Summary: Climate Air & Radiation	
EPA's 2017 Workplan & Budget Priorities	EPA's 2018 Workplan & Budget Priorities
Address Climate Change	***Address Climate Change - eliminated***
Climate Action Plan	**Climate Action Plan - eliminated**
Greenhouse Gas Reporting Program $103,258.0	**Greenhouse Gas Reporting Program - $13,580**
Clean Power Plan: Address GHGs from power plants	**Clean Power Plan: Address GHGs from power plants - eliminated; rules slated for elimination**
Strategy to Reduce Methane Emissions - Implement the following rules (all issued August 2015) • New Source Performance Standards (NSPS) for the oil and natural gas sector • Draft guidelines for states to implement Reasonably Available Control Technology for the oil and natural gas sector • Two rules which clarify and streamline air permitting requirements in states and Indian country • NSPS and Emission Guidelines for existing sources for the landfills source category - Voluntary partnership programs that promote cost-effective reductions of methane Natural Gas STAR Methane Challenge AgSTAR program Coalbed Methane Outreach Program Landfill Methane Outreach Program	**Strategy to Reduce Methane Emissions - eliminated**
Lead the Global Methane Initiative	**Not addressed in the 2018 budget**

Voluntary (non-regulatory) energy efficiency/GHG emission reduction programs
- ENERGY STAR
- Center for Corporate Climate Leadership
- Green Power Partnership
- Combined Heat and Power Partnership
- High Global Warming Potential Gases Voluntary Programs
  - Voluntary Aluminum Industrial Partnership
  - Sulfur hexafluoride (SF6) Reduction Partnership (voluntary EPA/electrical industry effort reducing leakage of sulfur hexafluoride, an excellent electrical insulator, also an extremely potent and long-lived greenhouse gas)
- Responsible Appliance Disposal Program
- GreenChill Partnership
- WasteWise
- Water Sense
	Voluntary (non-regulatory) energy efficiency/GHG emission reduction programs - eliminated

State and Local Climate Energy Program - Creating Resilient Water Utilities (CRWU) - Climate Ready Estuaries The Climate Ready Estuaries program works with the National Estuary Programs - State and Local Climate Energy Program - Partnership for Sustainable Communities - Smart Growth Program	**State and Local Climate Energy Program - eliminated**
Climate resiliency	**Climate resiliency - eliminated**
Address GHG emissions in the Transportation sector	**Address GHG emissions in the Transportation sector - eliminated**
Federal Vehicle and Fuel Standards and Certification Program $93,070.0	**Federal Vehicle and Fuel Standards and Certification Program $76,010.0**
Continue to develop and implement CAFE (fuel efficiency) & GHG emission standards	Reconsider Light-Duty Vehicle fuel and Emissions Standards, model years 2022-2025

Implement a second phase of medium & heavy-duty vehicle GHG regulations incorporating a wider range of advanced technologies	Not addressed in the 2018 budget
Perform a Midterm Evaluation of the Model Year 2022-2025 light-duty GHG standards with NHTSA and the California Air Resources Board	Not addressed in the 2018 budget
Increase testing and certification capacity to ensure that new vehicles, engines, and fuels are in compliance with new vehicle and fuel standards	The agency will continue to perform its compliance oversight functions on priority matters, where there is evidence to suggest noncompliance.
Support activities related to the finding that GHG emissions from certain classes of engines used in aircraft contribute to air pollution	GHG emissions aircraft engines used in aircraft - eliminated
Renewable Fuels program - continue to implement the Renewable Fuels program	**Continue to implement the RFS program.**
Transportation and Air Quality Voluntary Programs - National Clean Diesel Campaign - SmartWay Transport - Clean School Bus USA	**Transportation and Air Quality Voluntary Programs - eliminated**
Diesel Emissions Grant Program $49,905	**Diesel Emissions Grant Program - $10,000**
Restore and Protect the Ozone Layer	***Restore and Protect the Ozone Layer***
Stratospheric Ozone: Domestic Programs $4,906	**Stratospheric Ozone: Domestic Programs $3,687**
Stratospheric Ozone: Multilateral Fund $8,911.0	**Stratospheric Ozone: Multilateral Fund - eliminated**
Improve Air Quality	***Improve Air Quality***

Federal Support for Air Quality Management (SIPs & NAAQS) $131,959 Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The program also develops and provides information, training, and tools to assist state, Tribal, and local agencies, as well as communities, to reduce air toxics emissions and risk specific to their local areas. Finally, the program includes activities related to the Clean Air Act's stationary source residual risk program, which involves an assessment of source categories subject to Maximum Achievable Control Technology (MACT) standards to determine if more stringent standards are needed to further reduce the risks to public health (taking into account developments in practices, processes, and control technologies).	Federal Support for Air Quality Management (SIPs & NAAQS) $100,415 The budget request includes $100.4 million to provide federal support for state and local air quality management.In FY 2018, the EPA will continue to perform key activities in support of the NAAQS and implementation of stationary source regulations, supporting state, local, and tribal air quality programs.
Update & implement NAAQS (Ambient air quality standards) $22,899 This past year, the agency strengthened the NAAQS for ground-level ozone to 70 parts per billion (ppb), based on extensive scientific evidence. EPA will continue providing state and local air quality agencies with assistance in developing SIPs during FY 2017 Communities do not always have sufficient air quality data at a local level to understand and act upon existing risks. In FY 2017, the EPA will continue to invest resources to help enable environmentally overburdened and underserved communities to monitor their air quality through investments in monitoring equipment and technical outreach.	**Update & implement NAAQS (Ambient air quality standards) $16,653** Through implementation of Executive Order 13777, Enforcing the Regulatory Reform Agenda and Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs, the EPA will look for ways to repeal, replace, or modify existing regulations to make them less burdensome and to be prudent and financially responsible in the expenditure of public and private funds. EPA will provide state and local air quality agencies with a basic level of assistance in developing SIPs during FY 2018. Community scale air toxics monitoring will be funded by states and communities.
Implement new categorical emission control standards for petroleum refineries	**Not addressed in the 2018 budget**
Continue a multi-pollutant control approach for industry sectors	**Not addressed in the 2018 budget**

Grants to States Targeted Airshed Grants - - recommended for elimination, funded by Congress at $19,962 Tribal Air Quality Management $12,805 State and Local Air Quality Management $227,785 Radon $8,036 Diesel Emission Reduction Grants $49,905	**Grants to States** Targeted Airshed Grants - eliminated Tribal Air Quality Management $8,963 State and Local Air Quality Management $159,630 Radon - eliminated Diesel Emissions Reduction Grants - $10,000
Address interstate transport of air pollution	
Clean Air Allowance trading programs $23,905	**Clean Air Allowance Trading Programs - $18,530**
Cross-State Air Pollution Rule Requires 27 states to limit their state-wide emissions of SO2 and/or NOx in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states.	**Cross-State Air Pollution Rule** Work with states to implement emission reduction programs to comply with [the Good Neighbor] requirements (CAA Section 110(a)(2)(D)
Long term air quality monitoring, nationwide monitoring systems. Clean Air Status and Trends Network (CASTNET) Long-Term Monitoring (LTM)	**Long term air quality monitoring, nationwide monitoring systems.** Clean Air Status and Trends Network (CASTNET) EPA will close seven of 59 EPA-sponsored CASTNET monitoring sites (six on Tribal lands) and seven of EPA's 32 National Atmospheric Deposition Program sites. Long-Term Monitoring (LTM) Continue quality assurance, analysis, and reporting of environmental data from LTM surface water monitoring network to the extent possible.
Support community actions to address air quality http://www.epa.gov/otaq/climate/mte.htm	**Support to communities to address air pollution - Appears to be eliminated** (See note above on community-level monitoring as a local/state funding obligation.)
Address communities with significant cumulative exposure to air pollutants & air toxics: Port communities	Because large numbers of people live near ports and are vulnerable to mobile source diesel emissions, the EPA will focus its efforts on reducing mobile source emissions in and around ports.

Air toxics emissions control standards: ongoing reviews/rulemakings Technology-based standards (MACT): The air toxics technology-based emissions standards (MACT) 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. Technology reviews & risk assessments: 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 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. Information dissemination & transparency: 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.	**Air Toxics** The EPA will continue to prioritize CAA and court-ordered obligations. Section 112 of the CAA requires that the emissions control bases for all Maximum Achievable Control Technology (MACT) standards be reviewed and updated, as necessary, every eight years. In FY 2018, the EPA will continue to conduct risk assessments, to determine whether the MACT rules appropriately protect public health. Address air toxics emissions [with communities] in areas of greatest concern. Not addressed in the 2018 budget The agency will adjust the schedule of updating the National Air Toxics Assessment (NATA).
Minimize Exposure to Radiation & Indoor Air Pollutants $33,569	***Minimize Exposure to Radiation $5,596***
Reduce Risks from Indoor Air $13,916 - Training & networking on asthma triggers for healthcare professionals. AsthmaCommunityNetwork.org, - Indoor Air Quality/ asthma management in schools. - Asthma management support to disadvantaged communities. - Coordinated Federal Action Plan to Reduce Racial and Ethnic Asthma Disparities. - Indoor airPLUS program for homes & schools.	**Reduce Risks from Indoor Air - eliminated** This is a mature program where states have the technical capacity to continue this work

Indoor Air: Radon Program $ $3,076 • National Radon Action Plan The EPA will drive action at the national level to reduce radon risk in homes and schools using partnerships with other federal agencies, 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.	***Indoor Air: Radon Program - eliminated*** This is a mature program where states have the technical capacity to continue this work.
Minimize Exposure to Radiation	
Radiation: Protection (Support to Superfund, Brownfields & RCRA Corrective Actions)- $10,258	**Radiation: Protection - eliminated**
Finalize emission standards for uranium & thorium mill tailings	***Finalize emission standards for uranium & thorium mill tailings - slated for elimination***
Radioactive waste management: WIPP oversight	***Radioactive waste management: WIPP oversight - slated for elimination***
Radiation: Response Preparedness $6319	**Radiation: Response Preparedness $5596**
Radiation Monitoring - RadNet The RadNet fixed monitoring network provides near real-time radiation monitoring coverage near each of the 100 most populous U.S. cities, as well as expanded geographic coverage for a total of 135 monitoring sites.	***Radiation Monitoring - RadNet*** The agency will continue to operate RadNet, the agency's fixed ambient environmental radiation monitoring network for the U.S
Categorical Grant: Radon $8,036	***Categorical Grant: Radon - eliminated***
Research: Air, Climate and Energy $$91,731	***Research: Air & Energy $30,592***
Global Change Research	Not addressed in the 2018 budget
Air quality impacts from unconventional oil and gas activities	Not addressed in the 2018 budget
Clean Fuels research	Not addressed in the 2018 budget

Climate, Air & Radiation: Performance Plan Details

EPA's 2017 Workplan & Budget Priorities	EPA's 2018 Workplan & Budget Priorities
Address Climate Change Scientific consensus shows that as a result of human activities, **greenhouse gas (GHG) 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. 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 frequent flooding as well as 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 — both outdoors and indoors—in areas with higher temperatures and greater precipitation, including pest-borne diseases, as well as food and water-borne pathogens. The costs of 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.	***Address Climate Change - eliminated***

Climate Action Plan	Climate Action Plan - eliminated
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 GHG emissions. The President's **Climate Action Plan** frames the EPA's strategies to address climate change, including: • Cutting carbon (CO_2) pollution from new and existing power plants. Power plants are the largest source of carbon dioxide emissions in the United States, making up roughly one-third of all domestic GHG emissions. • Cutting carbon pollution (methane) from the oil and natural gas, and landfills source sectors • Establishing CO_2 emission standards and supporting increased fuel economy standards for heavy-duty vehicles • Cutting energy waste in homes, businesses, and factories • Reducing HFC use and emissions • Preparing 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 • Integrating climate adaptation planning into programs, policies, rules, and operations.	

Greenhouse Gas Reporting Program $103,258.0 Supporting reporting and verification in the GHG Reporting Program of emissions across 41 industry sectors and emission sources and approximately 8,000 reporters.	**Greenhouse Gas Reporting Program - $13,580** (GHG reporting is a statutory requirement) In FY 2018, the budget provides for $8.5 million to continue to implement the Greenhouse Gas Reporting Program. The program focus will include: • Implementing already-finalized regulatory revisions across multiple sectors to address stakeholder concerns associated with collection and potential release of data elements considered to be sensitive business information; • Aligning the database management systems with those regulatory revisions; and • Conducting a targeted Quality Assurance/Quality Control and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary. • [Balance of the Funds will be used to prepare the annual Inventory of US GHG Emissions and Sinks, a US government treaty obligation.]

Clean Power Plan (CPP): Address GHGs from power plants *[Currently, air pollution regulations for power plants only address "conventional" air pollutants (sulphur dioxide, nitrous oxides and fine particles, which contribute to ozone/ smog and acid rain). The new rules set standards for carbon emissions from new and existing power plants. The rules also establish state-by-state targets for CO^2 reduction, within a flexible framework of options to achieve compliance (similar to previous Clean Air Act requirements). Under the CPP, States can reduce carbon emissions by:* • *Adding renewable energy* • *Implementing energy efficiency measures* • *Switching from coal to natural gas (with limits to avoid a "rush to natural gas")* • *Adding nuclear energy* *States can also set up regional "allowance trading" markets, similar to the markets now successfully used to control acid rain pollutants.]* On August 3, 2015, the EPA finalized rules that will lower carbon pollution from existing fossil fuel-fired power plants and guidelines to help the states develop their plans for meeting their individual goals. The standards for existing sources will result in carbon pollution from the power sector that is 32 percent lower by 2030 (compared to 2005 emission levels). In 2013, the electricity sector was the largest source of U.S. GHG emissions, accounting for about one-third of the U.S. total. EPA finalized rulemakings setting carbon standards for new and modified fossil fuel power plants. With finalization of the rules and guidelines, 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. - ***Work with states to implement the Clean Power Plan carbon dioxide (CO_2) emission standards for existing power plants,*** including technical assistance and funding to support development of state plans. 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 2017, the agency will focus resources to support states as they begin to implement or, in some cases, finalize their plans	**Clean Power Plan (CPP): Address GHGs from power plants** The Administration has signaled its intent to eliminate all components of the Clean Power Plan. "On March 28, President Donald Trump signed the Executive Order on Energy Independence, which calls for a review of the Clean Power Plan. The event signaled a commitment to the rule of law, cooperative federalism, and sound scientific rulemaking at EPA. We will continue to post updates as available as we implement this executive order. In order to comply with the president's action, EPA Administrator Scott Pruitt issued the following Federal Register notices: Review of the Clean Power Plan Review of the Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Generating Units Withdrawal of Proposed Rules: Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations; and Clean Energy Incentive Program Design Details Administrator Pruitt also sent a letter **informing governors that EPA does not expect the states to dedicate resources to complying** with a rule that has been stayed by the Supreme Court of the United States." https://www.epa.gov/Energy-Independence

Strategy to Reduce Methane Emissions

Under the Climate Action Plan, in March 2014 the Administration released the Strategy to Reduce Methane Emissions and, in January 2015, announced a goal to cut methane emissions from the oil and gas sector.

[The oil and gas sector is the country's largest emitter of methane, a "super-pollutant" from of carbon emissions. The oil and gas industry is also the largest industrial source of emissions of volatile organic compounds (VOCs), a group of chemicals that also contribute to ground-level ozone (smog). In addition to forming smog, many VOCs are also toxic to humans. Many kinds of equipment used in the oil and gas sector leak methane and VOCs; prior to the 2015 rule making, these emissions were not regulated.]

The EPA and other federal agencies are pursuing a series of steps to put the U.S. on a path toward achieving a 40 to 45 percent reduction in methane emissions from 2012 levels by the year 2025. These actions include:

- ***Implement the following rules (all issued August 2015)***
  - Proposed updates to the agency's **New Source Performance Standards (NSPS) for the oil and natural gas sector** to regulate methane and address several previously unregulated sources. This rule will also achieve additional emission reductions of volatile organic compound (VOC) pollution from these sources.

Strategy to Reduce Methane Emissions - eliminated

New Source Performance Standards (NSPS) for the oil and natural gas sector

The Trump Administration has targeted these standards for reconsideration, and delayed implementation without going through the notice-and-comment rule-making process.

https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/actions-and-notices-about-oil-and-natural-gas

> [On July 3rd, a DC Circuit panel found the implementation delay to be action to be unlawful. http://www.utilitydive.com/news/dc-circuit-strikes-down-trump-delay-of-epa-methane-rule/446340/
>
> On July 31, the full D.C. Circuit Court of Appeals ordered EPA to resume enforcing its methane rule for new oil and gas wells.]

Review of the 2016 Oil and Gas New Source Performance Standards for New, Reconstructed, and Modified Sources

> [These new rules apply to all wells built or updated since September 2015. Over 1,000 wells a month (on average) have been built or updated during this period.]
>
> See also: http://www.saveepaalums.info/resisting-the-trump-de-regulatory-agenda-talking-points/methane-toxic-air-pollutant-standards-for-oil-and-gas-sector/

Voluntary (non-regulatory) energy efficiency/GHG emission reduction programs

The EPA will continue to implement non-regulatory climate change programs that work with key sectors to reduce greenhouse gases and facilitate energy-efficiency improvements. These programs extend across the residential, commercial, industrial, and transportation sectors.

- ENERGY STAR is a joint program of EPA and the U.S. Department of Energy, helping us all save money and protect the environment through energy efficient products and practices. ENERGY STAR helped promote investments in energy-efficient technologies and practices that prevented more than an estimated 300 million metric tons of GHGs, resulting in savings of $34 billion on Americans' annual utility bills in 2014 alone. ENERGY STAR Most Efficient is a recent program innovation to help consumers identify and advance highly efficient products in the marketplace. This effort identifies the most efficient products among those that qualify for the ENERGY STAR recognition in particular product categories. Product categories are selected and recognition criteria established to ensure that products receiving this recognition demonstrate efficiency performance that is truly exceptional, inspirational, or leading edge— consistent with the interests of environmentally-motivated consumers and early adopters. In 2015, EPA finalized ENERGY STAR product specifications across 8 products, including large network equipment for the first time. The EPA will have up to 20 product specifications underway, as well as a major update to the 1-100 ENERGY STAR scores for commercial buildings
- Center for Corporate Climate Leadership**:** EPA's Center for Corporate Climate Leadership serves as a resource center for all organizations looking to expand their work in the area of greenhouse gas (GHG) measurement and management.
- Green Power Partnership (to increase the use of renewable electricity in the US) i**s** a voluntary partnership between EPA and organizations that are interested in using green power, which is electricity produced from a subset of renewable resources, such as solar, wind, geothermal, biomass, and low-impact hydropower.
- Combined Heat and Power Partnership (promotes use of wasted heat, saving both energy and water and reducing pollution) is a voluntary program to reduce the environmental impact of power generation by promoting the use of CHP, which is an efficient, clean and reliable approach to generating power and thermal energy from a single fuel source.
- *High Global Warming Potential Gases Voluntary Programs* The high global warming potential partnership programs (or Fluorinated Gas Partnership Programs) are

Voluntary (non-regulatory) energy efficiency/GHG emission reduction programs - eliminated

In FY 2018, funding for ENERGY STAR and other partnership programs is eliminated as part of the Administration's commitment to return EPA to its core work. Certification programs like Energy Star have been and continue to be successfully administered by non-governmental entities like industry associated and consumer groups. The EPA will explore options for the potential transfer of the ENERGY STAR and other climate protection partnership programs to non-governmental entities. The eliminated sub-programs are as follows:

AgSTAR, Center for Corporate Climate Leadership, Coalbed Methane Outreach Program (CMOP), Combined Heat & Power Partnership (CHPP), ENERGY STAR, Global Methane Initiative, GreenChill Partnership, Green Power Partnership (GPP), Landfill Methane Outreach Program (LMOP), Natural Gas STAR, Responsible Appliance Disposal Program (RAD), SF6 Reduction Partnership for Electric Power Systems (EPS), SmartWay, State and Local Climate Energy Program, and Voluntary Aluminum Industrial Partnership (V AIP).

State and Local Climate Energy Program	State and Local Climate Energy Program - eliminated

- Creating Resilient Water Utilities (CRWU) initiative provides drinking water, wastewater, and stormwater utilities with the practical tools, training, and technical assistance needed to increase resilience to extreme weather events. Through a comprehensive planning process, CRWU assists the water sector utilities by promoting a clear understanding of potential long-term adaptation options. https://www.epa.gov/crwu
- Climate Ready Estuaries The Climate Ready Estuaries program works with the National Estuary Programs and the coastal management community to:
  - Assess climate change vulnerabilities,
  - Develop and implement adaptation strategies, and
  - Engage and educate stakeholders.
- CRE shares NEP examples to help other coastal managers, and provides technical guidance and assistance about climate change adaptation.
- State and Local Climate Energy Program Investing in energy efficiency, renewable energy, and climate change policies and programs is an important way for state and local governments to achieve multiple goals: reducing greenhouse gas emissions, improving air quality and people's health, and saving money. EPA's State and Local Climate and Energy Program offers expertise about energy efficiency, renewable energy, and climate change policies and programs to interested state, local, and tribal governments.
- Partnership for Sustainable Communities involving the Department of Housing and Urban Development, the Department of Transportation, and EPA, works to create communities that have a variety of housing and transportation choices, with destinations close to home, in order to lower transportation costs, reduce air pollution and stormwater runoff, and provide many other benefits.
- Smart Growth Program has resources to help tribes, states, regions, local governments, and the private sector build in ways that bring multiple environmental, economic, health, and social benefits, including reducing greenhouse gas emissions and preparing for climate change.	

Climate resiliency In FY 2017, the EPA will continue to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare for, and adapt to a changing climate. A central element of this effort focuses on supporting climate-resilient investments across the nation. The EPA will ensure that a cumulative number of 120 state, tribal, and community partners have integrated climate change data, models, information, and other decision- support tools developed by the EPA for climate change adaptation into their planning processes; and, that 100 state, tribal, and community partners have incorporated climate change adaptation into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements). The goal of these efforts is to ensure continued protection of human health and the environment even as the climate changes, and to empower states, tribes, and local communities to increase their resilience and prepare for the impacts of climate change.	**Climate resiliency - eliminated**
Address GHG emissions & air pollutants in the Transportation sector 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.	**Address air pollutants in the Transportation sector** In FY 2018 the program will focus its efforts on certification decisions [for conventional pollutants]..

Federal Vehicle and Fuel Standards and Certification Program $93,070.0

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

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

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

Federal Vehicle and Fuel Standards and Certification Program $76,010.0

In FY 2018, the Federal Vehicle and Fuels Standards and Certification program will focus its efforts on certification decisions. The agency will continue to perform its compliance oversight functions on priority matters. In FY 2018, the agency will conduct compliance oversight tests where there is evidence to suggest noncompliance. The EPA will continue to conduct, at a reduced level, testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars.

In FY 2018, the EPA anticipates reviewing and approving about 5,000 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. This has been a significant increase in demand for the EPA's certification services over the last two decades, due in part to the addition of certification requirements for marine, other nonroad, and small spark-ignited engines.

In FY 2018, the EPA also will oversee compliance with vehicle fuel economy labeling requirements. In past years, the EPA conducted in-use audits of manufacturer "coast-down" data revealing issues in manufacturer data submitted to the EPA and, as a result, inaccurate fuel economy labels on more than a million vehicles from several well-known manufacturers.

In FY 2018, the EPA will continue to provide state and local governments with assistance in developing SIPs and providing assistance with transportation conformity determinations. The EPA will continue to work with states and local governments to ensure the technical integrity of the mobile source emission estimates in their SIPs. The EPA will assist in identifying control options available and provide guidance, as needed. In addition, the EPA will ensure national consistency in how conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in air quality plans, for use in conformity determinations. The EPA will continue to provide assistance to state and local transportation and air quality agencies working on PM2.5 hot-spot analyses. This will help ensure that analyses use the latest available information and that a measure of consistency exists across the nation. Additionally, the EPA will continue partnering with states to support inspection and maintenance (I/M) programs that focus on in-use vehicles and engines. Basic and/or enhanced I/M testing is currently being conducted in over 30 states with technical and programmatic guidance from the EPA.

Continue to develop and implement CAFE (fuel efficiency) & GHG emission standards

Support implementation and compliance with GHG emission standards for light-duty vehicles (model years 2022-2025,), heavy-duty vehicles (through 2017) and adopted Corporate Average Fuel Economy (CAFE) standards

The EPA, in coordination with the National Highway Transportation Safety Administration (NHTSA), EPA adopts and 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. Working with the NHTSA, the EPA finalized Phase 2 GHG and fuel efficiency standards for heavy-duty vehicles in 2016. In 2017, EPA will implement a second phase of heavy-duty vehicle GHG regulations that incorporates a wider range of advanced technologies, including hybrid vehicle drive trains, and also explore options to reduce emissions from a wide range of nonroad equipment, locomotives, aircraft, and transportation fuels. https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks

The national program of **f**uel economy and GHG standards for model year 2012 through 2025 light-duty and heavy- duty vehicles will save American consumers about $1.7 trillion, decrease the nation's fuel consumption by over 12 billion barrels of oil and prevent 6.3 billion metric tons of GHG emissions over the lifetimes of the affected vehicles and commercial trucks sold through model year 2025, an FY 014-2015 Agency Priority Goal. 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 the model year 2014 average of 31.8 miles to the gallon.

Reconsider Light-Duty Vehicle fuel and Emissions Standards, model years 2022-2025

In FY 2018, the EPA will continue to implement the harmonized fuel economy and existing GHG emission standards for light-duty vehicles and heavy-duty vehicles which provide regulatory certainty to the marketplace and spur innovation in vehicle technology. These standards were finalized by the EPA in coordination with the National Highway Traffic Safety Administration (NHTSA) and the EPA is responsible for implementing both the emission standards and significant aspects of the fuel economy standards.

In FY 2018, the EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers' fleets for vehicle Model Year 2019. The EPA is responsible for establishing the test procedures needed to measure tailpipe emissions and for verifying manufacturers' vehicle fuel economy data; as a result, the agency will deploy its laboratory testing resources to ensure that new cars and trucks are in compliance with the Tier 3 emissions standards.

On March 15, 2017, the EPA and the Department of Transportation announced that the EPA intends to reconsider the Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle GHG Emissions Standards, issued on January 12, 2017. Consistent with the original schedule, the EPA intends to make a new Final Determination regarding the appropriateness of the standards no later than April 1, 2018. If the Administrator's Final Determination is that the model year 2022-2025 standards or program should be modified, the EPA must then make any modifications to the existing rule through a notice-and-comment rulemaking, including the issuing of a Notice of Proposed Rulemaking and a Final Rulemaking.

Implement a second phase of medium & heavy-duty vehicle GHG regulations incorporating a wider range of advanced technologies Implement a second phase of GHG standards for Model Year from 2021 to 2027 medium- and heavy-duty vehicles (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) offering further opportunities to reduce emissions, decrease the nation's oil use, and benefit consumers and businesses by reducing the cost of transporting goods while spurring job growth and innovation in the clean energy technology sector. Phase 2 regulations rolling out from model year 2021 to 2027 are expected to reduce fuel consumption of vocational trucks by 24% and heavy-duty pickup trucks by 16%.	**Not addressed in the 2018 budget**
Perform a Midterm Evaluation of the Model Year 2022-2025 light-duty GHG standards with NHTSA and the California Air Resources Board EPA 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 2017 the agency is performing a comprehensive feasibility evaluation of advanced technologies. This evaluation will support the agency strategy to advance the use of evidence in decision-making.	**Not addressed in the 2018 budget**

Increase testing and certification capacity to ensure that new vehicles, engines, and fuels are in compliance with new vehicle and fuel 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. 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. IN 2017, EPA anticipates reviewing and approving approximately 5,000 vehicle and engine emissions certification requests – a workload that has quadrupled over the past decade. The testing will screen for defeat devices and other emissions problems in both new and in-use vehicles and engines. In FY 2017, 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 and to conduct aggressive testing to identify the use of defeat devices. The EPA uses in-use emissions data provided by light-duty vehicle manufacturers as a means to measure compliance and determine if any follow-up evaluation or testing is necessary. The NVFEL's workload will continue to grow as the lab begins to implement new, and more stringent, GHG emission standards for additional classes of vehicles and engines. Construction a new heavy-duty certification test facility to address GHG emissions from heavy-duty vehicles has been completed. In FY 2017, the EPA will conduct and run testing operations in these new test cells. This modern testing helps ensure a level playing field between foreign and domestic manufacturers, revealing instances of non-compliance design, and can lead to equal opportunities for American manufacturers to benefit from developing innovative solutions to emissions challenges.	**Testing and certification of new vehicles, engines and fuels** • The agency will continue to perform its compliance oversight functions on priority matters, where there is evidence to suggest noncompliance. • The EPA will continue to conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars. • In FY 2018, the EPA anticipates reviewing and approving about 5,000 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. [EPA's Primary vehicle testing lab (Ann Arbor, MI) is targeted for closure by the Trump Administration. https://www.facebook.com/pg/SaveEPAAnnArbor/about/?ref=page_internal]

Support activities related to the finding that GHG emissions from certain classes of engines used in aircraft contribute to air pollution - Explore options to reduce emissions from a wide range of nonroad equipment, locomotives, aircraft, and transportation fuels. EPA will support activities related to the finding that GHG emissions from certain classes of engines used in aircraft contribute to air pollution that causes climate change and endangers public health and welfare. The EPA will develop domestic proposed CO_2 standards for consideration based on the finding. Additionally, working with the Federal Aviation Administration (FAA), the EPA will continue working with the International Civil Aviation Organization (ICAO) on international CO_2 standards for aircraft.	**GHG emissions aircraft engines used in aircraft - eliminated** The EPA will continue working with the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) on programs to control **conventional** pollutant emissions from marine and aircraft engines, respectively. The EPA will work with ICAO on its program to develop international action plans to reduce particulate matter (PM) emissions from international civil aviation
Renewable Fuels program The EPA 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 (as well as carrying out other actions required by the Energy Policy Act (EPAct) of 2005 and the Energy Independence and Security Act (EISA) of 2007).	**Renewable Fuels program** In the fuels area, the EPA will continue to implement the RFS program and to carry out several other actions required by the Energy Policy Act (EPAct) of 2005 and the Energy Independence and Security Act (EISA) of 2007, including operating and maintaining of credit trading system (EMTS).

