state flexibility to customize their plans, the agency needs additional capacity, including contract resources and personnel, to offer direct and timely technical assistance to states as they develop their plans.
- +\$10.0 million increase to develop resources to equip states with flexible tools, up-to-date power system data, and a reporting system for Clean Power Plan work and planning. The increase will allow states to track their compliance data, and improve the agency's ability to communicate up-to-date information about the power sector to states as they develop their plans.
- +\$3.6 million increase supports regional personnel to address regulatory implementation across the air program, including the backlog of SIPs awaiting processing, permitting needs (both NAAQS and GHG-related), and air quality monitoring and analysis needs.

#### Federal Vehicle and Fuels Standards and Certification

(FY 2016 PB: \$100.4 M, FY 2015 Enacted: \$93.3 M, FY 2016 Change: +\$7.1 M)

Significant changes include:

- +\$2.5 million increase for technical and engineering expertise to help finalize the Heavy-Duty GHG Phase 2 Rulemaking (Model Years 2018 and beyond).

## Highlight of Major Budget Changes

- +\$2.2 million increase to address the growing program implementation workload, including the growing number of certificates to process annually, compliance oversight, management of credit trading programs, and data system management.

### Targeted Airshed Grants

(FY 2016 PB: \$0.0 M, FY 2015 Enacted: \$10.0 M, FY 2016 Change: -\$10.0 M)

- -\$10.0 million decrease is an elimination of funding for this program project in FY 2016.

## America's Waters

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### Drinking Water Programs

(FY 2016 PB: \$128.8 M, FY 2015 Enacted: \$100.0 M, FY 2016 Change: +\$28.8 M)

Significant changes include:

- +\$24.1 million increase, as part of an overall \$50 million package, to build upon the EPA's infrastructure investments and promote economic growth through innovative financing, techniques such as system partnerships, capacity building, full cost pricing, and public and private collaboration. These investments, which build on the \$2.3 billion provided through the State Revolving Funds, are designed to enhance system capacity to reliably provide safe drinking water and ultimately increase the efficiency and effectiveness of available drinking water infrastructure funding.
- +\$1.5 million increase to fund the drinking water needs survey.

### Great Lakes Restoration

(FY 2016 PB: \$250.0 M, FY 2015 Enacted: \$300.0 M, FY 2016 Change: -\$50.0 M)

- -\$50.0 million reduction to interagency agreements, grants, and contracts that will place a greater focus on three continuing GLRI (Great Lakes Restoration Initiative) areas of emphasis: clean-up of Areas of Concern; preventing and controlling the spread of invasive species, and taking steps to address the causes of harmful algal blooms in priority watersheds.

### Surface Water Protection

(FY 2016 PB: \$238.8 M, FY 2015 Enacted: \$199.8 M, FY 2016 Change: +\$39.0 M)

Significant changes include:

- +\$21.9 million increase for water infrastructure, as part of an overall package of \$50 million, to build the technical, managerial, and financial capabilities of wastewater systems. The EPA will assist communities in developing integrated plans through a combination of direct technical assistance and competitive awards. This funding builds on the strong support of \$2.3 billion provided through the State Revolving Funds.
- +\$7.5 million increase will support green infrastructure and MS4 activities to further the agency's sustainability goals, and expand Green Infrastructure technical assistance efforts to include more communities;
- +\$4.5 million increase to support a new approach for measuring improvements in water quality. It will aid in the development of tools needed to automate the linking of state assessment data, make updates and necessary improvements to incorporate data into EPA data systems, and begin efforts to assist states in implementing the new approach.

### Water Quality Research and Support Grants

(FY 2016 PB: \$0.0 M, FY 2015 Enacted: \$16.8 M, FY 2016 Change: -\$16.8 M)

- -\$16.8 million reduction eliminates funds for program. The EPA is not requesting funds to support this grant program in FY 2016.

## Water Infrastructure

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### **Water Infrastructure Finance and Innovation Authority (WIFIA) Program** (FY 2016 PB: \$5.0 M, FY 2015 Enacted: \$0.0 M, FY 2016 Change: +\$5.0 M)

Significant changes include:

- +\$5.0 million increase represents a realignment of base FY 2015 Enacted resources for WIFIA in Surface Water Protection and an increase in 2016 to the new program project WIFIA, which will lay the groundwork for a WIFIA program that would provide additional assistance nationwide for water and wastewater infrastructure.

