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## United States Environmental Protection Agency

## FISCAL YEAR 2017

Justification of Appropriation Estimates for the Committee on Appropriations

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www.epa.gov/ocfo

## **Environmental Protection Agency 2017 Annual Performance Plan and Congressional Justification**

## Table of Contents - Program Performance and Assessment

EXECUTIVE OVERVIEW	. 881
PERFORMANCE: STRATEGIC GOALS AT A GLANCE AND EIGHT-YEAR ARRAY	892
PROGRESS ACHIEVED UNDER EPA'S CROSS-AGENCY STRATEGIES	. 989
VERIFICATION/VALIDATION OF PERFORMANCE DATA	992

### **FY 2015 Annual Performance Report**

#### **EXECUTIVE OVERVIEW**

EPA's FY 2015 Annual Performance Report (APR) presents the environmental and program performance results the Agency achieved in FY 2015 against the performance measures and targets established in its FY 2015 Annual Performance Plan and the Congressional Justification. In compliance with requirements of the Government Performance and Results Act Modernization Act of 2010 (GPRAMA) and Office of Management and Budget implementing guidance, EPA's FY 2015 APR discusses progress under the five goals and thirteen strategic objectives, as well as the four cross-agency strategies, established in its FY 2014–2018 Strategic Plan. As illustrated in the performance management framework figure below, EPA analyzes these annual performance results, as well as progress toward its longer-term strategic objectives, as the basis for formulating and justifying Agency resource requests.

### Organization of the FY 2015 APR

EPA's FY 2015 APR is integrated throughout the FY 2017 Annual Performance Plan and the Congressional Justification:

- The Introduction and Overview section presents EPA's mission statement and organizational structure;
- The Goal and Objective Overview section discusses FY 2015 performance results to help explain future directions; and
- Appropriation Program/Project Fact Sheets include FY 2015 performance results and trend data to provide context for budget decisions.

This Program Performance and Assessment section (Tab 12), including this Executive Overview, serves as the primary component of EPA's FY 2015 APR. It comprises a detailed eight-year data table, organized by strategic goal, which summarizes long-term progress toward each objective and presents performance results, including explanations for missed or exceeded targets, for each measure established in the Agency's *FY 2015 Annual Performance Plan*. Each strategic goal is introduced by a "Goal-at-a-Glance," which presents FY 2015 performance results and resource obligations under the goal. A summary of progress longer term under each of EPA's four crossagency strategies, including links to FY 2015 End-Of-Year "At-A-Glance" Progress Reports, follows the eight-year table.

To supplement the FY 2015 APR, please refer to EPA's FY 2015 Agency Financial Report (AFR), which discusses EPA's FY 2015 financial performance, and its web-based FY 2015 Highlights, which presents key financial and performance information from both the AFR and APR and provides links to additional information.

## **Performance Management in FY 2015**

During FY 2015, EPA implemented a number of new efforts to further strengthen its performance management. Notable activities included:

## EPA's Performance Management Framework



Completed All FY 2014-2015 Agency Priority Goals (APGs): In FY 2015, EPA accomplished all six of its FY 2014–2015 APGs. Some examples of key results include making more than 18,900 additional sites ready for anticipated use, completing more than 250 assessments of pesticides and other commercially available chemicals, and updating state nonpoint source management programs to comport with new grant guidelines. EPA also established five FY 2016-2017 APGs and drafted two-year action plans to advance its priorities. EPA reports progress on APG milestones and targets quarterly at <a href="http://www.performance.gov">http://www.performance.gov</a>.

EPA also contributes to Cross-Agency Priority (CAP) goals across the federal government, notably for cybersecurity, benchmarking, infrastructure permitting, and people and culture. EPA's Acting Deputy Administrator discusses progress in these areas at monthly meetings of the President's Management Council. More information on CAP goals and quarterly updates on government-wide progress are available at <a href="http://www.performance.gov">http://www.performance.gov</a>.

Streamlined End-of-Year Performance Reporting and Analysis Process: In June, EPA's Office of the Chief Financial Officer (OCFO) held an Agency-wide Lean event to streamline EPA's end-of-year reporting and analysis process and increase the value of performance analyses and products to inform Agency decision-making. Key outcomes included streamlined reporting to meet GPRAMA and OMB requirements, more effective use of 8-year performance results data as

a springboard for analysis and to support senior leadership end-of-year discussions, a streamlined *FY 2015 APR*, and enhancements to EPA's Web-based *Financial and Program Performance Highlights*.

National Program Manager (NPM) Guidance: In FY 2015, EPA published its new two-year FY 2016–2017 NPM Guidances, based on the recommendations of an NPM Guidance/National Environment Performance Partnership System (NEPPS) workgroup of state, regional, and national program representatives. The two-year process is part of the Agency's efforts to advance a new era of state, local, tribal, and international Partnerships, a cross-agency strategy established under the *FY 2014-2018 EPA Strategic Plan*. Key changes in the FY 2016–2017 NPM Guidance process included earlier and more meaningful state and tribal engagement in priority-setting, clear and transparent support for flexibility within the NPM Guidances, better alignment of NPM Guidances and grant guidances, and earlier and more meaningful state and tribal engagement in commitment-setting. EPA's OCFO and the NPM Guidance/NEPPS Workgroup are working collaboratively to implement and assess these key changes.

**Strategic Foresight Pilot Project**: EPA's OCFO and Office of the Science Advisor launched this project to set the stage for the Agency's next round of strategic planning and development of the *FY 2018–2022 EPA Strategic Plan*. The effort responds to National Academy of Science, Science Advisory Board, and National Advisory Council for Environmental Policy and Technology recommendations to anticipate future environmental problems and build EPA's resiliency in light of rapid technological change by engaging in futures analysis as a regular component of Agency operations. The pilot includes convening an Agency-wide Strategic Foresight Lookout Panel within a broader community of practice to identify emerging opportunities and challenges and develop actionable recommendations to inform annual and strategic planning.

#### **Program Evaluation**

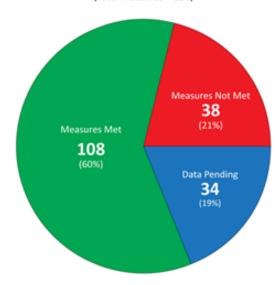
Program evaluations help provide the evidence EPA needs to ensure that its programs are meeting their intended outcomes and allow the Agency to support more effective and efficient operations. By assessing how well a program is working and why, a program evaluation can help EPA identify activities that benefit human health and the environment, provide the roadmap needed to replicate successes, and identify areas needing improvement. This is particularly important for fostering transparency and accountability. Summaries of program evaluations completed during FY 2015 are available at http://www.epa.gov/planandbudget/fy-2015-program-evaluations.

## **FY 2015 Performance Data**

In its FY 2015 Annual Performance Plan and Congressional Justification, committed to 180 annual performance These performance measures/targets. measures/targets and EPA's results are presented in the following eight-year table, which includes explanations for missed and significantly exceeded targets and describes the Agency's plans to meet these performance measures in the future. EPA reviews annual results in terms of long-term performance, and will carefully consider its FY 2015 results and adjust its program strategies and approaches accordingly.

## **EPA's FY 2015 Performance Results**

(Total measures = 180)



## FY 2015 Performance Measure Results

As of December 31, 2015, data are available for 146 of the 180 FY 2015 budget performance measures/targets.<sup>1</sup> The Agency met 108 of the performance measures, 74 percent of the performance measures for which data are available. Working with state and local governments, tribes, federal agencies, businesses, and industry leaders, EPA made significant progress toward the long-term strategic goals and objectives established in its Strategic Plan.

Despite its best efforts, however, the Agency missed 38 of its FY 2015 performance measures/targets. There are a number of reasons for missed targets, including an unexpected demand for resources or competing priorities; the impact of a changing workforce; the effect of budget cuts on the Agency's state, tribal, and local government partners; and other factors. As an integral part of its performance management process, EPA will continue to regularly review its performance, analyze results, and adjust FY 2016 and FY 2017 programmatic approaches and targets as necessary.

Because final end-of-year data for some measures are not yet available, EPA is not able to report on 34 of its 180 performance measures. Often environmental results do not become apparent within a fiscal year, and assessment is a longer-term effort requiring information over time. Extensive quality assurance/quality control processes can also delay the reporting of performance data. EPA relies heavily on performance data obtained from state, tribal, and local agencies, all of which require time to collect and review for quality. Data lags may also result when reporting cycles do not correspond with the federal fiscal year on which this report is based, for example, data which are reported biennially. Additional FY 2015 results will be available in the Agency's FY 2016

884

<sup>&</sup>lt;sup>1</sup> Of EPA's 180 FY 2015 performance measures, 26 measures fall under the Agency's enabling and support programs (including the Offices of Administration and Resources Management, Environmental Information, and Inspector General) and the Office of Research and Development. These measures are not reflected in the "Goal-at-a Glance" summaries which follow for each of EPA's five strategic goals.

*APR*, which will be included in the *FY 2018 Annual Performance Plan* and the "Program Performance and Assessment" section of the *FY 2018 Congressional Justification*.

#### Previous Fiscal Year Data Now Available

EPA can now report FY 2014 data that became available in FY 2015. In summary, final performance results became available for 20 of the 34 FY 2014 performance measures (out of a total 197 FY 2014 performance measures). Of these 20 performance measures, EPA met 16 and did not meet 4. Data remain unavailable for 12 measures.<sup>2</sup> Two measures were deleted.<sup>3</sup>

## **Summary of FY 2015 Performance Results**

### **Strategic Goals**

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

FY 2015 Performance Measures					
Met: 11	Not Met: 0	Data Pending: 18			
Total Measures: 29					

In FY 2015, EPA continued to address the changing climate and deployed programs to improve air quality. In support of the President's Climate Action Plan (CAP), in 2015 EPA issued the historic Clean Power Plan, which will cut U.S. carbon pollution from the power sector by 32 percent below 2005 levels in 2030. As part of the CAP, EPA proposed standards to cut methane emissions from the oil and gas sector by 40 to 45 percent from 2012 levels by 2025, and issued two proposals to further reduce methane emissions from municipal solid waste landfills by nearly a third. EPA continued to successfully implement motor vehicle greenhouse gas emissions standards, achieving its FY 2014-15 Agency Priority Goal. Additionally, more than 19,000 organizations and millions of Americans partnered with EPA's climate partnership programs, preventing more than 420 MMTCO2e emissions. The U.S. continued to outperform its obligations

<sup>&</sup>lt;sup>2</sup> Performance Measure G02: Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the buildings sector; Performance Measure G16: Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the industry sector; Performance Measure 001: Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline; Performance Measure R50: Percentage of existing homes with an operating radon mitigation system compared to the estimated number of homes at or above EPA's 4pCi/L action level; Performance Measure 002; Cumulative percentage reduction in tons of toxicity-weighted (for non-cancer risk) emissions of air toxics from 1993 baseline; Performance Measure S01: Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, measured in tons of Ozone Depleting Potential (ODP); Performance Measures SM1: Tons of materials and products offsetting use of virgin resources through sustainable materials management; Performance Measure FF1: Percent of Superfund federal facility sites construction complete; Performance Measure 008: Percent of children (aged 1-5 years) with blood lead levels (>5 ug/dl); Performance Measure 10D: Percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old; Performance Measure D6A: Reduction in concentration of PFOA in serum in the general population; Performance Measure 143: Percentage of agricultural acres treated with reduced-risk pesticides. <sup>3</sup> Performance Measure bpc: Percent of all major publicly owned treatment works (POTWs) that comply with their permitted wastewater discharge standards; Performance Measure 630: Five-year average annual loadings of soluble reactive phosphorous (metric tons per year) from tributaries draining targeted watersheds.

under the Montreal Protocol, holding HCFC consumption at more than 60 percent below required levels in 2014, and EPA finalized the 2015 HCFC allocation rule that will cut U.S. consumption by nearly 60 percent compared to 2014.