Transportation and Air Quality Voluntary Programs - National Clean Diesel Campaign. The Clean Diesel Program offers DERA funding in the form of grants and rebates as well as other support for projects that protect human health and improve air quality by reducing harmful emissions from diesel engines. - SmartWay Transport EPA's SmartWay program helps companies advance supply chain sustainability by measuring, benchmarking, and freight transportation efficiency. - Clean School Bus USA School buses travel about four billion miles each year, providing the safest transportation to and from school for more than 25 million American children every day. However, diesel exhaust from these buses has a negative impact on human health, especially for children who have a faster breathing rate than adults and whose lungs are not yet fully developed. While new buses must meet EPA's tougher emission standards, many older school buses continue to emit harmful diesel exhaust. EPA's Clean School Bus is a national program designed to help communities reduce emissions from older diesel school buses. School districts, fleet owners and operators, bus drivers, parents and students all have a role in helping to reduce diesel emissions from school buses. EPA offers funding, as appropriated annually by Congress, for projects that reduce emissions from existing diesel engines. EPA also provides information on strategies for reducing emissions from older school buses. One of the easiest ways to reduce school bus emissions and save money is to reduce idling. Another effective method is to replace the oldest school buses in the fleet.	**Transportation and Air Quality Voluntary Programs - eliminated** EISA dramatically expanded the renewable fuels provisions of EPAct and requires additional studies in various areas of renewable fuel use. EISA requires that the EPA set an annual volume standard for renewable fuels and the 2019 RFS volume requirements are statutorily required to be promulgated in FY 2018. EISA also requires the EPA to develop a comprehensive lifecycle GHG methodology to implement the Act's GHG threshold requirements for the RFS. Producers of new and advanced biofuels regularly seek to qualify their fuels under RFS and the EPA will continue to apply its lifecycle analysis to such fuels to evaluate and determine eligibility for the program. The EPA will reprioritize the evaluations of new fuel products. In FY 2018, the EPA will maintain oversight of the RFS program and continue to evaluate compliance with RFS provisions through its moderated transaction system, which is used to track the creation, trades, and use of billions of Renewable Identification Numbers (RINs) for compliance. The tracking system handles 4,000 to 6,000 submissions per day, typically averaging more than 20,000 transactions per day, and the generation of more than 1.4 billion RINs per month. RINs are generated with the production of qualifying renewable fuel and are used to achieve national RFS programmatic goals of reducing or replacing the quantity of petroleum-based transportation fuel, heating oil, or jet fuel. In FY 2018, the EPA will prioritize its review and decisions to implement its Fuel and Fuel Additive Registration program.
Diesel Emissions Grant Program $49,905 Cleaner vehicle fleets, focusing on school bus upgrades: In conjunction with the EPA's standards to cut carbon pollution and improve air quality, the President's 21st Century Clean Transportation Plan proposes to establish a mandatory fund at the EPA that will accelerate the transition to cleaner vehicle fleets, focusing on school bus upgrades that improve children's health. The new fund will renew and increase funding for the DERA Grant Program, which is set to expire in 2016.	**Diesel Emissions Grant Program - $10,000** In FY 2018, the EPA will continue to work with a broad range of stakeholders to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and freight) to limit emissions from older, pre-2007 diesel engines not subject to stringent emissions standards

Restore and Protect the Ozone Layer The air issues of highest importance facing the agency over the next few years will continue to be GHG mitigation and climate change adaptation, and 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 voluntary adoption of cost-effective technologies and practices.	**Restore and Protect the Ozone Layer**
Stratospheric Ozone: Domestic Programs $4,906.0 The EPA will continue to 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 continuously update the SNAP list, as well as to list more environmentally friendly alternatives with lower GWPs, and will continue to review existing SNAP listings to consider whether additional changes to the status of alternatives is appropriate. Work in FY 2017 will involve continued SNAP listings, rulemakings, and technical support for stakeholders and innovative firms with new alternatives.	**Stratospheric Ozone: Domestic Programs $3,687.0** The EPA will continue domestic ozone-depleting substances reduction work.
Stratospheric Ozone: Multilateral Fund $8,911.0 This program promotes international compliance with the Montreal Protocol by financing the incremental cost of converting existing industries in developing countries to cost-effective ozone friendly technology. The EPA will continue domestic ozone-depleting substances reduction work. In FY 2017, the EPA will focus its work to ensure that ODS production and import caps under the Montreal Protocol and CAAA continue to be met.	**Stratospheric Ozone: Multilateral Fund - eliminated**

Improve Air Quality Since passage of the Clean Air Act Amendments (CAAA) in 1990, nationwide air quality has improved significantly. From 2003 to 2014, population-weighted ambient concentrations of fine particulate matter and ozone have decreased 29 percent and 18 percent, respectively. However, even with this progress, in 2014, approximately 57 million people in the U.S. 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.	**Improve Air Quality** Cooperative federalism underpins all aspects of the National Air Program. Strong cooperative partnerships are needed to make and sustain improvements in air quality in accordance with the Clean Air Act. The National Air program will focus on implementing core programs where a federal presence in required by statute. Regulation and policy will be based upon the clear direction given by Congress in the Clean Air Act, follow the rule of law, and incorporate robust input from the public. States and tribes intimately understand their air quality problems and are therefore best positioned to develop solutions. This budget supports implementation of the Energy Independence Executive Order which directs agencies responsible for regulating domestic energy production to identify, and propose measures to revise or rescind, regulatory barriers that impede progress towards energy independence.
Federal Support for Air Quality Management (SIPs & NAAQS) $131,959 Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The program also develops and provides information, training, and tools to assist state, Tribal, and local agencies, as well as communities, to reduce air toxics emissions and risk specific to their local areas. Finally, the program includes activities related to the Clean Air Act's stationary source residual risk program, which involves an assessment of source categories subject to Maximum Achievable Control Technology (MACT) standards to determine if more stringent standards are needed to further reduce the risks to public health (taking into account developments in practices, processes, and control technologies).	**Federal Support for Air Quality Management (SIPs & NAAQS) $100,415** The budget request includes $100.4 million to provide federal support for state and local air quality management.In FY 2018, the EPA will continue to perform key activities in support of the NAAQS and implementation of stationary source regulations, supporting state, local, and tribal air quality programs.

Update & implement NAAQS (Ambient air quality standards) $22,899 (Federal Stationary Source Regulations) The agency 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. This past year, the agency strengthened the NAAQS for ground-level ozone to 70 parts per billion (ppb), based on extensive scientific evidence. The updated standards will improve public health protection, particularly for at-risk groups including children, older adults, people of all ages who have lung diseases such as asthma, and people who are active outdoors, especially outdoor workers. As part of implementing the revised NAAQS, the EPA will continue providing state and local air quality agencies with assistance in developing SIPs during FY 2017. The EPA also will help states identify the most cost-effective control options available and provide guidance, as needed, to assist them with attaining the NAAQS. The EPA will ensure national consistency in how air quality modeling is conducted as part of regulatory decision-making including federal and state permitting programs as well as how conformity determinations are conducted across the U.S. The agency will work with state and local air quality agencies to ensure that particulate matter (PM) hot-spot analyses are conducted in a manner consistent with the transportation conformity regulation and guidance. In FY 2017, the EPA will work with partners to continue improving emission factors and inventories, including the National Emissions Inventory. This effort includes gathering improved activity data and using geographic information systems and satellite remote sensing, where possible, for key point, area, mobile, and fugitive sources, and global emission events. The EPA is working on improving monitoring systems to fill data gaps and get a better estimate of actual population exposure to toxic air pollution. The EPA will continue to provide Quality Assurance proficiency testing for federal and commercial laboratories that produce data from $PM_{2.5}$ air monitoring systems to ensure quality data for use in determining air quality. Communities do not always have sufficient air quality data at a local level to understand and act upon existing risks. In FY 2017, the EPA will continue to invest resources to help enable environmentally overburdened and underserved communities to monitor their air quality through investments in monitoring equipment and technical outreach.	**Update & implement NAAQS (Ambient air quality standards) $16,653** (Federal Stationary Source Regulations) Through implementation of Executive Order 13777, Enforcing the Regulatory Reform Agenda and Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs, the EPA will look for ways to repeal, replace, or modify existing regulations to make them less burdensome and to be prudent and financially responsible in the expenditure of public and private funds. As part of implementing the revised NAAQS, the EPA will provide state and local air quality agencies with a basic level of assistance in developing SIPs during FY 2018. The EPA also will help states identify the control options available and provide priority guidance to assist them with attaining the NAAQS. The EPA will ensure national consistency in how air quality modeling is conducted as part of regulatory decision-making including federal and state permitting programs as well as how conformity determinations are conducted across the U.S. EPA will work with partners to continue improving emission factors and inventories, including the National Emissions Inventory, to the extent possible. The EPA is working on improving monitoring systems to fill data gaps and get a better estimate of actual population exposure to toxic air pollution. The EPA will continue to provide quality assurance proficiency testing for federal and commercial laboratories that produce data from $PM_{2.5}$ air monitoring systems to ensure quality data for use in determining air quality. The agency will work with state and local air quality agencies to ensure that particulate matter (PM) hot-spot analyses are conducted in a manner consistent with the transportation conformity regulation and guidance. Community scale air toxics monitoring will be funded by states and communities.

Implement new categorical emission control standards for petroleum refineries The EPA also sets emission standards for industrial categories that cause, or significantly contribute to, air pollution that may endanger public health or welfare. This past year the agency finalized a rulemaking to update air toxics standards for petroleum refineries, which included first-ever proposed requirements for fence-line monitoring as a cost-effective means of managing fugitive emissions. This common sense approach allows the agency and Working with stakeholders to implement the requirements of the EPA's NSPS and National Emission Standards for Hazardous Air Pollutants (NESHAP) to reduce emissions of GHG from the oil and gas industry https://www.epa.gov/stationary-sources-air-pollution/petroleum-refineries-national-emission-standards-hazardous-air	**Not addressed in the 2018 budget**
Continue a multi-pollutant control approach for industry sectors 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. ***Support State/Tribal Implementation Plans & provide technical support to States/ Tribes*** The EPA will provide technical and policy assistance to states and tribes developing or revising attainment State Implementation Plans (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 CAAA-mandated timeframe. 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.	**Not addressed in the 2018 budget**

Grants to States	**Grants to States**
Targeted Airshed Grants - not requested in FY17 budget, funded by Congress at $19,962	Targeted Airshed Grants - eliminated
Tribal Air Quality Management $12,805	Tribal Air Quality Management $8,963
State and Local Air Quality Management $227,785	State and Local Air Quality Management $159,630
Radon $8,036	Radon - eliminated
Diesel Emission Reduction Grants $49,905	Diesel Emissions Reduction Grants - $10,000

Grants to States The budget includes funding for state and local ambient air quality management grants to support core state workload for implementing NAAQS, for 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 air agencies to support these objectives includes source characterization analyses, emission inventories, quality assurance protocols, improved testing and monitoring techniques, and air quality modeling.	**Grants to States** In FY 2018, the EPA will provide grants to state, local, and tribal air pollution control agencies to manage and implement their air quality programs.
Targeted Airshed Grants - recommended for elimination, funded by Congress at - $19,962.0 This program offers competitive grants to reduce air pollution in the top five most polluted nonattainment areas relative to annual ozone or PM2.5. This program is regional in nature, and affected states can continue to fund work through the EPA's core air grant programs and statutes.	**Targeted Airshed Grants - eliminated**
Tribal Air Quality Management $12,805 Funds are used for: Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting CAA training for Federally- recognized Tribes.	**Tribal Air Quality Management $8,963**
State and Local Air Quality Management $227,785 The budget includes funding for state and local ambient air quality management grants to support core state workload for implementing NAAQS, for reducing exposure to air toxics to ensure improved air quality in communities, and for additional air monitors required by revised NAAQS. Funds State & Local monitoring and data collection activities in support of National Air Quality Standards.	**State and Local Air Quality Management $159,630**
Radon $8,036 The program provides funding for the development of state radon programs and disseminates public information and educational materials. The program also provides information on equipment training, data storage and management, and toll-free hotlines. For over 29 years the EPA's radon program has provided important guidance and significant funding to help states establish their own programs.	**Radon - eliminated**
Diesel Emission Reduction Grants $49,905	**Diesel Emissions Reduction Grants - $10,000**

Address interstate transport of air pollution 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 areas outside the source location.	
Clean Air Allowance trading programs $23,905 Clean Air Allowance trading programs are nationwide and multi-state programs that address major global, national, and regional air pollutants from large stationary sources. The programs help implement the National Ambient Air Quality Standards (NAAQS) and the Acid Rain Program, as well as reduce toxics emissions and regional haze. Pollutants reduced include sulfur dioxide (SO_2), nitrogen oxides (NO_X), ground-level ozone, fine particulate matter ($PM_{2.5}$), and mercury. The EPA provides assistance to states as they develop, implement, and assess their state and regional programs to address major regional and national air issues from large stationary sources. This assistance has traditionally come in the form of technical analysis, modeling, and emissions monitoring support. In FY 2018, the **EPA will operate seven Clean Air Allowance Trading Programs.** The Clean Air Allowance Trading Programs establish a total emission limit that is allocated to affected emission sources in the form of allowances; authorizations to emit one ton of a pollutant. The owners and operators of affected emission sources may select among different methods of compliance – install pollution control equipment, purchase allowances, or switch fuel types. These programs are managed through a centralized database system operated by the EPA. Select data, collected under these programs, is made available to the public through the EPA's Air Markets Program Data (AMPD) website. AMPD provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through interactive maps, charts, reports, and pre-packaged datasets. Under Title I of the Clean Air Act, the EPA operates five Clean Air Allowance Trading Programs – two annual SO2 trading programs, an annual NOx trading program, and two ozone season NOx trading programs on behalf of 27 states in the eastern U.S. In addition, under Title IV of the Clean Air Act, the Acid Rain Program (ARP), the EPA operates a national annual SO2 trading program and a NOx emissions reduction program for the power sector.	**Clean Air Allowance Trading Programs - $18,530** In FY 2018, the EPA will: Assure the continuation of ongoing SO_2 and NO_X emission reductions from power plants in the eastern half of the U.S. by implementing CSAPR and the CSAPR update, and across the contiguous U.S. by implementing the Acid Rain Program. Ensure accurate and consistent results for the programs. Work will continue on performance specifications and investigating monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting.

Cross-State Air Pollution Rule The Clean Air Act's Good Neighbor provision requires states or, in some circumstances, the agency to reduce interstate pollution that interferes with the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). Under this authority, the EPA issued the Cross- State Air Pollution Rule (CSAPR), which took effect on January 1, 2015. CSAPR, which took effect on January 1, 2015, requires 27 states to limit their state-wide emissions of SO2 and/or NOx in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states. The emissions limitations are defined in terms of maximum state-wide "budgets" for emissions of annual SO2, annual NOx, and/or ozone-season NOx from each state's large electric generating units (EGUs). In September 2016, the EPA finalized an update to CSAPR for the 2008 ozone NAAQS.	**Cross-State Air Pollution Rule** Work with states to implement emission reduction programs to comply with [the Good Neighbor] requirements (CAA Section 110(a)(2)(D)

Long term air quality monitoring, nationwide monitoring systems.

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

- The **Clean Air Status and Trends Network (CASTNET),** a long-term ambient monitoring network, which serves as the nation's primary source for atmospheric data on the dry component of acid deposition, regional ground-level ozone, and other forms of particulate and gaseous air pollution. Used in conjunction with the National Atmospheric Deposition Program's (NADP) wet deposition networks and other ambient air quality networks, CASTNET's long-term datasets and data products are used to determine the effectiveness of national and regional emission control programs. The CASTNET program provides spatial and temporal trends in ambient air quality and atmospheric deposition in non-urban areas and sensitive ecosystems (i.e., National Parks). Maintaining the CASTNET monitoring network continues to be critical for assessing the environmental benefits realized from the Acid Rain Program and regional programs that control transported emissions (thereby reducing secondary pollutant formation of ozone and fine particles).
- The EPA's **Long-Term Monitoring (LTM)** program was created to assess the health of water bodies in response to changes in deposition of atmospheric pollutants. Today, it ensures that the Clean Air Act continues to be effective in reducing the impact of atmospheric pollutants (e.g., strong acid anions) on surface waters in New England, the Adirondack Mountains, the Northern Appalachian Plateau (including the Catskill and Pocono mountains), and the Blue Ridge region. This program is operated cooperatively with numerous partners in state agencies, academic institutions, and other federal agencies. The LTM surface water chemistry monitoring program provides field measurements for understanding biogeochemical changes in sulfur, nitrogen, acid neutralizing capacity (ANC), aluminum, and carbon in streams and lakes in relation to changing pollutant emissions. The LTM program is one of the longest running programs at the EPA, providing long- term datasets based on sampling and measurements that go back

Long term air quality monitoring, nationwide monitoring systems.

Air monitoring…which provides information to states used to develop clean air plans, for research, and for the public, will continue to be a focus of the Administration. (Except monitoring at the community/local level - see below).

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

Clean Air Status and Trends Network (CASTNET)

Continue quality assurance, analysis, and reporting of environmental data from the **CASTNET** deposition/rural ozone monitoring network to the extent possible.

EPA will close seven of 59 EPA-sponsored CASTNET monitoring sites (six on Tribal lands) and seven of EPA's 32 National Atmospheric Deposition Program sites. Because these are the newest sites in the network, their closure would have the lowest impact on the agency's long-term record of monitoring.

Long-Term Monitoring (LTM)

Continue quality assurance, analysis, and reporting of environmental data from **LTM** surface water monitoring network to the extent possible.

Support community actions to address air quality In FY 2017, 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 2017, the EPA will continue to develop advanced monitoring technical support and tools to help communities detect, monitor, understand, and act upon their local air quality issues. For additional information, please see the following website: http://www.epa.gov/otaq/climate/mte.htm	**Support to communities to address air pollution - Appears to be eliminated** (See note above on community-level monitoring as a local/state funding obligation.)
Address communities with significant cumulative exposure to air pollutants & air toxics: Port communities The EPA also will continue to target its traditional discretionary funding for areas that suffer from poor air quality due to greater levels of industrial and mobile source activity (e.g., near ports, distribution areas, or large stationary sources, etc.)and will focus on projects that engage local communities and provide lasting benefits. The EPA is especially interested in working with port communities and has adjusted its national RFP to prioritize projects that reduce emissions from engines involved in goods movements and freight industries. The EPA also plans to continue to offer rebate funding and focus on fleet turnover for engines that pre-date the EPA's on-highway standards for PM (model year 2006 or older).	Because large numbers of people live near ports and are vulnerable to mobile source diesel emissions, the EPA will focus its efforts on reducing mobile source emissions in and around ports.

Air toxics emissions control standards: ongoing reviews/rulemakings The EPA's air toxic control programs are critical to continued progress in reducing public health risks and improving the quality of the environment. Air toxics are pollutants known to cause or suspected of causing cancer, birth defects, reproductive effects, or other serious health problems.The 2011 National Air Toxics Assessment (NATA) estimated that the U.S. population at the time of the assessment had an increased cancer risk of 40 in a million due to the inhalation of toxic air pollutants from outdoor sources. **Technology-based standards (MACT)**: The air toxics technology-based emissions standards (MACT) 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. **Technology reviews & risk assessments:** In FY 2017, 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 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. **Information dissemination & transparency:** 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. https://www.epa.gov/haps	**Air Toxics** The EPA will continue to **prioritize CAA and court-ordered obligations**. Section 112 of the CAA requires that the emissions control bases for all Maximum Achievable Control Technology (MACT) standards be reviewed and updated, as necessary, every eight years. In FY 2018, the EPA will continue to conduct **risk assessments**, to determine whether the MACT rules appropriately protect public health. The program will tier its work with an emphasis on meeting court ordered deadlines to align with priorities and capacity. **Not addressed in the 2018 budget** The agency will **adjust the schedule of updating the National Air Toxics Assessment** (NATA).
Minimize Exposure to Radiation & Indoor Air Pollutants $33,569 (Total - all Indoor Air & Radiation programs)	**Minimize Exposure to Radiation $5,596**

Reduce Risks from Indoor Air $4624

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes the EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate efforts at the federal, state, and local levels. This program addresses indoor environmental asthma triggers, such as secondhand smoke, dust mites, mold, cockroaches and other pests, household pets, and combustion byproducts through a variety of outreach, education, training and guidance activities. This is a mature program where states have technical capacity to continue this work.

The EPA continues to implement its non-regulatory indoor air quality programs. Because levels of certain pollutants can be higher indoors than outdoors, and since 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 23 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.

- **Training & networking on asthma triggers for healthcare professionals.** To address asthma, the EPA recently completed a 10-year effort to build capacity at the national, state and local levels to manage environmental asthma triggers by directly training 45,700 healthcare professionals. During this timeframe, the EPA also has led the federal effort to educate, equip and support community asthma programs across the country to deliver comprehensive asthma care. The EPA has reached an important milestone and enrolled the thousandth program in AsthmaCommunityNetwork.org, a virtual, on-line interactive community for asthma champions to share and more rapidly spread effective program strategies in order to advance asthma care.
- **Indoor Air Quality/ asthma management in schools.** Environmental pollutants in homes and schools can cause and exacerbate asthma. Further evidence indicates that investment in home and school interventions will improve health outcomes and reduce and/or shift health care costs from medical treatment to secondary prevention. Approximately one half of our nation's schools now have indoor air quality (IAQ) management programs in place, helping to ensure healthy school environments and the EPA will continue to promote the adoption of IAQ management programs to reach the remaining 60,000 schools.
- **Asthma management support to disadvantaged communities.** Strong evidence indicates that many chronic health conditions like asthma disproportionately affect low income, minority, and tribal communities. EPA will continue to leverage public and private systems to drive policies, interventions, and individual actions that increase

Reduce Risks from Indoor Air - eliminated

This is a mature program where states have the technical capacity to continue this work

Indoor Air: Radon Program $3,076 Within this program, the EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance, and advises the public of steps they can take to reduce exposure to radon. For over 29 years the EPA's radon program has provided important guidance and significant funding to help states establish their own programs. • **National Radon Action Plan** Title III of the Toxic Substances Control Act (TSCA) authorizes the EPA to undertake a variety of activities to address the public health risks posed by exposures to indoor radon. Under the statute, the EPA studies the health effects of radon, assesses exposure levels, sets an action level, and advises the public of steps they can take to reduce exposure. For over 29 years, the EPA's radon program has provided important guidance and significant funding to help states establish their own programs. EPA will continue its leadership role and collaborate with other federal agencies to reduce risks from radon through the National Radon Action Plan, a public-private partnership that includes multiple non-profit radon and public health organizations, 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 other federal agencies, 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.	**Indoor Air: Radon Program - eliminated** This is a mature program where states have the technical capacity to continue this work.
Minimize Exposure to Radiation 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.	

Radiation: Protection (Support to Superfund, Brownfields & RCRA Corrective Actions) - $10,258 The EPA supports waste site characterization and cleanup by providing field and fixed laboratory environmental radioanalytical data and technical support, radioanalytical training to state and federal partners, and by developing new and improved radioanalytical methods. The National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada provide analytical and field operation support for radioanalytical and mixed waste testing, quality assurance, analysis of environmental samples, field radiological support, and field measurement systems and equipment to support site assessment, cleanup, and response activities in the event of a radiological accident or incident. Together, these organizations provide technical support for conducting site-specific radiological characterizations and cleanups. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.	**Radiation: Protection - eliminated**
Finalize emission standards for uranium & thorium mill tailings The EPA expects to complete its review of the public comments and move toward a final rule in 2017 on the 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 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.	***Finalize emission standards for uranium & thorium mill tailings - slated for elimination*** The EPA will explore alternatives for its requirement, under the Atomic Energy Act, to establish health and environmental protection standards for exposures to radiation.
Radioactive waste management: WIPP oversight In FY 2017, 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 WIP	***Radioactive waste management: WIPP oversight - slated for elimination*** The EPA will explore alternatives to continue to meet its statutory obligation to implement its regulatory oversight responsibilities for Department of Energy (DOE) activities at the Waste Isolation Pilot Plant (WIPP) facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992.

Radiation: Response Preparedness $6319 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). The EPA's Radiological Emergency Response Team will maintain 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 2017. RadNet, the agency's national ambient radiation air monitoring system, will continue to provide data from 135 locations in the United States and Puerto Rico 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.	**Radiation: Response Preparedness $5596** In FY 2018, the EPA's Radiological Emergency Response Team (RERT) will • Maintain essential readiness to support federal radiological emergency response and recovery operations under the National Response Framework (NRF) and National Oil and Hazardous Substances Pollution Contingency Plan (NCP). • The EPA will design essential training and exercises to enhance the RERT's ability to fulfill the EPA's responsibilities and improve overall radiation response preparedness.
Radiation Monitoring - RadNet The RadNet fixed monitoring network provides near real-time radiation monitoring coverage near each of the 100 most populous U.S. cities, as well as expanded geographic coverage for a total of 135 monitoring sites. Maintenance of the RadNet air monitoring network supports EPA's responsibilities under the Nuclear/Radiological Incident Annex to the National Response Framework (NRF). The network includes near real-time stationary monitors and deployable monitors. This network is identified as an EPA Critical Infrastructure/Key Resource (CI/KR) asset. In FY 2017, the agency will operate and maintain the RadNet air monitoring network. Fixed stations will operate routinely and, should there be an emergency, in conjunction with as many as 40 deployable monitors following a radiological incident. The RadNet air monitoring network will provide the agency, first responders, and the public with greater access to data, improving officials' ability to make decisions about protecting public health and the environment during and after an incident. The EPA will continue to maintain its fixed and deployable monitoring systems, including their communications capability, across various media. Additionally, the data will be used by scientists to better characterize the effect of a radiological incident.	**Radiation Monitoring - RadNet** The agency will continue to operate RadNet, the agency's fixed ambient environmental radiation monitoring network for the U.S

• **Categorical Grant: Radon $8,036.0** The program provides funding for the development of state radon programs and disseminates public information and educational materials. The program also provides information on equipment training, data storage and management, and toll-free hotlines. For over 29 years the EPA's radon program has provided important guidance and significant funding to help states establish their own programs.	**Categorical Grant: Radon - eliminated**
Research **Air, Climate and Energy $91,731** EPA's Air, Climate and Energy (ACE) research program integrates air and climate science to gain a better understanding of how energy science and engineering interconnect. Human exposure to an evolving array of air pollutants is a considerable challenge. provides cutting-edge scientific information and tools to support EPA's strategic goals of protecting and improving air quality and addressing climate change and to assist communities and decision makers at all levels of government to make the best decisions. The ACE research program includes numerous stakeholders in the process—the EPA's regional and program offices, states and communities—that rely on the EPA's research. Research Objective 1: Assess Impacts Research Objective 2: Prevent and Reduce Emissions Research Objective 3: Prepare for and Respond to Changes in Climate and Air Quality	**Research** **Air & Energy $30,592** The funding request of $30.6 million for Air and Energy (A&E) research program will support five related topic areas [note: not delineated] that include research projects that support the EPA's mission to protect human health and the environment, fulfill the agency's legislative mandates, and advance cross- agency priorities. The A&E research program relies on successful partnerships with other EPA research programs, offices, academic and industry researchers, state, local and private sector organizations, as well as key federal agencies. The A&E program will: • Work to **measure progress toward environmental health goals,** • **Translate research results** to inform communities and individuals about measures to reduce impacts of air pollution • **Analyze existing research data** and publish scientific journal articles to disseminate findings associated with these data

Global Change Research The EPA's climate change research is conducted in coordination with other agencies through the U.S. Global Change Research Program (USGCRP), created through the Global Change Research Act of 1990. These efforts support USGCRP priority research topics, with particular emphasis on developing actionable science to inform local, state, and national decisions on how to respond to our changing climate. ACE research on models and observations of environmental changes related to climate change are critical to the EPA's ability to improve and maintain clean air and water and healthy ecosystems. The U.S. Fish and Wildlife Service, and the Army Corps of Engineers to study the impacts of climate change on estuarine ecosystems. The EPA's global change research efforts focus on understanding the impacts of climate change to air quality, water quality, and aquatic ecosystems, and includes efforts to improve models that address air and water pollution formation and transport in the context of a changing climate. These modeling efforts require close coordination with other agencies to use the results of global-scale models as input to more detailed regional models that describe pollutant formation and transport at levels needed by local and state resource managers. This work includes research to better understand the emissions, transport, and impacts to health and climate of black carbon. Additional coordination of global change research occurs through the National Science and Technology Council's Committee on Environment and Natural Resources and Sustainability (CENRS) Subcommittee on Water Availability and Quality. The program develops scientific information that supports policy makers, stakeholders, and society at large as they respond to climate change. This elimination prioritizes activities that support decision-making related to core environmental statutory requirements.	**Not addressed in the 2018 budget**

Air quality impacts from unconventional oil and gas activities In FY 2017, the EPA is investing $1.6 million to focus on understanding and preventing potential impacts on air quality. from unconventional oil and gas activities will focus on understanding and preventing potential impacts on air quality. This 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. This work aligns with a Memorandum of Agreement (MOA) between the EPA, Department of Energy (DOE) and the Department of the Interior (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 resources, maximizing each agency's particular strength, and reducing interagency overlap. Also, as part of the MOA, the EPA's Safe and Sustainable Water Resources (SSWR) research program will undertake a coordinated effort to study the potential impacts of hydraulic fracturing on water quality and ecosystems.	**Not addressed in the 2018 budget**
Clean Fuels research In FY 2017 the EPA is investing $3 million for research to study the environmental and resource conservation impacts of clean fuels use on air and water quality, soil quality and conservation, water availability, ecosystem health and biodiversity, invasive species, and on the international environment.	**Not addressed in the 2018 budget**

Summary: Water	
EPA's 2017 Workplan & Budget Priorities	**EPA's 2018 Workplan & Budget Priorities**
Protecting America's Waters	**Ensuring Clean and Safe Water**
Drinking Water Programs $99,853 Drinking Water Strategy focuses on: • addressing contaminants in groups to accelerate advancement of drinking water protection; • fostering development of new innovations in drinking water technologies (especially those applicable to small systems) to address health risks posed by a broad array of contaminants; • finding ways to use the authority of multiple statutes to help protect drinking water; and • partnering with the states to share more complete data from monitoring at Public Water Systems [using the Safe Drinking Water Information System	***Safe Drinking Water $84.01*** Develop regulations to implement the Water Infrastructure Improvement for the Nation Act (2016) Streamline its business processes and systems to reduce reporting burden on states and regulated facilities. In particular, the EPA will continue to focus on working with states to optimize corrosion control treatment to minimize exposure to lead. The EPA also will continue to require states to report violations data at all public water systems for all rules, including requirements to protect against Cryptosporidium, to control disinfection byproducts, and to implement the Revised Total Coliform Rule.