### **Infrastructure Assistance: Clean Water SRF** (FY 2016 PB: \$1,116.0 M, FY 2015 Enacted: \$1,448.9 M, FY 2016 Change: -\$332.9 M)

- -\$332.9 million reduction to the Clean Water State Revolving Fund, though continuing the Administration's strong support for the SRFs. The Budget includes \$2.3 billion for EPA's Clean Water and Drinking Water State Revolving Funds (SRFs) and \$50 million in technical assistance, training, and other efforts to enhance the capacity of communities and states to plan and finance drinking water and wastewater infrastructure improvements.

### **Infrastructure Assistance: Drinking Water SRF** (FY 2016 PB: \$1,186.0 M, FY 2015 Enacted: \$906.9 M, FY 2016 Change: +\$279.1 M)

- +\$279.1 million increase to support the higher documented needs for drinking water infrastructure, greater needs for smaller communities, and its lower revolving levels nationally compared to the Clean Water SRF.

## State and Tribal Partnerships

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### **Categorical Grant: Beaches Protection** (FY 2016 PB: \$0.0 M, FY 2015 Enacted: \$9.5 M, FY 2016 Change: -\$9.5 M)

- -\$9.5 million decrease eliminates funding of the Beaches Program.

### **Categorical Grant: Environmental Information** (FY 2016 PB: \$25.3 M, FY 2015 Enacted: \$9.6 M, FY 2016 Change: +\$15.7 M)

- +\$15.7 million increase for states and tribes to build tools, services and capabilities that will enable more efficient exchange of data between the agency, states, tribes, and regulated entities following E-Enterprise principles.

### **Categorical Grant: Nonpoint Source (Sec. 319)** (FY 2016 PB: \$164.9 M, FY 2015 Enacted: \$159.3 M, FY 2016 Change: +\$5.7 M)

- +\$5.7 million increase for state nonpoint source programs, including implementation of nonpoint source projects and statewide nonpoint source protection activities.

### **Categorical Grant: Pollution Control (Sec. 106)** (FY 2016 PB: \$249.2 M, FY 2015 Enacted: \$230.8 M, FY 2016 Change: +\$18.4 M)

- +\$18.4 million increase for states and tribes to implement water pollution control programs and strengthen their nutrient management efforts consistent with the EPA's 2011 Framework for state nutrient reduction.

**Categorical Grant: Public Water System Supervision (PWSS)**

**(FY 2016 PB: \$109.7 M, FY 2015 Enacted: \$102.0 M, FY 2016 Change: +\$7.7 M)**

- +\$7.7 million increase will help small and other water systems come into compliance with the new RTCR requirements and enable states to assist systems in developing asset management programs and improved rate structures, planning for drought and floods, and evaluating opportunities for greater water reuse to achieve greater efficiencies.

**Categorical Grant: Radon**

**(FY 2016 PB: \$0.0 M, FY 2015 Enacted: \$8.1 M, FY 2016 Change: -\$8.1 M)**

- -\$8.1 million eliminates funding for the State Indoor Radon Grants (SIRG) program.

**Categorical Grant: State and Local Air Quality Management**

**(FY 2016 PB: \$268.2 M, FY 2015 Enacted: \$228.2 M, FY 2016 Change: +\$40 M)**

- +\$25.0 million increase supports states as they implement the requirements of the Clean Power Plan. Of this increase, \$17.5 million will be provided to support states' Clean Power Plan modeling, technical analysis, and training efforts under CAA Section 103 authority and \$7.5 million will be allocated to states for Clean Power Plan activities under CAA Section 105 authority.
- +\$15.0 million increase for continuing environmental state programs in carrying out core air quality implementation activities.

**Categorical Grant: Tribal General Assistance Program**

**(FY 2016 PB: \$96.4 M, FY 2015 Enacted: \$65.5 M, FY 2016 Change: +\$30.9 M)**

- +\$30.9 million increase to augment base funding for individual GAP grants, providing tribes with a stronger foundation for building their environmental program capacity.