Working with its partners and co-regulators, EPA continued to develop and implement national programs that are reducing harmful air pollutants both indoors and outdoors. (Some results are subject to annual reporting delays.) From 2003 to 2014, for example, population-weighted ambient concentrations of PM2.5 (fine particulate matter) and ozone decreased 29 percent and 18 percent, respectively. However, due to resource constraints, EPA continues to face challenges in reviewing and revising standards as mandated by the Clean Air Act, leaving the Agency vulnerable to legal challenges. Looking ahead, EPA will continue to balance a significant air agenda to address climate change and improve air quality in order to deliver both environmental and public health protections.

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

FY 2015 Performance Measures							
Met: 36	Met: 36 Not Met: 14 Data Pending: 5						
Total Measures: 55							

The EPA's water program continues to make good progress toward its two strategic objectives: protecting human health and improving water quality on a watershed basis. During FY 2015 the program stepped up its work with federal and state partners under the National Estuary Program (NEP) to protect and restore critical wetlands habitat, exceeding its FY 2015 target by protecting or restoring over 111,500 coastal acres and contributing to a cumulative total of 1.5 million acres protected or restored since 2002. In one example of restoration through the NEP, in FY 2015 Tampa Bay reached a "Seagrass" milestone of 40,295 acres of healthy sea grass beds, the largest area measured since the 1950s. Working with its partners, the EPA met the Agency Priority Goal of all states with Nonpoint Source Management Plans updated to adhere to new Section 319 state grant guidelines. The Agency is developing a new Water Quality Framework, which uses a standard geographic unit of analysis—"the NHDPlus catchment"—to report on and track environmental water quality improvements. It is hoped that the new strategy will streamline water quality assessment and reporting while providing a more complete picture of the nation's water quality.

Despite the many successes of the NEP and EPA wetlands program efforts, land disturbance and nonpoint source pollution—especially nutrient and sediment runoff from land to waterbodies—remain critical challenges. Thirty-two percent of existing wetlands nationwide are in poor condition. Harmful algal blooms, a symptom of excess nutrients in water, still present a constant threat to drinking water. The EPA is addressing this challenge through new health advisories, technical assistance to drinking water utilities and laboratories, and improved analytical detection methods. For example, the Agency's research on developing methods for measuring organic chemicals in drinking water has provided three sensitive, rugged, and specific analytical methods for measuring organic chemicals—including pesticides and cyanotoxins—on the Contaminant Candidate List at concentrations of human health concern. EPA can now use these methods in

developing future Unregulated Contaminant Monitoring Regulations to gather nationwide occurrence data.

Goal 3: Cleaning Up Communities and Advancing Sustainable Development

FY 2015 Performance Measures						
Met: 26 Not Met: 3 Data Unavailable: 3						
Total Measures: 32						

EPA continues to make progress toward its land protection and restoration objectives. The Agency and its partners made 21,836 sites ready for anticipated use (RAU) in FY 2014-15, significantly exceeding its FY 2014-15 APG of 18,970 sites. This was primarily driven by the Underground Storage Tank Program exceeding its RAU target by 15 percent. EPA's Superfund and RCRA Corrective Action cleanup programs met their performance targets but expect future challenges, since stagnated appropriations have caused delays in assessment, investigation, and design work that bring sites into the remedy construction stage. In addition, many of the remaining sites are more complex and subject to newly identified contaminants and more stringent cleanup standards for specific contaminants. The Brownfields Program continued to show progress, leveraging over 11,000 jobs and \$1.71 billion in FY 2015.

The Agency is meeting its performance targets for prevention of hazardous waste and petroleum releases. In FY 2015, EPA published two rules that will help sustain this progress: an update to the UST leak prevention and detection regulations and the "Definition of Solid Waste" rule, which added safeguards for recycling of hazardous materials and included a groundbreaking environmental justice analysis to address potential impacts on low-income and minority communities. The Agency continues to make progress implementing the Executive Order on Improving Chemical Facility Safety and Security, developing guidance and implementing training for local, state, and tribal emergency responders and developing standard operating procedures for regional response teams. However, this work, coupled with the limited resources, contributed to the Agency missing its FY 2015 target of 460 risk management program (RMP) inspections. EPA's ability to maintain regular RMP inspections is limited to less than 4 percent of chemical facilities.

Strengthening environmental and health protection in Indian country continues to be an area of focus for improvement, as few tribes have sought federal environmental program implementation authorities due to understaffed tribal environmental departments. EPA worked with tribes to address one of the greatest challenges in FY 2015, that of implementing environmental and health programs in Indian Country, by finalizing 211 EPA-Tribal Environmental Plans through the end of the year and consulting with tribes on 75 regulations, permits and other policy issues.

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

FY 2015 Performance Measures						
Met: 10	Met: 10 Not Met: 7 Data Unavailable: 6					
Total Measures: 23						

Under its objective of "Ensuring the Safety of Chemicals," EPA exceeded its APG target of 250 chemical assessments by completing assessments for 297 pesticides and other commercial/industrial chemicals in FY 2014-2015. The Agency completed a risk assessment for a fifth TSCA Work Plan Chemical—adding to the four completed in FY 2014. The Agency could not complete risk assessments for an additional seven chemicals due to insufficient data; however, it released a data needs assessment to acquire adequate data to complete the risk assessments. Assessments for three of the five chemicals completed in FY 2014 and FY 2015 identified risks, and EPA acted expeditiously in FY 2015 to respond to the risks identified. Soon after the assessments were completed, the Agency conducted workshops with stakeholders and the public to examine risk management options, and quickly commenced the process for exercising its authority under Section 6 of TSCA to prohibit/restrict specific uses of those chemicals (TCE, NMP and BPM). EPA also initiated assessments of additional chemicals in preparation for accelerated assessment completion targets in FY 2016 and FY 2017 (12 and 21, respectively). With respect to draft risk assessments for existing pesticides, EPA exceeded its goal by 15, resulting in 69 draft risk assessments being issued in 2015. As part of its strategy to achieve the 2022 statutory deadline, the Agency implemented process efficiencies, while also addressing endangered species and pollinator protection issues. EPA also made progress on endocrine disruptor screenings, completing 54 in FY 2015. Especially noteworthy was the Agency's cross-office work to develop and implement new high throughput and computational models, which, starting in FY 2017, will allow nearly 20 times the current number of screenings to be performed while nearly eliminating animal testing in the estrogen screening phase. In the coming years, EPA's Office of Research and Development plans to expand these models to screen for other endocrine related biological activity and potentially non-endocrine activity as well.

Under its objective to "promote pollution prevention," EPA made significant progress in reducing hazardous materials, water usage, and greenhouse gases, as well as increasing company cost savings. A key accomplishment was the rebranding of the Design for the Environment program under a new "Safer Choice" label, designed to increase consumer awareness of and demand for products that are safer for families, pets and the environment. Recognition of products under the Safer Choice label and addition of chemicals to the Safer Chemical Ingredient List continued at the FY 2014 pace.

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

FY 2015 Performance Measures						
Met: 8 Not Met: 7 Data Unavailable: 0						
Total Measures: 15						

By focusing its efforts on large cases that drive compliance across industries and have the highest impact on protecting public health and the environment, EPA made strong progress under its enforcement objective in FY 2015. The Agency obtained more than \$404 million in combined federal administrative, civil judicial penalties and criminal fines—more than double the penalties and fines assessed in FY 2014—and a criminal conviction rate of 92 percent. Based on EPA's "tiering" methodology, the majority of the criminal cases (62 percent) were determined to have significant health, environmental, and deterrence impact. Several years of budget cuts, combined

with unpredictable year-to-year variance of the settlement process, affected some of the Agency's FY 2015 enforcement program results, contributing to missed targets for the number of cases initiated, pounds of pollutants reduced, and volume of contaminated soil cleaned up.

EPA's Superfund Enforcement program was able to secure the largest recovery for the cleanup of environmental contamination in U.S. history with the approval and payment of the \$4.4 billion settlement with the Kerr-McGee Corporation and related subsidiaries of the Anadarko Corporation. This settlement will help to cleanup 2,700 sites in 47 states. Of the environmental recovery in this settlement, nearly \$2 billion will pay for cleanup work associated with numerous EPA-lead sites, with the remainder flowing largely to states and tribes.

EPA continued to promote environmental justice (EJ) by targeting noncomplying facilities for their disproportionate impacts on low-income and minority communities. The Agency worked to include Supplemental Environmental Projects (SEPs) which directly benefit communities in settlement agreements, and SEPs more than doubled from FY 2014 (\$17M) to FY 2015 (\$39M). EPA also released EJSCREEN, a new tool for mapping demographic and enforcement data, and made considerable progress in finalizing its EJ2020 Action Plan. Looking forward, the Agency continues to implement Next Generation Compliance tools and strategies, such as electronically-submitted reports and advanced pollution monitoring, which will advance its enforcement activities and further safeguard public health and the environment.

### **Cross-Agency Strategies**

Working Toward a Sustainable Future. EPA is making steady progress in promoting sustainability, working within the Agency and with federal and non-federal partners. EPA coordinated the Federal Green Challenge to reduce waste, water, and electricity usage, while cutting roughly \$42 million. EPA also collaborated with the Council on Environmental Quality (CEQ), Office of Management and Budget, Department of Energy, and General Services Administration to finalize Executive Order 13693 to cut federal greenhouse gas emissions. EPA produced a set of 30 videos, which show the many ways the Agency is incorporating sustainability into its daily work. EPA also issued updated guidance on purchasing environmentally preferable electronic equipment, helping to meet the federal acquisition 95 percent Green Products purchasing requirement. Working with seven federal agencies and CEQ, EPA developed the Green Infrastructure Collaborative to advance federal commitments to Green Infrastructure, and the Agency took actions to reduce food waste, diverting 375,000 tons of food from landfills. Similar efforts increased electronic waste collection by 7.5 percent among participants in the Electronics Challenge.