Drinking Water Standards • Regulating strontium in drinking water. • Perchlorate: Proposing a perchlorate national primary drinking water regulation • Lead and Copper Rule: proposed revisions • Proposing regulations for the Reduction of Lead in Drinking Water Act of 2011. • Publishing the results of the third Six-Year Review of more than 80 existing drinking water regulations for chemical, microbial, and radiological contaminants. • Work with Public Water Supply Providers to address violations related to the Total Coliform Rule, the Lead and Copper Rule, the Stage 2 Disinfectants and Disinfection Byproducts Rule, and nitrates regulation.	**Drinking Water Standards** • Strontium rulemaking is not addressed in the 2018 budget • Preparing a proposed national primary drinking water regulation for perchlorate • Continue work to revise the Lead and Copper Rule • Develop regulations to implement the Reduction of Lead in Drinking Water Act • Six-Year Review - not addressed in the 2018 budget • Collecting information on microbial pathogens (e.g., Legionella) and disinfection byproduct • Directly implement the Aircraft Drinking Water Rule, designed to protect millions of people who travel on over five thousand aircraft in the U.S., if necessary to address identified significant risks;
Beach / Fish Programs - $1,978 **Categorical Grant: Beaches Protection (recommended for elimination) $9,531**	**Beach / Fish Programs - eliminated** **Categorical Grant: Beaches Protection - eliminated**

Source Water Protection	Source Water Protection
Continue to work with national, state, Tribal, local stakeholder organizations, and the Source Water Collaborative to promote a unified approach in protecting drinking water sources and to update source water assessments and plans as information becomes available.	Work with stakeholder organizations to encourage continuing engagement in the Source Water Collaborative, which works to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts to protect drinking water sources.
Work with other federal agencies to support state, Tribal, and local source water protection actions.	not addressed in the 2018 budget
Continue the partnership with the American Water Works Association (AWWA) and the Association of State Drinking Water Administrators (ASDWA)	not addressed in the 2018 budget
Continue promoting and providing training on its new GIS-based interactive drinking water tool - Drinking Water Mapping Application for Protecting Source Waters (DWMAPS).	Continue to support users of the existing data-layers of the Drinking Water Mapping Application for Protecting Source Waters (DWMAPS) through the EPA's geoplatform.
Continue to work with states and other stakeholders to characterize current and future pressures on drinking water supplies and how to address them.	not addressed in the 2018 budget
Develop new and revised drinking water health advisories that will support state needs for information for their own standards setting processes.	Develop new and revised drinking water health advisories that will support state needs for information for their own standards setting processes.
Continue to address cyanotoxins from harmful algal blooms (HABs) that can potentially contaminate drinking water supplies.	The EPA will investigate health impacts from exposure to harmful algal/cyanobacteria toxins. Research also focuses on monitoring and optimizing drinking water treatment systems and developing methods to predict, monitor, and characterize blooms with innovative technology.
The agency will work with states and other stakeholders to promote actions outlined in the State-EPA Collaboration Toolkit: Opportunities to Protect Drinking Water Sources and Advance Watershed Goals through the CWA.	not addressed in the 2018 budget

Underground Injection Control

In FY 2017, the EPA will continue to provide technical support to states and tribes Activities include:

- **Fracking best practices to protect drinking water**
- **Oil & gas recovery wells: Overseeing authorized state and Tribal agencies** in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells
- **Aquifer exemption requests for oil & gas and mineral extraction:** Managing aquifer exemptions related to uranium solution mining, other mineral extraction, and oil and gas activities by promoting implementation of a nationally consistent and predictable approach to reviewing and approving aquifer exemption requests, providing training and policy clarification to states, addressing legal actions and continuing development of a national aquifer exemption data set
- **Geologic Sequestration of CO2**
  - Continuing to implement the Class VI Geologic Sequestration (GS) Rule b
    - Reviewing and processing (by rulemaking) Class VI primacy applications from states and tribes
    - Directly implementing the regulation, where states have not yet obtained primacy by working directly with permit applicants
    - Providing technical assistance to states to analyze complex modeling, monitoring, siting, and financial assurance data for new GS projects and for determining if enhanced oil/gas wells storing carbon dioxide need to be transitioned from Class II to Class VI permits
  - Working towards transferring primary enforcement authority for Class II and Class VI Geologic Sequestration (of CO2) wells from the EPA direct implementation to state programs that apply for primacy
- **Disposal wells compliance**: Promoting voluntary strategies for improving compliance with Class II regulations

Underground Injection Control

In FY 2018, the EPA will continue to provide some technical support to states and tribes Activities include:

- Fracking best practices to protect drinking water - not addressed in the 2018 budget
  - Identify best practices in oil and gas development, such as reuse and recycling of produced water (with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association) recognizing the important role that energy extraction, including natural gas development, plays in our energy future
- Oil & gas recovery wells oversight- not addressed in the 2018 budget
- Promoting implementation of a nationally consistent and predictable approach to reviewing and approving aquifer exemption requests
- Working with Region 9 and the State of California to review and approve aquifer exemptions so that the state program is consistent with the Safe Drinking Water Act and UIC regulations

Geologic Sequestration of CO2 - not addressed in the 2018 budget

- Promoting voluntary strategies for improving compliance with Class II regulations
- Continuing to identify aquifer exemption records to add to the national aquifer exemption

Underground Injection Control (UIC) [compliance & enforcement] Grants $10,486	**Underground Injection Control (UIC) [compliance & enforcement] Grants $7,340**
Hydraulic Fracturing (Fracking) Drinking Water Study	**Hydraulic Fracturing (Fracking) Drinking Water Study - not addressed in the 2018 budget**
Water & Wastewater Infrastructure Investments $2,042,000 (includes SRFs, technical assistance, WIFIA)	***Water Infrastructure Investments $2.3 billion***
Drinking Water State Revolving Fund $$961,592 Alaska Rural and Native Village critical basic drinking water and sanitation infrastructure $19,962.0 Drinking Water State Revolving Fund survey (sets allocation priorities) Public Water System Supervision Grants $101,769	**Drinking Water State Revolving Fund $863,233** Alaska Native Villages Infrastructure Assistance - eliminated Drinking Water State Revolving Fund survey - not addressed in the 2018 budget Public Water System Supervision Grants $71,238
Clean Water State Revolving Fund $1,391,237 Infrastructure Assistance: Mexico Border - $9,981 Green Infrastructure planning (stormwater) Water Infrastructure Finance and Innovation loans $20,000	**Clean Water State Revolving Fund $1,393,887** Infrastructure Assistance: Mexico Border - eliminated Green Infrastructure planning (stormwater) - outreach & training eliminated Water Infrastructure Finance and Innovation Act $20,000
Water Sense **Water Technology Innovation blueprint**	**WaterSense - eliminated** **Water Technology Innovation blueprint - not addressed in the 2018 budget**

Homeland Security - $73, 345 ***Critical Infrastructure Program - $10497*** • National training program to support water systems in the design and deployment of a Water Quality Surveillance and Response System • Water Alliance for Threat Reduction program & Water Laboratory Alliance • Improving Critical Infrastructure Cybersecurity (EPA is lead agency responsible for cybersecurity in the water sector) • Climate Ready Water Utilities initiative	***Homeland Security - $40,096*** ***Critical Infrastructure Program - eliminated*** • Water Quality Surveillance and Response System training - not addressed in the 2018 budget • Water Alliance for Threat Reduction & Lab Alliance - not addressed in the 2018 budget • Improving Critical Infrastructure Cybersecurity • Climate Ready Water Utilities - not addressed in the 2018 budget
Homeland Security: Preparedness, Response, and Recovery $61,213	***Homeland Security: Preparedness, Response, and Recovery $39,054***
Protect and Restore Watersheds and Aquatic Ecosystems $199,875	***Surface Water Protection $174,975***
Water Pollution Control Grants (Section 106) $230,36 Monitoring Initiative $18.5 million [requested]	**Water Pollution Control Grants (Section 106) $161,25** Monitoring Initiative $12.5 million
Review and Update Water Quality Standards [Addressed through multiple initiatives, including impaired waters program, non-point source pollution activities and the Geographic Regional Water Programs.]	**Review and Update Water Quality Standards** The EPA will work with tribes that want to establish water quality standards.
Watershed planning to control pollution	**Watershed planning to control pollution - not addressed in the 2018 budget**

Non-point source pollution - Coordination with the U.S. Department of Agriculture (USDA) to focus federal resources on agricultural sources of pollution in select watersheds in every state. - Technical tools that states and tribes need to accurately assess water quality problems, set priorities, and analyze and implement solutions - Promote the implementation of low-impact development practices thereby preventing new nonpoint sources of pollution. - Support state efforts to design and implement nutrient reduction strategies and to design watershed plans; promote sustainable agricultural practices; collaborate to leverage and focus the most effective nutrient and sediment reduction practices; work to leverage resources of federal and state partners to address development and wetland restoration; and support critical monitoring needs to inform decision-making.	**Non-point source pollution program - eliminated** Continue to coordinate with the United States Department of Agriculture (USDA) on targeting funding, where appropriate
Nonpoint Source Categorical Grant (Sec. 319) $164,601.0	**Nonpoint Source Categorical Grant (Sec. 319) - eliminated**
Urban Waters Federal Partnership	**Urban Waters Federal Partnership - eliminated**
Issue Total Maximum Daily Loads (TMDLs) and National Pollutant Discharge Elimination System (NPDES) permits NPDES Permitting targets: • Stormwater: 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; • Permitting for new waste streams, such as shale gas extraction, and steam	**Issue Permits** NPDES Permitting targets - not addressed in the 2018 budget
Impaired waters program In FY 2017, the TMDL Program will continue to engage with states to implement the 10-year vision for the CWA 303(d) listing (of impaired waters) program.	**Impaired waters program** The EPA will work with states and other partners to develop and implement TMDLs for Clean Water Act 303(d) listed impaired waterbodies as a tool for meeting water quality restoration goals. The EPA will work with states to facilitate accurate, comprehensive, and geo-referenced water quality assessment decisions made available to the public via the Assessment Total Maximum Daily Load Tracking and Implementation System. In addition,

Accountability in Water Quality Protection and Restoration	*Not addressed in the 2018 budget*
Conducting Compliance Monitoring and Enforcement Accelerate implementation of electronic reporting -In FY 2017, states will begin to transition to the new system . The EPA also will assist states in the following areas: - Developing or implementing tools (e.g., the Recovery Potential Screening Tool) to identify priorities in support of the 303(d) Program 10-year vision and this new approach; - Developing GIS data for assessed and impaired waters; - Developing assessment methods and tracking abilities for healthy/unimpaired waters; - Developing data management capabilities to track and report water quality assessments; - Developing methods to automate the screening of monitoring data against water quality criteria; - Developing approaches to integrate state-scale statistical surveys with local-scale assessments; and Integrating water quality data across the various water quality programs.	**Conducting Compliance Monitoring and Enforcement** implementing the NPDES Electronic Reporting Rule through the Integrated Compliance Information System. Also, in FY 2018, the EPA will work with additional states in the development of electronic reporting tools. For example, approximately 20 states currently use the EPA's electronic reporting tool to collect DMRs. This saves the states a significant amount of resources in development and operations and maintenance costs. Work with NPDES-authorized states to implement the 2014 Clean Water Act NPDES Compliance Monitoring Strategy, which establishes national goals for allocation of inspection resources across all NPDES regulated entities.
Working with Tribal Water Pollution Control Programs In FY 2017, the EPA plans to propose rulemaking to provide more opportunities for tribes to fully engage in the 303(d) Program.	**Working with Tribal Water Pollution Control Programs** In FY 2018, the EPA will work with Tribal programs on activities that address water quality and pollution problems on Tribal lands.
Marine Pollution Program $10,142 Addressing Pollution from Vessels, Marinas, and Ports Ocean Dumping Management Program (including Dredged Material)/Marine Protection, Research, and Sanctuaries Act (MPRSA) Ocean and Coastal Acidification Reducing Marine Trash Coral Reef Protection	**Marine Pollution Program - eliminated**

RESTORE Act (Deepwater Horizon oil spill) - Permit reviews **RESTORE Act - Enforcement (settlement oversight)**	**RESTORE Act - Permit reviews - continuing** **RESTORE Act - Enforcement (settlement oversight)** - Not addressed in the 2018 budget
Climate Change - Management of Sustainable Water Resources 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.	***Climate Change - Management of Sustainable Water Resources - Eliminated***
National Estuaries Programs and Coastal Waterways $26,672.0 • Climate Ready Estuaries • Coastal wetlands/estuaries grants • Coastal community climate resilience • "Blue Carbon" pilot opportunities • Ocean acidification • National Coastal Condition Assessment (NCAA) 2015 report • Gulf Hypoxia Task Force	**National Estuary Program / Coastal Waterways - eliminated** Gulf Hypoxia Task Force - limited research only
Wetlands $21,025	***Wetlands $18,115***
National water surveys Conduct National Lakes Assessment 2017. calendar year 2018. Initiate data analysis for the National Wetlands Condition Assessment 2016. Complete data analysis for incorporation into the National Coastal Condition Assessment Report 2015.	**National water surveys - not addressed in the 2018 budget**

Wetlands Regulatory Program The Corps has responsibility for managing the day-to-day permit processes, and the EPA has a statutory role to provide input to the Corps as it develops proposed permits. In its national role, the EPA develops and interprets environmental criteria for evaluating permit applications; has final authority to determine the scope of CWA jurisdiction; approves and oversees state assumption; identifies activities that are exempt from permitting; reviews and comments on individual permits; has authority to prohibit, deny or restrict the use of waters as a disposal site (Section 404(c)); can elevate specific proposed Corps permit decisions to Army Headquarters (Section 404(q)); and enforces Section 404 provisions.	**Wetlands Regulatory Program** USACE is responsible for managing the day-to-day permit processes nationwide under Section 404 of the CWA. The EPA is statutorily required to provide input to the USACE as it develops proposed permits. The EPA and USACE will work together to evaluate options for improving efficiencies in federal CWA permitting that could help reduce potential costs and delays, increase consistency and predictability, and improve protection of public health and the environment. **Pebble Mine/Bristol Bay permit reversal** One of the Trump Administration's first actions was to overturn an EPA decision to restrict dumping of mining wastes in the Bristol Bay watershed in Southwest Alaska to protect salmon fisheries. The pristine habitat in the watershed sustains one of world's most important fisheries, including half of the global supply of wild sockeye salmon. http://www.saveepaalums.info/resisting-the-trump-de-regulatory-agenda-talking-points/defending-bristol-bay/
Waters of the US (WOTUS) Rule	**Waters of the US (WOTUS) Rule** A de-regulatory rule-making process has been initiated to rescind or narrow the scope to exclude small streams and wetlands covered by the 2015 rule. https://www.epa.gov/wotus-rule See: http://www.denverpost.com/2017/07/10/epa-clean-water-act-colorado-industries/
Wetlands Program Development Grants $14,633	Wetlands Program Development Grants $10,243

Geographic Regional Water Programs	***Geographic Regional Water Programs - eliminated***
Great Lakes Restoration Initiative $299,430.0 Chesapeake Bay Program $72,861.0 Puget Sound program $27,947.0 Gulf of Mexico Program $4,473.0 Lake Champlain $4,391.0 Long Island Sound $3,932.0 [Other] $7,379.0 Northwest Forest Program Lake Pontchartrain $0.0 S.New England Estuary (SNEE) $0.0 Southeast New England Coastal Watershed Restoration Program $0.0 South Florida $1,701.0 San Francisco Bay $4,810.0	.
Research	***Research***
Water Quality Research and Support Grants - $14, 073	**Eliminated**
Safe and Sustainable Water Resources (SSWR) research program $107,230	**Safe and Sustainable Water Resources (SSWR) research program $68,250**

Water: Performance Plan Details	
EPA's 2017 Workplan & Budget Priorities	EPA's 2018 Workplan & Budget Priorities

Protecting America's Waters

While much progress in water quality has been made over the last two decades, America's waters remain imperiled. Increased demands, poorly managed land use practices, population growth, aging infrastructure, and the impacts of a changing climate 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.[10] In addition, the latest national assessments[11] 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. In addition, pollution discharged from industrial, municipal, and other point sources continues to cause a decline in the quality of water in many areas. 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 no longer rely solely on traditional tools and approaches to protect our waters in urban and rural settings. We are developing new targeting tools, promoting green infrastructure and sustainable solutions, and building resiliency to deal with the impacts from climate change.

We also are strengthening our partnerships with federal agencies, non-governmental organizations and private companies committed to supporting local efforts to improve and protect waterways. From nutrient loadings and polluted 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 work together with our partners to protect and restore threatened natural treasures such as the Great Lakes, the Chesapeake Bay, the Gulf of Mexico, and the Puget Sound; address our neglected urban rivers; ensure safe drinking water; and reduce pollution from

Ensuring Clean and Safe Water

Protecting the nation's water from pollution and contaminants relies on cooperation between the EPA, states and tribes. This cooperative federalism guides and underpins all aspects of the National Water Program. Strong partnerships between states, tribes, and the EPA are needed to make and sustain improvements in water quality. States and tribes intimately understand their water quality problems and are therefore best positioned to develop localized solutions to protect their waters.

The National Water Program will focus on implementing core programs where a federal presence is required by the statute. The decisions and priorities of the National Water Program will be based upon the clear direction given by Congress in the Clean Water Act and the Safe Drinking Water Act. Following the rule of law, all regulation and policy will be based on what the law directs and incorporate robust input from the public. Input from the public will help make our water policy beneficial to both the environment and the economy. The EPA will work with states and tribes to target the funds to core requirements while providing states and tribes with flexibility to best address their particular priorities.

The EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure efforts as source water protection can reduce the need for additional drinking water treatment and associated costs. As progress has been made, work remains for existing and emerging issues.

In FY 2018, the National Water Program will focus its resources on supporting the modernization of outdated water infrastructure; creating incentives for new water technologies and innovation; and funding the core requirements of the Clean Water Act and Safe Drinking Water Act while providing states and tribes with flexibility to best address their particular priorities.

The EPA will continue to provide scientific water quality criteria information, review and approve state water quality standards, and review and approve state lists of impaired waters. In FY 2018, the agency will continue to work with states and other partners on Total Maximum Daily Loads (TMDLs) as required by the Clean Water Act, as well as on other waterbody restoration plans for listed impaired waterbodies. The EPA also will continue to implement and support core water quality programs that control point-source discharges through permitting and pre-treatment programs.

Drinking Water Programs $99,853 Safe drinking water is critical to protecting human health and the economic vitality of the nation. Approximately 320 million Americans rely on the safety of tap water provided by public water systems that are subject to national drinking water standards. The EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach to protecting public health from contaminants in drinking water. The National Primary Drinking Water Regulations set forth health-based standards, and monitoring, reporting and recordkeeping, sanitary survey, compliance tracking, and enforcement elements to ensure that the nation's drinking water supplies do not pose adverse health effects. The states are the primary implementers of the national drinking water program and work with the public water systems within their jurisdiction to achieve and maintain compliance with drinking water rules. In FY 2017, the agency will continue to work with states to implement requirements for all drinking water standards to ensure that systems install and maintain appropriate levels of treatment and effectively manage their distribution systems. **Drinking Water Strategy** The agency will continue to implement the in FY 2017 to expand public health protection for drinking water. The strategy focuses on: • addressing contaminants in groups to accelerate advancement of drinking water protection; • fostering development of new innovations in drinking water technologies (especially those applicable to small systems) to address health risks posed by a broad array of contaminants; • finding ways to use the authority of multiple statutes to help protect drinking water; and • partnering with the states to share more complete data from monitoring at Public Water Systems [using the Safe Drinking Water Information System	***Safe Drinking Water $84.01*** Develop regulations to implement the ***Water Infrastructure Improvement for the Nation Act (2016)*** {The WIIN Act is comprehensive legislation to address the needs of America's harbors, locks, dams, flood protection, and other water resources infrastructure. It includes the Water Resources Development Act ("WRDA") of 2016, which supports the critical missions of the U.S. Army Corps of Engineers ("USACE") in overseeing the nation's water infrastructure. In addition, the WIIN Act includes provisions aimed at improving drinking water infrastructure around the country, addressing control of coal combustion residuals, and improving water storage and delivery to help drought stricken communities.} Continue work with states to develop the new ***Safe Drinking Water Information System tool*** will provide the following benefits: improvements in program efficiency and data quality, greater public access to drinking water data, facilitation of electronic reporting, reductions in reporting burdens on laboratories and water utilities, reductions in data management burden for states, and ultimately reduction in public health risk. **Drinking Water Strategy - not addressed in the 2018 budget** In FY 2018, the agency will continue to streamline its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of regulatory programs for the EPA, states, and tribes. In particular, the EPA will continue to focus on working with states to optimize corrosion control treatment to minimize exposure to lead. The EPA also will continue to require states to report violations data at all public water systems for all rules, including requirements to protect against Cryptosporidium, to control disinfection byproducts, and to implement the Revised Total Coliform Rule.

Drinking Water Programs $99,853 The FY 2017 budget proposes to increase funding for Drinking Water Programs by over $12 million to expand the technical, managerial, and financial capabilities of drinking water systems to reliably provide safe drinking water to their customers now and into the future. This investment is designed to promote economic growth through innovative financing, techniques such as system partnerships, capacity building, full cost pricing, and public and private collaboration. These initiatives all have the potential to reduce the long-term need for water infrastructure investment and will complement the successful state revolving fund programs.	**Drinking Water Programs $84,101** Through the Drinking Water Technical Support Center, this program provides critical tools to provide accurate and reliable monitoring for contaminants and effective operation of treatment systems to remove the contaminants that present public health risk in drinking water.
Drinking Water Standards The agency will continue to evaluate and address drinking water risks in FY 2017, including:	**Drinking Water Standards** In FY 2018, the EPA also will conduct the following activities to facilitate compliance with rules (see also PWSS, below). Directly implement the drinking water program where states do not have primacy (*e.g.*, Wyoming, the District of Columbia, and Tribal lands), focused on actions that are under court order or address significant identified risks.
• ***Strontium:*** Evaluating additional scientific data to assist in the determination of whether there is a meaningful opportunity for health risk reduction by regulating strontium in drinking water. In FY 2016, the EPA has published final regulatory determinations for the third Contaminant Candidate List. Strontium was among the contaminants considered for a regulatory determination. However, the EPA delayed the regulatory determination for strontium to consider additional scientific data. The EPA is evaluating recent data related to human exposure to strontium and new health studies on the effects of strontium exposure.	**Strontium** rulemaking is not addressed in the 2018 budget
• ***Perchlorate:*** Proposing a perchlorate national primary drinking water regulation based on substantial scientific analysis conducted by the EPA, the recommendations of the Science Advisory Board (SAB), and collaboration with the Food and Drug Administration to inform the derivation of a perchlorate Maximum Contaminant Level Goal (MCLG) and regulation. The EPA will conclude peer review of the methodology used to inform the derivation of the perchlorate MCLG and propose a National Primary Drinking Water Regulation for perchlorate in FY 2017.	Preparing a proposed national primary drinking water regulation for **perchlorate** by October 2018 in accordance with a consent decree. Conducting analyses to establish a health based goal for the regulation, evaluating costs and benefits of alternative regulatory requirements, and consulting with stakeholders.
• ***Lead and Copper Rule:*** Considering recommendations garnered from the National Drinking Water Advisory Council (NDWAC) in development of the proposed revisions to the Lead and Copper Rule (LCR) which will be published in FY 2017. The Retrospective Review of the LCR sought ways to simplify and clarify	Continue work to revise the ***Lead and Copper Rule,*** providing certainty to states and Tribes. Offer training and technical assistance on a prioritized basis, using materials developed in prior years, to states, tribes, and public water systems for the Lead and Copper Rule (LCR);

Beach / Fish Programs - $1,978 This program provides science, guidance, technical assistance and nationwide information to state, Tribal, and federal agencies on the human health risks associated with eating locally caught fish/shellfish or wildlife with excessive levels of contaminants, as well as beach monitoring and notification programs. The agency will encourage states to continue this work within ongoing core programs. 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.	**Beach / Fish Programs - eliminated**
Categorical Grant: Beaches Protection (recommended for elimination) $9,531 Grants authorized under the Beach Act support continued development and implementation of coastal recreational water monitoring and public notification programs. After over 17 years of technical guidance and financial support, state and local governments now have the technical expertise and procedures to continue beach monitoring without federal support.	**Categorical Grant: Beaches Protection - eliminated**

Source Water Protection The EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure effort because source water protection can reduce the need for additional drinking water treatment and the associated additional infrastructure costs and energy usage, while better protecting public health. In the past two years, there have been harmful algal blooms on Lake Erie and along the Ohio River, and a chemical storage tank leak on the Elk River in Charleston, WV that impacted access to safe drinking water for residents, hospitals, schools, and businesses in these communities. These events highlight the importance of safe drinking water to public health and local economies, and in particular, the need to prioritize threats and protect drinking water sources. Success has resulted from these efforts, as 90 percent of CWSs met all applicable health-based standards through approaches that included source water protection in FY 2015, meeting the performance target of 90 percent.	**Source Water Protection** The EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure effort because source water protection can reduce the need for additional drinking water treatment and the associated additional infrastructure costs and energy usage, while better protecting public health. In the past three years, states of emergency have been declared due to source water contamination from harmful algal blooms on Lake Erie, and a leaking chemical storage tank leak on the Elk River that lead to “do not drink” and “do not use” advisories in Toledo, OH and Charleston, WV respectively, that prevented access to safe drinking water for residents, hospitals, schools, and businesses in these communities, causing economic impacts in the tens of millions of dollars. These events highlight the importance of safe drinking water to public health and local economies, and, in particular, the need to prioritize threats and protect drinking water sources.
- Continue to work with national, state, Tribal, local stakeholder organizations, and the **Source Water Collaborative** to promote a unified approach in protecting drinking water sources and to update source water assessments and plans as information becomes available. Building on the Collaborative’s FY 2016 “Call to Action,” the EPA will support an “Innovation Challenge” to assist communities in source water protection activities and projects and to improve data collection and sharing to facilitate integration of Clean Water Act (CWA) activities with source water assessments.	Work with stakeholder organizations to encourage continuing engagement in the **Source Water Collaborative,** which works to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts to protect drinking water sources.
- **Work with other federal agencies** to support state, Tribal, and local source water protection actions.	**Work with other federal agencies - not addressed in the 2018 budget**
- Continue the **partnership with the American Water Works Association (AWWA) and the Association of State Drinking Water Administrators (ASDWA)** to encourage and support states, drinking water utilities, and local communities in redoubling their efforts to identify drinking water systems vulnerable to threats to source waters, revisit their source water assessments, and take steps to ensure that adequate preventative and response measures are in place.	Partnership with the **American Water Works Association (AWWA) and the Association of State Drinking Water Administrators** (ASDWA) - **not addressed in the 2018 budget**
- Continue promoting and providing training on its new GIS-based interactive drinking water tool - **Drinking Water Mapping Application for Protecting Source Waters** (DWMAPS). DWMAPS provides the EPA, states, tribes, utilities and other members of the drinking water community with access to GIS-based information to comprehensively identify, map and evaluate threats to drinking water sources. The application enables states, utilities and	Continue to support users of the existing data-layers of the **Drinking Water Mapping Application for Protecting Source Waters** (DWMAPS) through the EPA’s geoplatform. This online GIS-based application enables states, utilities, and others to combine national datasets previously integrated with DWMAPS with their own datasets, such as chemical storage facilities and sensitive drinking water intakes, to evaluate threats to drinking water

Underground Injection Control

In order to safeguard current and future underground sources of drinking water from contamination, the UIC program regulates the construction, operation, permitting, and closure of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery.

The number of UIC wells, especially Class II oil- and gas-related wells, has risen significantly in recent years, and this trend is expected to continue. Additionally, as population growth, land use changes and changes in local climatic weather patterns exacerbate water supply challenges in many areas of the country, management of water availability has become increasingly important in providing safe and reliable drinking water to communities.

In FY 2017, the EPA will continue to provide technical support to states and tribes in making sound permitting decisions, provide oversight related to implementation of underground injection regulations, and directly implement the UIC regulations where the EPA has primary authority. Activities include:

- ***Fracking best practices***: Encouraging states to apply best practices contained in the EPA's guidance for hydraulic fracturing activities released on February 12, 2014, and for states to participate in agency- wide activities to improve safety of unconventional oil and natural gas operations. This supports the agency's priorities of safeguarding public health and environmental justice, while recognizing the important role that energy extraction, including natural gas development plays in our energy future

- ***Oil & gas recovery wells***: Overseeing authorized state and Tribal agencies in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells in a rapidly growing energy sector to prevent endangerment of underground sources of drinking water

- ***Aquifer exemption requests for oil & gas and mineral extraction***: Managing aquifer exemptions related to uranium solution mining, other mineral extraction, and oil and gas activities by promoting implementation of a nationally consistent and predictable approach to reviewing and approving aquifer exemption requests, providing training and policy clarification to states, addressing legal actions and continuing development of a national aquifer exemption data set. https://

Underground Injection Control

In FY 2018, the EPA will continue to provide some technical support to states and tribes in making permitting decisions, evaluating approaches to providing oversight related to implementation of underground injection regulations, and directly implement the UIC regulations where the EPA has primary authority. Activities include:

Fracking best practices to protect drinking water - not addressed in the 2018 budget

Identify best practices in oil and gas development, such as reuse and recycling of produced water: Working with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association to identify best practices in oil and gas development, such as reuse and recycling of produced water, that can help safeguard public health, recognizing the important role that energy extraction, including natural gas development, plays in our energy future

Oil & gas recovery wells oversight- not addressed in the 2018 budget

Promoting ***implementation of a nationally consistent and predictable approach to reviewing and approving aquifer exemption requests***

Working with Region 9 and the ***State of California*** to review and approve aquifer exemptions so that the state program is consistent with the Safe Drinking Water Act and UIC regulations. https://www.epa.gov/pacific-southwest-media-center/epas-oversight-californias-underground-injection-control-uic-program

Hydraulic Fracturing (Fracking) Drinking Water Study *Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources* (External Review Draft), along with nine peer- reviewed EPA reports conducted as part of the EPA's Hydraulic Fracturing Drinking Water Study. This study has produced a total of 12 EPA reports and four EPA-authored journal publications. It advances our scientific understanding of the potential impacts of hydraulic fracturing on drinking water resources and the factors that may influence those impacts. The assessment is an important resource for states, tribes, industry and other stakeholders, and the public who are seeking to develop unconventional oil and gas resources while protecting human health and the environment. The EPA's draft hydraulic fracturing drinking water assessment will be reviewed by the agency's Science Advisory Board (SAB) in FY 2016, and will be finalized in 2016 once all comments are incorporated. In FY 2017, research devoted to unconventional oil and gas activities will focus on understanding and preventing potential impacts on water quality and ecosystems. This research will continue to assist decision makers (federal, state, tribal, and local; industry and energy sectors; and the public) in making environmentally responsible energy extraction and processing decisions. This work aligns with a Memorandum of Agreement (MOA) between the EPA, the Department of Energy (DOE) and the Department of the Interior (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 resources, maximizing each agency's particular strength, and reducing interagency overlap. Also as part of the MOA, the EPA's Air, Climate and Energy (ACE) research program will undertake a coordinated effort to study the potential impacts of hydraulic fracturing on air quality.	***Hydraulic Fracturing (Fracking) Drinking Water Study - not addressed in the 2018 budget***

Water & Wastewater Infrastructure Investments $2,042,000
(includes SRFs, technical assistance, WIFIA)

The Administration has strongly supported the SRFs. To date, federal capitalization totals over $22 billion since 2009. Since their inception, the SRFs have been funded at over $62 billion. In FY 2017, the agency's budget includes $2 billion for the SRFs (a decrease of $257 million in funding from FY 2016 Enacted levels) and over $22 million in technical assistance, training, and other efforts to enhance the capacity of communities, states, and private investors to plan and finance drinking water and wastewater infrastructure improvements. The SRFs also are complemented by $20 million included in the new Water Infrastructure Finance and Innovation Act (WIFIA) program, through which EPA will make direct loans to regionally or nationally significant water infrastructure projects. This investment is designed to promote economic growth through innovative financing, techniques such as system partnerships, capacity building, full cost pricing, and public and private collaboration. These initiatives will complement the successful state revolving fund programs.

Sustainable Water Infrastructure Policy

With the aging of the nation's critical water infrastructure and a growing need for investment, the drinking water and wastewater sectors face a significant challenge to maintain and advance the achievements attained in protecting public health and the environment. The EPA's water and wastewater sustainability efforts are designed to promote more effective management of water systems in order to continuously improve their performance and achieve long-term sustainability.