**Categorical Grant: Wetlands Program Development**

**(FY 2016 PB: \$19.7 M, FY 2015 Enacted: \$14.7 M, FY 2016 Change: +\$5.0 M)**

- +\$5.0 million increase will fund competitively awarded projects to protect and restore coastal wetlands with a focus on mitigating storm surge and carbon sequestration.

**Enforcement and Compliance**

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**Civil Enforcement**

**(FY 2016 PB: \$188.8 M, FY 2015 Enacted: \$173.9 M, FY 2016 Change: +\$14.9 M)**

Significant changes include:

- +\$7.6 million increase will support technical analyses of complex data to support enforcement cases; settlement agreements; compliance oversight activities; and support activities such as expert witness, discovery and laboratory analyses which are core elements of civil enforcement legal proceedings.
- +\$1.4 million increase will support the use of Next Generation Compliance tools in enforcement case settlements, including advanced monitoring, electronic reporting, and third party verification.

**Compliance Monitoring**

**(FY 2016 PB: \$123.6 M, FY 2015 Enacted: \$102.8 M, FY 2016 Change: +\$20.8 M)**



## Highlight of Major Budget Changes

Significant changes include:

- +\$7.1 million increase in funding for activities under the agency's E-Enterprise business strategy which streamlines the agency's business processes and systems to reduce reporting burden on states and regulated facilities, and improves the effectiveness and efficiency of regulatory programs for the EPA, states and tribes. Projects will include advancing e-reporting for NPDES, developing an advanced monitoring strategy, and supporting transparency and modernization of Enforcement and Compliance History Online (ECHO) and the Air Facility System (AFS).
- +\$5.1 million increase for the agency's efforts to improve the quality and efficiency of compliance inspections in the field. These resources will be used to develop software for the Clean Air Act Title V program and the Clean Water Act NPDES program to help inspectors gather and analyze data to prepare for and record inspections.
- +\$3.4 million increase to provides basic and essential support for inspection workforce including laboratory analysis, data systems, and mandatory inspector training.
- +\$1.8 million increase to support the integration of advanced monitoring equipment by addressing the cross-media legal, policy, and programmatic issues.

### **Criminal Enforcement**

**(FY 2016 PB: \$59.6 M, FY 2015 Enacted: \$54.0 M, FY 2016 Change: +\$5.6 M)**

Significant changes include:

- +\$2.4 million increase for targeted, analytically-driven enforcement activities necessary to effectively investigate complex criminal enforcement cases.

### **Homeland Security: Critical Infrastructure Protection**

**(FY 2016 PB: \$12.9 M, FY 2015 Enacted: \$11.3 M, FY 2016 Change: +\$1.6 M)**

Significant changes include:

- +\$1.2 million increase to support Climate Ready Water Utilities and cyber-security activities within the water infrastructure sector.

## **Chemical Safety**

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### **Endocrine Disruptors**

**(FY 2016 PB: \$4.3 M, FY 2015 Enacted: \$7.6 M, FY 2016 Change: -\$3.3 M)**

- -\$3.3 million decrease to the Endocrine Disruptor program is a result of the deployment of the computational toxicology high-throughput model that reduces the workload in developing new assays.

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

**(FY 2016 PB: \$63.3 M, FY 2015 Enacted: \$58.9 M, FY 2016 Change: +\$4.4 M)**

Significant changes include:

- +\$3.0 million increase supports Registration and Registration Review statutory activities; and efforts to redesign core business processes to become more efficient.

### **Pesticides: Protect the Environment from Pesticide Risk**

**(FY 2016 PB: \$43.7 M, FY 2015 Enacted: \$37.8 M, FY 2016 Change: +\$5.9 M)**

Significant changes include:

- +\$3.2 million increase in funding for Registration and Registration Review statutory activities, and efforts to redesign core business processes to become more efficient.

## Communities

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### **Brownfields Projects**

**(FY 2016 PB: \$110.0 M, FY 2015 Enacted: \$80.0 M, FY 2016 Change: +\$30.0 M)**

- +\$30.0 million increase for communities in environmental revitalization and economic redevelopment to be able to work together to plan, assess, cleanup, and reuse brownfields.
- Of the above increase, \$5.0 million will be for AWP grants; \$6.9 million will enhance the Revolving Loan Fund (RLF) program; and \$18.1 million will be for assessment and cleanup grants.