**Working to Make a Visible Difference in Communities.** During FY 2015 EPA progressed as planned toward the vision established in its *FY 2014-2018 EPA Strategic Plan* by focusing on four areas: target communities, the Community Resource Network, empowering communities, and tools. With the help of more than 200 local governmental and nongovernmental organizations, EPA's regional offices are implementing activities in 50 underserved communities to address their most pressing environmental needs—clean water, safe indoor environments, air pollution, and other focus areas. Working across programs and with shared funds, expertise, and data, EPA is collecting and disseminating stories from these local projects, along with a wide range of helpful

tools, databases, and peer contacts, on a single agency-wide Community Resource Network. EPA also finalized and launched a <u>single landing page for communities</u> on its public website, which includes one tool to help communities in their green infrastructure/stormwater management integrated planning. EPA incorporated Next Generation monitoring tools (such as air and water sensors) in 12 negotiated enforcement settlements (covering 9 regions) and in 12 discharge permits. Ultimately, EPA wants to empower community members to follow pollution trends in their own backyards and to help them interpret and use the data to spur action. The Agency is working to identify institutional mechanisms to solidify community and cross-agency work in additional program areas and opportunities for incorporating Next Generation advanced monitoring tools into negotiated settlements.

Launch a New Era of State, Tribal, Local, and International Partnerships. EPA continues to make progress in strengthening its partnerships with states, tribes, local governments, and the global community. To revitalize the National Environmental Performance Partnership System, EPA fully engaged with states in establishing national priorities as part of the new 2-year National Program Manager Guidance process, and increased support for flexibility to achieve them through Performance Partnership Agreements and Performance Partnership Grants. The Agency also worked with states to develop a management plan and selected five pilot projects to modernize and streamline environmental protection through E-Enterprise for the Environment. To strengthen environmental programs in Indian country, EPA launched a national consultation with tribal leaders on guidance addressing the importance and role that treaties play in the context of EPA decision-making. Additionally, the Agency conducted an unprecedented level of outreach with intergovernmental partners during development of key regulations such as the Clean Power Plan and the Waters of the U.S. Rule. A challenge for partnerships is the need to socialize and integrate improvements to the National Environmental Performance Partnership System and E-Enterprise priorities into the Agency's everyday business practices.

Embracing EPA as a High-Performing Organization. Embracing EPA as a High Performing **Organization.** During FY 2015 EPA made progress in continuing to improve as a high performing organization by focusing on fostering employee development and streamlining business practices. For the first time in over five years, EPA developed and implemented a Senior Executive Service (SES) Candidate Development Program (CDP), the Office of Personnel Management's preferred method for identifying and developing individuals for senior leadership. EPA typically faces 20-30 SES vacancies per year; under this CDP, EPA selected 26 outstanding candidates. The Agency continued to implement its successful Skills Marketplace program by selecting over 300 employees to work on projects part-time while remaining in their home offices. To help streamline business practices, this year EPA identified 36 priority projects to be supported by 38 Lean events. The Agency completed 27 of these Lean events in FY 2015 and expects to complete the remaining 11 in the first quarter of FY 2016. In FY 2016, EPA will focus Agency leadership in Lean implementation through rapid assessments of progress to date and by convening a Lean Action Board to advise the Administrator on how to remove barriers to successful replication and scaleup. EPA also faced challenges in FY 2015 related to timely completion of space planning and design and regional personnel moves and consolidations. Finally, EPA continued to develop its Agency-wide training platform, EPA-U. EPA's ability to fully build EPA-U system capabilities was delayed, pending procurement and implementation of a new Learning Management System by the Agency's service provider, the Department of Interior.

#### THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY



WASHINGTON, D.C. 20460

#### Reliability of the U.S. Environmental Protection Agency's Performance Data

Data used to report performance results are reliable and as complete as possible. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data for several of our performance measures for this reporting year. When possible, however, we have portrayed trend data to illustrate progress over time. We also report final performance results for previous years that became available in FY 2015.

Gin McCarthy	FEB - 2 2016	
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Administrator		

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## **EPA Programs and Activities Contributing to Goal 1**

- Acid Rain Program
- Air Toxics
- Clean Air Allowance Trading Programs
- Clean Air Research
- Indoor Air Quality and Radon Programs
- National Ambient Air Quality Standards Development and Implementation
- Mobile Sources
- New Source Performance Standards
- New Source Review
- Regional Haze
- Stratospheric Ozone Layer Protection Program
- Radiation Protection and Emergency Response Programs
- Climate Partnership Program

## GOAL 1: ADDRESSING CLIMATE CHANGE AND IMPROVING AIR QUALITY

Reduce greenhouse gas emissions and develop adaptation strategies to address climate change, and protect and improve air quality

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

## **Summary of progress towards strategic objective:**

EPA continues to address the challenges of a changing climate and is on track to meet its strategic measures supporting this objective. The President's June 2013 Climate Action Plan (CAP) outlines specific actions the U.S. will undertake to cut carbon pollution, prepare the country for the impacts of climate change, and lead international efforts to address climate change. On August 3, 2015, EPA finalized the Clean Power Plan, which will cut U.S. carbon pollution from the power sector by 870 million tons, or 32 percent below 2005 levels, in 2030. Power plants are the largest drivers of climate change in the United States, accounting for roughly one-third of all carbon pollution emissions, but there were no national limits on carbon pollution until the Clean Power Plan. EPA is also implementing motor vehicle greenhouse gas (GHG) emission standards that, in coordination with the fuel economy standards of the National Highway Transportation Safety Agency (NHTSA), will save American consumers about \$1.7 trillion, decrease the nation's fuel consumption by approximately 12.5 billion barrels of oil and prevent 6.3 billion metric tons of GHG emissions over the lifetimes of affected vehicles sold through model year 2025. EPA's partnership efforts are achieving real emission reductions; in 2013, EPA worked with the building, industry, and transportation sectors to avoid emissions of 694.8 million metric tons of CO2 equivalents. Despite this progress, U.S. GHG emissions have increased 6 percent from 1990 to 2013. While EPA and its partners (across industry, government, etc.) are taking action to address climate change, low carbon prices and resource constraints may limit the adoption of energy efficiency practices, investments in renewable energy, and other capital investments to reduce GHG emissions. EPA and its partners are making significant progress integrating climate adaptation planning into programs, policies, rules, and operations. 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.

Program Area	Performance Measures and Data
(1) Address Climate Change	Strategic Measure: By 2018, additional programs from across EPA will promote practices to help Americans save energy and conserve resources, leading to expected greenhouse gas emissions reductions of 1,178.5 MMTCO2Eq. from a baseline without adoption of efficient practices. Building Programs 215.5 MMTCO2Eq., Industrial Programs 651.4 MMTCO2Eq., SmartWay Transportation Partnership 100 MMTCO2Eq., Pollution Prevention Programs 71 MMTCO2Eq., Sustainable Materials Management Programs117.4 MMTCO2Eq., WaterSense Program 23 MMTCO2Eq., Executive Order 13514 GHG Reduction Program 0.21 MMTCO2Eq., This reduction compares to 621.08 MMTCO2Eq. reduced in 2011. Baseline FY 2011: Building Programs 189.0 MMTCO2Eq., Industrial Programs 357.9 MMTCO2Eq., SmartWay Transportation Partnership 27.9 MMTCO2Eq., Pollution Prevention Programs 17 MMTCO2Eq., Sustainable Materials Management Programs 22.1 MMTCO2Eq., WaterSense Program 7 MMTCO2Eq., Executive Order 13514 GHG Reduction Program 0.18 MMTCO2Eq.

GOAL 1: ADDRESSING CLIMATE CHANGE AND IMPROVING AIR QUALITY

(PM G02) Million metric tons of	carbon equivalent (MMT)	CO2E) of greenhouse gas r	reductions in the buildings sector.
(			

(1 M1 G02	(1 M G02) Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the buildings sector.							mgs sector.	
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	143.0	156.9	168.7	182.6	196.2	188.0	201.1	210.4	
Actual	163.5	189.0	221.9	254.2	Data Avail 4/2016	Data Avail 12/2016			MMTCO2e

Additional Information: The reductions (from a baseline in 2004 of 89.5 million metric tons of carbon dioxide equivalent reduced) are the result of EPA ENERGY STAR®'s partnership, energy efficiency resources, outreach, and recognition across products, homes, buildings, and industrial plants. ENERGY STAR is a highly cost-effective program which helps Americans reduce GHG emissions while saving energy and money. The program is a trusted source for voluntary standards and unbiased information on energy efficient products and practices across the economy. With consumer awareness growing yearly, and now at about 90%, the benefits from ENERGY STAR products and buildings has tripled in the last 10 years.

(PM G06) Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the transportation sector through EPA's SmartWay partnership program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	15.4	23.7	28.0	33.0	61	70	76	82	) (T) (T) (C) (2)
Actual	17.3	27.9	38.9	51.6	61.7	72.8			MMTCO2e

Additional Information: SmartWay's emissions reductions are estimated by comparing the emissions performance of trucks in SmartWay with modeled estimates of national truck emissions. The baseline in 2004 is 0.7 million metric tons of carbon dioxide equivalent reductions from the SmartWay program. From 2004 to 2014, EPA projected forward from the 2004 baseline assuming no impact on GHG emissions from U.S. climate change programs. Beginning in 2014, heavy-duty vehicles subject to the Phase 1 Greenhouse Gas rule are gradually penetrating the national fleet, raising the emissions performance of the national fleet, and reducing the difference between the emissions performance of SmartWay truck carrier partners and the national fleet. This is reflected in SmartWay's modeling, and is expected to reduce the emissions benefit of the trucking component of SmartWay over time. Trucking is only one component of SmartWay. Activities by SmartWay's rail, barge, and shipper partners also reduce the carbon footprint of goods movement and are not currently captured in these benefit estimates

(PM G16) Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the industry sector.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	304.0	346.2	372.9	421.9	461.8	540.3	676	702.7	
Actual	362.8	386.4	378.1	637.9	Data Avail 4/2016	Data Avail 12/2016			MMTCO2e

Additional Information: The baseline in 2004 is 201 million metric tons of carbon dioxide equivalent reductions from ENERGY STAR for Industry, Clean Energy Programs, Non-CO2 Partnership Programs, Significant New Alternatives Policy (SNAP), and the Landfill Rule. Through EPA's voluntary and regulatory programs, the industrial sector is making cost-beneficial reductions in GHG emissions. Combined, energy, agriculture, waste, manufacturing and other industrial sectors generate more than a third of the nation's annual GHG emissions. Industrial sector emissions are produced either from a process itself, from the energy consumed during the process, or to produce electricity. For example, the transformation of raw materials from one state to another can result in the release of GHGs such as carbon dioxide (CO2) and methane (CH4). In addition, GHGs are often used in products or by end-consumers. These gases include industrial sources of man-made compounds such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). GHG emissions reductions benefits from OAR's industrial sector programs continue to grow, exceeding programmatic targets each year. OAR only reports benefits from those programs that are still active in the reporting year.

(PM G18) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target				93	95	95	95	95	Percent of
Actual				96	98	Data Avail 4/2016			Reports Verified

Additional Information: The Greenhouse Gas Reporting Program, established in 2009, has 41 sectors that include approximately 10,000 reporters. Both facilities and suppliers are required to report their data annually by the reporting deadline of March 31st. After submission of the data, the Agency conducts a verification review that lasts approximately 150 days. The data verification process includes a combination of electronic checks, staff review, and follow-up with facilities to identify potential reporting errors and have them corrected before publication. The 150-day period includes 60 days for the EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for the EPA to review responses or resubmitted reports. EPA plans to publish all of the data through its online, interactive publication tool (www.epa.gov/ghgreporting) each year by October 1st.