EPA is implementing a Sustainable Water Infrastructure Policy 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. The agency will continue to promote capacity building, small system partnerships, and full-cost pricing, which all have the potential to reduce the long- term need for water infrastructure investment. Important to enhancing the technical capacity of the water sector, the EPA will utilize alternatives analyses to expand green infrastructure options and their multiple benefits. Implementation of the Water Infrastructure Finance Innovation Act program (WIFIA), federal dollars provided through the State Revolving Funds (SRFs) and support from the Water Infrastructure and Resiliency Finance Center (WIRFC) and the Center for Environmental Finance (CEF) will act as catalysts for efficient system-wide planning and ongoing management of sustainable water infrastructure.

Water Infrastructure Investments $2.3 billion

A top priority for the National Water Program is modernizing the outdated water infrastructure on which the American public depends. Robust funding is provided for critical drinking and wastewater infrastructure. These funding levels further the President's ongoing commitment to infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high priority infrastructure investments that protect human health and the environment.

Water Infrastructure Priorities

The EPA will continue to support financing and construction of drinking water infrastructure and encourage public water systems to adopt sustainable management practices by doing the following:

- Provide states with funds, through the Drinking Water State Revolving Fund (DWSRF) capitalization grants, for low-interest loans to assist utilities with financing drinking water infrastructure needs and to support utility compliance with Safe Drinking Water Act (SDWA) standards;
- Encourage states to consider using the set-asides in the DWSRF to build water system technical and managerial capacity;
- Provide effective oversight of the DWSRF funds;
- Advise states on maintaining their capacity development and operator certification programs to support compliance by public water systems with the SDWA and to enable water systems, especially small systems, to meet statutory prerequisites for receiving infrastructure financing; and
- Encourage states to develop state-centric tools, in lieu of national tools, to assist water systems with capacity development.

Drinking Water State Revolving Fund $961,592

The Drinking Water SRF provides funding for new infrastructure improvement projects for public drinking water systems. More than 156,000 public water systems provide drinking water to the approximately 320 million people in the U.S. More than 97 percent of these public water systems serve fewer than 10,000 people. 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 on the needs of these small communities/systems as the state grant and state assistance programs are implemented.

Expand the technical, managerial, and financial capabilities of drinking water systems

These initiatives all have the potential to reduce the long-term need for water infrastructure investment and will complement the successful state revolving fund programs. The FY 2017 budget proposes to increase funding for Drinking Water Programs by over $12 million to expand the technical, managerial, and financial capabilities of drinking water systems to reliably provide safe drinking water to their customers now and into the future. This investment is designed to promote economic growth through innovative financing, techniques such as system partnerships, capacity building, full cost pricing, and public and private collaboration. 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.

Alaska Rural and Native Village critical basic drinking water and sanitation infrastructure $19,962

The EPA published data concerning the drinking water infrastructure needs of water systems serving tribes and Alaska Native Villages as a special focus of DWSRF survey. These communities lack basic drinking water & sanitation services disproportionately when compared to the rest of the country. In Alaska, 13 percent of native and rural households are without complete indoor plumbing, a much higher figure than the national average of 0.4 percent (US Census Survey 2012) of occupied homes that lacked complete indoor plumbing. As a result, 2008 data indicates that the age adjusted infectious disease hospitalization rate for Alaska natives was 28 percent higher than the national average, with a higher

Drinking Water State Revolving Fund $863,233

The EPA will continue to support financing and construction of drinking water infrastructure and encourage public water systems to adopt sustainable management practices by doing the following:

- Provide states with funds, through the Drinking Water State Revolving Fund (DWSRF) capitalization grants, for low-interest loans to assist utilities with financing drinking water infrastructure needs and to support utility compliance with Safe Drinking Water Act (SDWA) standards;
- Encourage states to consider using the set-asides in the DWSRF to build water system technical and managerial capacity;
- Provide effective oversight of the DWSRF funds;
- Advise states on maintaining their capacity development and operator certification programs to support compliance by public water systems with the SDWA and to enable water systems, especially small systems, to meet statutory prerequisites for receiving infrastructure financing; and
- Encourage states to develop state-centric tools, in lieu of national tools, to assist water systems with capacity development.

Alaska Native Villages Infrastructure Assistance - eliminated

The program supports wastewater and drinking water infrastructure projects in Alaska Native and rural villages. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in Alaska.

Clean Water State Revolving Fund $1,391,237 The program provides funding to treatment plant operators, communities, nonprofits and some private organizations for a variety of water infrastructure needs, including: • Construction of publicly owned treatment works • Nonpoint source management • National estuary program projects • Decentralized wastewater treatment systems • Stormwater • Water conservation, efficiency, and reuse • Watershed pilot projects • Energy efficiency • Water reuse • Security measures at publicly owned treatment works • Technical assistance For the Clean Water SRF, the Administration strongly supports efforts to expand the use of green infrastructure to meet Clean Water Act goals. - **Target 20% to** green infrastructure **for stormwater.** To further these efforts, the budget targets 20 percent of the Clean Water SRF capitalization grants, subject to project availability, to green infrastructure and innovative projects including those to manage stormwater, which helps communities improve water quality while creating green space, mitigating flooding, and enhancing air quality. - **Tribal set-aside of two percent, or $30 million**, whichever is greater, of the funds appropriated from the CWSRF. The lack of access to safe drinking water and basic sanitation in Indian Country continues to threaten the public health of American Indian and Alaska Native (AI/AN) communities. According to 2010 data from the Indian Health Service (IHS), approximately 12 percent of AI/AN homes do not have safe water and/or basic sanitation facilities. The efficiencies and partnerships resulting from the Federal Infrastructure Task Force will directly assist tribes with their infrastructure needs. ***Infrastructure Assistance: Mexico Border - $9,981*** The program provides for the planning, design, and construction of water and	**Clean Water State Revolving Fund $1,393,887** The EPA will continue its robust support of the nation's infrastructure. The EPA will focus efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure. This program/project supports the policy and fiduciary oversight of the Clean Water State Revolving Fund program, which provides low-interest loans to help finance wastewater treatment facilities and other water quality projects. The program supports work toward ensuring the good financial condition of the State Revolving Funds. The FY 2018 budget continues to provide funding for the Environmental Finance program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing. **Infrastructure Assistance: Mexico Border - eliminated** The program provides for the planning, design, and construction of water and wastewater

WaterSense is a key component of the agency's efforts to ensure long-term sustainable water infrastructure, contribute to greenhouse gas reductions, and help communities adapt to drought and climate change. Based on the number of **water-conserving products** shipped through the end of 2014 (the most recent year for which there is data), the program has contributed to cumulative savings in excess of one trillion gallons of water – enough water to supply all the homes in the United States for 42 days – and $21.7 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 54 MMTCO2E of greenhouse gas reductions. As of December, 2015, more than 2,450 different models of high-efficiency toilets, 9,300 faucet models and accessories, 365 models of flushing urinals, 3,700 models of showerheads, 25 models of pre-rinse spray valves, and 200 models of weather-based irrigation controllers had earned the WaterSense label. More than 645 homes also have earned the WaterSense label. WaterSense has more than 1,735 partners which include manufacturers, retailers, builders, utilities, state/local governments, and community organizations that help to educate consumers on the benefits of switching to water-efficient products. In FY 2017, the program will work with its partners to carry out a number of consumer campaigns that encourage consumers to switch to WaterSense labeled products and practice other water efficient behaviors. WaterSense also is working within the federal government to ensure that it leads by example through the use of water- efficient products and practices. In FY 2017, the WaterSense program will continue to extend support to additional sectors by working with the ENERGY STAR program to reach ENERGY STAR program partners.	***WaterSense - eliminated***
Water Technology Innovation blueprint The EPA's Water Technology Innovation blueprint frames the business case for and provides examples of innovation across the water sector.	***Water Technology Innovation blueprint - not addressed in the 2018 budget***

Homeland Security - $73, 345 ***Critical Infrastructure Program - $10,497*** This program provides resources to coordinate and support protection of the nation's critical water infrastructure from terrorist threats and all-hazard events. Reducing risk in the water sector requires a multi-step approach to: determine risk through vulnerability, threat, and consequence assessments; reduce risk through security and resiliency enhancements; prepare to effectively respond to and recover from incidents; and measure the water sector's progress in risk reduction. The Public Health Security and Bioterrorism Response and Preparedness Act of 2002 (Bioterrorism Act) directs the EPA to support the water sector in such activities. In addition, the President has further delineated the EPA's security and resiliency responsibilities under Presidential Policy Directive 21 (Critical Infrastructure Security and Resilience), Homeland Security Presidential Directive 9 (Defense of Food and Agriculture), and Executive Order 13636 (Improving Critical Infrastructure Cybersecurity). The water security program also provides the tools and technical assistance to advance the long-term sustainability of water sector infrastructure and supplies by incorporating climate change and resiliency considerations into effective utility management practices. N**ational training program to support water systems in the design and deployment of a Water Quality Surveillance and Response System** In FY 2017, the EPA will continue to provide its national training program to support water systems in the design and deployment of a Water Quality Surveillance and Response System (SRS). Deployment of a Water Quality Surveillance and Response System can allow a water utility to rapidly detect and respond to water quality problems such as contamination in the distribution system in order to reduce public health and economic consequences. In FY 2017, the EPA's water contamination detection efforts will focus on providing outreach and training across the nation, exploring a possible SRS certification program for water systems, and providing technical assistance to water utilities engaged in designing and deploying SRS systems. ***Water Alliance for Threat Reduction program & Water Laboratory Alliance*** Also, the EPA will continue to support the Water Alliance for Threat Reduction program to protect the nation's critical water infrastructure and oversee the Water Laboratory Alliance, which enables the water sector to rapidly analyze a surge of laboratory samples during a significant contamination event. ***Improving Critical Infrastructure Cybersecurity (EPA is lead agency responsible***	**Homeland Security - $40,096** ***Critical Infrastructure Program - eliminated*** 5.0 FTE and associated resources have been provided to the Homeland Security: Preparedness, Response, and Recovery Program for a focused effort to meet the EPA's responsibilities as the water Sector- Specific Agency (SSA) implementing specific statutory and Presidential directives relating to homeland security. In FY 2018, the EPA will propose a targeted set of activities and outreach in its role as the sector specific agency for the water sector critical infrastructure. Outreach and technical assistance will be provided for the highest priority areas. Under Executive Order 13636: Improving Critical Infrastructure Cybersecurity, the EPA, in FY 2018, will continue to coordinate water sector specific cybersecurity risks with DHS. **Water Quality Surveillance and Response System training - not addressed in the 2018 budget** ***Water Alliance for Threat Reduction & Lab Alliance - not addressed in the 2018 budget*** ***Improving Critical Infrastructure Cybersecurity***

Homeland Security: Preparedness, Response, and Recovery $61,213

The EPA's Homeland Security work is an important component of the agency's prevention, protection, and response activities. Exposure to hazardous chemicals, microbial pathogens, and radiological materials purposely released into the environment by terrorists or unintentionally as a result of industrial accidents or natural disasters can be harmful to humans. Our communities and country can recover more quickly and cost effectively from these events if effective tools, methods, information, and guidance are developed and successfully delivered to local, state, and federal decision-makers. The EPA's Homeland Security Research Program (HSRP) enhances the nation's preparedness, response, and recovery capabilities for large-scale catastrophic incidents by filling critical gaps associated with the EPA's homeland security responsibilities. Over the years, the research program has developed many products that address critical terrorism-related issues while having resilience applicability to other natural and manmade disasters. Recent examples of critical support provided by HSRP's emergency response experts include: (1) the Deepwater Horizon Oil Spill cleanup, (2) the Fukushima Daiichi nuclear reactor meltdown recovery, and (3) clean up/treatment of wastes associated with the Ebola response.

Maintain agency capability to respond effectively to incidents that may involve harmful chemical, biological, and radiological (CBR) substances

Maintain the Environmental Response Laboratory Network

Develop and maintain agency expertise and operational readiness for all phases of consequential management following a CBR incident, specifically with respect to environmental characterization, decontamination, laboratory analyses and clearance

Maintain the Emergency Management Portal (EMP)

Conduct CBR training for agency responders to improve CBR preparedness.

Homeland Security: Preparedness, Response, and Recovery $39,054

The HSRP features three topic areas of research that support the EPA's mission to protect human health and the environment and fulfill the Agency's legislative mandates.

Characterizing Contamination and Assessing Exposure

During an incident, the EPA oversees site characterization and remediation of contaminated water systems and indoor and outdoor areas. This funding request will enable the EPA to continue to decrease the time it takes for site characterization, getting people back into their homes faster. In FY 2018, the HSRP activities in this topic will fill critical scientific research gaps by: providing the science needed for effective sampling strategy development, developing sampling and analysis methods for biological contaminants, and developing methods to assess exposure pathways for biological contamination to inform all aspects of the response.

Supporting Characterization of Contamination

In FY 2018, HSRP will develop innovative bio-threat agent sampling and analytical methods for the Selected Analytical Methods for Environmental Remediation and Recovery document, available on a publically-accessible website, to support post-incident decisions regarding exposure assessment, remediation, and re-occupancy. The HSRP will conduct studies to support sample strategy options for characterization after a wide-area biological incident and examine methods and deployment strategies to reduce the logistical burden of characterization. A tool also will be developed to assist EPA end users in developing sampling and analysis plans for biological agents, which will incorporate data quality objectives and increase public confidence in the data and accompanying decisions. This research will be used by the EPA's OSCs and the Environmental Unit within the Incident Command Structure to ensure that biological agent characterization supports decisions within resource and time constraints.

Water System Security and Resilience

As of 2006, there were approximately 160,000 public drinking water utilities and more than 16,000 wastewater utilities in the United States. Roughly 75 percent to 85 percent of the population receives potable water and sanitary sewer service from these utilities. As the lead agency overseeing the Water Sector, the EPA addresses Water Sector needs identified by the Water Sector Coordinating Council and the Water Government Coordinating Council's Critical Infrastructure Partnership Advisory Council.

Improving Resilience of Water Systems

Recent drinking water system contamination incidents, such as the spill of MCHM12 into the Elk River in West Virginia, illustrates the connectivity between source water and

Protect and Restore Watersheds and Aquatic Ecosystems $199,875	***Surface Water Protection $174,975***

Water Pollution Control Grants (Section 106) $230,36

Section 106 of the Clean Water Act authorizes the EPA to provide federal assistance to states, territories, Tribes and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources. Activities supported through these grants include providing permits, ambient water quality monitoring and assessment, water quality standards development, Total Maximum Daily Load (TMDL) development, surveillance and enforcement, water quality planning, advice and assistance to local agencies, training, and public information. Section 106 grants also may be used to provide “in-kind” support through an EPA contract, if requested by a state or tribe. FY 2017 priorities

- Continue to foster a ***watershed approach*** as the guiding principle of the clean water programs…with the goal of sustaining and improving the entire watershed.
- **Address nitrogen and phosphorus** through the use of a Framework for State Nutrient Reductions (Framework) provided in the EPA guidance issued in March 2011. Nitrogen and phosphorus pollution has the potential to become one of the costliest and most challenging environmental problems, such as harmful algal blooms (HABs). HABs often result from high levels of nutrients and have caused significant economic losses to the fishing and recreation industries, while increasing costs for managing and treating potable water supplies. The nutrient reduction activities outlined in the Framework will work in conjunction with those being carried out by states and tribes using Section 319 and U.S. Department of Agriculture funding and focus on a set of key principles that guide the agency’s technical assistance and collaboration with the states.

Monitoring Initiative $18.5 million [requested]

In FY 2017, the Monitoring Initiative will be funded at $18.5 million and will be designated for states and tribes under the Initiative: $8.5 million for monitoring as part of statistically valid reports on the national water condition, and $10 million to implement program improvements per state monitoring strategies.

In FY 2017, the EPA will continue working with the states and tribes to implement the Monitoring Initiative, which includes enhancements to state and interstate monitoring programs consistent with their individual monitoring strategies and collaboration on statistically-valid surveys of the nation’s waters. 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, to expand the use of monitoring data and geo-spatial tools for water resource protection, and to set priorities and evaluate effectiveness of

Water Pollution Control Grants (Section 106) $161,25

The Section 106 Grant Program supports prevention and control measures that improve water quality. In FY 2018, the EPA will focus on core statutory requirements while continuing to provide states and tribes with flexibility to best address their particular priorities.

Monitoring Initiative $12.5 million

In FY 2018, the EPA will continue working with states and tribes to support their water quality monitoring programs. Monitoring Initiative funds for states and tribes will support the statistically valid National Aquatic Resource Surveys (NARS) of national and regional water conditions and the enhancement of state and Tribal monitoring programsIn FY 2018, the Monitoring Initiative will be funded at $12.5 million, with $5.9 million allocated for participation in the NARS and $6.6 million for monitoring program priority enhancements. 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 priority Clean Water Act program needs.

Review and Update Water Quality Standards [Addressed through multiple initiatives, including impaired waters program, non-point source pollution activities and the Geographic Regional Water Programs.]	***Review and Update Water Quality Standards*** States and authorized tribes will review and update their water quality standards as required by the Clean Water Act and the EPA regulation at 40 CFR part 131. The regulations place a focus on states and tribes keeping water quality criteria in their standards up-to-date to reflect the latest science. The EPA will work with tribes that want to establish water quality standards.
Watershed planning to control pollution The EPA will support 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 2017, 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.	***Watershed planning to control pollution - not addressed in the 2018 budget***

Non-point source pollution

Nonpoint Source pollution, generated by runoff that carries excess nutrients, pesticides, pathogens, toxics and other contaminants to waterbodies, is the greatest remaining source of surface water quality impairments and threats in the United States. Nonpoint source management is integral to addressing most of the remaining water quality problems and threats in the United States. Protection and restoration of water quality on a watershed basis requires a careful assessment of the nature and sources of pollution, the location and setting within the watershed, the relative influence on water quality, and the amenability to preventive or control methods.

In FY 2017, the program will continue to work with states to strengthen and enhance their nonpoint source programs with a continued focus on watershed project implementation and maintaining
current Nonpoint Source Management Program priorities funded through Section 319. The EPA also will work to better document progress through enhanced program measures and a new Section 319 program highlights report. The Nonpoint Source program will work closely with the 303(d) program to encourage coordination and integration of state 303(d) vision priorities and nonpoint source program priorities and implementation.

In FY 2017, the EPA will support efforts of states, tribes, other federal agencies, and local communities to **develop and implement watershed-based plans** that successfully address all of these factors to restore waters through the national Nonpoint Source Program (Section 319) while also devoting effort to protecting those waters that are healthy. In FY 2017, the EPA will continue to provide nonpoint source program leadership and technical support to states, municipalities, watershed organizations, and concerned citizens by:

- Continuing coordination with the U.S. Department of Agriculture (USDA) to focus federal resources on agricultural sources of pollution in select watersheds in every state. **USDA's Natural Resources Conservation Service** implements Farm Bill conservation programs that can help control nonpoint source pollution. Also, the EPA will continue to take advantage of opportunities to work with the U.S. Forest Service, Bureau of Land Management, and other federal agencies with land management responsibilities to address water quality impairments;
- Creating, supporting, and promoting **technical tools** that states and tribes need to accurately assess water quality problems, set priorities, and analyze and implement solutions;
- Continuing to work closely with a broad set of partners to promote the

Non-point source pollution program - eliminated

Resources for this program have been eliminated in FY 2018.

The agency will continue to **coordinate with the United States Department of Agriculture** (USDA) on targeting funding, where appropriate, to address nonpoint sources.

Nonpoint Source Categorical Grant (Sec. 319) $164,601.0 This program provides grants to assist states and tribes in implementing approved elements of Nonpoint Source Programs including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects. The agency will continue to coordinate with the United States Department of Agriculture on targeting funding where appropriate to address nonpoint sources. In FY 2017, EPA will continue assuring accountability for results through (1) use of the EPA's nonpoint source program grants tracking system, which will continue to track the nationwide pollutant load reductions achieved for phosphorus, nitrogen, and sediment; and (2) tracking the remediation of waterbodies that had been primarily impaired by nonpoint sources and that were subsequently restored so that they may be removed from the Section 303(d) list of impaired waters.	***Nonpoint Source Categorical Grant (Sec. 319) - eliminated***

Urban Waters Federal Partnership

EPA will assist communities in restoring and revitalizing urban waterways and the surrounding land through partnerships with governmental, business, community and other local partners. EPA 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.assist local communities, particularly underserved communities, in their efforts to restore and protect the quality of their urban water. 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 and will contribute these ideas to the EPA agency-wide Communities Resource Network. In FY 2017, the EPA will continue to support place-based work by providing technical assistance and networking support through the EPA's Urban Waters Learning Network, as follows:

- ***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.

Urban Waters Federal Partnership - eliminated

Urban Waters Partnership locations:

- Proctor Creek Watershed/Atlanta (GA)
- Lake Pontchartrain Area / New Orleans (LA)
- Caño Martín Peña (Martín Peña Channel, Puerto Rico)
- San Antonio River Basin, within Bexar County (TX)
- Anacostia (DC/Maryland)
- Patapsco Watershed / Baltimore Region (MD)
- Greater Philadelphia Area / Delaware River Watershed (PA, NJ, DE)
- Passaic River / Newark (NJ)
- Mystic River Watershed (MA)
- Bronx and Harlem River Watersheds (NY)
- Northwest Indiana Area (IN)
- Grand River/Grand Rapids (MI)
- Western Lake Erie Basin, near Toledo (OH)
- Meramec and Big River (MO)
- Middle Blue River (MO)
- South Platte Watershed, Headwaters to Denver Metropolitan Area (CO)
- Middle Rio Grande / Albuquerque (NM)
- Los Angeles River Watershed (CA)
- Green-Duwamish Watershed (Washington)

Issue Total Maximum Daily Loads (TMDLs) and National Pollutant Discharge Elimination System (NPDES) permits 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 (TMDLs) and National Pollutant Discharge Elimination System (NPDES) permits, built upon scientifically sound water quality standards and technology-based pollutant discharge limits. Development and implementation of TMDLs for CWA 303(d) listed impaired waterbodies is a critical tool for meeting water quality restoration goals. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented via permit requirements and through local, state, and federal watershed plans and programs. Cumulatively, states and the EPA have made significant progress in the development and approval of Total Maximum Daily Loads and have completed more than seventy- two thousand TMDLs through FY 2015. ***NPDES Permitting targets:*** • **Stormwater:** EPA will focus on: promoting the use of green infrastructure and water quality-based effluent limits in stormwater permits. To combat polluted 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 a minimum, eligible existing and new construction projects in all areas of the country where the EPA is the NPDES permitting authority. • Controlling discharges from **concentrated animal feeding operations**; • Permitting for new waste streams**, such as shale gas extraction, and steam**	***Issue Permits*** The NPDES program requires point source dischargers to be permitted and pretreatment programs to control discharges from industrial and other facilities to the nation's wastewater treatment plants. The EPA will work with states to balance competing priorities, identify opportunities to enhance the integrity and effectiveness of NPDES permits, set schedules to address significant action items, and map out program revisions. **NPDES Permitting targets - not addressed in the 2018 budget**

Impaired waters program Water quality conditions still remain a significant challenge, with approximately 43,000 known impaired water bodies nationwide at the end of calendar year 2015. In FY 2017, the TMDL Program will continue to engage with states to implement the 10-year vision for the CWA 303(d) listing (of impaired waters) program. As part of this effort, the EPA will encourage states to: continue to engage with the public and stakeholders on their priorities, and identify opportunities to integrate CWA 303(d) Program priorities with other water quality programs (e.g., state water quality standards (WQS), monitoring, CWA 319, NPDES, source water protection, and conservation programs) to achieve overall water quality goals and complete TMDLs and other restoration plans to address impaired segments. The EPA will work with states and other partners to develop and implement activities and watershed plans to restore these waters. Additionally, the EPA will work with states and other partners to improve our ability to identify and protect healthy waters/watersheds, and will integrate protection priorities with those identified under the CWA 303(d) program. Also, the EPA will continue to work with states to implement a new measure that looks more comprehensively at the 303(d) program by measuring the extent of state priorities addressed by TMDLs, alternative restoration, or protection approaches.	***Impaired waters program*** The EPA will work with states and other partners to develop and implement TMDLs for Clean Water Act 303(d) listed impaired waterbodies as a tool for meeting water quality restoration goals. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented via permit requirements and through local, state, and federal watershed plans and programs to restore waters. The EPA will work with states to facilitate accurate, comprehensive, and geo-referenced water quality assessment decisions made available to the public via the Assessment Total Maximum Daily Load Tracking and Implementation System. In addition, the EPA and states will implement a performance measure that looks more comprehensively at the 303(d) program by measuring the extent of state priorities addressed by TMDLs, alternative restoration plans, or protection plan EPA and states will implement a performance measure that looks more comprehensively at the 303(d) program by measuring the extent of state priorities addressed by TMDLs, alternative restoration plans, or protection plan
Accountability in Water Quality Protection and Restoration Most impaired waters take years to recover fully, and incremental improvements are currently not readily visible. In FY 2017, the EPA will continue to support a new approach for measuring local improvements in water quality, resulting in a more transparent and efficient measure of progress and better allowing cross-program integration. This new approach will use the National Hydrography Dataset Plus (NHDPlus) to calculate watershed area to describe previously impaired waters where plans are in place, actions are being implemented, and waters are now attaining water quality standards. This tiered, evidence-based approach to tracking environmental outcomes integrates data from the national, state and local scales and enables the EPA to transition from tracking program outputs to tracking environmental outcomes as strategic measures to show the effectiveness of the nation's investments in water quality. This approach will provide greater accountability and transparency while supporting more flexibility in how the EPA and states achieve the CWA goal to restore and maintain the chemical, physical and biological integrity of the nation's waters.	Not addressed in the 2018 budget

Conducting Compliance Monitoring and Enforcement An important part of restoring impaired waters is reliable and timely data. As part of an agency-wide effort for modernization, the EPA will 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. In FY 2016, the EPA completed the redesign of the system to improve the process that states use for submitting Integrated Reporting information to support this new approach. In FY 2017, states will begin to transition to the new system in preparation for the 2018 Integrated Reporting cycle. The EPA also will assist states in the following areas: - Developing or implementing tools (e.g., the Recovery Potential Screening Tool) to identify priorities in support of the 303(d) Program 10-year vision and this new approach; - Developing GIS data for assessed and impaired waters; - Developing assessment methods and tracking abilities for healthy/unimpaired waters; - Developing data management capabilities to track and report water quality assessments; - Developing methods to automate the screening of monitoring data against water quality criteria; - Developing approaches to integrate state-scale statistical surveys with local-scale assessments; and Integrating water quality data across the various water quality programs. This assistance will be coordinated through the EPA regional offices to identify state needs and to align those resources in support of this improved approach for accountability.	***Conducting Compliance Monitoring and Enforcement*** The EPA will work with NPDES-authorized states to implement the 2014 Clean Water Act NPDES Compliance Monitoring Strategy (CMS). The NPDES CMS establishes national goals for allocation of inspection resources across all NPDES regulated entities in order to best protect water quality. The EPA works with states on advanced technologies such as remote water monitoring sensors to collect discharge data and to more efficiently identify problem areas. The agency expects that these technologies will improve the EPA's and state's analytical capabilities and enhance the public's knowledge about the quality of their environment. Currently, the EPA and states are implementing the NPDES Electronic Reporting Rule through the Integrated Compliance Information System. Phase 1 of the rule was implemented in FY 2017 for NPDES Discharge Monitoring Reports and Phase 2 will begin cooperatively with our state partners in FY 2018. Also, in FY 2018, the EPA will work with additional states in the development of electronic reporting tools. For example, approximately 20 states currently use the EPA's electronic reporting tool to collect DMRs. This saves the states a significant amount of resources in development and operations and maintenance costs.

Working with Tribal Water Pollution Control Programs In FY 2017, the EPA plans to propose rulemaking to provide more opportunities for tribes to fully engage in the 303(d) Program. Section 518 of the CWA provides that eligible tribes may seek treatment in a similar manner as states (TAS) for CWA Section 303; however existing regulations do not explicitly address how tribes obtain TAS for the 303(d) program. In this rulemaking, the EPA would propose a process for tribes to apply to the EPA for TAS authority to establish lists of impaired waters and TMDLs pursuant to section 303(d) of the CWA. http://www.epa.gov/tribalportal/trprograms/infra-water.htm	***Working with Tribal Water Pollution Control Programs*** In FY 2018, the EPA will work with Tribal programs on activities that address water quality and pollution problems on Tribal lands. Tribes will implement the *Clean Water Act Section 106 Tribal Guidance*, which forms a framework for tribes to establish, implement, and expand their Water Pollution Control Programs.

Marine Pollution Program **$10,142**

The goals of the EPA's Marine Pollution Program are to:

1) ensure marine ecosystem protection by controlling and preventing pollutants from land-based sources and vessels;
2) manage ocean dumping of dredged material and limit and prevent disposal of wastes and other materials in the ocean;
3) develop strategies and programs to address emerging environmental threats to the marine and coastal water quality such as ocean acidification and aquatic trash and debris;
4) develop strategies to protect sensitive marine habitats such as coral reefs;
5) gather data and undertake research to inform policy and program decisions for protection of the marine and near coastal environment.

FY 17 priorities:

(1) Addressing Pollution from Vessels, Marinas, and Ports

- Develop regulations to control operational discharges from vessels of the Armed Forces;
- Develop strategies and implement projects to:
  - address vessel-related impacts from sewage discharge, invasive species, ballast water,
    and pollution from shipping;
  - address water impacts from ports;
  - promote best practices for recreational boaters and marina facilities through regulatory
    and/or non-regulatory means;
- Participate on the U.S. delegation to the International Maritime Organization - develop international standards and guidance addressing operational discharges from ships
- Develop communication and education tools and resources to promote best practices to prevent pollution from vessels, marinas, and ports.

(2) Ocean Dumping Management Program (including Dredged Material)/Marine Protection, Research, and Sanctuaries Act (MPRSA)

In order to ensure U.S. ports can be reached by large sea-going vessels, several hundred million cubic yards of sediment are dredged each year from U.S. waterways, ports, and harbors. This directly impacts the U.S. economy, national security, and the

Marine Pollution Program - eliminated

The EPA will seek opportunities to continue to meet statutory mandates through the core national water program.