### **Environmental Education**

**(FY 2016 PB: \$11.0 M, FY 2015 Enacted: \$8.7 M, FY 2016 Change: +\$2.3 M)**

Significant changes include:

- + \$2.2 million increase to implement provisions of the National Environmental Education Act (NEEA), including administration of Environmental Education (EE) grants, advancing the frameworks and tools used for measuring impacts, identifying and addressing gaps and redundancies in existing EE materials, leveraging efforts government-wide, and develop the longer-term strategic direction of the program.

### **Environmental Justice**

**(FY 2016 PB: \$14.6 M, FY 2015 Enacted: \$7.3 M, FY 2016 Change: +\$7.3 M)**

Significant changes include:

- +\$5.0 million increase for financial assistance to eligible organizations working on projects to address local environmental and public health issues in overburdened and vulnerable communities.
- +\$2.0 million increase for assisting overburdened and vulnerable communities through the agency's Advanced Monitoring priority to better detect and understand environmental risks.

### **Integrated Environmental Strategies**

**(FY 2016 PB: \$21.9 M, FY 2015 Enacted: \$12.7 M, FY 2016 Change: +\$9.2 M)**

Significant changes include:

- +\$3.0 million increase to improve integration of community-level efforts at the local level across programs.
- +\$2.9 million increase expands Lean government business process improvements.
- +\$2.1 million increase for non-EPA "Circuit Riders" to work with the Administration's existing Place-Based Climate Action Champions to provide on-the-ground community assistance.

### **LUST Prevention**

**(FY 2016 PB: \$28.9 M, FY 2015 Enacted: \$25.4 M, FY 2016 Change: +\$3.5 M)**

- +\$3.5 million increase to conduct 5,600 more inspections and further the EPA, states and tribes ability to maintain inspection frequency, ensure compliance, and help prevent future confirmed releases.

### **Oil Spill: Prevention, Preparedness and Response**

**(FY 2016 PB: \$18.5 M, FY 2015 Enacted: \$14.4 M, FY 2016 Change: +\$4.1 M)**

Significant changes include:

- +\$3.4 million increase for oil accident prevention and additional preparedness activities which includes support for inspections at FRP (high risk) facilities and training.

**RCRA: Waste Management**

**(FY 2016 PB: \$70.8 M, FY 2015 Enacted: \$63.6 M, FY 2016 Change: +\$7.1 M)**

Significant changes include:

- +\$3.6 million increase for development of the E-Manifest IT system.
- +\$2.8 million increase to provide direct financial assistance and support tribal waste management program activities.

**RCRA: Waste Minimization & Recycling**

**(FY 2016 PB: \$10.8 M, FY 2015 Enacted: \$8.5 M, FY 2016 Change: +\$2.3 M)**

Significant changes include:

- +\$2.0 million increase to support the agency-wide investment for climate mitigation through waste program activities.

**State and Local Prevention and Preparedness**

**(FY 2016 PB: \$27.8 M, FY 2015 Enacted: \$15.7 M, FY 2016 Change: +\$12.1 M)**

Significant changes include:

- +\$11.5 million increase to support the implementation of Executive Order 13650 for Improving Chemical Facility Safety and Security, including compliance outreach to industry, emergency planning assistance to local communities, updates to guidance and regulations, and enhancements to emergency response software.

**Research**

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**Research: Air, Climate and Energy**

**(FY 2016 PB: \$100.3 M, FY 2015 Enacted: \$91.9 M, FY 2016 Change: +\$8.4 M)**

Significant changes include:

- +\$3.8 million increase to support hydraulic fracturing (HF) within the ACE research program to address the potential impacts of hydraulic fracturing on air quality as part of the interagency effort with DOE and DOI.
- +\$3.6 million increase to assess the impacts of climate change to provide data and tools necessary for EPA, state and local governments to effectively respond to the potential human health and environmental impacts.

**Research: Chemical Safety and Sustainability**

**(FY 2016 PB: \$101.4 M, FY 2015 Enacted: \$87.5 M, FY 2016 Change: +\$13.9 M)**

Significant changes include:

- +\$10.9 million increase to expand the breadth of the CSS CompTox research program to include more assays that can cover the biology of interest (including thyroid), more emphasis on estimating relevant exposures to individual and multiple chemicals, and better integration of human and ecological risk evaluations.