**Strategic Measure:** By 2018, an additional 240 state, tribal, and community partners will integrate climate change data, models, information, and other decision support tools developed by EPA for climate change adaptation into their planning processes. (Baseline: 0.)

(PM AD1) Cumulative number of major scientific models and decision support tools used in implementing environmental management programs that integrate climate change science data.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			3	4	5	5			Major
Actual			3	4	7	8			Models and Tools

Additional Information: To ensure EPA's mission, EPA will build resilience to climate change by integrating considerations of climate data into major scientific models and decision support tools. Many of the outcomes EPA is working to attain are sensitive to climate, and every action EPA takes must be resilient to these fluctuations. The FY 2011 baseline is 0 major scientific models/decision support tools.

(PM AD4) Cumulative number of state, tribal, and community partners that have integrated climate change data, models, information, and other decision-support tools developed by EPA for climate change adaptation into their planning processes.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target							50	120	Number of
Actual									Partners

Additional Information: A key goal of EPA's work on climate adaptation is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. A central element of this effort focuses on providing the tools, training, technical assistance, data, models, and other information they need to build their adaptive capacity. This is consistent with directives in Executive Order 13653 ("Preparing the United States for the Impacts of Climate Change"). This measure replaces measure AD1. The new measure is focused more on the actual use of EPA models and tools by states, tribes, and local communities. The FY 2015 baseline is zero state, tribal, and community partners.

**Strategic Measure:** By 2018, 240 state, tribal, and community partners will incorporate climate change adaptation into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements). (Baseline: 5.)

(PM AD3) Cumulative number of major grant, loan, contract, or technical assistance agreement programs that integrate climate science data into climate sensitive projects that have an environmental outcome.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			1	2	3	3			Major
Actual			3	5	7	8			Programs

Additional Information: To ensure EPA's mission, EPA will build resilience to climate change by integrating considerations of climate data into grant, loan, contract, and technical assistance programs. Many of the outcomes EPA is working to attain are sensitive to climate, and every action EPA takes must be resilient to these fluctuations. The FY 2011 baseline is 0 programs

(PM AD5) Cumulative number of state, tribal, and community partners that 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).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target							50	100	Number of
Actual									Partners

Additional Information: A key goal of EPA's work on climate adaptation is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. A central element of this effort focuses on supporting climate-resilient investments across the nation. This is consistent with directives in Executive Order 13653 ("Preparing the United States for the Impacts of Climate Change"). This measure replaces measure AD3. The new measure is focused more on the actual integration of adaptation into the implementation of environmental programs by states, tribes, and local communities. The FY 2015 baseline is zero state, tribal, and community partners.

**Strategic Measure:** By 2018, 6 existing or new EPA-developed training programs will incorporate climate change adaptation planning for EPA staff, state, tribal, and community partners (includes programmatic and cross-programmatic trainings). (Baseline: 0.)

(PM AD6) Cumulative number of EPA-developed training programs that incorporate climate change adaptation planning for EPA staff, state, tribal, and community partners (includes programmatic and cross-programmatic trainings).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target							3	4	<b>N</b> T 1
Actual									Number

Additional Information: A key goal of EPA's work on climate adaptation is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. A central element of this effort focuses on the provision of training to increase awareness of ways climate change may affect their ability to implement effective programs. This is consistent with directives in Executive Order 13653 ("Preparing the United States for the Impacts of Climate Change"). This measure addresses training programs for climate change adaptation planning, which is not covered in the current set of measures.

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

## **Summary of progress towards strategic objective:**

EPA, together with its implementation partners, continues to improve air quality by designing, developing, and implementing national programs that are delivering significant reductions in harmful air pollutants. EPA's recent and previous actions are generating real environmental and public health benefits. Environmental indicators related to criteria pollutants and air toxics show improving outdoor air quality trends, and we continue to make progress in preventing lung cancer deaths from radon exposure and reducing adverse asthma health outcomes. From 2003 to 2014, population-weighted ambient concentrations of fine particulate matter and ozone have decreased 29 percent and 18 percent, respectively. EPA actions include setting health-based ambient air quality standards grounded in scientific research, setting fuel and engine standards that improve air quality in communities across the U.S. and developing regulations that will reduce emissions of harmful pollutants from sources that pose the greatest risk to communities. In FY 2015, EPA strengthened the ground-level ozone National Ambient Air Quality Standard (NAAQS) to 70 from 75 parts per billion, creating public health benefits estimated at \$2.9 to \$5.9 billion annually in 2025, and issued standards to further control toxic air emissions from petroleum refineries and requiring first-ever fenceline monitoring to protect nearby communities. Despite great progress in air quality improvement, approximately 57 million people nationwide lived in counties with pollution levels above the primary NAAQS in 2014.

Program Area					Performance	Measures and	Data							
	decrease (PM M9)	to 0.072 ppm	compared to	the average	of 0.076 ppm	ge concentrati i in 2011, a rec weighted am	duction of 5 p	ercent.						
	Countries	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit				
	Target	11	12	13	15	16	16	17	19	Percent				
	Actual													
(1) Reduce Criteria Pollutants and Regional Haze	to counties with more people by weighting each county's concentration by its population. The targets for this measure are based on predictions of future year concentrations resulting from the Community Multi-scale Air Quality model which estimates the impact of existing and future control strategies. The actuals are updated annually based on the actual monitored ozone concentrations.  (PM M92) Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.  FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit													
	Target									Unit				
	Actual	70	73	50 72	80 74	80 79	80 Data Avail 12/2016	81	83	Percent Reduction				
	Explanation of Results: The FY 2014 target was missed given that meteorology plays a significant role in ozone formation and PM 2.5 emissions, making it challenging to estimate out year targets for this measure and to have the result align precisely. Moreover, ambient concentrations for ozone and PM 2.5 have been relatively stable over the past few years and actuals for this measure have followed suit. The Agency continues to make progress towards Goal 1 Strategic Objectives, and will continue to work with its regulatory partners to improve the results of this measure.  Additional Information: This measure shows progress in reducing the number of "unhealthy" air quality days based on the Air Quality Index (AQI) relative to the 2003 baseline of zero percent reduction. The AQI is an index for reporting daily air quality. An AQI value of 100 generally corresponds to the National Ambient Air Quality Standard for each of the five pollutants included in the index. When AQI values are above 100, air quality is considered to be unhealthy for certain sensitive groups of people and then for everyone as AQI values get higher. This measure assigns more weight to higher AQI values and also assigns more weight to counties with more people. Because ozone and PM2.5 typically account for the vast majority of AQI values above 100, this measure largely tracks changes in those two pollutants.													

(PM MM9) Cumulative percentage reduction in the average number of days during the ozone season that the ozone standard is exceeded in non-attainment areas, weighted by population.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	26	29	45	50	50	50	68	70	Percent
Actual	56	58	54	59	67	Data Avail 12/2016			Reduction

Additional Information: This measure shows progress in reducing the number of exceedance days in the 1997 ozone nonattainment areas relative to the 2003 baseline. Consistent with the National Ambient Air Quality Standard for ozone, it is based on a three-year average. The measure assigns more weight to nonattainment areas with more people by weighting each nonattainment area's exceedance count by its population.

(PM O33) Cumulative millions of tons of Volatile Organic Compounds (VOCs) reduced since 2000 from mobile sources.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	1.71	1.88	2.05	2.23	2.4	2.57	2.74	2.91	Tons
Actual	1.71	1.88	2.05	2.23	2.4	2.57			Reduced

Additional Information: Volatile organic compounds (VOCs) react in the atmosphere to form ozone and particulate matter, both of which are criteria pollutants for which EPA establishes National Ambient Air Quality Standards. In addition, some VOC species are air toxics (such as benzene) or react in the atmosphere to form air toxics. Reducing VOC emissions from mobile sources reduces the atmospheric concentrations and resulting health and environmental effects of these pollutants. EPA is reducing VOC emissions from mobile sources through its emissions standards promulgated since 2000, which apply to a wide range of mobile sources, including on-road cars and trucks, nonroad engines and equipment (such as lawn and garden equipment), locomotives, and marine engines. VOC emissions will continue to fall over time as the new, cleaner vehicles and engines enter the fleet. The baseline in 2000 for Volatile Organic Compounds emissions from mobile sources is 7.7 million tons. The 2000 Mobile6 inventory is used as the baseline for mobile source emissions.

(PM O34) Cumulative millions of tons of Nitrogen Oxides (NOx) reduced since 2000 from mobile sources.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	3.39	3.73	4.07	4.41	4.74	5.08	5.42	5.76	Tons
Actual	3.38	3.73	4.07	4.41	4.74	5.08			Reduced

Additional Information: Nitrogen oxides (NOx) react in the atmosphere to form ozone, particulate matter, and NO2, all of which are criteria pollutants for which EPA establishes National Ambient Air Quality Standards. Reducing NOx emissions from mobile sources reduces the atmospheric concentrations and resulting health and environmental effects of these pollutants, as well as, the ecosystem effects associated with nitrogen deposition to water bodies. EPA is reducing NOx emissions from mobile sources through its emissions standards promulgated since 2000, which apply to a wide range of mobile sources, including on-road cars and trucks, nonroad engines and equipment (such as construction, farming, and lawn and garden equipment), locomotives, aircraft, and marine vessels. NOx emissions will continue to fall over time as the new, cleaner vehicles and engines enter the fleet. The baseline in 2000 for Nitrogen Oxide emissions from mobile sources is 11.8 million tons. The 2000 Mobile6 inventory is used as the baseline for mobile source emissions.

**Strategic Measure:** By 2018, the population-weighted average concentrations of inhalable fine particles in all monitored counties will decrease to  $9.5 \,\mu\text{g/m}^3$  compared to the average of  $10.4 \,\mu\text{g/m}^3$  in 2011, a reduction of 9 percent.

(PM M91) Cumulative percentage reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	6	15	16	20	28	29	31	32	Dancont
Actual	23	26	26	29	29	Data Avail 12/2016			Percent Reduction

Additional Information: This measure shows progress in reducing ambient PM2.5 concentrations with respect to the 2003 baseline (population-weighted national average of 14.1 ug/m3). Consistent with the National Ambient Air Quality Standard for PM2.5, it is based on a three-year average concentration. The measure assigns more weight to counties with more people by weighting each country's concentration by its population. The targets for this measure are based on predictions of future year concentrations resulting from the Community Multi-scale Air Quality model which estimates the impact of existing and future control strategies. The actuals are updated annually based on the actual monitored concentrations.

### (PM P34) Cumulative tons of PM-2.5 reduced since 2000 from mobile sources.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	122,434	136,677	146,921	159,164	171,407	183,651	195,895	208,138	Tons
Actual	122,434	136,677	146,921	159,164	171,407	183,651			Reduced

Additional Information: Reducing emissions of PM-2.5 results in decreases in atmospheric concentrations of inhalable fine particles, which in turn lowers the risk of premature mortality, hospital admissions for heart and lung disease, and respiratory symptoms. EPA is reducing PM-2.5 emissions from mobile sources through its emissions standards promulgated since 2000, which apply to a wide range of mobile sources, including on-road cars and trucks, nonroad engines and equipment (such as construction and farming equipment), locomotives, and marine vessels. PM-2.5 emissions will continue to fall over time as the new, cleaner vehicles and engines enter the fleet. The baseline for 2000 for PM-2.5 emissions from mobile sources is 510,550 tons. The 2000 Mobile6 inventory is used as the baseline for mobile source emissions.