(4) Reducing Marine Trash

Trash that is improperly disposed of – either intentionally or inadvertently – can enter fresh water and coastal ecosystems. This "aquatic trash" may eventually make its way to the ocean. Trash has become a pervasive problem in such aquatic and marine environments, presenting a challenge to water quality and habitat protection, in addition to aesthetic blight, ecological effects, economic impacts, and possible human health risks. The EPA's Trash Free Waters (TFW) national program prompts collaborative actions to reduce and prevent land-based trash from entering our watersheds, coastal waters, and the marine environment. In FY 2017, the emphasis will be to:

- Implement regional TFW programs in California and the Pacific Islands, the Mid-Atlantic, the Gulf of Mexico, Puerto Rico and the Caribbean, New York/New Jersey and other possible locations;
- Develop, support, and implement policy decisions based on the outcome of a 2016 effort to estimate the national cost of managing aquatic trash;
- Address major research needs and assess scientific findings for purposes of making policy and program decisions regarding possible human health effects of plastic trash in the food chain and the ecosystem impacts of aquatic trash;
- Develop public/private partnerships with corporate commitments to achieve major reductions in trash entering U.S. water bodies;
- Continue to work with other members of the Interagency Marine Debris Coordinating Committee to assess, reduce, and prevent marine debris per the Marine Debris Research, Prevention, and Reduction Act of 2006;
- Work with other federal agencies and the international community to provide technical, best practices, and policy guidance related to the presence, sources, impacts, and potential efforts to prevent/reduce the amounts of plastics becoming marine litter; and
- Continue to prepare, support, and sometimes serve on the U.S. delegation for a number of international conventions and efforts, such as the G7 Foreign Affairs Sous-Sherpa Meetings and Workshops addressing Marine Litter, the Organization for Economic Cooperation and Development's (OECD) Working Party on Resource Productivity and Waste Group, the Land Based Sources of Trash workgroup efforts implementing the Cartagena Protocol, and the London Dumping Convention. Other international efforts include working closely with the State Department as well as the Council of the Commission for Environmental Cooperation.

(5) Coral Reef Protection

[Marine Pollution Program - eliminated]

RESTORE Act (**Deepwater Horizon oil spill) (permit reviews)** In FY 2017, the EPA [Wetlands Program] will conduct activities pursuant to responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the RESTORE Act. Activities will include coordinating with the Army Corps of Engineers and other federal, state, and local partners to design and implement RESTORE Act projects, and reviewing proposed activities that require authorization by the Corps under CWA Section 404.	RESTORE Act (**Deepwater Horizon oil spill) (permit reviews)** In FY 2018, the EPA also will conduct activities pursuant to responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the **RESTORE Act**. [Note: The coastal, marine protection and wetlands programs discussed below provide staffing and technical support to these restoration activities. Many of these programs have been eliminated, with funding reduced for the remainder.]

RESTORE Act - Enforcement (settlement oversight)
 	
The EPA's enforcement response to the Deepwater Horizon oil spill will continue in FY 2017 as the agency, together with the U.S. Department of Justice, conclude a record settlement in excess of $18.0 billion in penalties and natural resource damages with BP. This settlement follows a civil trial which began in February 2013, and concluded in February 2015. The settlement with BP was reached after the trial but before the court's ruling. A Consent Decree memorializing the settlement was lodged with the court in the first quarter of FY 2016. Some highlights of Deepwater related activities that have occurred to date include:
• The EPA obtained a record settlement of $1 billion with Transocean for its liability for the Deepwater Horizon Gulf of Mexico oil spill.
• Pursuant to the RESTORE Act, $800 million of the Transocean penalty went to the Gulf Coast Restoration Trust Fund to fund programs, projects, and activities that restore and protect the environment and economy of the Gulf Coast region.
• In October 2015, a $20.8 billion settlement with BP was filed with the courts, that include:
  • A $5.5 billion Clean Water Act penalty, 80 percent of which will go to restoration efforts in the affected states pursuant to a Deepwater-specific statute, the RESTORE Act. This is the largest civil penalty in the history of environmental law.
  • $8.1 billion in natural resource damages (this includes $1 billion BP already committed for early restoration). BP also will pay an additional $700 million specifically to address any future natural resource damages unknown at the time of the agreement and assist in adaptive management needs. The natural resource damages money will fund gulf restoration projects as designated by the federal and state natural resource damage trustees.
  • $5.9 billion to settle claims by state and local governments for economic damages they have suffered as a result of the spill.
  • A total of $600 million for other claims, including claims for reimbursement of natural resource damage assessment costs and other unreimbursed federal expenses due to this incident.
• In November 2015, a $159.9 million penalty was assessed by the court against Anadarko Petroleum Co., a co-owner of the well with BP. Eighty percent of this penalty will likewise be directed for Gulf restoration efforts pursuant to the RESTORE Act.
	RESTORE Act - Enforcement (settlement oversight)
	
	Not addressed in the 2018 budget

Climate Change - Management of Sustainable Water 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. Climate Ready Estuaries, Climate Ready Water Utilities, and Green Infrastructure are examples of programs that will help stakeholders adapt to climate change in FY 2017.

[Climate Change - Management of Sustainable Water Resources - eliminated]

National Estuaries Programs and Coastal Waterways $26,672

Since 2002, approximately 1.5 million acres of habitat have been protected or restored within National Estuary Program study areas. The agency's FY 2017 budget requests over $27 million for National Estuaries Programs and Coastal Waterways that will enable the protection or restoration of one hundred thousand habitat acres. Resources support efforts to achieve the EPA's goal of protecting and restoring 100,000 additional acres of habitat in FY 2017 and promoting alignment of National Estuary Program restoration goals with those of Tribal, state, regional, and local agencies.

Climate Ready Estuaries

The water quality and ecological integrity of estuarine and coastal areas is critical to the economic vitality of the United States (U.S.). While the estuarine regions of the U.S. comprise just 12.6 percent of U.S. land area, they contain 43 percent of the U.S. population and provide 49 percent of all U.S. economic output. The economic value of coastal recreation in the United States – for beach going, angling, bird watching, and snorkeling/diving – has been conservatively estimated by the National Oceanic and Atmospheric Administration (NOAA) to be in the order of $20 billion to $60 billion annually. When natural resources such as fisheries are adversely impacted by upstream and coastal development, so too are the livelihoods of those who live and work in estuarine watersheds. The National Estuary Program (NEP)/Coastal Waterways Programs works to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds by protecting and restoring water quality, habitat, and living resources.

Coastal wetlands/estuaries grants

In FY 2017, the EPA will provide $16.8 million in Clean Water Act Section 320 grants for 28 National Estuary Programs (NEPs) ($600 thousand per NEP). This funding continues the EPA support for implementation of the NEP Comprehensive Conservation and Management Plans.

National Estuary Program / Coastal Waterways - eliminated

The program works to restore the physical, chemical, and biological integrity of estuaries and coastal watersheds. The EPA will encourage states to continue this work and continue to implement conservation management plans.

[Note: Some specific research activities related to these discontinued NEP programs are continuing. See Safe and Sustainable Water Resources (SSWR) research program, below.)

Climate Ready Estuaries - eliminated

Coastal wetlands/estuaries grants - eliminated

Local NEP grants:

Albemarle-Pamlico National Estuary Program

Barataria-Terrebonne National Estuary Program

Barnegat Bay Partnership

Buzzards Bay National Estuary Program

Casco Bay Estuary Partnership

Charlotte Harbor National Estuary Program

Coastal Bend Bays and Estuaries Program

Delaware Center for the Inland Bays

Galveston Bay Estuary Program

Wetlands $21,025 Wetlands provide numerous functions critical to the nation's public health and environmental integrity. According to one assessment of natural ecosystems, the dollar value of wetlands worldwide was estimated to be $14.9 trillion. Wetlands improve water quality; recharge water supplies, including public drinking water sources; provide many recreational opportunities, including hunting and fishing; reduce flood risks and storm damage; provide fish and wildlife habitat; and support valuable recreational and commercial fishing and shellfish industries. For example, coastal wetlands were estimated in calendar year 2008 to provide $23 billion of storm protection services each year in the United States. The Wetlands Protection program operates under the broad national goal of "no net loss" of wetlands for the Section 404 permit policy and review functions, and strives to increase the quality and quantity of wetlands nationwide. Major activities of the program include development and dissemination of guidance, information and scientific tools to improve management and public understanding of wetland programs and legal requirements; review of Section 404 permit applications submitted to the U.S. Army Corps of Engineers (Corps) or authorized states; and assistance to support development of state and Tribal wetland protection programs under the CWA.	***Wetlands $18,115*** The EPA's Wetlands program has two primary components: the Clean Water Act (CWA) Section 404 regulatory program and the state and Tribal development program. Major activities of the program include improving management and public understanding of wetland programs and legal requirements; reviewing Section 404 permit applications submitted to the U.S. Army Corps of Engineers (USACE) or authorized states; and assisting in the development of state and Tribal wetland protection programs under the CWA.

National Aquatic Resource Surveys	***National Aquatic Resource Surveys - not addressed in the 2018 budget***
As part of the national surveys, the EPA, states, and tribes will collaborate to conduct field sampling for the **National Lakes Assessment 2017**. In FY 2017, the EPA and states will finalize the **National Rivers and Streams Assessment 2013/2014**. The EPA/State Steering Committee for the National Rivers and Streams Assessment will be planning the national survey for rivers and streams, which will be targeted to be in the field in calendar year 2018. The EPA and states will initiate data analysis for the **National Wetlands Condition Assessment 2016.** The EPA and states will complete data analysis for incorporation into the **National Coastal Condition Assessment Report 2015**. This report and the preceding five reports in this series are the only statistically-significant measures of coastal water quality that cover both national and regional scales. Information on coastal ecological conditions generated by the National Coastal Condition Reports is used by resource managers to efficiently and effectively target water quality actions and manage those actions to maximize benefits. The National Coastal Condition Assessment 2010 was based on estuarine coastal and Great Lakes monitoring data collected at over 1,000 sites around the United States during 2010.	
Wetlands Regulatory Program The Corps has responsibility for managing the day-to-day permit processes, and the EPA has a statutory role to provide input to the Corps as it develops proposed permits. Also, the EPA has an oversight role in the Section 404 program in the states of Michigan and New Jersey, which have assumed the responsibility for Section 404 permitting in some waters of their respective states. In its national role, the EPA develops and interprets environmental criteria for evaluating permit applications; has final authority to determine the scope of CWA jurisdiction; approves and oversees state assumption; identifies activities that are exempt from permitting; reviews and comments on individual permits; has authority to prohibit, deny or restrict the use of waters as a disposal site (Section 404(c)); can elevate specific proposed Corps permit decisions to Army Headquarters (Section 404(q)); and enforces Section 404 provisions.	***Wetlands Regulatory Program*** USACE is responsible for managing the day-to-day permit processes nationwide under Section 404 of the CWA. The EPA is statutorily required to provide input to the USACE as it develops proposed permits. The EPA and USACE will work together to evaluate options for improving efficiencies in federal CWA permitting that could help reduce potential costs and delays, increase consistency and predictability, and improve protection of public health and the environment. **Pebble Mine/Bristol Bay permit reversal** One of the Trump Administration's first actions was to overturn an EPA decision to restrict dumping of mining wastes in the Bristol Bay watershed in Southwest Alaska to protect salmon fisheries. The pristine habitat in the watershed sustains one of world's most important fisheries, including half of the global supply of wild sockeye salmon. http://www.saveepaalums.info/resisting-the-trump-de-regulatory-agenda-talking-points/defending-bristol-bay/

Clean Water Rule (WOTUS) [The Clean Water Rule ("Waters of the U.S." or WOTUS rule) was issued in 2015 to more clearly define which "waters" are protected under the Clean Water Act. The Rule's definition of protected waters is based on hydrologic science. It recognizes the real-world connectivity between large volume, "navigable" waters and smaller non-navigable streams and wetlands. The Clean Water Rule protects tributary streams and wetlands that have impacts on downstream water.] At least 117 million Americans—more than one- third of the U.S. population—get at least part of their drinking water from sources that are fed by small streams. In FY 2015, the EPA and the Corps completed a rulemaking that provides greater consistency, certainty, and predictability nationwide regarding where the CWA applies – and where it does not. The EPA and the Corps are currently complying with a court-ordered nationwide stay preventing application of the new rule and are implementing the previous regulations in the interim. A key activity in FY 2017 will be to implement our efforts to increase transparency and strengthen coordination as we administer the Clean Water Act Section 404 program with the U.S. Army Corps of Engineers. The EPA Administrator and Deputy Assistant Secretary of the Army have committed to a number of actions in Memoranda of July and November of 2015 that will improve the implementation of the CWA Section 404 regulatory program, particularly with respect to geographic jurisdiction following the finalization of the **Clean Water Rule.** The EPA and Army will be providing increased access to jurisdictional determinations, as well as improving aspects of the permit process to address concerns with delay, inconsistency, and lack of information. The EPA also will continue to provide questions and answers on our websites, hold webinars, and develop other resources to assist the public with their understanding of the program.	***Clean Water Rule (WOTUS) - rescind & redefine*** A de-regulatory rule-making process has been initiated to rescind (step 1) and narrow (step 2) the definitional scope to exclude small streams and wetlands from federal protection. https://www.epa.gov/wotus-rule See: saveepa.wordpress.com/2017/08/04/the-clean-water-rule-why-navigability-matters/ http://www.saveepaalums.info/resisting-the-trump-de-regulatory-agenda-talking-points/defending-our-waters/ http://www.denverpost.com/2017/07/10/epa-clean-water-act-colorado-industries/

Wetlands Program Development Grants $14,633 The Wetlands Program Development Grants (WPDGs) assist states, tribes, and local governments to build or enhance their wetland protection and restoration programs. The program's grants are used to develop new or refine existing state and Tribal wetland programs in one or more of the following areas: (1) monitoring and assessment; (2) voluntary restoration and protection; (3) regulatory programs, including Section 401 certification and Section 404 assumption; (4) wetland water quality standards. States and tribes develop program elements based on their goals and resources. The grants support development of state and Tribal wetland programs that further the goals of the Clean Water Act and improve water quality in watersheds throughout the country. The grants are awarded on a competitive basis under the authority of Section 104(b)(3) of the Clean Water Act. Funding is split among the EPA Regional Offices according to the number of states and territories per Regional Office. Each Regional Office is required, by regulation, to compete the award of these funds to states, tribes, local governments, interstate agencies, and inter-tribal consortia.Continue to make progress toward achieving the **national goal of no net loss of wetland**s under the Clean Water Act Section 404 regulatory program.	***Wetlands Program Development Grants $10,243*** EPA will continue to work with states and tribes interested in assuming administration of the CWA Section 404 program. The EPA will continue to administer Wetland Program Development Grants in support of state and Tribal wetland programs, with a focus on working more efficiently with states and tribes to achieve specific program development outcomes.

Geographic Regional 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 deposited from the air, 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.

Great Lakes Restoration Initiative $299,430

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.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) preventing introduction of invasive species. Expected outcomes to be achieved in FY 2017 include completing management actions at two Areas of Concern and removing seven Beneficial Use Impairments at 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, restoration, or enhancement of 35,000 acres of Great Lakes habitats.

Chesapeake Bay Program $72,861

A key focus is implementation of the management strategies under the Bay Watershed Agreement, which was signed in June 2014. The agreement establishes 10 goals and 31 outcomes for sustainable fisheries, water quality, vital habitats, climate change, toxic contaminants, and other areas consistent with the EO. The EPA and its federal partners have worked with the Bay watershed jurisdictions to develop and implement management strategies for all of the outcomes and in FY 2017 will implement two-year workplans. Also, the EPA will continue its oversight of the Chesapeake Bay Total Maximum Daily Load and its support for the Bay watershed

Geographic Regional Water Programs - eliminated

The EPA will encourage [partners] to continue to make progress from within core water programs.

Research **Water Quality Research and Support Grants - $14, 073** The program focuses on the development and application of water quality criteria, the implementation of watershed management approaches, and the application of technological options to restore and protect water bodies.	***Research*** **Water Quality Research and Support Grants - eliminated** States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF).

Safe and Sustainable Water Resources (SSWR) research program $107,230 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 environmental stressors, extreme events, land use, energy, agriculture and demographic scenarios.	**Safe and Sustainable Water Resources (SSWR) research program $68,250 million** The EPA's Safe and Sustainable Water Resources (SSWR) research program is funded at $68.5 million in the FY 2018 President Budget. The SSWR research program uses a systems approach to develop scientific and technological solutions for the protection of human health and watersheds. The research is conducted in partnership with other EPA programs, federal and state agencies, academia, non-governmental agencies, public and private stakeholders, and the scientific community. This approach maximizes efficiency, interdisciplinary insights and integration of results. The EPA has established a standing subcommittee under the EPA's Board of Scientific Counselors (BOSC) for the SSWR program to **evaluate its performance** and provide feedback to the agency. In addition, the EPA will meet regularly with both the BOSC and SAB to seek their input on topics related to research program design, science quality, innovation, relevance, and impact. This includes advising the EPA on its strategic research direction as part of the review of the research and development program's recently released StRAPs. The agency collaborates with several science agencies and the research community to **assess our research performance**. For example, the EPA is partnering with the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Department of Defense, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, and others. The EPA also works with the White House's Office of Science and Technology Policy and supports the interagency Science and Technology in America's Reinvestment–Measuring the Effect of Research on Innovation, Competitiveness, and Science (STAR METRICS) effort.
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.** For example, a collaborative, cross-agency economic analysis will be continued to account for the value of water benefits and to provide tools for determining changes in value associated with changes in water quality, ecosystem services of water bodies, and watershed integrity.	**Watershed Sustainability:** The EPA will **continue research on waterborne pathogens to improve recreational water quality**. A collaborative, cross-agency economic analysis will continue to develop tools for determining changes in value associated with changes in water quality, ecosystem services of water bodies, and watershed integrity
Nutrients (including harmful algal blooms): Conducting the EPA's **nitrogen and co-**	**Nutrients:** The EPA will investigate **health impacts from exposure to harmful algal/ cyanobacteria toxins.** Research also focuses on monitoring and optimizing drinking water

Summary: Communities, Land & Development	
EPA's 2017 Workplan & Budget Priorities	**EPA's 2018 Workplan & Budget Priorities**
Cleaning Up Communities and Advancing Sustainable Development $140,253 (requested)	**Restoring Contaminated Sites to Productive Use, Creating Jobs and New Economic Opportunities $992.2**
Promote Sustainable and Livable Communities - $481,556 (see programs below)	***Strategic Environmental Management $1 million*** Analyzing the economic and regulatory impacts on the largest manufacturing sectors of the U.S. economy, streamline permitting processes and provide technical assistance to communities. The EPA will build constructive relationships with the largest manufacturing sectors of our economy. The goals are to ensure that the agency understands the needs of our customers, the regulated community, and states; identifies collaborative and innovative solutions to overcome barriers that prevent job creation and economic growth; and provide for better-informed rulemakings, reduced burden, increased transparency about environmental performance, and develop efficient, effective, consensus-based solutions to environmental problems.

Sustainable Materials Management (SMM) $1.6 million Cutting energy waste in businesses and factories; Reducing methane emissions; Federal Government: The federal government occupies nearly 500,000 buildings, operates more than 600,000 vehicles, employs more than 1.8 million civilians, and purchases more than $500 billion per year in goods and services. Used Electronics: National Strategy for Electronics Stewardship, Sustainable Food Management: Strategic Plan for FYs 2017-2022 adds: . Built Environment: The range of materials, goods, and services used to construct, maintain, repair, and renovate the built environment is complex, involving—directly or indirectly—almost every sector of the U.S. economy. Sustainable Packaging: Packaging comprises the overwhelming majority of what is recycled from MSW and therefore presents a significant opportunity for the application of SMM approaches..	**Sustainable Materials Management - eliminated**
Waste Management (Resource Conservation & Recovery Act) $70.4 million **Hazardous Waste Financial Assistance Grants - $$99,503** **Permits & technical support to state implementation support requests** The EPA is facing an increasing number of state implementation support requests, including help addressing complex regulatory and statutory interpretation issues. Requests for this type of support are expected to continue in FY 2017. **RCRA: Waste Minimization & Recycling - $8,832** **Polychlorinated biphenyl (PCB) cleanup approvals** **Electronic Hazardous Waste Manifest $3,667**	**Waste Management (Resource Conservation & Recovery Act) - $41.2 million** **Hazardous Waste Financial Assistance Grants - $$69,652.** **Permits & technical support to state implementation support requests** EPA will provide work-sharing and leadership assistance to the states and territories authorized to implement the permitting program and directly implement the entire RCRA program in two states. **RCRA: Waste Minimization & Recycling - eliminated** **Polychlorinated biphenyl (PCB) cleanup approvals - continuing** **Hazardous Waste Electronic Manifest $0** Transition into a fee-funded program.

Chemical Facility Safety: State and Local Prevention & Preparedness $15,289 **Risk Management Program rule**	**Chemical Facility Safety $10,011** Conduct **reconsideration of Risk Management Program rule** as a result of three petitions [from Big Pharma] for reconsideration requested under the Clean Air Act. Reconsideration may result in further amendments to the final rule. EPA has also delayed implementation of the rule pending reconsideration.]
Toxics Release Inventory/Community Right to Know $13,856 Ensure that communities have access to timely and meaningful data on toxic chemical releases and other waste management and pollution prevention activities at facilities and continue to clarify toxic chemical reporting requirements, improve the reporting experience, explore opportunities to use this valuable information, and share pollution prevention approaches with industry. TRI Annual Report • In FY 2017, the TRI program also will continue to make the data available to the public within weeks after the July 1st reporting deadline (via the TRI website and data.gov) and through online analytical tools such as Envirofacts and TRI Analyzer. • Publish the annual TRI National Analysis, describing relevant trends in toxic chemical releases and other waste management; industry sector profiles and parent company analyses; and TRI information reported from facilities in specific urban communities, large aquatic ecosystems, Indian country, and Alaska Native Villages. • Continue to foster stakeholder discussions and collaborations in analyzing and using the TRI data, including with such stakeholders as industry, government, academia, non-governmental organizations, and the public.	**Toxics Release Inventory/Community Right to Know $8,680** In FY 2018, the EPA will focus on the collection of the chemical release data and making the data available to governments and the public. As required by [statute] the agency will respond to EPCRA petitions regarding TRI within 180 days after receipt. Petitions may request to add or delete chemicals or industry sectors on the TRI. TRI Annual Report • Operations and maintenance will be reduced to meet statutory requirements for industry reporting and public access to TRI data. • Publish the annual TRI National Analysis, including describing relevant trends in toxic chemical releases and other waste management and innovative approaches by industry to reduce pollution.
Environmental Justice - $7,268	**Environmental Justice - eliminated**
Tribal General Assistance Program Grants $65,352 Tribal Access Coordination: Improve infrastructure in Tribal lands (Partnership with Department of the Interior, the Department of Health and Human Services, the Department of Agriculture, and the Department of Housing and Urban Development). http://www.epa.gov/ecoambassadors/tribal.	**Tribal General Assistance Program Grants $45,746** Tribal Access Coordination: Improve infrastructure in Tribal lands - limited to water & wastewater infrastructure

Smart Growth	**Smart Growth - not addressed in the 2018 budget**
Environmental Information Categorical Grant - $16,984.0 **Environmental Education program - $8,685.0** **Office of Public Engagement** **Small & Minority Business Assistance - $1,667**	**Environmental Information Categorical Grant - $11,784.0** **Environmental Education program - eliminated** **Office of Public Engagement - eliminated** **Small & Minority Business Assistance - eliminated**
Restore & Preserve Land	***Restore Land***
Brownfields $25,544 Brownfields Grants - $47,654.0	**Brownfields $16,082** Brownfields Grants - $33,358.0
Underground Storage Tanks/Leaking Underground Storage Tanks $91,766 Leaking Underground Storage Tank Clean up $9,222 Leaking Underground Storage Tank Prevention $25, 321 UST Grants - $1,495.0 in July 2015, the EPA finalized the updated federal regulations for the UST program (implemented by states). LUST (cleanup) Cooperative Agreements $54,935. Twice each year, the EPA collects data regarding LUST performance measures and makes the data publicly available.	**Underground Storage Tanks/Leaking Underground Storage Tanks $47,429** Leaking Underground Storage Tank Clean up $6,364 Leaking Underground Storage Tank Prevention - eliminated UST Grants — eliminated Updated federal regulations for the UST program - not addressed in the 2018 budget LUST Cooperative Agreements $38,840 Publication of LUST data - not addressed in the 12018 budget

Oil Spill Prevention, Preparedness and Response program $14,382	Oil Spill Prevention $12,100
Emergency Preparedness	**Emergency Preparedness**
• Lead responder for cleanup of all *inland zone spills*, including transportation related spills from pipelines, trucks, railcars, and other transportation systems	• The EPA's responsibility to respond to *inland oil spills* within 12 hours cannot be delegated or shared with any other federal agency, state, or local government.
• Provides technical assistance and support to the U.S. Coast Guard for coastal and *maritime oil spills*.	
• Multi-media training exercise development/implementation for responders (states, local communities, tribes and other federal officials)	• Deliver required annual oil spill inspector training to federal and state inspectors.
• Provide technical assistance, assets, and outreach to industry, states, and local communities to ensure national safety and security for chemical and oil incidents.	
Spill Prevention, Control and Countermeasure (SPCC) regulation	**Spill Prevention, Control and Countermeasure (SPCC) regulation**
• Bring into compliance 60 percent of SPCC facilities that were found to be non-compliant during FY 2010 through FY 2016 by the end of FY 2017.	• Compliance targets - not addressed in the 12018 budget
Product Schedule listing bioremediation, dispersants, surface washing, surface collection, and other agents that may be used to remediate oil spills.	**Product Schedule listing bioremediation, dispersants, surface washing, surface collection, and other agents that may be used to remediate oil spills.**
• EPA published a proposed rule on January 22, 2015, and is in the process of analyzing the comments received from stakeholders. In 2017, the EPA expects to finalize the Subpart J rule and propose modifications to the SPCC rule to address the requirements imposed by the Water Resources Reform and Development Act (WRRDA).	• Maintain the product schedule. Proposed modifications to address new oil remediation product requirements - not addressed in the 2018 budget
Facility Response Plan (FRP) regulation	**Facility Response Plan (FRP) regulation**
• In FY 2017, the EPA's goal is to bring into compliance 60 percent of FRP facilities that were found to be non-compliant during FY 2010 through FY 2016 by the end of FY 2017. 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.	• Compliance targets - not addressed in the 2018 budget
• The FY 2017 Oil Spill program request provides additional resources for inspections at high risk FRP regulated facilities. These inspections require more extensive	• Increased inspections - not addressed in the 2018 budget

Superfund $1,063,355 **Superfund Emergency Response and Removal program; Emergency Preparedness $188,583** **Superfund [& Federal Facilities] Enforcement Program $178,403** • 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 proposes to provide $21.8 million to the Department of Justice through an Interagency Agreement. **Superfund Federal Facilities Enforcement $28,061** **Superfund Remedial program $500,048**	**Superfund $$745,728** **Superfund Emergency Response and Removal program; Emergency Preparedness $154,428** **Superfund [& Federal Facilities] Enforcement Program $94,418** • Due to resource levels within the FY 2018 budget request, DOJ support for Superfund enforcement will need to come from DOJ's base resources. • The agency will streamline the financial management aspects of Superfund cost recovery and the collection of related debt to the federal government. **Superfund Federal Facilities Enforcement - $0 {$19,553}** $19,553 is allocated for Federal Facilities Enforcement with the Superfund Enforcement Program **Superfund Remedial program $341,803**
RCRA Corrective Action $36,860.0	**RCRA Corrective Action $31,947**

Research: Sustainable and Healthy Communities $140,692	***Research: Sustainable and Healthy Communities $54,715 - research focus to be re-prioritized***
	Board of Scientific Councilors and the Science Advisory Board will evaluate performance and advising the EPA on its **strategic research direction** [Note: One of Scott Pruitt's first actions was to dismiss academic scientists serving on EPA's science advisory boards, creating opportunities to appoint scientists from industry. 38 science advisers get pink slips — internal email]
In FY 2017: • Sustainable Approaches for Contaminated Sites and Materials Management	Not addressed in the 2018 budget
• Provide research to managers addressing cleanup at contaminated sites	Prioritize efforts to support the EPA' s program offices and state and Tribal partners in protecting and restoring land.
• 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 and arctic conditions.	Continue to develop or revise protocols to test oil spill control agents
• Develop improved characterization and remediation methods for fuels released from leaking underground storage tanks	Not addressed in the 2018 budget.
• Community Well-being (Environmental Justice focus) How the natural and built environment affects the health and well-being of urban residents. This research will address impacts in all communities including communities and tribes that are at risk for disproportionate environmental and health impacts.	Retained: Conducting valuation of ecosystem services Studying how ecosystem services impact human health Measuring impact on vulnerable populations (e.g. children) EnviroAtlas, a web-based atlas of ecosystem services (see next cell)
• Decision Support and Innovation tools for communities	Prioritize efforts to provide community decision makers with decision tools to support community health and well-being.
• Integrated Solutions for Sustainable Outcomes Research will develop methods and data that will allow communities to consider	Not addressed in the 2018 budget.

Communities, Land & Development: Performance Plan Details

EPA's 2017 Workplan & Budget Priorities	EPA's 2018 Workplan & Budget Priorities

Cleaning Up Communities and Advancing Sustainable Development $140,253. (requested)

The EPA leads efforts to preserve, restore, and protect our land, for current and future generations. In communities across the country, the EPA improves the health of American families and protects the environment by cleaning up and restoring valuable local assets, preventing contamination, and responding to emergencies. Collaborating with and effectively leveraging efforts of other federal agencies, states, tribes and local communities, the EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around brownfields, Superfund, underground storage tank, and other hazardous waste sites. The EPA uses resources to improve oversight of chemical facilities (storage and manufacturing), conducted in coordination with other federal agencies, to prevent and, if needed, respond to chemical facility accidents.

Cleaning up contaminated sites optimizes reuse of using existing infrastructure and results in more efficient and livable communities. Encouraging the minimization of environmental impacts throughout the full life cycle of materials, the EPA's programs promote sustainability. 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. Through the prevention of releases and the cleanup of existing contamination and efforts to more effectively reuse materials, the EPA protects and restores air and water resources. Uncontrolled waste releases often affect the quality of the air and cause contamination of groundwater and surface water, contaminating drinking water supplies. Contamination may cause acute illnesses or chronic diseases and threaten healthy ecosystems. Unintended consequences of local land use and infrastructure investments may cause environmental harm, such as increased stormwater runoff, loss of open space, and increased greenhouse gas emissions.

The EPA works collaboratively with international, state, Tribal, and local partners to reach its goals and consider the effects of decisions on communities, placing an emphasis on those areas that are disadvantaged, overburdened and underserved. The EPA will continue to work with communities to help them understand and address risks posed by intentional and accidental releases of hazardous substances into the environment and ensure that

Restoring Contaminated Sites to Productive Use, Creating Jobs and New Economic Opportunities $992.2

The EPA works to improve the health and livelihood of all Americans by cleaning up and restoring our land, preventing contamination, and responding to emergencies. Approximately 166 million people – roughly 53 percent of the U.S. population and 55 percent of children under the age of 5 – live within three miles of a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), Resource Conservation and Recovery Act (RCRA) Corrective Action, or a Brownfields site that received EPA funding. Collaborating with and effectively leveraging efforts of other federal agencies, industry, states, tribes, and local communities, the EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around hazardous waste sites.

The EPA partners with states, tribes and industry to prevent and reduce exposure to contaminants. Superfund and 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 the generation, transportation, treatment, storage, or disposal of waste as well as works to clean up contamination at active sites.

The EPA works collaboratively with international, state, Tribal, and local governments to reach its goals and consider the effects of decisions on communities. The EPA will continue to work with communities to help them understand and 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. The EPA's efforts are guided by scientific data, tools, and research that alert us to emerging issues and inform decisions on managing materials and addressing contaminated properties.