**Research: Safe and Sustainable Water Resources**

**(FY 2016 PB: \$111.0 M, FY 2015 Enacted: \$107.4 M, FY 2016 Change: +\$3.6 M)**

Significant changes include:

- +\$3.7 million increase. to continue coordination with Federal partners to study potential impacts of hydraulic fracturing on water quality and ecosystems to support sustainable approaches to oil and natural gas development and production, consistent with the Federal Multiagency

## Highlight of Major Budget Changes

Collaboration on Unconventional Oil and Gas Research. In addition, funding will help to finalize the *Study of Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*

### **Research: Sustainable and Healthy Communities**

**(FY 2016 PB: \$152.3 M, FY 2015 Enacted: \$165.0 M, FY 2016 Change: -\$12.7 M)**

Significant changes include:

- +\$3.2 million increase in funding to support community-based research, including, data collection and analysis to understand disparities in disease susceptibility, including cumulative impacts of exposure.
- -\$11.1 million decrease. The EPA's Science to Achieve Results (STAR) and the Greater Research Opportunities (GRO) fellowship programs will be consolidated as part of the government-wide STEM education programs.
- -\$3.1 million decrease in ecosystem services research to incorporate sustainability approaches into the EPA's community-based decision support tools.

## **Superfund**

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### **Superfund: Emergency Response and Removal**

**(FY 2016 PB: \$190.7 M, FY 2015 Enacted: \$181.3 M, FY 2016 Change: +\$9.4 M)**

Significant changes include:

- +\$8.3 million increase to support the EPA's ability to quickly respond to multiple simultaneous emergencies.

### **Superfund: Federal Facilities**

**(FY 2016 PB: \$26.3 M, FY 2015 Enacted: \$21.1 M, FY 2016 Change: +\$5.1 M)**

Significant changes include:

- +4.6 million increases essential core program technical assistance and collaboration with other federal agencies at NPL and other regional CERCLA cleanup sites.

### **Superfund: Remedial**

**(FY 2016 PB: \$539.6 M, FY 2015 Enacted: \$501.0 M, FY 2016 Change: +\$38.6 M)**

Significant changes include:

- +\$34.0 million increase to critical resources to further the agency's ability to continue essential ongoing fund-financed projects, maximize the preparation of "shovel ready" projects, and fund new construction projects.

## **Facilities Infrastructure**

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### **Facilities Infrastructure and Operations**

**(FY 2016 PB: \$516.0 M, FY 2015 Enacted: \$490.8 M, FY 2016 Change: +\$25.2 M)**

Significant changes include:

- +\$7,991.0 million is a net program change, which includes a reduction in resources associated with the construction design and engineering for a consolidated Las Vegas laboratory, and an increase of \$5 million to supports construction associated with the agency's space consolidation efforts at headquarters and \$10 million to support space optimization projects to initiate work and laboratory upgrades at the NEIC/Region 8 laboratories and the Willamette Research Station/Corvallis laboratories.

## Highlight of Major Budget Changes

- +\$3,981.0 million reflects an investment in master planning necessary to achieve future savings through laboratory space optimization of \$1 million and an increase in support of basic facility needs to meet specific needs required by research and development facilities and laboratories of \$2,981 million.

### Other Programs

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#### Acquisition Management

(FY 2016 PB: \$62 M, FY 2015 Enacted: \$52.9 M, FY 2016 Change: +\$9.1 M)

Significant changes include:

- +\$5.5 million increase to adapt EPA's accounting and acquisition systems to comply with the DATA Act's reporting requirements part of a government-wide effort.

#### Exchange Network

(FY 2016 PB: \$26.7 M, FY 2015 Enacted: \$18.3 M, FY 2016 Change: +\$8.4 M)

Significant changes include:

- +\$9.6 million increase for projects that will enable states, Tribes, and the EPA to modernize business processes following E-Enterprise principles. The projects will tie together information requirements to facilitate industries routine environmental business transactions with the EPA. Projects include implementation of an Identity and Access Management service, enhancements to the Facility Registry Service, development of the Laws and Regulations Service, and deployment of reusable electronic signature services.