**Strategic Measure:** Through 2018, maintain emissions of sulfur dioxide (SO2) from electric power generation sources to 5.0 million tons per year compared to the 2009 level of 5.7 million tons emitted. (In 2011, these sources emitted 4.5 million tons.) (Rationale for baseline year: 2009 is the year immediately preceding the first year of SO2 compliance under the Clean Air Interstate Rule [CAIR] and full implementation of Acid Rain's permanent cap on utility SO2 emissions.)

(PM A0	(PM A01) Annual emissions of sulfur dioxide (SO2) from electric power generation sources.												
FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit													
Target	8,450,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	5,000,000	5,000,000	Toma				
Actual	5,166,000	4,544,000	3,319,000	3,210,365	3,122,921	Data Avail 4/2016			Tons Emitted				

Additional Information: The baseline in 1980 is 17.4 million tons of SO2 emissions from electric utility sources. This inventory was developed by the National Acid Precipitation Assessment Program (NAPAP) and is used as the basis for reduction in Title IV of the 1990 Clean Air Act Amendments (CAAA). Statutory SO2 emissions capped in 2010 at 8.95 million tons, approximately 8.5 million tons below 1980 emissions level. Targets for this measure through 2010 were based on implementation of the nationwide Acid Rain Program alone whereas the (lower) target of 6 million tons for 2011-2015 recognized implementation of the CAIR Programs in eastern states in combination with the Acid Rain Program (ARP). The updated 2016 and 2017 targets are based on the ARP and newly established SO2 budgets under the Cross State Air Pollution Rule (CSAPR) which began implementation in January 2015. The FY 2016 and FY 2017 targets incorporate the following assumptions: 1) CSAPR states emit at the full assurance provision level allowed under the rule; 2) sources in non-CSAPR states would continue to emit at historical levels; 3) potential use of banked ARP allowances; and, 4) uncertainty regarding future impact of market forces on the use of coal and natural gas in power generation. Actual performance has consistently been lower than the target due to a number of factors including: 1) the economics of power sector fuel prices currently favor natural gas over coal; 2) electricity generation fell starting in 2007 and has been relatively flat in recent years, but is expected to grow over time; and 3) some implementation strategies that are currently being used to comply with other environmental regulations also reduce SO2 emissions.

(PM MM6) Total number of backlogged SIPs remaining.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target				No Target	No Target	No Target	300-400	100-200	Number of
Actual				699	649	557			Backlogged SIPs

*Explanation of Results:* At the end of FY 2015, EPA had 557 backlogged SIPs remaining to be acted on. In FY 2015, EPA took action on 536 SIPs. 298 of these actions were on backlogged SIPs and 238 actions were on non-backlogged SIPs. The total number of active SIPs is trending down (22.5% decrease since 10/1/2013) and EPA is receiving fewer incoming SIPs than in the past.

Additional Information: The Clean Air Act requires states to develop a general plan to attain and maintain the National Ambient Air Quality Standards (NAAQS) in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans or SIPs, are developed by state and local air quality management agencies and submitted to EPA for approval. SIPs vary in their complexity with more complex SIPs requiring more effort from EPA to act on them. Each year EPA identifies the baseline of total active SIPs, current and backlogged, and considers a range of anticipated incoming SIPs for that year. EPA then estimates the total number of SIP actions it will take in the upcoming year. The SIP baseline changes year to year depending on actions taken in the prior year. The estimated number of actions will also vary year to year depending on the status of rulemakings, state priorities for which SIPs they want acted on, and potential new SIPs or SIP revisions. Targets are presented as a range to reflect this variability. For more information on SIPs, see http://www.epa.gov/airquality/urbanair/sipstatus/overview.html.

(PM MM7) Cumulative Percent of State Implementation Plans (SIPs) removed from the historical backlog. FY 2010 FY 2011 FY 2013 FY 2014 FY 2012 FY 2015 FY 2016 FY 2017 Unit **Target** 0 20 40 60 84 Cumulative Percentage Actual 0 25 48 Removed

*Explanation of Results:* As of October 1, 2015, there are currently 365 SIPs remaining in the historical backlog. The agency expects that by 2017, the historical backlog will be eliminated with the exception of approximately 110 historically backlogged SIPs of which NACAA/ECOS and the associated Regions and states are aware of the remaining backlogged SIP issues.

Additional Information: The Clean Air Act requires states to develop a general plan to attain and maintain the National Ambient Air Quality Standards (NAAQS) in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. State Implementation Plans, or SIPs, are developed by state and local air quality management agencies and submitted to EPA for approval. A SIP is considered backlogged if it has not been acted on within 12 months from its completeness date. In a February 2014 joint EPA/ECOS/NACAA/commitment, EPA and the States agreed to work toward eliminating the backlog of SIPs that existed as of October 1, 2013 by the end of the 2017. The baseline for the historical backlog is 699. Net cumulative progress against the baseline is measured for each fiscal year as of September 30th. The EPA has revised PM MM7 to simplify the existing measure to more clearly convey our progress to clear the SIP backlog that existed at the start of NACAA-ECOS-EPA agreement (also known as the historical SIP backlog). Accordingly, the EPA has tracked progress for this new measure since FY 2013 and has set targets for FY 2016 and FY 2017.

(PM M94) Percent of major NSR permits issued within one year of receiving a complete permit application.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	78	78	78	78	78	78	78	78	Danasat
Actual	46	73	80	81	91	Data Avail 12/2016			Percent Issued

Additional Information: New Source Review (NSR) requires stationary sources to obtain permits before they start construction. NSR permits are usually issued by state or local air pollution control agencies; EPA issues permits in some cases (such as in Indian country). This measure shows progress against the CAA requirement that NSR prevention of significant deterioration (PSD) permits are issued within one year of determination of complete application. The 2004 baseline is 61%.

(PM M95) Percent of significant Title V operating permit revisions issued within 18 months of receiving a complete permit application.

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Targ	et	100	100	100	100	88	88	88	88	D
Actu	al	82	84	86	91	91	Data Avail 12/2016			Percent Issued

Additional Information: Stationary Source operating permits are legally enforceable documents that permitting authorities issue to air pollution sources after the source has begun to operate and must be renewed every five years. Title V permits are usually issued by state or local air pollution control agencies; EPA issues the permit in some cases (such as in Indian country). Additionally, when a source (or facility) undergoes a major or "significant" revision to its operations that affects emissions, a revision to the Title V operating permit must be sent to the permitting agency for review. This measures tracks timeliness of significant permit revision issuance within 18 months. The 2004 baseline is 100%.

(PM M96) Percent of new Title V operating permits issued within 18 months of receiving a complete permit application.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	99	99	99	99	75	75	75	75	Dansant
Actual	67	72	76	60	59	Data Avail 12/2016			Percent Issued

**Explanation of Results:** The EPA did not meet its FY 2014 target for this measure. The vast majority of permits are issued by state air agencies and it is difficult to estimate targets for state work. The variation in actual performance is partly attributable to states' inexperience in issuing selected types of permits as well as shifts to higher priority work.

Additional Information: Operating permits are legally enforceable documents that permitting authorities issue to air pollution sources after the source has begun to operate. Usually Title V permits are issued by state or local air pollution control agencies, and the EPA issues the permit in some cases. Title V permits must be renewed every five years. When a new source (or facility) begins operations and has the potential to emit air pollution beyond a certain threshold, a new Title V operating permit must be sent to the permitting agency for review. The 2004 baseline is 75%.

(PM N35) Limit the increase of Carbon Monoxide (CO) emissions from mobile sources compared to a 2000 baseline.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	1.69	1.86	2.02	2.19	2.36	2.53	2.70	2.87	Tons
Actual	1.69	1.86	2.02	2.19	2.36	2.53			Emitted

Additional Information: As of 2010, the few areas in the United States that still had active issues with local levels of carbon monoxide had controlled their levels to or below EPA's National Ambient Air Quality Standard for CO. These areas have all been re-designated to attainment with a Clean Air Act maintenance plan (i.e., known as "maintenance areas"). For these areas, the local CO level was no longer a growing problem. The baseline in 2000 for Carbon Monoxide emissions from mobile sources is 79.2 million tons. The 2000 Mobile6 inventory is used as the baseline for mobile source emissions.

# (2) Reduce Air Toxics

**Strategic Measure:** Through 2018, maintain air toxics (toxicity-weighted for cancer) emissions reductions to 4.2 million tons from the 1993 toxicity-weighted baseline of 7.2 million tons.

(PM 001) Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	36	36	37	42	42	42	41	41	Percent
Actual	40	45	45	45	Data Avail 2017	Data Avail 2017			Reduction

Additional Information: The baseline in 1993 is 7.24 million tons. The toxicity-weighted emission inventory utilizes the National Emissions Inventory (NEI) for air toxics along with the Agency's compendium of cancer and non-cancer health risk criteria to develop a risk metric that can be tabulated on an annual basis. Air toxics emissions data are revised every three years with intervening years (the two years after the inventory year) interpolated utilizing inventory projection models. The outyear targets are based on expected estimates made with the rules and 2005 NEI inventory and also incorporate population growth estimates, which indirectly project more area source (small source) emissions. The EPA will update future targets with the newly released 2011 National Air Toxics Assessment (NATA) data.

## (PM 002) Cumulative percentage reduction in tons of toxicity-weighted (for non-cancer risk) emissions of air toxics from 1993 baseline.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	59	59	59	59	59	58	57	57	Dancont
Actual	53	55	55	55	Data Avail 2017	Data Avail 2017			Percent Reduction

Additional Information: The baseline in 1993 is 7.24 million tons. The toxicity-weighted emission inventory utilizes the National Emissions Inventory (NEI) for air toxics along with the Agency's compendium of cancer and non-cancer health risk criteria to develop a risk metric that can be tabulated on an annual basis. Air toxics emissions data are revised every three years with intervening years (the two years after the inventory year) interpolated utilizing inventory projection models. The outyear targets are based on expected estimates made with the rules and 2005 NEI inventory and also incorporate population growth estimates, which indirectly project more area source (small source) emissions. The EPA will update future targets with the newly released 2011 National Air Toxics Assessment (NATA) data.

(4) Reduce Exposure to Indoor Air Pollutants **Strategic Measure:** By 2018, the number of future premature lung cancer deaths prevented annually through lowered radon exposure will increase to 1,056 from the 2008 baseline of 756 future premature lung cancer deaths prevented. The 2011 benchmark is 905 future premature lung cancer deaths prevented.

# (PM R50) Percentage of existing homes with an operating radon mitigation system compared to the estimated number of homes at or above EPA's 4pCi/L action level.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit			
Target	12.0	12.5	13.3	13.9	13.9	14.9	14.9	14.9	Domaint of			
Actual	12.3	12.9	14.1	15	Data Avail 3/2016	Data Avail 12/2016			Percent of Homes			

Additional Information: The baseline in 2003 is 6.9 percent of existing homes. Radon causes lung cancer, and is a significant threat to human health because it tends to collect in homes, sometimes at very high concentrations. As a result, radon is the largest source of exposure to naturally occurring radiation.