Promote Sustainable and Livable Communities - $481,556

Sustainable Materials Management (SMM) $1.6 million

The Resource Conservation and Recovery Act (RCRA) and the Pollution Prevention Act establish the EPA's role to promote and encourage the conservation of materials and energy resources to protect human health and the environment. The EPA invests in Sustainable Materials Management (SMM) in order to efficiently and effectively minimize environmental impacts throughout the full life cycle of materials—from raw materials extraction, through transportation, processing, manufacturing, and use, as well as reuse, recycling, and disposal. The cradle-to-cradle approach highlights ways to reduce waste throughout the life- cycle and to use waste materials as commodities to grow industries and associated jobs. Waste management and recycling accounts for $82 billion dollars in revenue in the U.S., equal to 0.5 percent of the annual GDP. Nearly 8.8 million tons of materials and products offset the use of virgin materials through SMM in calendar year 2013, reducing greenhouse gas emissions by more than 27.7 million metric tons of carbon dioxide equivalents (MMTCO2E)—and providing over $1.1 billion in benefits to society by reducing damages from climate change. The SMM program performs a unique coordinating role, bringing together various public and private organizations and providing guidance for redirecting materials away from disposal and towards beneficial uses.

Through the Resource Conservation and Recovery Act (RCRA) Waste Minimization program, industries are able to become more efficient, which allows the U.S. to conserve virgin resources, including natural resources, fossil fuels, minerals, and precious metals. By undertaking activities such as reducing, reusing, and recycling materials that would otherwise be disposed, industries are saving money and preventing pollution, providing significant benefits to health and the environment. Representative activities include efforts to prevent food waste, increase the recycling of electronics, and reduce waste from federal facilities.

GHG emissions associated with materials/waste

Americans' use of materials has a strong association with greenhouse gas (GHG) emissions. In 2013, Americans generated about 254 million tons of trash and recycled and composted over 87 million tons of this material, equivalent to a 34.3 percent recycling rate. On average, Americans recycled and composted 1.51 pounds out of our individual waste generation rate of 4.40 pounds per person per day. The EPA's 2009 report, Opportunities to Reduce Greenhouse Gas Emissions through Materials and Land Management Practices, shows that approximately 42 percent of U.S. GHG emissions are associated with materials management. These GHG emissions can be reduced through materials recovery. In 2013, the 87 million tons of municipal solid waste (MSW) recycled

Sustainable Materials Management - eliminated

Strategic Environmental Management $1 million

In FY 2018, the agency requests $1 million and 5.0 FTE to focus on analyzing the economic and regulatory impacts on the largest manufacturing sectors of the U.S. economy, streamline permitting processes and provide technical assistance to communities. The EPA will build constructive relationships with the largest manufacturing sectors of our economy. The goals are to ensure that the agency understands the needs of our customers, the regulated community, and states; identifies collaborative and innovative solutions to overcome barriers that prevent job creation and economic growth; and provide for better-informed rulemakings, reduced burden, increased transparency about environmental performance, and develop efficient, effective, consensus-based solutions to environmental problems.

Waste Management (Resource Conservation & Recovery Act) $70.4 million

The RCRA program is critical to comprehensive and protective management of solid and hazardous materials for the entire lifecycle.In FY 2017, RCRA permits for approximately 20,000 hazardous waste units (such as incinerators and landfills) at 6,600 treatment, storage, and disposal facilities 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. The EPA is facing an increasing number of state implementation support requests, including help addressing complex regulatory and statutory interpretation issues.

- ***Hazardous Waste Financial Assistance Grants - $99,503***

  Under the Resource Conservation and Recovery Act (RCRA), the EPA successfully partners with state and local governments, as well as American businesses and non-governmental organizations, to significantly improve waste and material management practices. Through these programs, the EPA and the states protect human health and the environment by minimizing waste generation, preventing the release of millions of tons of hazardous wastes from hazardous waste generators and management facilities, and cleaning up land and water. Authorized states conduct most of the direct implementation of permitting, corrective action, and enforcement components of the RCRA hazardous waste management program.

  The Hazardous Waste Financial Assistance Grants program applies to all 50 states and 6 territories. Currently, 48 states and 2 territories are authorized to implement the RCRA program with regulatory direction and oversight from the EPA. The agency provides funding assistance through grant programs and participates in work-sharing with states and tribes. When appropriate, these grants also are used to support tribes in conducting hazardous waste work in Indian Country. In addition, the EPA directly implements the RCRA program in the states of Iowa and Alaska.

- ***Permits & technical support to state implementation support requests***

  In FY 2017, RCRA permits for approximately 20,000 hazardous waste units (such as incinerators and landfills) at 6,600 treatment, storage, and disposal facilities 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. The EPA is facing an increasing number of state implementation support requests, including help addressing complex regulatory and statutory interpretation issues. Requests for this type of support are expected to continue in FY 2017. The EPA's long-term goal

Waste Management (Resource Conservation & Recovery Act) - $41.2 million

The FY 2018 budget provides $41.1 million to the RCRA Waste Management program. The EPA will focus on PCB cleanups and providing work-sharing and leadership assistance to the states and territories authorized to implement the permitting program and directly implements the entire RCRA program in two states.

Hazardous Waste Financial Assistance Grants - $69,652

Permits & technical support to state implementation support requests

In FY 2018, RCRA permits for approximately 20,000 hazardous waste units (such as incinerators and landfills) at 6,600 treatment, storage, and disposal facilities will be issued, updated or maintained. EPA will provide work-sharing and leadership assistance to the states and territories authorized to implement the permitting program and directly implement the entire RCRA program in two states.

Chemical Facility Safety: State and Local Prevention and Preparedness $15,289

The EPA's State and Local Prevention and Preparedness program has responsibility for the national regulatory framework to prevent, prepare for, and respond to catastrophic accidental chemical releases at industrial facilities throughout the United States. (This program includes the Clean Air Act Section (CAA) 112(r) Risk Management Program (RMP) and the Emergency Planning and Community Right-to-Know Act (EPCRA) program.) Accidents at chemical facilities have resulted in injury, death, severe environmental damage, and great financial loss. Accidents reported to the EPA since the beginning of calendar year 2005 have resulted in approximately 62 deaths, over 2,056 injuries, nearly 368,000 people sheltered in place, and more than $2.8 billion in on-site and off-site damages. States and communities often lack the capacity needed to prevent, prepare for, and /or respond to these emergencies. Only 9 states and 5 counties have asked for and received delegated authority for this program. The EPA therefore plays a significant and vital role in working with facilities, emergency planners, first responders, and local communities to prevent and prepare for the release of hazardous substances.

Risk Management Program rule

On August 1, 2013, the White House issued Executive Order (EO) 13650 on Improving Chemical Facility Safety and Security, after the disaster in West, Texas. The EO serves to enhance the safety and security of chemical facilities and reduce risk associated with hazardous chemicals to owners and operators, workers, and communities. The **Chemical Facility Safety and Security Working Group**, established by Executive Order 13650, released the status report entitle*d Actions to Improve Chemical Facility Safety and Security – A Shared Commitment* on June 6, 2014. Through listening sessions and meetings with various stakeholders during the EO implementation process, the EPA identified several areas of focus for improving enhancing the SERC and LEPC infrastructure and improving chemical facility safety. Those areas include: enhancing the Computer-Aided Management of Emergency Operations (CAMEO) system to better support local planners and responders; modernize the RMP regulations to expand prevention requirements; improve facility coordination with LEPCs; and improve Federal, State, Tribal, and local coordination on all aspect of chemical facility safety including training, inspection, and data sharing.

The **EPA initiated work within base resources on several of the actions identified in the status report action plan to expand support for local**

Chemical Facility Safety $10,011

States and communities often lack the capacity needed to prepare for and/or respond to these emergencies or to prevent them from happening, and the EPA fills valuable role in filling this gap.

The program establishes a structure composed of federal, state, local, and Tribal partners who work together with industry to protect emergency responders, local communities, and property from chemical risks through advanced technologies, community and facility engagement, and improved safety systems.

Risk Management Program rule

Conduct **reconsideration of RMP** rule as a result of three petitions for reconsideration requested under the Clean Air Act. Reconsideration may result in further amendments to the final rule.

Petitioners: American Chemistry Council ("ACC"), the American Forest & Paper Association ("AF&PA"), the American Fuel & Petrochemical Manufacturers ("AFPM"), the American Petroleum Institute ("API"), the Chamber of Commerce of the United States of America (the "Chamber"), the National Association of Manufacturers ("NAM"), and the Utility Air Regulatory Group ("UARG").
https://www.epa.gov/sites/production/files/2017-03/documents/rpm_coalition_-_cover_letter_and_petition_for_reconsideration_and_stay_508_3-13-17.pdf

See: RMP Amendments Stalled by Industry Petition

"The RMP Rule includes requirements for larger facilities to conduct root cause analyses following major releases or near misses, conduct third party audits following certain reportable incidents, adopt certain enhanced emergency response activities, and for only a few industrial sectors, conduct safer technology and alternatives analyses as part of ongoing process hazard reviews. Generally, industry groups have expressed concerns that EPA's changes will create disincentives for public collaboration, interfere with effective process safety programs and increase security concerns, while environmental groups have argued that EPA's changes will

Toxics Release Inventory/Community Right to Know $13,856	Toxics Release Inventory/Community Right to Know $8,680
The EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, high-quality and relevant information. The Toxics Release Inventory (TRI) program supports the EPA's mission by annually publishing, for the public, release and other waste management (e.g., recycling) and pollution prevention data on over 650 toxic chemicals from approximately 20 thousand industrial and federal facilities. TRI data help inform communities and other stakeholders about toxic chemical releases and other waste management and pollution prevention practices by facilities in their neighborhoods and across the nation. It also can be used to help ensure facility compliance with environmental laws and regulations, as well as promote pollution prevention and source reduction activities by facilities. Due to the broad scope and timeliness of the data, the TRI Program is a premiere source of toxic chemical release data for communities, non-governmental organizations, industrial facilities, academia, and government agencies.	In FY 2018, the EPA will focus on the collection of the chemical release data and making the data available to governments and the public.
In FY 2017, the EPA will continue to enhance the regulatory foundation of TRI to **ensure that communities have access to timely and meaningful data on toxic chemical releases and other waste management and pollution prevention activities at facilities**. As part of this effort, the TRI program will continue to clarify toxic chemical reporting requirements, improve the reporting experience, explore opportunities to use this valuable information, and share pollution prevention approaches with industry.	As required by the Emergency Planning and Community Right-to-Know Act (EPCRA), the agency will **respond to EPCRA petitions** regarding TRI within 180 days after receipt. Petitions may request to add or delete chemicals or industry sectors on the TRI. The quantity and complexity of petitions are unknown until submitted to the agency.
With the implementation of the rule on "Electronic Reporting of Toxics Release Inventory Data," effective January 21, 2014, facilities are required to **report non-trade secret TRI data to the EPA** using electronic software provided by the agency. Electronic reporting of TRI data provides numerous benefits to the EPA, the regulated community and the public. Electronic reporting delivers transparent, readily available and understandable data more quickly to the public while decreasing the time needed for facilities to complete the reporting form; this decreases the cost to the EPA and the regulated community. In FY 2017, the TRI program will continue to provide facilities with an online reporting application, TRI-MEweb, to facilitate the electronic preparation and submission of TRI reports using the EPA's Central Data Exchange (CDX). CDX manages access and authentication services for TRI. In particular, it provides a third-party authentication for reporting facilities using LexisNexis. In addition, TRI data collected by the EPA are shared with states who have an active node on CDX and are partners of the TRI Data Exchange (TDX). Facilities located in states that participate in this exchange, submit reports to the EPA, through CDX. The data are then downloaded by the states or transferred to their nodes using TDX. The EPA will continue to encourage greater participation in the TDX by states, tribes and territories, thereby reducing reporting burdens on TRI facilities.	The TRI program, working with the EPA's Environmental Information program, will **continue to provide reporting facilities with an online reporting application,** TRI-MEweb, to facilitate the electronic preparation and submission of TRI reports through the EPA's Central Data Exchange (CDX). CDX manages access and authentication services for most EPA reporting systems, including the TRI. In particular, it provides a third-party authentication for reporting facilities using LexisNexis. In addition, TRI data collected by the EPA are shared with states who have an active node on CDX and are partners of the TRI Data Exchange (TDX). Facilities located in states that participate in this exchange submit reports to the EPA through CDX. The data are then downloaded by the states or transferred to their nodes using TDX. The EPA will continue to maintain the TDX used by states, tribes, and territories.

Environmental Justice - $7,268 In FY 2017, the EPA will continue to enhance capabilities to engage communities and support their ability to be full partners in agency programs. The Environmental Justice (EJ) program aims to make a visible difference in communities 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 other agency and other federal programs such as Brownfields assessment and cleanup, Urban Waters, Sustainable Communities, and Brownfields Area-Wide Planning. 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 help communities to have capacity and skills and to 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 continue to build community capacity and provide technical assistance and training to overburdened and vulnerable communities. In FY 2017, the proposed budget for Environmental Justice is $15. 9 million.	**Environmental Justice - eliminated**

Tribal General Assistance Program Grants $65,352

In calendar year 1992, Congress established the Indian Environmental General Assistance Program (GAP) which provides grants and technical assistance to tribes to cover the costs of planning, developing, and establishing Tribal environmental protection programs consistent with other applicable provisions of law administered by the EPA, providing for enforcement of such laws by tribes on Indian lands. The EPA works collaboratively with Tribal partners on mutually identified environmental and health priorities to achieve these aims. Funding provided under GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that the EPA may delegate to tribes. Please see http://www.epa.gov/aieo/gap.htm for more information.

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 Indian Environmental General Assistance Program (GAP) is the primary financial assistance program available to tribes to assist with capacity building and the development of environmental protection programs in Indian country. In FY 2017, the EPA will continue to significantly support environmental capacity in Indian country by providing $96.4 million under the GAP grants. The request includes a $30.9 million increase. This will allow tribes to develop multiple media-specific environmental programs and also will ensure adequate resources for grantees to successfully implement the EPA-Tribal Environmental Plans (ETEPs). Tribal resources are essential to address long-standing challenges to recruit and retain qualified environmental professionals to remote Indian country locations and will assist tribes with the implementation of environmental regulatory programs. In addition, in FY 2017, the agency will continue to support environmental research projects with Tribal colleges and universities that will expand capacity to address issue of concern in Tribal communities. These Tribal EcoAmbassador projects41 have benefitted the professors and students involved, while demonstrating an ability to focus resources and leverage support within Tribal communities while strengthening Tribal youth.

Tribal Access Coordination: Improve infrastructure in Tribal lands

(partnership with Department of the Interior, the Department of Health and Human Services, the Department of Agriculture, and the Department of Housing and Urban Development).

The EPA has a long history of working with other federal agencies to address shared environmental and human health concerns in Indian country. The EPA, the Department of

Tribal General Assistance Program Grants $45,746

The EPA ensures federal environmental laws are implemented in Indian country. In situations in which tribes are not administering Tribal environmental programs, the EPA generally directly implements those programs to ensure protection of Tribal health and the environment. At this time, EPA directly implements the majority of federal environmental programs in Indian country. The EPA seeks to ensure that federal environment statutes are as effective inside Indian county as they are outside Indian country. 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 and to working with other federal agencies to effectively leverage resources. The EPA, the Department of the Interior, the Department of Health and Human Services (Indian Health Service), the Department of Agriculture, and the Department of Housing and Urban Development have worked through several Memoranda of Understanding (MOUs) as partners to improve infrastructure on Tribal lands. The Infrastructure Task Force will build on prior partnership success, including improved access to funding and reduced administrative burden for Tribal communities, through the review and streamlining of agency policies, regulations, and directives, as well as improved coordination of technical assistance to water service providers and solid waste managers through regular coordination meetings and web-based tools.

Tribal Access Coordination: Improve infrastructure in Tribal lands - limited to water & wastewater infrastructure

The EPA, the Department of Agriculture, the Department of Housing and Urban Development, the Department of Health and Human Services, the Indian Health Service, and the Department of the Interior have worked together to maintain and improve coordination in delivering water and wastewater infrastructure services and financial assistance to American Indian communities. The agencies work together to increase the number of American Indian

Smart Growth	***Smart Growth - not addressed in the 2018 budget***
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. 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. The Smart Growth program helps 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, 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. In FY 2017, 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 Information Categorical Grant - $16,984.0

Strengthening state, Tribal, and international partnerships is a priority for the EPA. Funds provided under this categorical grant support the Environmental Information Exchange Network (EN) which is a critical component of the agency's strategy. The EN is a standards-based, secure approach for the EPA and its state, Tribal and territorial partners to exchange and share environmental data over the Internet. Through its use of technology and data standards, open- source software, shared services and reusable tools and applications, the EN, in tandem with the agency's E-Enterprise efforts, offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently. E-Enterprise for the Environment is a transformative 21st century strategy – jointly governed by states and the EPA – for modernizing government agencies' delivery of environmental protection. As a part of E- Enterprise, it is a priority to further enhance portal compatibility and shared services provided by the Exchange Network. This will lead to improved decision making and reduced regulatory burden by making data more accessible, eliminating redundant data collection, resolving issues with data validation, streamlining processes, and avoiding development and operational costs for redundant IT systems and components.

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 (ECOS) agreed upon the EN as the standard approach for the EPA, state, tribe and territorial data sharing. The grant program has provided the funding to make this approach a reality. The EPA plays a critical role in program planning, management and evaluation for the Exchange Network. Specifically, the EPA supports the Exchange Network and E-Enterprise governance which oversees strategic planning, administers the Network's grant program, issuing approximately 40 grants annually and overseeing nearly 150 active grants, partners with tribes to expand Tribal participation in the Exchange Network and implements the Cross-Media Electronic Reporting Regulation (CROMERR). The EPA also conducts return on investment analyses on specific electronic data exchange projects in partnership with programs and Regional Offices.

Environmental Education program - $8,685.0

This program promotes delivery of environmental education through science-based

Environmental Information Categorical Grant - $11,784.0

Support for the Exchange Network program and E-Enterprise business strategy through a cooperative agreement with ECOS under the associated program support cost authority (Public Law 113-76). This includes direct support to both Exchange Network and E-Enterprise joint governance, each of which represents a cross-section of the EPA, state and Tribal organizations. The cooperative agreement assists state, Tribal and territorial organizations in fulfilling the missions of both programs by providing programmatic, policy, technical and administrative support; promoting information-sharing amongst state/Tribal/territorial/federal partners; enhancing communication and outreach; and convening national user meetings.

Environmental Education program - eliminated

Restore & Preserve Land

Approximately 166 million people – roughly 53 percent of the U.S. population and 55 percent of all U.S. children under the age of 5 – live within three 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. The EPA is making significant progress in protecting people who live near sites, assuring that in advance of the full cleanup process, and unacceptable human exposures to contaminants are eliminated or controlled as soon as possible. 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 1,164 final NPL sites, deleted NPL sites and non-NPL sites with Superfund Alternative Approach (SAA) agreements in place; and to control human exposures to contamination at 1,457 final NPL sites, deleted NPL sites and non-NPL sites with SAA agreements in place by the end of FY 2017.

The RCRA Corrective Action and Superfund programs have made significant progress in stabilizing exposure, while longer-term cleanup moves forward. As of FY 2013, approximately 30 million people lived within a mile of a Superfund or RCRA Corrective Action site where human exposure to contamination has been controlled. By September 30, 2017, an additional 18,600 sites will be made ready for anticipated use (RAU). RAU is an indicator that the local, state, or federal agency has determined that cleanup goals and engineering and institutional controls have been implemented for the media that affects current and reasonably anticipated future use so that the sites are available for communities to use or reuse.

In FY 2017, the agency is investing nearly $1.31 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 the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or 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.

The EPA will work to conduct transparent and accessible decision-making processes, deliver information that communities can use to participate meaningfully, and help make timely cleanup decisions and produce outcomes that are responsive to community

Brownfields $25,544

This program supports states, local communities, and tribes work to assess and cleanup sites within their jurisdiction and return them to productive reuse. Brownfields sites are often in the heart of America's downtowns and former economic centers. Reclaiming these vacant or underutilized properties and repurposing them is at the core of the EPA's community revitalization efforts. In looking at census data, the EPA found that approximately 104 million people (roughly 33 percent of the U.S. population) live within three miles of a Brownfields site that received EPA funding, including 35 percent of all children in the U.S. under the age of five. By awarding brownfields grants, the EPA is making investments in communities so that they can realize their visions for environmental health, economic growth, job creation, and advancing social goals.

EPA requests a $12.1 million increase in Brownfields resources. This increase will provide **funding to communities for environmental revitalization and economic redevelopment** efforts to work together to plan, assess, cleanup, and reuse brownfields, and to prioritize ongoing efforts to target Brownfields work toward small and rural communities, and fund new Tribal grantees. Specifically within this increase, resources will support **area-wide planning (AWP) grants** as part of the Administration's POWER+ initiative, additional direct assessment grants, Targeted Brownfield Assessments in communities without access to other assessment resources.

Award of New Cooperative Agreements: Development of the cooperative agreement funding solicitations, and the selection, award and ongoing management of the approximately 500 additional grant awards. The EPA brownfields grants are administered through cooperative agreements. As part of its grants management role, the EPA will ensures that applicable grant management requirements are met by the recipient. This is supported through EPA personnel and contracts for competition support. In FY 2017, the EPA plans to **award approximately 97 assessment cooperative agreements** (estimated $24.0 million) that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites. In FY 2017, the EPA expects to continue the Assessment Coalition option which allows three or more eligible entities to submit one grant proposal for up to $600 thousand to assess sites within the assessment coalition members' area. This level of assessment funding will lead to approximately 582 site assessments in the three years following the awards. Funding also will support approximately 38 direct cleanup cooperative agreements (estimated $7.5 million) to enable eligible entities to clean up properties that the recipient owns. This funding will lead to approximately 38 sites cleaned up. The agency will award direct cleanup cooperative agreements of up to $200 thousand per site to eligible entities and non-profits.

Brownfields $16,082

Brownfield sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The Brownfields program supports these efforts by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. In FY 2018, the Brownfields program will continue to manage over 900 assessments, cleanup, revolving loan fund (RLF), area-wide planning (AWP), and Environmental Workforce Development and Job Training (EWDJT) cooperative agreements; as well as Land Revitalization projects.

Develop and manage five competitively awarded and two allocation-based cooperative agreement funding solicitations. **Review, select, and award 450 new cooperative agreements** which will lead to over 1,200 projects and approximately $1.1billion and 5,800 jobs leveraged in future years.

Underground Storage Tanks/Leaking Underground Storage Tanks $91,766 The UST program has achieved significant success in closing releases since the beginning of the program. Of the approximately 528,000 releases reported since the beginning of the UST program in 1988, approximately 456,000 (or 86.4 percent) have been cleaned up through FY 2015. However, while the UST program continues to make progress decreasing the overall backlog, the pace of cleanups is declining. 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. In FY 2017, the UST program will primarily focus on: inspections; technical assistance; financial assurance mechanisms; safe transition to alternative fuels; implementation in Indian country; bringing petroleum brownfields properties into productive use, and implementing the revised UST regulations. While considerable progress has been made over the last ten years, much work remains. The LUST Prevention and LUST Cleanup programs have an important relationship. The fewer new releases we experience in the future because of a robust prevention program will allow us to focus on existing and historic releases in the cleanup program. As the EPA has implemented improvements and increased frequency of inspections and other prevention efforts, there also has been a decrease in newly confirmed releases. The continued reduction in confirmed releases will remain a critical component in backlog reduction, but given that new releases are confirmed each year, maintaining cleanup progress is essential as well. In partnership with state and Tribal programs, strategies to reduce the number of remaining LUST sites that have not reached cleanup completion will leverage best practices and support management, guidance, and enforcement activities. End of year FY 2015 data show that, of the approximately 528,000 releases reported since the beginning of the UST program in 1988, more than 456,000 (or 86.4 percent) have been cleaned up. This means approximately 72,000 releases remain that have not reached cleanup completion. In addition, even though the EPA and its partners have made major progress in reducing the number of new releases that add to this cleanup backlog, thousands of new releases are discovered each year. In FY 2015, the EPA completed 32 cleanups in Indian country. Since FY 2011 to FY 2016, the EPA's budget to clean up LUST sites in Indian country has decreased by 39 percent. Recognizing these realities, the EPA lowered the performance targets for FY 2016 and FY 2017 because the sites are more complex and, therefore, more expensive resulting in longer-term cleanups than were completed in the past. While there are a number of difficult and costly LUST sites with substantial releases in Indian country, the EPA has become more vigilant about optimizing remediation plans. This increased scrutiny adds	**Underground Storage Tanks/Leaking Underground Storage Tanks $47,429** [The 2018 Congressional Justification document does not contain a corresponding summary of the UST/LUST program.]

Oil Spill Prevention, Preparedness and Response program $14,382

The Oil Spill program helps protect U.S. waters by effectively preventing, preparing for, responding to, and monitoring oil spills. The EPA's Oil program protects U.S. waters by preventing, preparing for, and responding to inland oil spills. The discharge of oil into U.S. waters from facilities can threaten human health and cause severe environmental damage. The Deepwater Horizon (DWH) oil spill resulted in 11 deaths, millions of barrels of spilled oil, and untold economic and environmental damage. More than 30,000 oil discharges and hazardous substance releases occur in the U.S. every year, with a number of these spills occurring in the inland zone for which the EPA has jurisdiction. The EPA responds to about 200 of these oil spills each year.

Emergency Preparedness

The EPA conducts its activities as part of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the federal government's plan for responding to both oil spills and releases of hazardous substances. The EPA serves as the **lead responder for cleanup of all inland zone spills, including transportation related spills from pipelines, trucks, railcars, and other transportation systems and provides technical assistance and support to the U.S. Coast Guard for coastal and maritime oil spills.** The EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard (USCG), to obtain reimbursement for site-specific oil spill response activities. However, the EPA utilizes congressionally appropriated Oil funding requested here to support oil spill prevention and preparedness, response readiness in the inland zone, and compliance monitoring through inspections.

The Oil program assists with **multi-media training and exercise development/ implementation** for responders, which establish and sustain coordination with states, local communities, tribes and other federal officials. In addition, the program may provide technical assistance, assets, and outreach to industry, states, and local communities as part of the agency's effort to ensure national safety and security for chemical and oil incidents. In FY 2017, EPA will **train emergency responders on risks of spills associated with the rapid expansion in production and transportation of crude shale oils.** EPA requests a $6.1 million increase over the FY 2016 Enacted Budget. These additional funds will focus on training emergency responders given the increased risks of spills associated with the rapid expansion in production and transportation of crude shale oils. Increased domestic production rates and increased shipment of oil by rail, combined with the volatility hazards associated with crude shale oil, pose new

Oil Spill Prevention $12,100

The inland oil spills can threaten human health, cause severe environmental damage, and create financial loss to industry and the public. The Oil Spill program helps protect the American people by effectively preventing, preparing for, responding to, and monitoring inland oil spills. The EPA serves as the lead responder for cleanup of all inland zone spills, including transportation-related spills, and provides technical assistance and support to the U.S. Coast Guard for coastal and maritime oil spills.

Emergency Preparedness

The EPA's responsibility to respond to **inland oil spills** within 12 hours cannot be delegated or shared with any other federal agency, state, or local government.

Deliver required annual oil spill inspector training to federal and state inspectors.

Superfund $1,063,355

The Superfund Emergency Response and Removal program resources address releases that pose an imminent threat to public health or welfare and the environment, while the Superfund Remedial program addresses more long-term cleanup activities. Superfund Removal partners with the Superfund Remedial program, as needed, for assessment and site cleanup activities involving National Priorities List (NPL), non-NPL, and potentially responsible party (PRP) actions.

Superfund Emergency Response & Removal program; Emergency Preparedness $188,583

The EPA's Superfund Emergency Response and Removal program (SF Removal) responds to incidents involving release of hazardous substances, pollutants or contaminants, regardless of cause. The EPA's SF Removal program ensures responders to imminent threats on land or inland waterways have the most up-to-date information and the most effective tools to contain or remove these substances. These tools are provided through training, on-site technical expertise, and coordination with other emergency responders. The SF Removal program is the "backbone" or foundation of national response, and as such, it is a capability that is essential to national resilience. The White House has identified this program as the agency's only Primary Mission Essential Function (PMEF).

The SF Removal program has valuable expertise that assists in the response, prevention, and preparedness activities associated with the potential releases of chemical, oil, and hazardous substances, discharges to our inland waterways, or any other type of hazard. The program assists with multi-media training and exercise development/implementation for responders which establish and sustain coordination with states, local communities, tribes, and other federal officials. In addition, the SF Removal program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the agency's effort to ensure national safety and security for chemical and oil incidents.

The Superfund Removal Program has been consistently used to complement several response areas including agency oil and Superfund homeland security activities. The SF

Superfund $745,728

In FY 2018, the EPA is looking to identify efficiencies and reduce administrative costs to accelerate the pace of cleanups. The agency will continue to help communities clean up and revitalize once productive properties by: removing contamination; enabling economic development; taking advantage of existing infrastructure; and maintaining, and improving quality of life. There are multiple benefits associated with cleaning up contaminated sites: reducing mortality and morbidity risk; preventing and reducing human exposure to contaminants; making land available for commercial, residential, industrial, or recreational reuse; and promoting community economic development.

Superfund Emergency Response & Removal program; Emergency Preparedness $154,428

The Emergency Response and Removal program (SF Removal) is responsible for the agency's only Primary Mission Essential Function. In the case of a national emergency, the EPA is charged with preventing limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. The SF Removal program is the foundation of federal emergency response and is essential to managing risks from releases of hazardous substances, pollutants, or contaminants. Typical situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. The EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan (NCP).

The SF Removal program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the agency's effort to ensure national safety and security for chemical and oil responses. The EPA trains, equips, and deploys resources in order to manage, contain, and remove contaminants. These substances, until contained or removed, have the potential to significantly damage property, endanger public health and have critical environmental impact on communities.

Agency On-Scene Coordinators (OSCs) make up the core of the SF Removal program. These trained and equipped EPA personnel respond to, assess, mitigate, and cleanup up environmental releases regardless of the cause. States, local, and Tribal communities rely upon the OSC's expertise and support to deal with environmental emergencies that are beyond their capabilities and resources.