#### Human Resources Management

(FY 2016 PB: \$59.3 M, FY 2015 Enacted: \$49.8 M, FY 2016 Change: +\$9.5 M)

Significant changes include:

- +\$3.4 million increase to support the EPA University, a central repository for all agency learning and development initiatives that will use technology to engage a wider audience of employees in learning and development opportunities.
- +\$3.3 million increase in contractual services for the EPA's sign language program based on increased demand for sign language translation, an increase in fees that the IBC charges EPA for HRLoB and to finalize the migration strategy and initiate the clean-up and migration of human resource data from the legacy HR system to HRLoB.

#### IT/Data Management

(FY 2016 PB: \$114.5 M, FY 2015 Enacted: \$101.1 M, FY 2016 Change: +\$13.4 M)

Significant changes include:

- +\$4.9 million increase in data analytics, visualization, and predictive analysis advances that will help the agency explore and address environmental, business, and public policy challenges.

#### Legal Advice: Environmental Program

(FY 2016 PB: \$52.9 M, FY 2015 Enacted: \$42.5 M, FY 2016 Change: +\$10.4 M)

Significant changes include:

- +\$3.6 million increase to provide strong legal counsel support for the Clean Power Plan and ensure a clearer and more implementable rule and more consistency for regulated entities.
- +\$3.4 million increase to address the increased legal counseling demand throughout the agency, to be more responsive to requests, to improve legal defensibility of agency actions, which saves the agency resources in the long run, because actions that are reversed by the courts have to be redone.

*Acronyms*

***Environmental Protection Agency  
List of Acronyms***

AA	Assistant Administrator
ACE	Air, Climate, and Energy
ACE/ITDS	Automated Commercial Environment/International Trade Data System
ACRES	Assessment Cleanup and Redevelopment Exchange System
ADR	Alternative Dispute Resolution
AFS	Air Facility System
AGO	America's Great Outdoors
ANCR	Annual Non-Compliance Report
AOP	Adverse Outcome Pathway
APEC	Asia-Pacific Economic Cooperation
ARA	Assistant Regional Administrator
ARRA	American Recovery and Reinvestment Act
ASTM	American Society for Testing and Materials
ATSDR	Agency for Toxic Substances and Disease Registry
B&F	Buildings and Facilities
BayTAS	Bay Tracking and Accounting System
BFRs	Brominated Flame Retardants
BOSC	Board of Scientific Counselors
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CAFÉ	Cooperate Average Fuel Economy
CAFO	Concentrated Animal Feeding Operations
CAIR	Clean Air Interstate Rule
CAP	Clean Air Partnership Fund
CASTNet	Clean Air Status and Trends Network
CBEP	Community-Based Environmental Protection
CBP	Customs and Border Protection
CBR	Chemical, Biological, Radiological
CBRN	Chemical, Biological, Radiological, and Nuclear
CCAP	Climate Change Action Plan
CCS	Carbon Capture and Storage
CCPS	Community Collaborative Problem Solving
CCTI	Climate Change Technology Initiative
CEIS	Center for Environmental Information and Statistics
CENRS	Committee on Environment, Natural Resources, and Sustainability
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CMAQ	Community Multi-scale Air Quality
CMDS	Content Management and Discovery Services
COOP	Continuity of Operations
CRRR	Chemical Risk Review and Reduction Program
CSO	Combined Sewer Overflows
CWA	Clean Water Act
CWAP	Clean Water Action Plan
CWS	Community Water Systems
CWSRF	Clean Water State Revolving Fund
DASEES	Decision Analysis for a Sustainable Environment, Economy and Society
DBP	Disinfection Byproducts
DERA	Diesel Emissions Reduction Act
DFAS	Defense Finance and Accounting System