## (PM R51) Percentage of all new single-family homes (SFH) in high radon potential areas built with radon reducing features.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	33.0	34.5	36.0	37.5	37.5	40.5	40.5	40.5	Domoont of
Actual	40.1	38.2	44.6	38.9	44.1	Data Avail 12/2016			Percent of Homes

Additional Information: The baseline in 2003 is 20.7 percent of all new single-family homes. Radon causes lung cancer, and is a significant threat to human health because it tends to collect in homes, sometimes at very high concentrations. As a result, radon is the largest source of exposure to naturally occurring radiation.

**Strategic Measure:** By 2018, the number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers in homes and schools will increase to 9 million from the 2003 baseline of 3.0 million. EPA will place special emphasis on reducing racial and ethnic asthma disparities among children. The 2012 benchmark is 6.5 million people taking all essential actions to reduce exposure to indoor environmental asthma triggers.

## (PM R16) Percentage of parents of children with asthma aware of the EPA asthma program media campaign.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	>30	>30	>30	>30	>30	>30			Dancont
Actual	Data Not Avail	36	Data Not Avail	37	37	Data Not Avail			Percent Aware

Additional Information: The baseline in 2003 is 27%. Public awareness is measured before and after the launch of a new wave of the campaign. "Data not available" indicates a time point that was not included in the assessment plan.

## (PM R17) Additional health care professionals trained annually on the environmental management of asthma triggers.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	2,000	2,000	3,000	3,000	3,000	1,000			Professionals
Actual	4,153	5,600	4,914	7,237	4,679	2,964			Trained

Additional Information: The baseline in 2003 is 2,360 trained health care professionals. Asthma is a serious, life-threatening respiratory disease that affects millions of Americans. In response to the growing asthma problem, EPA created a national, multifaceted asthma education and outreach program to share information about environmental factors that trigger asthma. This measure is discontinued after FY 2015 as EPA shifts emphasis to the programs supporting the delivery, infrastructure, and sustainable financing of environmental asthma interventions at homes and schools.

(PM R19) Cumulative number of programs supporting the delivery, infrastructure, and sustainable financing of environmental asthma interventions at home and school.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target							300	600	
Actual									Programs

Additional Information: The baseline for this new initiative in 2015 is zero programs. EPA is addressing the next important gap in comprehensive asthma care – equipping health, housing, environmental and health insurance programs to effectively support delivery, infrastructure and sustainable financing of environmental asthma interventions at home and school. Strong evidence indicates that many chronic health conditions like asthma disproportionately affect low income, minority, and tribal communities. Environmental pollutants in homes can cause and exacerbate asthma. Further evidence indicates that investment in home interventions will improve health outcomes and reduce and/or shift health care costs from medical treatment to secondary prevention. Programs addressing asthma at the local, tribal, state, regional, and federal level that support in-home asthma education, assessment and interventions will help low-income, minority, and tribal families and communities reduce their exposure to environmental asthma triggers.

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

## Summary of progress towards strategic objective:

EPA continues to make progress through domestic commitments and leadership in international efforts to restore and protect the ozone layer. The latest data available indicate the U.S. has reduced hydrochlorofluorocarbons (HCFC) consumption to 1,640 tons, well below its FY 2013 target of 3,700 tons, and putting EPA on track to meet its strategic goal of reducing HCFC consumption to 1,520 tons by 2015. Under the Montreal Protocol and the Clean Air Act, total United States HCFC production and consumption is capped, and will be completely phased out by 2030. Even with the challenges of long atmospheric lifetimes and pre-phaseout stockpiling of ozone-depleting substances (ODS), ambient concentrations are stabilizing, and with continued significant actions to reduce the atmospheric loading of ODS, EPA expects that ambient concentrations will begin to decline.

Program Area	Performance Measures and Data
(1) Reduce Consumption of Ozone- Depleting Substances	<b>Strategic Measure:</b> By 2015, U.S. consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, will be less than 1,520 tons per year of ozone depletion potential from the 2009 baseline of 9,900 tons per year. By this time, as a result of worldwide reduction in ozone-depleting substances, the level of "equivalent effective stratospheric chlorine" (EESC) in the atmosphere will have peaked at 3.185 parts per billion (ppb) of air by volume and begun its gradual decline to less than 1.800 ppb (1980 level). [Note: This strategic measure will not be adjusted at this time because the baseline dates and milestones are set through the international treaty, the Montreal Protocol.]

(PM S01) Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's
protective ozone layer, measured in tons of Ozone Depleting Potential (ODP).

L	protectiv	c ozone raye	1, incasurcu	III tolls of O	zone Depien	ng i otentiai (	ODI ).			
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
	Target	<3,811	<3,811	<3,700	<3,700	<3,700	<1,520	<1,520	<1,520	
	Actual	2,435	2,339	1,450	1,640	Data Avail 4/2016	Data Avail 12/2016			ODP Tons

Additional Information: The baseline in 1989 for Ozone Depleting Substances consumed is 15,240 tons. The base of comparison for assessing progress is the domestic consumption cap of Class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone - this is its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.

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

## Summary of progress towards strategic objective:

EPA is on track to meet its strategic objective of minimizing exposure to radiation by maintaining a high level of readiness, both in personnel and assets, to support federal radiological emergency response and recovery operations. EPA's regulatory and non-regulatory activities support our mission to protect human health and the environment by minimizing unnecessary exposures to radiation, including operating and maintaining RadNet, providing oversight at the Waste Isolation Pilot Plant (WIPP), and developing important rules and guidance documents. In FY 2015, EPA proposed updated standards for uranium extraction facilities that include groundwater restoration and monitoring requirements. EPA also issued updated Radiation Protection Guidance for Diagnostic and Interventional X-Ray Procedures to ensure radiation doses given to children are as low as possible to minimize exposure risk. Moving forward, EPA continues to face challenges maintaining scientific, technical, and policy expertise in the radiation field as the workforce ages, and continues to utilize innovative approaches to maintaining the requisite expertise.

Program Area	Performance Measures and Data
(1) Prepare for Radiological Emergencies	<b>Strategic Measure:</b> Through 2018, EPA will maintain a 93 percent level of readiness of radiation emergency response program personnel and assets that meet functional requirements necessary to support federal radiological emergency response and recovery operations. The 2012 readiness baseline is 91.5 percent. The level of readiness measure is based on the Agency's Core National Approach to Response assessment process.

(PM R35) Level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	90	90	90	90	93	93	93	93	Percent
Actual	97	97	92	99	94	93			Readiness

*Additional Information:* The baseline in 2005 is a 50% level of readiness. The level of readiness is measured as the percentage of response team members and assets that meet scenario-based response criteria.

# (PM R36) Average time before availability of quality assured ambient radiation air monitoring data during an emergency.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	_
Actual	0.5	0.5	0.4	0.3	0.3	0.3			Days

Additional Information: The baseline in 2005 is 2.5 days. The average time in availability is measured as time in days between collection and availability of data for release by EPA during emergency operations.

# (PM R37) Time to approve site changes affecting waste characterization at DOE waste generator sites to ensure safe disposal of transuranic radioactive waste at WIPP.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	70	70	70	70	70	70	70	70	
Actual	66	64	73	64	66	67			Days
	•	•			•			•	

Additional Information: The baseline in 2004 is 150 days.

## **EPA Programs and Activities Contributing to Goal 2**

**Analytical Methods** National Estuary Program/Coastal Waterways Beach Program National Pollutant Discharge Elimination

Coastal and Ocean Programs **System** 

Chesapeake Bay Nonpoint Source Pollution Control

Children's Health Protection Other Geographic Programs (including Lake Clean Water State Revolving Fund Pontchartrain and Northwest Forest). Columbia River Estuary Partnership Lake Champlain, San Francisco Bay Delta

Commission for Environmental Cooperation Estuary, South Florida Cooling Water Intakes Persistent Organic Pollutants Drinking Water and Ground Water Protection Pollutant Load Allocation

Programs **Puget Sound** 

Drinking Water Research

Surface Water Protection Program Drinking Water State Revolving Fund Sustainable Infrastructure Program

**Effluent Guidelines** Total Maximum Daily Loads

Fish Consumption Advisories Trade and Governance **Underground Injection Control Program Great Lakes** 

Gulf of Mexico U.S.-Mexico Border Wastewater Management Human Health and Ecosystem Protection

Research Water Efficiency

Human Health Risk Assessment Water Monitoring Water Quality Research Long Island Sound

Mercury Research Water Quality Standards and Criteria

National Environmental Monitoring Initiative Watershed Management Wetlands Marine Pollution

### **GOAL 2: PROTECTING AMERICA'S WATERS**

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

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

## **Summary of progress towards strategic objective:**

EPA has determined performance toward this objective is progressing as planned, with over 91 percent of the nation's population served and 96 percent of the person months during which community water systems received drinking water that meets all applicable health-based drinking water standards in FY 2015. The high performance of drinking water systems meeting health-based drinking water standards is reflective of EPA's and states' efforts to build the technical, managerial and financial capabilities of drinking water systems; most recently, the focus is on the smaller systems serving fewer than 10,000 people because of their unique challenges, and in exploring partnerships to promote system sustainability, and in innovative financing options for infrastructure improvements. The adoption of new recreational water quality criteria by states will protect the public from exposure to harmful levels of fecal contamination. Excess phosphorus and nitrogen loadings in waterbodies continue to be a challenge and contribute to water quality impairments including harmful algal blooms. EPA is developing health advisories for key cyanotoxins, developing new analytical methods, preparing stakeholder support tools and educational materials to respond to this issue.

Program Area		Performance Measures and Data										
	health-ba baseline: (PM aa)	Strategic Measure: By 2018, 92 percent of community water systems will provide drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection. (2005 baseline: 89 percent. FY 2013 universe: 51,535 community water systems. Status as of FY 2013: 91.4 percent.)  (PM aa) Percent of population served by CWSs that will receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.										
(1) Water Safe to Drink		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit		
to Drink	Target	90	91	91	92	92	92	92	92			
	Actual	92	93.2	94.7	92	93	91			Population		
	Revised Tota	al Coliform Rule	(RTCR).			ystems. At least 1	·		•			

(PM apc) Fund utilization rate for the DWSRF. FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit **Target** 86 89 89 89 89 89 89 89 **Dollars** Actual 92

94

Additional Information: In 2005, the fund utilization rate for the Drinking Water State Revolving Fund was 85 percent.

90

91.3

90

(PM aph) Percent of community water systems that have undergone a sanitary survey within the past three years (five years for outstanding performance or those ground water systems approved by the primacy agency to provide 4-log treatment of viruses).