RCRA Corrective Action $36,860	RCRA Corrective Action $31,947
The EPA's Corrective Action program focuses its resources on the 3,779 operating hazardous waste facilities undergoing cleanup. A subset of approximately six thousand facilities with potential corrective action obligations under the Resource Conservation and Recovery Act (RCRA), these facilities include some of the most highly contaminated and technically challenging sites the EPA confronts in its cleanup programs. Preventing exposures to unacceptable levels of contamination in soils or contaminated groundwater is a top priority for the program. Over 108 million people live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population). While there is no single way to characterize communities located near these sites, the population residing in close proximity to RCRA's cleanup sites is more minority, low income, linguistically isolated, and less likely to have a high school education than the U.S. population as a whole. As a result, these communities may have fewer resources to address concerns about their health and environment. The total area covered by these corrective action sites is approximately 18 million acres. The cost to clean up sites under the RCRA program can vary widely, with some costing less than one million dollars, and others exceeding 50 million dollars. The EPA's obligation is to protect human health and the ecosystem at these facilities during cleanup and for the long-term where waste is managed in place. A successful RCRA Corrective Action program assures that hazardous waste management facilities address contamination during the operational life of the facility when they are financially viable, thereby reducing the likelihood of the site becoming a brownfield or a Superfund site. In addition to preventing exposures, corrective action cleanup has a proven record of helping revitalize communities and spurring economic development by enabling reuse of land for housing, industrial, or commercial projects. Ridding neighborhoods of underutilized and blighted properties can reduce crime and bolster community pride and well-being, raise property values, address environmental justice issues, as well as create new opportunities for commerce, employment, and property tax revenue. The EPA works in partnership with states, having authorized 44 states and one territory to directly implement the corrective action program. State implementation of the Corrective Action program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching State contributions. The agency continues to provide leadership and support to its state partners and serves as lead regulator at a significant, and increasing, number of facilities. As in previous years, the agency **continues to provide technical assistance to authorized states** in the areas of site characterization, sampling, remedy selection, and long-term stewardship at our baseline facilities. States have been challenged in the cleanup program due to downsizing and are looking to the	The program focuses its resources on cleaning up 3,779 priority contaminated facilities (the "2020 Baseline"), which includes highly contaminated and technically challenging sites. Currently, only 31 percent of the 2020 Baseline facilities have completed final and permanent cleanups, leaving over 2,600 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. Additionally, the 2020 Baseline is a subset of approximately six thousand facilities with potential corrective action obligations under the RCRA. The program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the 2020 Baseline facilities, and assess the non-2020 Baseline facilities. In FY 2018, the EPA will: Provide **technical assistance** to authorized states in the areas of site characterization, sampling, remedy selection, and long-term stewardship at 2020 Baseline facilities. For **high priority facilities, perform cleanup work under work-sharing agreements** to assist with facilities that have complex issues or special tasks (*e.g.*, ecological risk

Research

Sustainable and Healthy Communities $140,692

The EPA's Sustainable and Healthy Communities (SHC) program supplies research to support regulatory activities, including protocol development for the National Contingency Plan, and provides on-demand technical support at federal, Tribal, or state-led cleanup sites and during emergencies. The SHC program serves two primary customers: the EPA's federal and regional decision makers, and community decision makers across the country.

The overall research effort is organized around six integrated and transdisciplinary national research programs. The six research programs are:

- Air, Climate, and Energy (ACE)
- Chemical Safety for Sustainability (CSS)
- Homeland Security Research Program (HSRP)
- Human Health Risk Asssessment (HHRA)
- Safe and Sustainable Water Resources (SSWR)
- Sustainable and Healthy Communites (SHC)

Each program is guided by a Strategic Research Action Plan (StRAP) that is the result of a collaboration with, and supportive of, the EPA's program offices and regions.

Every day, communities face challenges with environmental implications, such as the following:

- Management of municipal and hazardous waste
- Health impacts from environmental contamination
- Increased stormwater runoff and flooding
- Loss of green space and ecosystem functions
- Increased greenhouse gas emissions
- Remediation of contaminated sites
- Siting of schools and public facilities
- Planning for roads and mass transit

In FY 2017 the Sustainable and Healthy Communities (SHC) program will continue to support the EPA's program offices and state and Tribal partners in protecting and

Research

Sustainable and Healthy Communities $54,715 - research focus to be re-prioritized

In FY 2018, the EPA research personnel and associated support staff will **analyze existing research data and publish scientific journal articles to disseminate findings** associated with these data.

The EPA has established a standing subcommittee under ORD's Board of Scientific Councilors (BOSC) for the SHC program to **evaluate its performance** and provide feedback to the agency.

In addition, ORD will meet regularly with both the BOSC and the Science Advisory Board over the next several years to seek their input on topics related to **research program design, science quality, innovation, relevance, and impact.** This includes advising the EPA on its **strategic research direction with the review of ORD's recently released Strategic Research Action Plans (StRAPs).**

[Note: One of Scott Pruitt's first actions was to dismiss academic scientists serving on EPA's science advisory boards, creating opportunities to appoint scientists from industry.

38 science advisers get pink slips — internal email]

The EPA also collaborates with several science agencies and the research community to assess our research performance. For example, the EPA is partnering with the National Institutes of Health, National Science Foundation, Department of Energy, and Department of Agriculture.

The EPA also works with the White House's Office of Science and Technology Policy and supports the interagency Science and Technology in America's Reinvestment–Measuring the Effect of Research on Innovation, Competitiveness, and Science (STAR METRICS) effort.

[Note: The Trump Administration has signaled its intent to revise protocols underlying EPA's scientific and economic analysis in a number of ways. See, e.g.

EPA Water Rule Repeal Based on Sloppy Cost Analysis: Economists

The perversity of the climate science kangaroo court (Red Team-Blue Team review)]

Recent accomplishments include:

Identifying Key Factors for Improved Water Quality in Lawrence, MA: SHC has worked closely with Region 1, the City of Lawrence, Groundwork Lawrence23, and the Merrimack Valley Watershed Council24 to map and analyze flood zones, precipitation data, combined sewer overflows, E. coli concentration data, incidents of gastrointestinal illness, and exposure locations to inform actions that reduce potential flooding and improve water quality.

Facilitating Improvements in Great Lakes Areas of Concern: SHC works closely with Region 5, the Great Lakes Program Office, and Great Lakes States to fully integrate environmental protection with the communities' economic vitality. At the St. Louis River Estuary in Duluth, MN, significant improvements already have been made. A 2016 SHC study found that up to 85% of the estuary surface now falls below pollution limits.

Developing Guidelines for Evaluating the Post-Closure Care (PCC) Period for Hazardous Waste Disposal Facilities: SHC is evaluating data to quantify the field performance of engineered containment systems from eight landfills that are nearing the end of their 30-year PCC period. Results from this evaluation will form the basis for technical guidance to evaluate hazardous waste landfills nation-wide per Subtitle C of RCRA.

Improving Children's Health Protection Through Lead Exposure Modeling: In response to the National Drinking Water Advisory Council's (NDWAC)26 recommendations for a revised Lead and Copper Rule, SHC has produced age-specific estimates of lead exposure from water, soil ingestion, food, and air to inform health-based values for lead in drinking water. This effort supplies information to otherwise data-poor areas of exposure research in very young children.

Adding Six New Communities to EnviroAtlas: EnviroAtlas is an interactive online mapping system that displays layers of information on environmental quality, health statistics, and socio-economic factors in specific communities. It provides local leaders with high resolution data to inform decision-making. In 2016, SHC added Austin, TX, Cleveland, OH, Des Moines, IA, Memphis, TN, Minneapolis, MN and New York, NY to the Atlas. The addition of these cities brought the number of EnviroAtlas communities to 18, with another 6 planned for inclusion in the coming fiscal year.

Summary: Chemicals & Pollution Prevention	
EPA's 2017 Workplan & Budget Priorities	**EPA's 2018 Workplan & Budget Priorities**
Ensuring the Safety of Chemicals and Preventing Pollution	**Ensuring the Safety of Chemicals $65 million**
Toxic Substances Control Act Chemical Risk Review and Reduction program $58,443	**TSCA Risk Review & Prevention $65,036**
Toxic Substances Compliance Grants - $4,910	**Toxic Substances Compliance Grants - $3,437**
Pesticide applications review and registration program $100,995	**Pesticide review & registration (FIFRA) $85,526**
Pesticides Program Implementation Grants $12,677 ***Pesticide Enforcement Grants - $18,016***	***Pesticides Program Implementation Grants $8,874*** ***Pesticide Enforcement Grants - $11,050***
Pesticides Science Policy and Biotechnology Advisory Panel -$1,172.0	**Pesticides Science Policy and Biotechnology Advisory Panel - Eliminated**
Lead Risk Reduction program $13,250 ***Lead Paint Categorical Grants $14,022***	**Lead Risk Reduction program - eliminated** ***Lead Paint Categorical Grants - eliminated***
Children's Health Protection $6,535	**Children's Health Protection $2,018**
Research ***Chemical Safety for Sustainability (CSS) $126,688***	***Research*** ***Chemical Safety for Sustainability $84,189***
Human Health Risk Assessment (HHRA) - $37,530	***Human Health Risk Assessment (HHRA) - $22,516***
Endocrine Disruptor Screening Program $$7,539	***Endocrine Disruptor Screening Program - eliminated***
Computational Toxicology	***Computational Toxicology (continuing)***

Other Activities: Emerging Materials (including Nanotechnology)	***Other Activities: Emerging Materials (including Nanotechnology) (continuing)***
Homeland Security Research Program	***Homeland Security Research Program (continuing)***
Pollution Prevention Program $13,115.0	***Pollution Prevention Program - eliminated***
Categorical Grant: Pollution Prevention -$4,756.0	**Eliminated**
Safer Choice Program	**Eliminated**
Economy, Energy, and Environment (E3) Partnership and the Green Suppliers Network (GSN)	**Eliminated**

Chemicals & Pollution Prevention: Performance Plan Details

EPA's 2017 Workplan & Budget Priorities	EPA's 2018 Workplan & Budget Priorities
Ensuring the Safety of Chemicals and Preventing Pollution 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 and underserved populations, including low-income, minority and indigenous populations may be disproportionately impacted by, and thus particularly at risk from, exposure to chemicals. 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. The FY 2017 funding level for Ensuring the Safety of Chemicals and Preventing Pollution is $679.6 million, an increase of $56.4 million over the FY 2016 Enacted Budget.	**Ensuring the Safety of Chemicals $65 million** The EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of unsafe new chemicals into commerce. In FY 2018, $65 million is requested for the TSCA Chemical Risk Review and Reduction Program to support the agency's significant continuing and new responsibilities for ensuring that chemicals in commerce do not present unreasonable risks to human health or the environment. New chemicals will be evaluated and decisions will be based on best available science and the weight of evidence. For chemicals in commerce, the EPA will maintain an ambitious schedule for initiating and completing chemical risk evaluations and, where risks are identified, for initiating and completing regulatory actions to address those risks. The EPA also will implement the new mandates related to determinations on claims for confidentiality for chemical identities.

Toxic Substances Control Act Chemical Risk Review and Reduction program $58,443

Under existing Toxic Substances Control Act (TSCA) authorization, the EPA is charged with the responsibility of assessing the safety of commercial and industrial chemicals and acting upon those chemicals if they pose significant risks to human health or the environment before they enter commerce.

The major activity of the New Chemicals Program is the review of approximately 1,000 premanufacture notices annually (including products of biotechnology and new chemical nanoscale materials) and to ensure that they do not pose unreasonable risks prior to their entry into the U.S. marketplace. In FY 2017, the EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of unsafe new chemicals into commerce.

The requested increase in funding will continue to support ramping up the program's assessment of existing chemicals, building on the success of FY 2014 and FY 2015, when the first risk assessments on Existing Chemicals under TSCA were completed for five chemicals, the first in 28 years.

By September 2017, the EPA will complete more than 3,400 assessments of pesticides and other commercially available chemicals to evaluate risks they may pose to human health and the environment. These assessments are essential in determining whether products containing these chemicals can be used safely for commercial, agricultural, and/or industrial uses. For example, assessments can help determine the potential for chemicals to disrupt endocrine systems or to pose risks to honey bees and other pollinators by outdoor use of pesticides. will invest substantial resources to improve the compliance of pesticide registrations with the Endangered Species Act in accordance with the National Academy of Sciences study/recommendations (http://www.epa.gov/espp/2013/nas.html). 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.

FY 17 activities fall into three major categories:

Obtaining, managing, and making chemical information public

Expand the amount and usability of TSCA information made available to the public through the ChemView database, a database containing information on chemical health and safety data received by the EPA and the EPA's assessment and regulatory actions for specific chemicals. The EPA will continue to expand and enhance the quantity, accessibility and usefulness of chemical safety information, thereby building the capacity of the EPA, other regulators, and the public to assess chemical hazards and potential

TSCA Risk Review & Prevention $65,036

Review of new chemicals will be prioritized. Scheduling will reflect a need for the agency to eliminate the backlog of reviews in order to ensure chemicals go to market in a manner that better promotes economic development. Timely evaluation will be based on the intended use of chemicals.

For chemicals in commerce, the EPA will maintain an ambitious schedule for initiating and completing chemical risk evaluations and, where risks are identified, for initiating and completing regulatory actions to address those risks.

The new law [Frank R. Lautenberg Chemical Safety for the 21st Century Act, June 2016] substantially amended TSCA by providing the EPA with significant new authorities and obligations:

Clear and enforceable deadlines. The EPA is now required to systematically prioritize and evaluate existing chemicals on a specific schedule, complete specified numbers of chemical risk evaluations within specified time frames, complete risk management actions within specified time frames where warranted by the findings of the evaluations, and review and make determinations on Confidential Business Information (CBI) claims within specified time frames, among other actions.

Requirement to address risks. The EPA is required to take timely action to address identified risks by imposing requirements specified in Section 6(a) which can include: prohibiting, restricting, or modifying the manufacture, processing, distribution in commerce or commercial use and modifying the labeling, recordkeeping, and other restrictions so that the chemical will no longer present an unreasonable risk.

Increased transparency of chemical data while protecting legitimate confidential information. The EPA is required to review all chemical identity Confidential Business Information (CBI) claims for certain types of submissions and for 25% of most other CBI claims within 90 days.

Requirement that the EPA make an affirmative determination of safety on every new chemical. Previously, new chemicals were reviewed in 90 days and were allowed to enter the marketplace unless the EPA made a specific determination that regulatory controls were needed. Now, continuing with a mandated 90-day timeframe, an affirmative determination must be made by the EPA that a new chemical substance will present, may present, or is not likely to present an unreasonable risk to human health or the environment; or that the available information is insufficient to enable the agency to make any of the above determinations. Unless the EPA determines that the substance is not likely to present unreasonable risk, the agency must issue an order or rule that imposes conditions sufficient to protect against any such unreasonable risk before the chemical

Toxic Substances Compliance Grants - $4,910 Assist in developing, maintaining, and implementing compliance monitoring (and, in some cases, enforcement) programs for: • PCBs, • Asbestos • Lead Based Paint	**Toxic Substances Compliance Grants - $3,437** EPA will continue, within our resource levels, to award state and Tribal assistance grants to assist in the implementation of compliance and enforcement provisions of TSCA.

Pesticide applications review and registration program $100,995

In FY 2017 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 FQPA. The EPA will register pesticides in a manner that protects consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. The program also will continue the registration review process for older pesticides. For all pesticides in review, the EPA will evaluate potential impacts on the environment with particular attention to endangered species and the effects of pesticides on honey bees and other pollinators.

In FY 2018, the agency will protect human health by ensuring the availability of appropriate analytical methods and techniques for analyzing pesticide residues in food, feed, water, soil, and bees (and their products) and ensuring their suitability for monitoring pesticide residues and enforcing tolerances. The Microbiology laboratory will continue with efficacy testing of antimicrobials. In addition, the laboratory will assist with efforts to formulate a new regulatory schematic for evaluating claims based on use of a disinfectant hierarchy for establishing efficacy claims for antimicrobials. Post- registration testing of antimicrobials enables the agency to remove ineffective products from the market. New methods enable the regulated community to register new products for use against emerging pathogens.

In 2017 EPA will:

(a) continue to develop improved analytical methods using state of the art instruments to replace outdated methods, thus increasing laboratory efficiency and accuracy of the data;

(b) continue to provide analytical support to fill in data gaps for the Pesticide Programs' risk assessment and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation;

(c) continue to provide analytical assistance and technical advice to all Regional Offices in their enforcement cases;

(d) continue operation of the NPSR;

(e) continue to verify that antimicrobial pesticides are properly formulated; and

(f) validate, optimize, and standardize a method to determine permeability of agricultural tarps for fumigants.

Pesticide review & registration (FIFRA) $85,526

The 2018 workplan mirrors the 2017 workplan.

Pesticides Program Implementation Grants $12,677 In FY 2017, the EPA will continue to award state and Tribal pesticides cooperative agreements to assist in the implementation of the compliance monitoring and enforcement provisions of the Federal Insecticide, Fungicide, and Rodenticide Act. The EPA provides grants to 56 states and territories, and 17 Tribal grants encompassing 31 tribes. These cooperative agreements support state and Tribal compliance and enforcement activities designed to protect the public and the environment from harmful chemicals and pesticides. Enforcement and pesticides program cooperative agreement guidance is issued to focus regional, state and Tribal efforts on the highest priorities. The EPA's support to state and Tribal pesticide programs19 emphasizes reducing chemical risks by ensuring compliance with: • Worker protection standards; • Pesticide applicator certification and training requirements; • Requirements for management of pesticide containers; • Soil fumigation label requirements; and • Pesticide use requirements designed to protect water quality. ***Pesticide Enforcement Grants - $18,016*** Assist with implementation of cooperative pesticide enforcement programs.	***Pesticides Program Implementation Grants $8,874*** In FY 2018 grants will support the following activities: • Worker protection standards • Pesticide applicator certification and training requirements; • Integrated Pest Management • Endangered Species Protection Program • Protection of Water Sources from Pesticide Exposure • Pollinator Health ***Pesticide Enforcement Grants - $11,050*** In FY 2018, the EPA will prioritize and award state and Tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA within our resource levels.
Pesticides Science Policy and Biotechnology Advisory Panel -$1,172.0 The Scientific Advisory Panel (SAP) organizes and conducts reviews (typically six to ten each year) by independent, outside scientific experts of science documents, science policies, and/or science programs that relate to the EPA's pesticide and toxic program activities. Statutory requirements will be absorbed by the pesticides and toxics programs	**Pesticides Science Policy and Biotechnology Advisory Panel - Eliminated**

Lead Risk Reduction program $13,250 Addresses lead contamination in homes, schools, childcare facilities. products, drinking water, soils and outdoor air. ***Lead Paint Categorical Grants* $14,022** The Lead Risk Reduction program and the Categorical Grant Lead program, with $27.6 million in resources (EPM and STAG combined), will continue certifying and re-certifying lead-based paint firms capable of implementing lead-safe practices in abatement and renovation, repair and painting (RRP) activities, and will conduct outreach to educate the public about the risks of elevated blood lead levels and encourage testing for children at risk. These efforts are intended to sustain the dramatic progress made to reduce the percentage of children with elevated blood-lead levels illustrated in the figure below.	**Lead Risk Reduction program - eliminated** ***Lead Paint Categorical Grants - eliminated*** The agency also will provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as provide for the operation and maintenance of the online Federal Lead- Based Paint program database (FLPP) that supports the processing of applications for training providers, firms and individuals.
Children's Health Protection $6,535 The agency coordinates and advances protection of children's health through regulatory development, policy, program implementation, communication and effective results measurement as an explicit part of its mission. In FY 2017 the EPA will continue to coordinate its activities to ensure that policies and programs explicitly consider and use the most up to date data and methods to protect children from public health risks.	**Children's Health Protection $2,018** Not addressed in the 2018 budget

Research

Chemical Safety for Sustainability (CSS) $126,688

Chemicals are a lynchpin of innovation in the American economy. Moving toward sustainable development requires designing, producing, and using chemicals in safer ways. Information and methods are needed to make better-informed, more-timely decisions about the thousands of chemicals circulating in the United States. Many of these chemicals have not been thoroughly evaluated for potential risks to human health and the environment. The EPA's Chemical Safety for Sustainability (CSS) Research Program is designed to meet this challenge.

The CSS program strengthens the agency's ability to evaluate and predict impacts from the use of manufactured chemicals throughout their lifecycle. The program places an increasing emphasis on making research results available and translating them into solutions and technical support for our agency partners. External stakeholders who benefit from this information include states, regions, communities, environmental and public health advocacy groups, as well as diverse industries upstream and downstream of chemical manufacturers.

These research programs 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 2017, the EPA will further strengthen its planning and delivery of science by continuing an integrated research approach that tackles problems systematically.

In FY 2017, the CSS program has a net increase of $5.6 million. These increased resources will:

- incorporate advancements in computational chemistry to allow use of information from chemical structures with known bioactivity to other structures with less data (i.e. read-across) in concert with growing international efforts,
- use the high-throughput hazard and exposure information to begin to evaluate cumulative risk of chemical exposures,
- expand and extrapolate to novel assays that have relevance to ecological impacts, and
- demonstrate how the ToxCast/Tox21 data can be used to develop high-throughput risk assessments, in particular for data-poor chemicals.

In FY 2017, the EPA will continue to tailor, apply and demonstrate newer computational toxicology approaches to increase the pace and efficiency of the Endocrine Disruptor

Research

Chemical Safety for Sustainability $84,189

The EPA's Chemical Safety for Sustainability (CSS) research program provides information, tools, and methods to make better-informed, more-timely decisions about the thousands of chemicals circulating in the United States. The CSS program provides products that strengthen the agency's ability to evaluate and predict impacts from the use and disposal of manufactured chemicals. The CSS program works with program offices to plan and develop innovative research that directly addresses agency challenges and informs agency decisions. Products delivered by the CSS program inform the implementation of multiple agency programs including mitigation activity at Superfund sites (CERCLA), the assessment of chemical toxicity using alternative testing protocols, and chemical prioritization (TSCA).

The CSS program is one of six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that is the result of a collaboration with, and supportive of, the EPA's program offices and regions.

The CSS program will continue to produce innovative tools that accelerate the pace of data-driven chemical evaluations, enable the EPA and state decisions to be environmentally sound and public health protective, and support sustainable innovation of chemicals.

Human Health Risk Assessment (HHRA) - $37,530 In FY 2017, 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 • Advancing Analyses and Applications.	***Human Health Risk Assessment (HHRA) - $22,516*** In FY 2018, the agency's Human Health Risk Assessment Research Program will continue to develop assessments and scientific products that are used extensively by EPA programs 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 science; and • Advancing analyses and applications.

Endocrine Disruptor Screening Program $$7,539 The Endocrine Disruptor Screening Program, established under authorities contained in the Food Quality Protection Act (FQPA) and the Safe Drinking Water Act (SDWA), is responsible for protecting human health and the environment from risks associated with chemicals with endocrine bioactivity. Under this program, the EPA has introduced groundbreaking new technologies—alternative techniques that use computational toxicology (CompTox) to predict endocrine effects using computer models—allowing the agency to move from screening dozens of chemicals per year to up to 1,000 per year, while moving away from animal testing. While these techniques are first being developed and implemented for endocrine disruptors, they also have potential to shed light on other potential human health and environmental risks identified through toxicity screening. the EPA's Endocrine Disruptor Screening Program (EDSP) will expand the 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 related to the estrogen, androgen, or thyroid hormone pathways in humans and wildlife. The increased use of alternative testing methodologies will increase the output of screening results within existing resource levels. In FY 2017, 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.	***Endocrine Disruptor Screening Program - eliminated*** The agency is requesting funding to fulfill its core statutory requirements under the Food Quality Protection Act of 1996 (Public Law 104-170). The EPA will significantly reduce its overall research efforts focused on endocrine disrupting chemicals.

Computational Toxicology The EPA has been a leader in developing innovative computational and high-throughput methods for efficiently screening large numbers of chemicals in a shorter amount of time and using fewer research dollars than conventional methods. In FY 2018, CompTox research will provide essential support to agency activities across diverse regulatory frameworks (e.g., TSCA, FIFRA). Novel applications can add significant efficiency and effectiveness to agency operations and provide states with the information to support effective decisions and actions. These applications perform research as directed by, and to support efforts of the agency's Chemical Safety and Pollution Prevention Program to fulfill requirements for chemical evaluation under the Toxic Substances Control Act of 1976 (TSCA) as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. Opportunities in FY 2018 include: • Using ToxCast/Tox21 data to develop high-throughput risk assessments, in particular for chemicals for which adequate information has not been available historically to conduct risk assessments. • Developing and releasing on-line software tools to transparently provide information on thousands of chemicals and integrate human health, environmental, and exposure data for a range of decisions, including chemical prioritization decisions. • Exploring how high-throughput exposure and hazard information can be combined to predict potential for exposure and risk to susceptible subpopulations.	***Computational Toxicology*** The EPA has been a leader in developing innovative computational and high-throughput methods for efficiently screening large numbers of chemicals in a shorter amount of time and using fewer research dollars than conventional methods. In FY 2018, CompTox research will provide essential support to agency activities across diverse regulatory frameworks (e.g., TSCA, FIFRA). Novel applications can add significant efficiency and effectiveness to agency operations and provide states with the information to support effective decisions and actions. These applications perform research as directed by, and to support efforts of the agency's Chemical Safety and Pollution Prevention Program to fulfill requirements for chemical evaluation under the Toxic Substances Control Act of 1976 (TSCA) as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. Opportunities in FY 2018 include: • Using ToxCast/Tox21 data to develop high-throughput risk assessments, in particular for chemicals for which adequate information has not been available historically to conduct risk assessments. • Developing and releasing on-line software tools to transparently provide information on thousands of chemicals and integrate human health, environmental, and exposure data for a range of decisions, including chemical prioritization decisions. • Exploring how high-throughput exposure and hazard information can be combined to predict potential for exposure and risk to susceptible subpopulations.
Other Activities: Emerging Materials (including Nanotechnology) In FY 2018, the CSS program will continue research on emerging materials, including the increased use of nanoparticles. Research activities on nanoparticles maintain the agency's contribution to research carried out under the 21st Century Nanotechnology Research and Development Act (Public Law 108-153), which includes specifically mapping the environmental fate of nanomaterials across the lifecycle, evaluating impacts to ecosystems and wildlife health, and providing research support that aids industry in developing safer nanomaterials.	***Other Activities: Emerging Materials (including Nanotechnology)*** In FY 2018, the CSS program will continue research on emerging materials, including the increased use of nanoparticles. Research activities on nanoparticles maintain the agency's contribution to research carried out under the 21st Century Nanotechnology Research and Development Act (Public Law 108-153), which includes specifically mapping the environmental fate of nanomaterials across the lifecycle, evaluating impacts to ecosystems and wildlife health, and providing research support that aids industry in developing safer nanomaterials.

Homeland Security Research Program 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 biothreat agents such as anthrax.	***Homeland Security Research Program*** 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 biothreat agents such as anthrax.

***Pollution Prevention Program* $13,115.0** 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. Preventing pollution at the source is the most cost effective technique for reducing human and environmental exposure to contaminants and associated risks. The P2 program seeks to alleviate environmental problems by achieving significant reductions in the generation and 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; safer, "greener" chemicals, materials and products; and improved practices. The program also promotes the increased use 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. These efforts also support the Cross-Agency Priority Goal on federal actions to address climate change and Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade.*	***Pollution Prevention Program - eliminated***
Categorical Grant: Pollution Prevention -$4,756.0 Provides assistance to States and State entities (i.e., colleges and universities) and Federally - recognized Tribes and intertribal consortia to deliver pollution prevention technical assistance to small and medium-sized businesses. A goal of the program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source.	**Eliminated**

Safer Choice Program In FY 2017, the EPA will continue to implement the Safer Choice Program, a product labeling initiative that identifies products that meet rigorous human health and environmental criteria. The Safer Choice Program's label was redesigned in FY 2015 based on an analysis showing that the improved label will more clearly communicate to purchasers the benefits of those products and chemicals. This analysis supports the agency strategy to advance the use of evidence in decision- making by providing consumers with improved informa	**Eliminated**
Economy, Energy, and Environment (E3) Partnership and the Green Suppliers Network (GSN) The P2 Program also will continue to implement the Economy, Energy, and Environment (E3) Partnership and the Green Suppliers Network (GSN), which are collaborations including five other federal agencies, to identify environmental improvements and cost savings and to help manufacturers consider sustainable changes to their business practices. E3 Initiative and GSN are expected to grow to include more than 35 state partners.	**Eliminated**

Summary: Compliance and Enforcement	
EPA's 2017 Workplan & Budget Priorities	EPA's 2018 Workplan & Budget Priorities
Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance	**Enforcing Laws and Assuring Compliance**

National Enforcement Initiatives

The EPA establishes National Enforcement Initiatives every three years to address the most serious pollution problems affecting communities. The initiatives focus on industry sectors or sources of pollution that the EPA believes can best be addressed by a national enforcement approach, and employ traditional enforcement approaches in conjunction with innovative evidence-based approaches.

In FY 2017, the agency will continue to focus on complex and challenging national pollution problems, and in FY 2016 will consider candidates and make final selections for the National Enforcement Initiatives for FY 2017-2019.

The national initiatives for FY 2014-2016 include:

Clean Water Act “wet weather” pollutant discharges

Combined Sewer Overflows

Between FY 1998 and FY 2015, 94 percent of the largest cities with Combined Sewer Overflows were on a schedule to clean up their water and achieve compliance. 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 water

Concentrated animal feeding operations (CAFOs)

At these facilities, live animals, as well as mortalities, feed, and animal wastes may be congregated on a small land area. These operations generate significant volumes of animal waste which, if improperly managed, can result in environmental and human health risks such as water quality impairment, fish kills, algal blooms, contamination of drinking water sources, and transmission of disease-causing bacteria and parasites associated with food and waterborne diseases.