## Acronyms

DfE	Design for the Environment
DHS	Department of Homeland Security
DMR	Discharge Monitoring Reports
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DWSRF	Drinking Water State Revolving Fund
E3	Economy, Energy and Environment Partnership
ECHO	Enforcement and Compliance History Online
EDSP	Endocrine Disruptor Screening Program
EELC	E-Enterprise Leadership Council
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act of 2007
EJ	Environmental Justice
ELP	Environmental Leadership Project
EMP	Emergency Management Portal
EN	Enacted (Budget)
EO	Executive Order
EPAct	Energy Policy Act of 2005
EPCRA	Emergency Preparedness and Community Right-to-Know Act
EPM	Environmental Programs and Management
EPP	Environmentally Preferable Purchasing Program
ERRS	Emergency Rapid Response Services
ESC	Executive Steering Committee
ESI	Essential Science Indicator
ETI	Environmental Technology Initiative
ETV	Environmental Technology Verification
EU	European Union
EWDJT	Environmental Workforce Development and Job Training
FAN	Fixed Account Numbers
FASAB	Federal Accounting Standards Advisory Board
FCO	Funds Certifying Officer
FFDCA	Federal Food, Drug, and Cosmetic Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FLC	Federal Leadership Committee
FMFIA	Federal Managers' Financial Integrity Act
FQPA	Food Quality Protection Act
FRP	Facility Response Plan
FSMA	Food Safety Modernization Act
FSMP	Financial System Modernization Project
FTE	Full-Time Equivalent
FUDS	Formerly Used Defense Sites
GAPG	General Assistance Program Grants
GHG	Greenhouse Gas
GHGRP	Greenhouse Gas Reporting Program
GIS	Geographic Information System
GMI	Global Methane Initiative
GPRA	Government Performance and Results Act
GSN	Green Suppliers Network
GWP	Global Warming Potential
HHRA	Human Health Risk Assessment
HHS	Department of Health and Human Services
HPPG	High Priority Performance Goals

## Acronyms

HPV	High Production Volume
HS	Homeland Security
HSWA	Hazardous and Solid Waste Amendments of 1984
HWIR	Hazardous Waste Identification Media and Process Rules
IA	Interagency Agreements
IAQ	Indoor Air Quality
ICR	Information Collection Rule
ICS	Industrial Control Systems
IG	Inspector General
IPCC	Intergovernmental Panel on Climate Change
IPM	Integrated Pest Management
IRIS	Integrated Risk Information System
IRM	Information Resource Management
ISA	Integrated Science Assessments
ISTEA	Intermodal Surface Transportation Efficiency Act
ITMRA	Information Technology Management Reform Act of 1995-AKA Clinger/Cohen Act
LEPC	Local Emergency Planning Committee
LGEAN	Local Government Environmental Assistance Network
LUST	Leaking Underground Storage Tanks
M&O	Management and Oversight
MACT	Maximum Achievable Control Technology
MARL	Microarray Research Laboratory
MATS	Mercury and Toxics Standards
MTM	Mountaintop Mining
NAAEC	North American Agreement on Environmental Cooperation
NAAQs	National Ambient Air Quality Standards
NAFTA	North American Free Trade Agreement
NAPA	National Academy of Public Administration
NAS	National Academy of Sciences
NASA	National Aeronautics and Space Administration
NATA	National-Scale Air Toxics Assessment
NCDC	National Clean Diesel Campaign
NCEA	National Center for Environmental Assessment
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEA	Nuclear Energy Agency
NESCA	National Enforcement Strategy for Correction Action
NDPD	National Data Processing Division
NEP	National Estuary Program
NEPA	National Environmental Policy Act
NEPPS	National Environmental Performance Partnership System
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHTSA	National Highway Transportation Safety Administration
NHDPlus	USGS National Hydrography Dataset Plus
NIPP	National Infrastructure Protection Plan
NLIC	National Lead Information Center
NOA	New Obligation Authority
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPDWRs	National Primary Drinking Water Regulations
NPL	National Priority List
NPM	National Program Manager
NPR	National Performance Review