91

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	95	95	95	95	83	79	79	85	CITIC
Actual	87	92	89	93	87	90.8			CWSs

Additional Information: In 2007, 92 percent of community water systems had undergone a sanitary survey. Prior to FY 2007, this measure tracked states rather than community water systems in compliance with this regulation. Starting in FY 2014, this measure includes ground water systems in addition to surface water systems. Ground water systems that have been approved by the primacy agency to provide 4-log treatment of viruses or have outstanding performance based on prior sanitary surveys may have sanitary surveys conducted no less than every five years (per sec. 142.16(o)(2)(iii)). Because the universe is larger, the targets starting in FY 2014 have been adjusted accordingly.

(PM apm) Percent of community water systems that meets all applicable health-based standards through approaches including effective treatment and source water protection.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	90	90	90	90	90	90	90	90	G
Actual	89.6	90.7	91	91	91	90			Systems

Additional Information: In 2005, 89 percent of community water systems met all applicable health-based drinking water standards.

(PM aps) Percent of Classes I, II and III salt solution mining wells that have lost mechanical integrity and are returned to compliance within 180 days, thereby reducing the potential to endanger underground sources of drinking water.

_	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			90	85	85	85	85	85	*** 11
Actual			85	89	89	88			Wells

Additional Information: There is no fixed point that can be used as a baseline for this measure, since the activity that we are monitoring - "Mechanical Integrity Loss" has not yet occurred. The universe of wells losing mechanical integrity is not static.

(PM apt) Number of Class V motor vehicle waste disposal wells (MVWDW) and large capacity cesspools (LCC) [approximately 23,640 in FY 2010] that are closed or permitted (cumulative).

Logi	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			20,840	25,225	25,225	25,225	27,783	28,083	*** 11
Actual			25,225	26,027	26,560	27,383			Wells

Additional Information: FY 2012 was the first year of reporting for the measure. The baseline is set at the FY 2012 end-of-year result. Note: the Regions are finding fewer and fewer wells suitable for closure or that have not already been permitted.

(PM dw2) Percent of person months during which community water systems provide drinking water that meets all applicable health-based standards.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	95	95	95	95	95	95	95	95	Person
Actual	97.3	97.4	97.8	96.9	97	96			Months

Additional Information: In 2005, community water systems provided drinking water that met all applicable health-based drinking water standards during 95 percent of "person months."

(PM pi1) Percent of population in each of the U.S. Pacific Island Territories (served by community water systems) that meets all applicable health-based drinking water standards, measured on a four-quarter rolling average basis.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	73	75	80	82	80	80	80	80	
Actual	82	87	80	81	98	97.7			Population

Additional Information: In 2005, 95 percent of the population in American Samoa, 10 percent in the Commonwealth of the Northern Mariana Islands (CNMI) and 80 percent in Guam were served by CWSs that received drinking water that met all applicable health-based standards.

**Strategic Measure:** By 2018, 88 percent of the population in Indian country served by community water systems will receive drinking water that meets all applicable health-based drinking water standards. (2005 baseline: 86 percent. FY 2013 universe: 1,013,222 people in Indian county served by community water systems. Status as of FY 2013: 77 percent.)

(PM E) Percent of the population in Indian Country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	87	87	87	87	87	87	87	87	
Actual	87.2	81.2	84	77	89	88			Population

(2) Fish and	Strategic level of c blood lev	Measure: Boncern to 2.1 els above lev	by 2018, redu percent. (20 rels of concer	ce the percen 12 baseline (2 m identified b	tage of wome 2009-2010 da by the Nationa	en of childbeanta): 2.3 percental Health and lercury levels i	ring age havi ent of women Nutrition Exa	ng mercury le of childbeari mination Sur	evels in bloong age have vey (NHAN	d above the mercury	
(2) Fish and Shellfish Safe	(2 1/2 202)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit	
to Eat	Target	5.1	4.9	4.9	4.9	4.9	2.3	2.3	2.3	Women of	
Actual Data Unavailable Unavailable 2.3 2.3 1.8											
	Additional I	nformation: Base	eline is 7.8 percer	nt based on data c	ollected in 1999-2	2000.					

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

#### **Summary of progress towards strategic objective:**

EPA has determined performance toward this objective is "progressing as planned." The Agency has made sustained progress in removing waterbodies on its impaired waters list, delisting 3,944 waterbodies by end-of-year 2015. Working with its partners, the EPA met the FY 2014-2015 Agency Priority Goal of updating all state Nonpoint Source Management Plans to focus Section 319 and other investments to address nonpoint source pollution, one of the Nation's largest impediments to improving water quality. Further, the final Clean Water Rule, published in the Federal Register June 2015, clarifies those waters that are protected under the Clean Water Act. The EPA launched the Water Infrastructure and Resiliency Finance Center as a resource for communities as they explore innovation financing options for resilient drinking water, wastewater and storm water infrastructure. 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. In FY 2017, the EPA will continue to work with states to transition to the new approach, developed in partnership with states, to allow more efficient reporting under CWA Sections 303(d) and 305(b). The Chesapeake Bay Program missed its FY 15 nitrogen and sediment loadings targets, which may make it challenging to achieve the 2017 goals under the Executive Order. The lower than expected performance results are largely attributed to unanticipated increases in corn and soy acreages.

Program Area				,	Performance	Measures and	Data					
	identified not meeti counted to mercury; mercury a (PM L) N	l in 2002 as n ng water qua oward this ta 1,703 impair alone. Status Number of w	ot attaining s lity standards rget when all ed water bod as of FY 202 ater body se	tandards (cur s. Water bod pollutants bu ies are impair 13: 3,679 wa gments iden	nulative). (20 ies where me at mercury att red by multipater bodies att tified by stat	rcury is among	39,798 water g multiple po but must be ncluding mer ls.)	bodies identillutants causi identified as cury, and 6,5	ified by states ing impairme still needing 601 are impair	s and tribes as nt may be restoration for red by		
	standards are now fully attained (cumulative).											
	Target	2,809	3,073	3,324	3,727	3,829	4,016	4,082	4,182	<b>G</b> .		
(1) Improve	Actual	Actual 2,909 3,119 3,527 3,679 3,866 3,944  Explanation of Results: The target was missed because:										
Water Quality on a Watershed Basis	o Reduced o Meeting o Many of segments.  Additional I multiple poll restoration for	state budgets are standards in a sir the impairments information: 2002 lutants causing in or mercury; 1,703 e EPA is evaluati	slowing implementage waterbody see which remain in section 2 baseline: 39,798 apairment may be 3 impaired water lang a new approach	entation activities gment impaired b waters identified i 3 water bodies ide counted toward toodies are impaire th for measuring I	by multiple polluta in 2002 require m entified by states a this target when a ed by multiple pol ocal improvemen	ary to improve impants is more difficularly years before result tribes as not mell pollutants but mellutants, including its in water quality.	It than if just one estoration strategiceting water qualicercury attain standmercury, and 6,50. The goal is to pro-	or a few pollutan es accomplish ful ty standards. Wat lards but must be 11 are impaired by ovide a consistent	I recovery of the ter bodies where r identified as still y mercury alone.	waterbody nercury is among needing For future		
	(PM bpb	ĺ		or the CWSF								
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit		
	Target	92	94.5	94.5	94.5	94.5	94.5	95	95	Dollars		
	Actual	100	98	98	97	98	98			Donars		
		<i>information:</i> In 2 d Puerto Rico).	002, 91 percent w	vas used as the bas	seline for this mea	asure. It was calcul	ated using data co	ollected annually	from all 51 state	CWSRF programs		

(PM bpf) Estimated annual reduction in millions of pounds of phosphorus from nonpoint sources to water bodies (Section 319 funded projects only).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	Dounds
Actual	2.6	4.8	4.4	3.5	2.7	Data Avail 3/2016			Pounds (Million)

*Explanation of Results:* EPA collects this information in its Grants Reporting Tracking System (GRTS) for Section 319-funded on-the-ground implementation projects that will reduce phosphorus loads to waterbodies. States use models to estimate load reduction information and enter it into GRTS after the full year of project implementation, so that estimates are informed by on-the-ground field data. Results are reported in GRTS by mid-February for the preceding fiscal year. Therefore, FY 2015 results will be available March 1, 2016.

Additional Information: In 2005, there was a reduction of 558,000 lbs. of phosphorus from nonpoint sources.

# (PM bpg) Estimated additional reduction in million pounds of nitrogen from nonpoint sources to water bodies (Section 319 funded projects only).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	8.5	8.5	8.5	9.1	9.1	9.1	9.1	9.1	Doumdo
Actual	9.8	12.8	9	10.4	11.3	Data Avail 3/2016			Pounds (Million)

*Explanation of Results:* EPA collects this information in its Grants Reporting Tracking System (GRTS) for Section 319-funded on-the-ground implementation projects that will reduce nitrogen loads to waterbodies. States use models to estimate load reduction information and enter it into GRTS after the full year of project implementation, so that estimates are informed by on-the-ground field data. Results are reported in GRTS by mid-February for the preceding fiscal year. Therefore, FY 2015 results will be available March 1, 2016.

Additional Information: In 2005, there was a reduction of 3.7 million lbs. of nitrogen from nonpoint sources.

# (PM bph) Estimated additional reduction in thousands of tons of sediment from nonpoint sources to water bodies (Section 319 funded projects only).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	700	700	700	1,100	1,200	1,200	1,200	1,200	Т
Actual	2,100	2,007	1,100	1,169	1,674	Data Avail 3/2016			Tons (Thousand)

*Explanation of Results:* EPA collects this information in its Grants Reporting Tracking System (GRTS) for Section 319-funded on-the-ground implementation projects that will reduce sediment loads to waterbodies. States use models to estimate load reduction information and enter it into GRTS after the full year of project implementation, so that estimates are informed by on-the-ground field data. Results are reported in GRTS by mid-February for the preceding fiscal year. Therefore, FY 2015 results will be available March 1, 2016.

Additional Information: In 2005, there was a reduction of 1.68 million tons of sediment from nonpoint sources.

(PM bpl) Percent of high-priority state NPDES permits that are issued in the fiscal year.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	95	100	100	80	80	80	80	80	<b>.</b>
Actual	142	135	130	55	80	82			Permits

Additional Information: Priority Permits are permits in need of reissuance that have been identified by states as environmentally or programmatically significant. The annual universe of Priority Permits includes the number of permits selected as priority, from which a subset will be issued in the current fiscal year. In 2005, 104% of the designated priority permits were issued in the fiscal year. Starting in FY 2013, results can no longer exceed 100% issuance due to an adjustment of the measure definition, and the target was revised accordingly. The universe used to calculate percentage results changed from the number of permits committed to issuance in the current fiscal year to the total number of permits selected as priority.

(PM bpv) Percent of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	95	100	100	80	80	80	67.9	80	<b>.</b>
Actual	138	132	128	55	77	81			Permits

Additional Information: Priority Permits are permits in need of reissuance that have been identified by states or EPA Regions as environmentally or programmatically significant. The annual universe of Priority Permits includes the number of permits selected as priority, from which a subset will be issued in the current fiscal year. In 2005, 104% of the designated priority permits were issued in the fiscal year. Starting in FY 2013, results can no longer exceed 100% issuance due to an adjustment of the measure definition, and the target was revised accordingly. The universe used to calculate percentage results changed from the number of permits committed to issuance in the current fiscal year to the total number of permits selected as priority.