Keeping Industrial Pollutants Out of the Nation’s Waters (Fiscal Years 2017-19)

Certain facilities in industrial sectors like chemical and metal manufacturing, mining and food processing are responsible for nutrient and metal pollution in lakes, rivers and streams, and can degrade water quality and threaten drinking water sources. Violations of the Clean Air Act New Source Review/Prevention of Significant Deterioration (NSR/PSD) requirements and Air Toxics regulations

Violations of the Clean Air Act New Source Review/Prevention of Significant Deterioration (NSR/PSD) requirements and Air Toxics regulations

National Enforcement Initiatives - Not addressed in the 2018 budget

	Several
Compliance monitoring $102,465.0 In FY 2017, the EPA's compliance monitoring activities will be both environmental media-based and sector-based. 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.	***Compliance Monitoring $87,036.0*** In FY 2018, the EPA will streamline its compliance monitoring activities such as field inspections, data tools, and assistance. The EPA will focus on those programs that are not delegated to states, while providing some targeted oversight and support to state, local, and Tribal programs. In FY 2018, the EPA will streamline its Superfund-related compliance monitoring activities.
Compliance Assistance. The EPA has been providing a modest level of compliance assistance through seventeen on-line sector-based compliance assistance centers (e.g., automotive recycling, agriculture, and transportation) which contain information helpful to facilities in complying with their environmental obligations.	Within the current resourcing levels, the EPA will **conduct an analysis to identify and prioritize necessary updates** at existing compliance assistance centers and identify additional sectors that would potentially benefit from a compliance assistance center.
Smart Tools for Field Inspectors. These are software solutions to improve the effectiveness and efficiency of how the EPA and states conduct RCRA Subtitle C (hazardous waste) inspections.	**Not addressed in the 2018 budget**
Compliance Training for the EPA and States. To ensure the quality of compliance monitoring activities, the EPA develops national policies, updates inspection manuals, provides required training for inspectors, and issues inspector credentials.	**Not addressed in the 2018 budget**
Next Generation Compliance The sheer number of regulated facilities, the contributions of large numbers of smaller sources to environmental problems, and limited resources mean the EPA and states cannot rely solely on the traditional single facility inspection and enforcement approach to ensure widespread compliance. Towards this end, in FY 2017, the agency will continue to focus efforts on moving forward with the Next Generation Compliance approaches to harness state-of-the-art technology and best practices 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.	**Not addressed in the 2018 budget**

E-Enterprise for the Environment The E-Enterprise business strategy is an integral part of an agency-wide effort to launch a new era of state, local, Tribal, and international partnerships. Under this strategy, the agency will streamline its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of regulatory programs for the EPA, states and tribes. On-going projects include: • Partnering with states to develop and implement fillable e-forms for electronically reporting NPDES information; • Supporting NPDES e-reporting rule implementation and program evaluation; • ***Developing a field collection, evidence management, and reporting system for waste management to be used*** for conducting compliance monitoring inspections in tandem with the states. • ***Purchasing advanced monitoring equipment***	**E-Enterprise for the Environment** The agency will implement the NPDES Electronic Reporting Rule which covers the e-reporting rule permitting requirements for the EPA and states on a prolonged schedule. The EPA will ***work with states to evaluate and prioritize the development of additional electronic reporting tools that support states***. The EPA's centralized development of electronic reporting tools saves the states significant resources in development. ***Not addressed in the 2018 budget***

Civil enforcement $171,670 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. ***National Enforcement Initiatives*** In FY 2017, the EPA's civil enforcement program will focus on the national enforcement initiatives [see above] ***Environmental Justice*** The Civil Enforcement program also supports the Environmental Justice program by taking actions in communities that may be disproportionately exposed to risks and harm from environmental contaminants, including minority and/or low-income areas. In FY 2015, 35 percent of the enforcement cases initiated by the EPA addressed violations that had occurred in locations with potential environmental justice concerns, and many additional cases located outside the community will reduce pollution that will benefit those communities. ***Chesapeake Bay*** 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.	***Civil Enforcement $141,029*** The EPA Civil Enforcement program's goal is to assure the fair and effective enforcement of the nation's environmental laws, to deter violations and promote compliance while working together with the United States Department of Justice, states, local agencies, and Tribal governments. In FY 2018, recognizing the role of states as primary implementers, the EPA will focus resources on direct implementation responsibilities and the most significant violations. The EPA also will continue to pursue enforcement actions at federal facilities where significant violations are discovered. ***Environmental Justice program is eliminated in the 2018 budget*** ***Chesapeake Bay regional program is eliminated in the 2018 budget***

Superfund [& Federal Facilities] Enforcement Program $178,403	***Superfund [& Federal Facilities] Enforcement Program $94,418***
Superfund enforcement uses an “enforcement first” approach	Maximizing the participation of liable and viable parties in performing and paying for cleanups.
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 proposes to provide $21.8 million to the Department of Justice through an Interagency Agreement.	Due to resource levels within the FY 2018 budget request, DOJ support for Superfund enforcement will need to come from DOJ’s base resources.
The EPA will focus Superfund enforcement resources to support Potentially Responsible Party (PRP) searches, cleanup settlements, and cost recovery.	In FY 2018, the agency will prioritize its efforts on the most significant sites in terms of environmental impact and potential cost liability to the government.
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 continue its efforts to establish **special accounts** (site-specific, interest-bearing accounts funded by the potentially responsible party under a settlement agreement for cleanup and enforcement activities at the site for which it received the money)..
	Cost Recovery Support
The agency will continually assess its priorities and embrace new approaches that can help achieve its goals more efficiently and effectively.	The agency will streamline the financial management aspects of Superfund cost recovery and the collection of related debt to the federal government.

Federal Facility Oversight The Federal Facilities Enforcement program will continue to expeditiously pursue enforcement actions at federal facilities where significant violations are discovered, with a specific focus on: • **Noncompliance with storm water,** • **RCRA waste requirements,** • **Vulnerable populations** • and other priority areas. • The EPA will continue its partnership in **FedCenter**, the federal facility environmental stewardship and compliance assistance center co-sponsored and voluntarily funded by more than a dozen federal agencies.	**Federal Facility Oversight** In FY 2018, the EPA will focus its resources on the highest priority federal sites, particularly those that may present an imminent and/or substantial endangerment, In FY 2018, the EPA will focus its resources on **resolving formal disputes under the Federal Facility Agreements** (FFAs). ***FedCenter not addressed in the 2018 budget***
Partnering with States and Tribes (chemicals & pesticides enforcement) $23,000 Supports States & Tribes for inspections & enforcement around pesticides use, PCBs, asbestos, and lead-based paint.	**Partnering with States and Tribes (chemicals & pesticides enforcement) $14,500** [Program description mirrors 2017]

Criminal Enforcement $53,335	***Criminal enforcement $44,502***
Criminal Enforcement 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.	**24 hour Security for Administrator Scott Pruitt ~ $4 million/year** **Criminal Enforcement** In FY 2018, the Criminal Enforcement program will focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes.
Forensics Support (NEIC) $163,985 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 National Enforcement Investigations Center maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with a wide range of environmental scientific expertise.	***Forensics Support (NEIC) $104,862*** In FY 2018, NEIC will provide high-quality forensics work within our resource levels in support of the highest priority investigations. Initiatives to stay at the forefront of environmental enforcement in FY 2018 will include: • improvements in inspection methods used at regulated hazardous waste facilities • utilizing existing technologies, such as advanced remote sensing for on-site air and water sampling for toxic and non-conventional pollutants.

National Environmental Policy Act (NEPA) $16,179.0 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. 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. Continue to **use and promote** NEPAssist, a geographic information system (GIS) tool developed to assist users.	***National Environmental Policy Act (NEPA) $13,496.0*** In FY 2018, the EPA will work with OMB, CEQ, and other federal agencies to coordinate, streamline, and improve the NEPA process. Work with agencies as they implement FAST-41, which sets out requirements to streamline infrastructure permitting project reviews. Work to implement the **Executive Order: "Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects."** The program will use and promote **NEPAssist**

Compliance & Enforcement: Performance Plan Details

EPA's 2017 Workplan & Budget Priorities

Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance

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 realizing the benefits of our laws and regulations, maintaining a level economic playing field, and attaining 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.

The FY 2017 request maintains FTE near the lowest levels in the program's history, but includes resources for the EPA to identify and address noncompliance by dedicating resources to 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).

In FY 2017, 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 continue to find opportunities to focus and 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 to use modern, streamlined techniques, strategies and tools to improve targeting and transparency and increase compliance. The EPA will continue to focus resources on environmental problems where noncompliance is having a significant impact. This strategy means the EPA's top enforcement priority will be pursuing higher impact cases, including large, complex cases that require significant investment and a long-term commitment.

EPA's 2018 Workplan & Budget Priorities

Enforcing Laws and Assuring Compliance

The EPA's enforcement program is focused on assuring compliance with our nation's environmental laws. 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. The EPA works in partnership with state and Tribal agencies to achieve this objective and to ensure that our communities have clean air, water, and land. To improve compliance, the EPA works to provide accessible tools that help regulated entities, federal agencies, and the public understand these laws and find efficient, cost effective means for putting them into practice. The EPA's enforcement program prioritizes inspections and other monitoring and enforcement activities based on the degree of health and environmental risk. The program collaborates with the Department of Justice, states, local government agencies, and Tribal governments to ensure consistent and fair enforcement of all environmental laws and regulations.

National Enforcement Initiatives

The EPA establishes National Enforcement Initiatives every three years to address the most serious pollution problems affecting communities. The initiatives focus on industry sectors or sources of pollution that the EPA believes can best be addressed by a national enforcement approach, and employ traditional enforcement approaches in conjunction with innovative evidence-based approaches. Information on initiatives, regulatory requirements, enforcement alerts, and results from civil enforcement activities are made available to the public and the regulated community on the EPA's web sites. https://www.epa.gov/enforcement/national-enforcement-initiatives

In FY 2017, the agency will continue to focus on complex and challenging national pollution problems, and in FY 2016 will consider candidates and make final selections for the National Enforcement Initiatives for FY 2017-2019.

The national initiatives for FY 2014-2016 include:

Clean Water Act "wet weather" pollutant discharges

The EPA's Clean Water program will continue to work with states, tribes, and communities to improve our nation's impaired waters. Towards that end, the EPA, working with permitting authorities, is revamping compliance and enforcement approaches to make progress on the most important water pollution problems. This work includes getting raw sewage out of water, cutting pollution from animal waste, and reducing pollution from storm water runoff.

Combined Sewer Overflows

Between FY 1998 and FY 2015, 94 percent of the largest cities with Combined Sewer Overflows were on a schedule to clean up their water and achieve compliance. 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. The recent settlement with the District of Columbia Water and Sewer Authority, for example, will directly benefit residents of that community by reducing the exposure of low income and minority populations to uncontrolled raw sewage and stormwater runoff into the Rock Creek and Potomac River watersheds, including an innovative "green infrastructure" strategy that uses vegetation, soils, and natural processes to absorb and store rainwater to control wet weather pollution. Enforcement also will support the goal of assuring clean drinking water for all communities, including those served by small systems and in Indian country.

[A series of maps and charts showing EPA's progress in targeting the largest

National Enforcement Initiatives - Not addressed in the 2018 budget

	Several
Compliance monitoring $102,465.0 The Compliance Monitoring program promotes compliance with the nation's environmental laws. Compliance monitoring is comprised of a variety of tools and activities that states and the EPA use to identify whether regulated entities are in compliance with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as inspections and investigations, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment. In FY 2017, the EPA's compliance monitoring activities will be both environmental media-based and sector-based. 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 2015, the EPA conducted approximately 15,400 federal inspections and evaluations. Tools used in the compliance monitoring program include the Information System Tools identified as National Enforcement Initiatives (above) and the following:	***Compliance Monitoring $87,036.0*** In FY 2018, the EPA will streamline its compliance monitoring activities such as field inspections, data tools, and assistance. The EPA will focus on those programs that are not delegated to states, while providing some targeted oversight and support to state, local, and Tribal programs. To accomplish this, the agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. In FY 2018, the EPA will streamline its Superfund-related compliance monitoring activities.
Compliance Assistance. The EPA has been providing a modest level of compliance assistance through seventeen on-line sector-based compliance assistance centers (e.g., automotive recycling, agriculture, and transportation) which contain information helpful to facilities in complying with their environmental obligations.	Within the current resourcing levels, the EPA will conduct an analysis to identify and prioritize necessary updates at existing compliance assistance centers and identify additional sectors that would potentially benefit from a compliance assistance center.
Smart Tools for Field Inspectors. These are software solutions to improve the effectiveness and efficiency of how the EPA and states conduct RCRA Subtitle C (hazardous waste) inspections.	**Not addressed in the 2018 budget**
Compliance Training for the EPA and States. To ensure the quality of compliance monitoring activities, the EPA develops national policies, updates inspection manuals, provides required training for inspectors, and issues inspector credentials. The EPA's National Enforcement Training Institute (NETI) has provided on-line, e-learning courses for 2,500 EPA, state and Tribal inspectors, and has made available over 165 on-line training courses in the NETI e-Learning Center for the EPA and state, local, and Tribal enforcement partners.	**Not addressed in the 2018 budget**

Next Generation Compliance The sheer number of regulated facilities, the contributions of large numbers of smaller sources to environmental problems, and limited resources mean the EPA and states cannot rely solely on the traditional single facility inspection and enforcement approach to ensure widespread compliance. In FY 2017, 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 2017, the agency will continue to focus efforts on moving forward with the Next Generation Compliance approaches to harness state-of-the-art technology and best practices 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. It also aligns with the E-Enterprise business strategy, described below, with a focus on process efficiencies in collaboration with states and tribes as systems are modernized. There are five main components to Next Generation Compliance: • Structuring our regulations and permits to be easier to implement and contain self-implementing mechanisms to achieve higher compliance; • Using advanced pollutant detection technology to detect pollution as it happens in real-time; • Moving from paper to electronic reporting to enhance government efficiency and reduce paperwork burden; • Making pollution and compliance information more accessible, user- friendly, and available to the public to support community awareness and promote facility; • 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 September 2015, the EPA signed the final rule to convert the National Pollutant Discharge Elimination System (NPDES) paper-	**Not addressed in the 2018 budget**

E-Enterprise for the Environment The Next Generation Compliance approach complements E-Enterprise for the Environment, a 21st century strategy – jointly governed by states and the EPA – to modernize government agencies' delivery of environmental protection in the United States. The E-Enterprise business strategy is an integral part of an agency-wide effort to launch a new era of state, local, Tribal, and international partnerships. Under this strategy, the agency will streamline its business processes and systems to reduce reporting burden on states and regulated facilities, and improve the effectiveness and efficiency of regulatory programs for the EPA, states and tribes. On-going projects, include: • ***Partnering with states to develop and implement fillable e-forms*** for electronically reporting NPDES information; • ***Supporting NPDES e-reporting rule*** implementation and program evaluation; • ***Developing a field collection, evidence management, and reporting system for waste management to be used*** for conducting compliance monitoring inspections in tandem with the states. • • ***Purchasing advanced monitoring equipment*** • ***Modernizing database systems for transparency and public access***: Supporting transparency through the modernized Enforcement and Compliance History Online (ECHO) database and transition of the Air Facility System (AFS) to the Integrated Compliance Information System (ICIS)-Air. Data transparency is a key foundation of the ECHO web reporting tool 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 the EPA's databases. ECHO usage has grown to more than three million queries per year.	**E-Enterprise for the Environment** The agency will implement the NPDES Electronic Reporting Rule which covers the e-reporting rule permitting requirements for the EPA and states on a prolonged schedule. The EPA will work with states to evaluate and prioritize the development of additional electronic reporting tools that support states. The EPA's centralized development of electronic reporting tools saves the states significant resources in development. Not addressed in the 2018 budget Not addressed in the 2018 budget

Civil enforcement $171,670

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. The EPA also pursues enforcement against federal agency violators to ensure compliance with environmental laws and protection of human health and the environment. In FY 2015, the EPA's enforcement actions required regulated entities to invest more than $7 billion in actions and equipment to control pollution (injunctive relief). Also in FY 2015, the enforcement program obtained a total of $205 million in federal administrative and civil judicial penalties. The EPA's enforcement actions required regulated entities to reduce pollution by an estimated 530 million pounds and treat, minimize, or properly dispose of 500 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.

National Enforcement Initiatives (see above)

In FY 2017**,** the EPA's civil enforcement program will focus on the national enforcement initiatives [see above] including in communities that may be disproportionately exposed to risks and harm from pollutants in their environment**.**

The EPA's enforcement response to the Deepwater Horizon oil spill will continue in FY 2017 as the agency, together with the U.S. Department of Justice, conclude a record settlement in excess of $18.0 billion in penalties and natural resource damages with BP.

A Consent Decree memorializing the settlement was lodged with the court in the first quarter of FY 2016.

The EPA obtained a record settlement of $1 billion with Transocean for its liability for the Deepwater Horizon Gulf of Mexico oil spill.

Pursuant to the RESTORE Act, $800 million of the Transocean penalty went to the

Civil Enforcement $141,029

The EPA Civil Enforcement program's goal is to assure the fair and effective enforcement of the nation's environmental laws, to deter violations and promote compliance while working together with the United States Department of Justice, states, local agencies, and Tribal governments. The EPA Civil Enforcement program is responsible for maximizing compliance with 12 major environmental statutes, 28 distinct programs under those statutes, and numerous regulatory requirements under those programs, which apply in various combinations to a universe of approximately 40 million regulated federal and private entities. The Civil Enforcement program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws.

Civil enforcement efforts achieve meaningful results. For example, in 2016, through its civil enforcement cases, the EPA achieved commitments to treat, minimize, or properly dispose of 62 billion pounds of hazardous waste and estimated pollution reduction commitments totaling 324 million pounds. Also in FY 2016, the EPA enforcement actions resulted in companies investing an estimated $13.7 billion in actions and equipment to control pollution (injunctive relief).

In FY 2018, recognizing the role of states as primary implementers, the EPA will focus resources on direct implementation responsibilities and the most significant violations. Direct implementation responsibilities include programs that are not delegable or where a state has not sought or obtained the authority to implement a particular program.

Examples include:

- Clean Air Act mobile source program
- Pesticide labeling and registration under FIFRA
- Enforcement on Tribal lands
- Enforcement of non-delegated portions of various other laws, including RCRA, the Clean Water Act, and stratospheric ozone under the CAA, among others.

The EPA also will continue to **pursue enforcement actions at federal facilities where significant violations are discovered**. The agency will refocus efforts from areas where

Superfund [& Federal Facilities] Enforcement Program $178,403

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 properties available for reuse.

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 **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 proposes to 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 2015, the EPA reached a settlement or took an enforcement action at 100 percent of non-federal Superfund sites with viable, liable parties. In addition, in FY 2015, private party cleanup commitments were approximately $2 billion, the second highest amount committed to spend on site "cleanup" during a fiscal year, and the EPA billed private parties for $106 million in oversight costs, the highest amount ever billed during a fiscal year. Responsible parties agreed to reimburse approximately $512 million of the EPA's past costs for cleanup work at Superfund sites, the second highest total since the inception of the program.

The EPA will **focus Superfund enforcement resources to support 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.

Superfund [& Federal Facilities] Enforcement Program $94,418

The EPA's Superfund Enforcement program protects communities by ensuring that responsible parties conduct cleanups, preserving federal dollars for sites where there are no viable contributing parties.

In FY 2018, the EPA is requesting to merge the Superfund Federal Facilities Enforcement program with the Superfund Enforcement program. The agency will optimize the resources between the two programs.

The EPA's Superfund Enforcement program ensures prompt site cleanup and reuse by m**aximizing the participation of liable and viable parties** in performing and paying for cleanups. In both the Superfund Remedial and Superfund Emergency Response and Removal programs, the Superfund Enforcement program obtains potentially responsible parties commitments to perform and pay for cleanups through civil, judicial, and administrative site actions.

Due to resource levels within the FY 2018 budget request, DOJ **support for Superfund enforcement will need to come from DOJ's base resources**.

In FY 2018, the agency will **prioritize its efforts on the most significant sites in terms of environmental impact and potential cost liability to the government**.

The agency will continue its efforts to establish **special accounts** (site-specific, interest-bearing accounts funded by the potentially responsible party under a settlement agreement for cleanup and enforcement activities at the site for which it received the money). Since special account funds may only be used for sites and uses specified in the settlement

Federal Facility Oversight The Civil Enforcement program includes the regulation of federal facility sites. The Federal Facilities Enforcement program will continue to expeditiously pursue enforcement actions at federal facilities where significant violations are discovered, with a specific focus on: • **Noncompliance with storm water,** • **RCRA waste requirements,** • **Vulnerable populations** • and other priority areas. The EPA will continue its partnership in **FedCenter,** the federal facility environmental stewardship and compliance assistance center co-sponsored and voluntarily funded by more than a dozen federal agencies.	**Federal Facility Oversight** In FY 2018, the EPA will focus its resources on the highest priority federal sites, particularly those that may present an imminent and/or substantial endangerment, In FY 2018, the EPA will focus its resources on resolving formal disputes under the Federal Facility Agreements (FFAs). In FY 2018, the EPA is requesting to merge the Superfund Federal Facilities Enforcement program with the Superfund Enforcement program. The agency will optimize the resources between the two programs. In FY 2018 the proposed budget for the Superfund Enforcement program is $94.4 million. **FedCenter not addressed in the 2018 budget**
Partnering with States and Tribes (chemicals & pesticides enforcement) $23,000 In FY 2017, 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 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.	**Partnering with States and Tribes (chemicals & pesticides enforcement) $14,500** [Program description mirrors 2017]

Criminal Enforcement $53,335	*Criminal enforcement $44,502*
	24 hour Security for Administrator Scott Pruitt ~ $4 million/year Administrator Scott Pruitt's round-the-clock security protection is being provided by EPA criminal Program special agents. He has requested 10 additional FTE to provide this service https://thinkprogress.org/scott-pruitt-epa-bodyguards-budget-32916d5ab162 "EPA spent $832,735.40 on Pruitt's protection detail for about his first quarter running the agency — nearly double what was spent on security for [the two previous Administrators." https://www.eenews.net/stories/1060056958
Criminal Enforcement Criminal enforcement exemplifies the EPA's commitment to pursue 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.	**Criminal Enforcement** The EPA's Criminal Enforcement program enforces the nation's environmental laws through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment. The EPA's Criminal Enforcement program investigates and helps prosecute violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice. The EPA's criminal enforcement agents (Special agents) do this through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment.
In FY 2015, the conviction rate for criminal defendants was 92 percent.	Within the Criminal Enforcement program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents. The EPA's criminal enforcement attorneys provide legal and policy support for all of the program's responsibilities, including forensics and expert witness preparation, information law, and personnel law to ensure that program activities are carried out in accordance with legal requirements and agency policies. These efforts support environmental crimes prosecutions primarily by the United States Attorneys and the Department of Justice's Environmental Crimes Section. In FY 2016, the conviction rate for criminal defendants was 94 percent.
To efficiently maximize resources, in FY 2017 the program will use its special agent capacity to identify and investigate cases with the most significant environmental, human health and	In FY 2018, the Criminal Enforcement program will focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes.

Forensics Support (NEIC) $163,985 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 2017, NEIC will continue to function under rigorous International Standards Organization 17025 requirements for environmental data measurements to maintain its accreditation. The National Enforcement Investigations Center maintains a sophisticated chemistry laboratory and a corps of highly trained inspectors and scientists with a wide range of environmental scientific expertise. The NEIC works closely with the EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with the EPA's Headquarters and Regional Offices to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the agency's Civil Enforcement program.	***Forensics Support (NEIC) $104,862*** 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. The NEIC works closely with the EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with the EPA's Headquarters and Regional Offices to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the agency's Civil Enforcement program. In FY 2018, NEIC will provide high-quality forensics work within our resource levels in support of the highest priority investigations. Initiatives to stay at the forefront of environmental enforcement in FY 2018 will include: • improvements in inspection methods used at regulated hazardous waste facilities • utilizing existing technologies, such as advanced remote sensing for on-site air and water sampling for toxic and non-conventional pollutants.

National Environmental Policy Act (NEPA) $16,179.0 (In the 2017 budget, NEPA is discussed as part of pollution prevention. The 2018 budget includes NEPA as part of enforcement.) 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 2017, 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. 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 (including accounting for and addressing climate change impacts), and promoting the use of IT tools. The program has been successful at working with other federal agencies to ensure that project proposals are designed in a manner that protects environmental and community resources. 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. Approximately 900 users visit the website each month and 83 percent are return visitors. The EPA also will continue to utilize and improve e-NEPA**,** a web-based system for federal agencies to file EISs and to make comments on EISs accessible to the public on a centralized website.	***National Environmental Policy Act (NEPA) $13,496.0*** In FY 2018, the EPA will work with OMB, CEQ, and other federal agencies to coordinate, streamline, and improve the NEPA process. The EPA will work with agencies as they implement FAST-41, which sets out requirements to streamline infrastructure permitting project reviews. The EPA also will work to implement the **Executive Order: "Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects."**The program expects to achieve some efficiencies by expediting environmental reviews and approvals for high priority infrastructure projects. During FY 2018, the EPA will focus resources on the most significant proposals for major federal actions. As a component of this effort, the program will 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.

EPA Mission & Strategic Focus FY 2018 vs. FY 2017

EPA's Strategic Focus 2017

(From webpage)

EPA's mission: To protect human health and the environment.

EPA's purpose is to ensure that:

- all Americans are protected from significant risks to human health and the environment where they live, learn and work;
- national efforts to reduce environmental risk are based on the best available scientific information;
- federal laws protecting human health and the environment are enforced fairly and effectively;
- environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy;
- all parts of society -- communities, individuals, businesses, and state, local and tribal governments -- have access to accurate information sufficient to effectively participate in managing human health and environmental risks;
- environmental protection contributes to making our communities and ecosystems diverse, sustainable and economically productive; and
- the United States plays a leadership role in working with other nations to protect the global environment.

To accomplish this mission, we:

- Develop and enforce regulations
- Give grants
- Study environmental issues
- Sponsor partnerships
- Teach people about the environment
- Publish information

Strategic Plan (Fiscal Years 2014–2018)

EPA's Strategic Plan identifies the measurable environmental and human health outcomes the public can expect from EPA and describes how we intend to achieve those results.
Learn more about the 2014-2018 Strategic Plan.
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

Cross-Agency Strategies

Working Toward a Sustainable Future
Working to Make a Visible Difference in Communities
Launching a New Era of State, Tribal, Local, and International Partnerships
Embracing EPA as a High-Performing Organization

Core Values

Science, Transparency, Rule of Law

EPA's Strategic Focus 2018

(from 2018 Congressional Budget Justification)

"The mission of the Environmental Protection Agency (EPA) is to protect human health and the environment. In carrying out its mission, the EPA works to ensure that all Americans are protected from exposure to hazardous environmental risks where they live, learn, work, and enjoy their lives. The agency guides national efforts to reduce environmental risks, based upon on-going research and scientific analysis."

Emphasis on Economic Benefits

"The budget addresses our highest environmental priorities and refocuses efforts toward streamlining and reducing burden."

"Environmental stewardship while growing our economy is essential to the American way of life and key to economic success and competitiveness.

"Back to Basics" Three Core Philosophies

- Rule of law: Administering the laws enacted by Congress and issuing environmental rules tethered to those statutes, relying on agency expertise and experience to carry out congressional direction and to ensure that policies and rules reflect common sense and withstand legal scrutiny. [Note: work is directed towards "core" statues.]
- Cooperative federalism: Recognizing the states and tribes, as applicable, as the primary implementers and enforcers of our environmental laws and programs, and partnering with them to engender trust and maximize environmental results to protect human health and environment.
- Public participation: Fulfilling obligations to conduct open and transparent rulemaking processes, engaging with and learning from the diverse views of the American public, and addressing stakeholder input on the impacts of rules on families, jobs, and communities.

The 2018 Congressional Budget Justification does not mention EPA's 5-Year Strategic Plan.

EPA has now replaced the previous mission, strategic plan and priorities section:

https://www.epa.gov/aboutepa/our-mission-and-what-we-do

EPA's budget priorities 2017

- Reduce greenhouse gas emissions from cars and trucks
- Advance resilience in the nation's water infrastructure, while protecting public health and the environment, particularly in high-risk and vulnerable communities.
- Clean up contaminated sites to enhance the livability and economic vitality of communities.
- Assess and reduce risks posed by chemicals and promote the use of safer chemicals in commerce.
- Strengthen environmental protection through business process improvements enabled by joint governance and technology.

- The EPA's FY 2017 Annual Performance Plan and Budget of $8.267 billion is $127 million above the FY 2016 Enacted budget of $8.139 billion.
- The agency will increase its FTE level to 15,078 appropriated FTE, which is an increase of 39.9 FTE above FY 2016.
- Resources will address our highest priorities and sustain efforts for critical next steps where sound implementation and support are necessary to make progress on priority actions in: addressing climate change and improving air quality; taking action on toxics and chemical safety; protecting water; cleaning up communities and advancing sustainable development; supporting state, Tribal and local partnerships; strengthening the EPA as a forward looking organization; and maintaining core enforcement strength.
- We will make steady progress and build on the work we have done with our partners which includes raising awareness that social justice includes environmental justice.
- We will move beyond planning and into implementation in areas like the Clean Power Plan and water infrastructure finance.
- Across all our programs, we continue to focus on meaningfully transforming the way we do business to provide greater benefit to all stakeholders, including taking advantage of the advances in technology.
- In FY 2017, we will continue E-Enterprise, program evaluation, and Lean efforts focused on a new, more results-driven approach that emphasizes customer-facing, integrated, and less burdensome interactions for the regulated community as well as greater efficiency for states and the EPA.

"Today's environmental problems require critical thinking about the complex interactions of environmental pollutants and new tools that promote innovation, incentives and partnerships.

The issue of highest importance facing the agency over the next few years will continue to be greenhouse gas (GHG) mitigation and climate change adaptation. The EPA will continue to use a variety of approaches to address these challenges including traditional regulatory tools;

Pruitt's budget priorities 2018

- Infrastructure
- Improving Air Quality
- Clean and Safe Water
- Ensuring the Safety of Chemicals

- The EPA's FY 2018 Annual Performance Plan and Budget of $5.655 billion is $2.6 billion below the FY 2017 Annualized Continuing Resolution funding level for the EPA.
- This resource level and the agency FTE level of 11,611 supports the agency's return to a focus on core statutory work and recognizes the appropriate federal role in environmental protection.
- The budget addresses our highest environmental priorities and refocuses efforts toward streamlining and reducing burden.
- Responsibility for funding local environmental efforts and programs is returned to state and local entities, while federal funding supports priority national work.
- Funding is provided for infrastructure and includes accelerating the pace of work in clean water and drinking water infrastructure as well as at Brownfield and Superfund projects.
- Resources also are focused on efforts to improve and protect air quality and to ensure the safety of chemicals. In FY 2018, increased resources will support the agency's significant continuing and new responsibilities for ensuring that new and existing chemicals are evaluated in a timely manner for introduction in commerce and do not present unreasonable risks to human health or the environment.
- The agency will work across all of our programs to unite varied interests and stakeholders to focus attention and leverage federal, state, local, and non-governmental resources in a coordinated effort to address the nation's greatest environmental challenges.

"Funding is provided for infrastructure and includes accelerating the pace of work in clean water and drinking water infrastructure as well as at Brownfield and Superfund projects."

"Resources also are focused on efforts to improve and protect air quality and to ensure the safety of chemicals… In FY 2018, increased resources

innovative market-based techniques; public- and private-sector partnerships; community-based approaches; and programs that encourage voluntary adoption of cost-effective technologies and practices.

EPA's commitment to increase our engagement with local communities and address what really matters to people, to make a visible difference with new approaches and tools to accelerate environmental progress. The agency will build on our ongoing efforts to enhance the livability and economic vitality of neighborhoods; strengthen our relationship with America's agricultural community; address impacts of climate change; support green infrastructure and resiliency; and reduce air pollution along roadways, railways, and at ports. We will take into consideration the impacts of our decisions on disadvantaged communities through increased analysis, the most up-to-date science, and enhanced community engagement.

The EPA will also build on efforts to promote more sustainable, healthier communities by restoring land, developing prevention programs, improving response capabilities, and maximizing the impact of cleanup actions.

Central to our strategy is maintaining a strong and effective enforcement program, modernizing and streamlining how we work, and effectively leveraging technology and the efforts of our partners.

We will work to provide all parts of society—communities, individuals, businesses, and federal, state, local, and Tribal governments—access to usable and understandable information so that they may participate effectively in managing human health and environmental risks. The EPA's work is guided by the best possible scientific information and a commitment to transparency and accountability.

The EPA will continue to rebuild internal capacity that has been lost through several years of reductions, provide training and information technology support for our workforce, modernize our business process for long-term sustainability and make strategic choices in FY 2017 that support the EPA of the future.

and to ensure the safety of chemicals in FY 2016, increased resources will support the agency's significant continuing and new responsibilities for ensuring that new and existing chemicals are evaluated in a timely manner for introduction in commerce and do not present unreasonable risks to human health or the environment."

Responsibility for funding local environmental efforts and programs is returned to state and local entities, while federal funding supports priority national work.

Regulation and policy will incorporate robust input from the public through formal and informal mechanisms to seek full understanding of the impacts of proposed policy on public health, the environment, the economy, jobs, families, and our communities.

The agency will work across all of our programs to unite varied interests and stakeholders to focus attention and leverage federal, state, local, and non-governmental resources in a coordinated effort to address the nation's greatest environmental challenges.