## Acronyms

NPS	Nonpoint Source
NPSR	National Pesticide Standard Repository
NRCS	National Resource Conservation Service
NROC	Northeast Regional Ocean Council
NRF	National Response Framework
NRT	National Response Team
NVFEL	National Vehicle and Fuel Emissions Laboratory
OA	Office of the Administrator
OAM	Office of Acquisition Management
OAR	Office of Air and Radiation
OARM	Office of Administration and Resources Management
OCFO	Office of the Chief Financial Officer
OCHP	Office of Children's Health Protection
OCSP	Office of Chemical Safety and Pollution Prevention
OECA	Office of Enforcement and Compliance Assurance
OECD	Organization of Economic Cooperation and Development
OEI	Office of Environmental Information
OEM	Office of Emergency Management
OERR	Office of Emergency and Remedial Response
OFA	Other Federal Agencies
OFPP	Office of Federal Procurement Policy
OGC	Office of the General Counsel
OIG	Office of the Inspector General
OITA	Office of International and Tribal Affairs
OMTR	Open Market Trading Rule
OPA	Oil Pollution Act of 1990
OPAA	Office of Planning, Analysis, and Accountability
ORD	Office of Research and Development
OSRTI	Office of Superfund Remediation and Technology Innovation
OSWER	Office of Solid Waste and Emergency Response
OTAG	Ozone Transport Advisory Group
OW	Office of Water
PB	President's Budget
PBTs	Persistent Bioaccumulative Toxins
PCB	Polychlorinated Biphenyls
PC&B	Personnel, Compensation and Benefits
PESP	Pesticide Environmental Stewardship Program
PG	Priority Goal
PHEV	Plug-in Hybrid Electric Vehicles
PIP	Plant-incorporated Protectants
PIRT	Pesticide Inspector Residential Program
P2	Pollution Prevention
PM	Particulate Matter
PNGV	Partnership for a New Generation of Vehicles
POTWs	Publicly Owned Treatment Works
PPG	Performance Partnership Grants
PPIN	Pollution Prevention Information Network
PPRTV	Provisional Peer Reviewed Toxicity Values
PRC	Program Results Code
PREP	Pesticide Regulatory Education Program
PRIA	Pesticide Registration Improvement Act
PRIRA	Pesticide Registration Improvement Renewal Act
PWSS	Public Water System Supervision

*Acronyms*

RC	Responsibility Center
RCRA	Resource Conservation and Recovery Act of 1976
RGJ	Regional Geographic Initiative
RLF	Revolving Loan Fund
RMP	Risk Management Plan
ROE	Report on Environment
RPIO	Responsible Planning Implementation Office
RR	Reprogramming Request
RRP	Renovation, Repair and Painting
RWTA	Rural Water Technical Assistance
SAP	Science Advisory Panel
SAB	Science Advisory Board
S&T	Science and Technology
SALC	Sub-allocation (level)
SARA	Superfund Amendments and Reauthorization Act of 1986
SBIR	Small Business Innovation Research
SBEAPs	Small Business Environmental Assistance Program
SBLRBRA	Small Business Liability Relief and Brownfields Revitalization Act
SBO	Senior Budget Officer
SBREFA	Small Business Regulatory Enforcement Fairness Act
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
SERC	State Emergency Response Commission
SF	Hazardous Substance Superfund
SHC	Sustainable and Healthy Communities
SIP	State Implementation Plan
SIRG	State Indoor Radon Grants
SITE	Superfund Innovative Technology Evaluation
SLC	Senior Leadership Council
SNAP	Significant New Alternatives Policy
SNEE	Southern New England Estuaries
SPCC	Spill Prevention, Control and Countermeasure
SRF	State Revolving Fund
SRO	Senior Resource Official
SSWR	Safe and Sustainable Water Resources
STAG	State and Tribal Assistance Grants
STAR	Science to Achieve Results
STAR METRICS	Science and Technology in America's Reinvestment-Measuring Effects of Research on Innovation, Competitiveness, and Science
STEM	Science, Technology, Engineering, and Mathematics
STORS	Sludge-To-Oil-Reactor System
SWP	Source Water Protection
SWTR	Surface Water Treatment Rule
TASC	Technical Assistance Support for Communities
TIM	Technology Infrastructure Modernization
TIP	Tribal Implementation Plan
TMDL	Total Maximum Daily Load
TPP	Trans-Pacific Partnership Agreement
TRI	Toxic Release Inventory
TRIO	Taskforce on Research to Inform and Optimize
TSCA	Toxic Substances Control Act
TSD	Treatment, Storage, and Disposal
UIC	Underground Injection Control

*Acronyms*

USDA	U.S. Department of Agriculture
USGCRP	U.S. Global Change Research Program
UST	Underground Storage Tanks
WCF	Working Capital Fund
WFC	Water Finance Center
WHO	World Health Organization
WIF	Water Infrastructure Funds
WIFIA	Water Infrastructure Finance and Innovation Authority
WIPP	Waste Isolation Pilot Plant
WSI	Water Security Initiative
WTO	World Trade Organization





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