(PM bpw) Percent of states and territories that, within the preceding 3-year period, submitted new or revised water quality criteria acceptable to the EPA that reflect new scientific information from the EPA or sources not considered in previous standards.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	66	64.3	64.3	64.3	66.1	67.9	67.9	73.2	States and
Actual	67.9	69.6	69.6	58.9	51.8	64.3			Territories

*Explanation of Results:* Because updating water quality criteria is often complex, some states have had difficulty meeting this measure. EPA expects improved performance in FY 2016 and beyond as states utilize EPA's recently updated national recommended criteria to assist them in complying with 2015 revisions to the Water Quality Standards regulation and with Beach Act requirements.

Additional Information: In 2004, the baseline was 70% of states and territories submitting acceptable water quality criteria reflecting new scientific information.

(PM bpx) Extent of priority areas identified by each state that are addressed by EPA-approved TMDLs or alternative restoration approaches for impaired waters that will achieve water quality standards. These areas may also include protection approaches for unimpaired waters to maintain water quality standards.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						8	8	12	% Priority
Actual						Data Avail 9/2016			Watershed Areas

*Explanation of Results:* The EPA will successfully report on this measure in FY 2016—with 49 states and territories in the position to report. Due to the timing of completing the development of the tools to automate the calculation of the measure, the EPA was not able to work with states on reporting under this measure in FY 2015.

Additional Information: This is a new measure replacing the measures that tracked state and total TMDL development. Cumulatively, EPA and states completed more than 72,000 TMDLs through FY 2015. A TMDL is a technical plan for reducing pollutants in order to attain water quality standards. The terms "approved" and "established" refer to the completion and approval of the TMDL itself. The universe for the measure is 100% of watershed areas corresponding to priority waters identified by each state. The baseline is the extent of priority areas identified by each state that have been addressed by EPA-approved TMDLs or alternative restoration approaches for impaired waters, or protection approaches for unimpaired waters, at the beginning of the year when the baseline is established. Baseline information will begin to be finalized in FY 2016. The target is the extent of areas within priority areas projected to have a TMDL or alternative restoration or protection plan in 2022. States will identify annual commitments in each fiscal year to work toward the 2022 target.

(PM wq2) Remove the specific causes of water body impairment identified by states in 2002 (cumulative).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	8,512	9,016	10,161	11,634	12,134	12,788	12,990	13,340	C
Actual	8,446	9,527	11,134	11,754	12,288	12,640			Causes

Explanation of Results: The target was missed because:

- o Reduced state budgets are slowing implementation activities which are necessary to improve impaired waterbodies.
- o Meeting standards in a single waterbody segment impaired by multiple pollutants is more difficult than if just one or a few pollutants are impairing the single segment.
- o Many of the impairments which remain in waters identified in 2002 require many years before restoration strategies accomplish full recovery of the waterbody segments.

**Additional Information:** In 2002, an estimate of 69,677 specific causes of water body impairments were identified by states. For future reporting, the EPA is evaluating a new approach for measuring local improvements in water quality. The goal is to provide a consistent method for measuring progress. This new approach will enable the EPA to more effectively track water quality outcomes from investments in protection and restoration.

**Strategic Measure:** By 2018, improve water quality conditions in 575 impaired watersheds nationwide using the watershed approach (cumulative). (2002 baseline: Zero watersheds improved of an estimated 4,800 impaired watersheds of focus having one or more water bodies impaired. The watershed boundaries for this measure are those established at the "12-digit" scale by the U.S. Geological Survey (USGS). Watersheds at this scale average 22 square miles in size. "Improved" means that one or more of the impairment causes identified in 2002 are removed for at least 40 percent of the impaired water bodies or impaired miles/acres, or there is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters associated with the impairments. Status as of FY 2013: 376 improved watersheds.)

(PM uw1) Number of urban water projects initiated addressing water quality issues in the community.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			3	10	30	22	49	25	
Actual			46	9	65	28			Projects

Additional Information: This measure tracks progress in grants that help communities access, improve, and benefit from their urban waters and surrounding land. The target of 49 projects initiated for FY 2016 includes 29 projects under EPA's Urban Waters Small Grants (direct grants) and 20 projects under the Five-Star and Urban Waters Restoration Program managed by the National Fish and Wildlife Foundation (sub-grants with EPA and leveraged public and private funds). Projects under both programs advance water quality improvement and EPA investments are consistent with CWA Section 104(b)(3) authority. In FY 2015, all grants will be awarded from the Five Star and Urban Waters Restoration Program.

(PM uw2) Number of urban water projects completed addressing water quality issues in the community (cumulative).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						61	78	124	
Actual						60			Projects

Explanation of Results: Missed target of 61 for completions because one grantee requested an extension to their project completion date.

Additional Information: As this was a new measure in FY 2012, projects were not completed in FY 2013 or FY 2014. Measure was deactivated for FY 2013 and 2014. Measure reactivated in FY 2015 to track cumulative projects completed. This target includes completed Urban Waters Small Grants and grants funded in part by the EPA through the Five Star and Urban Waters Restoration Program managed by the National Fish and Wildlife Foundation.

(PM wq3) Improve water quality conditions in impaired watersheds nationwide using the watershed approach (cumulative).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	141	208	312	370	408	446	484	519	
Actual	168	271	332	376	411	450			Watersheds

Additional Information: In 2002, there were 0 watersheds improved of an estimated 4,800 impaired watershed of focus having 1 or more water bodies impaired. The watershed boundaries for this measure are those established at the "12-digit" scale by the U.S. Geological Survey. Watersheds at this scale average 22 square miles in size. "Improved" means that that one or more of the impairment causes identified in 2002 are removed for at least 40 percent of the impaired water bodies or impaired miles/acres, or there is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters associated with the impairments.

Strategic Measure: By 2018, in coordination with other federal agencies, provide access to basic sanitation for 91,900 American Indian and Alaska Native homes. (Status as of FY 2013 baseline: 69,783 homes. Universe: 360,000 homes.)

(PM Opb) Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal.

EX 2010 EX 2011 EX 2012 EX 2013 EX 2014 EX 2015 EX 2015 EX 2017 Universe: Tex 2017 EX 2017

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	98	92	93	93	93.5	92.5	93	93.5	
Actual	92	92	91	91	94.4	94.6			Homes

Additional Information: In 2003, 77 percent of serviceable rural Alaska homes had access to drinking water supply and wastewater disposal.

**Strategic Measure:** By 2018, improve regional coastal aquatic ecosystem health, as measured on the "good/fair/poor" scale of the National Coastal Condition Report. (FY 2012 baseline: National rating of "fair" or 3.0 where the rating is based on a 4-point system ranging from 1.0 to 5.0 in which 1 is poor and 5 is good using the National Coastal Condition Report indicators for water and sediment, coastal habitat, benthic index, and fish contamination.)

(2) Improve Coastal and Ocean Waters (PM sf3) At least seventy-five percent of the monitored stations in the near shore and coastal waters of the Florida Keys National Marine Sanctuary will maintain Chlorophyll a(CHLA) levels at less than or equal to 0.35 ug l-1 and light clarity (Kd) levels at less than or equal to 0.20 m-1.

FY 2010         FY 2011         FY 2012         FY 2013         FY 2014         FY 2015         FY 2016         FY 2017         Unit           Target         75         75         75         75         75         75         75         75         75         75         75         75         75         75         75         84.5; KD: Kd: 84.5; KD: Kd: 84.5; KD: Kd: 84.5; KD: Rd: 87.2         82.0; Kd: 87.2         82.0; Kd: 87.2         77.3         77.3         82.0; Kd: 87.2         82.0; Kd: 87.2         77.3         82.0; Kd: 87.2         82													
Actual 85.4 CHLA: 70.9; KD: 72.5 Stations Stations		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit			
Actual 85.4   CHLA: 70.9;   84.5; KD:   CHLA = 80.0;   82.0; Kd =	Target		75	75	75	75	75	75	75				
00.1)	Actual		85.4		>75 (CHLA: 84.5; KD: 80.4)					Stations			

Additional Information: In 2005, total water quality was at CHLA < 0.2 ug/l, light attenuation < 0.13/meter.

(PM sf4) At least seventy-five percent of the monitored stations in the near shore and coastal waters of the Florida Keys National Marine Sanctuary will maintain dissolved inorganic nitrogen (DIN) levels at less than or equal to 0.75 uM and total phosphorus (TP) levels at less than or equal to 0.25 uM.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		75	75	75	75	75	75	75	
Actual		73.6	DIN: 81; TP: 89.5	<75 (DIN: 60.0; TP: 82.3)	DIN=72.6; TP=87.6	DIN=61.7; TP=78.3			Stations

*Explanation of Results:* This measure has two parts and requires both DIN and TP targets be met to achieve the measure. The EPA did not meet the target for DIN, but did meet the target for TP. Since 1995 elevated DIN numbers have been found closer to shore suggesting human impact. The elevated FY15 DIN number may suggest increasing polluted runoff entering the waterways or may be a bias in the dataset introduced by the reduction of monitoring stations in the western FKMNS (less human impact) and an increase in nearshore shores (heavily human impacted sites).

Additional Information: The baseline for DIN is <0.75 uM (76.3 percent); TP < 0.25 uM (89.9 percent).

(PM sf6) The number of Everglades Stormwater Treatment Areas (STAs) with the annual total phosphorus (TP) outflow less than or the same as the five-year annual average TP outflow, working towards the long-term goal of meeting the 10 parts per billion annual geometric mean.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						3	3	3	Stormwater
Actual						4			Treatment Areas

Additional Information: This was a new measure for FY 2015, replacing PM sf5. The baseline period is the most recent 5 years. The 5-year baseline takes into account variability due to climatic conditions including extremely wet or dry years which are common in South Florida. For FY 2015, the 5-year baseline, 2010 to 2015, is 36 parts per billion (ppb) for STA-1E, 35 ppb for STA-1W, 21 ppb for STA-2, 17 ppb for STA-3/4, and 54 ppb for STA-5/6. The universe is 5 STAs. This measure is working towards the long-term goal of the phosphorus criterion for the Everglades marsh, a 5-year geometric mean of 10 ppb. The equivalent flow-weighted mean discharge concentration at the STAs is 13 ppb.

**Strategic Measure:** By 2018, 95 percent of active dredged material ocean dumping sites, as determined by 3-year average, will have achieved environmentally acceptable conditions (as reflected in each site's management plan and measured through onsite monitoring programs). (2013 baseline: 96 percent. FY 2012 universe is 67.) (Due to variability in the universe of sites, results vary from year to year (e.g., between 85 percent and 99 percent). While this much variability is not expected every year, the results are expected to have some change each year.)

(PM co5) Percent of active dredged material ocean dumping sites that will have achieved environmentally acceptable conditions (as reflected in each site's management plan).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	98	98	95	95	95	95	95	95	
Actual	90.1	93	97	96	95	95			Sites

Additional Information: The 2013 baseline is 66 sites.

**Strategic Measure:** By 2018, working with partners, protect or restore an additional (i.e., measuring from 2012 forward) 600,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program. (2013 baseline: 1,295,327 acres of habitat protected or restored, cumulative from 2002-2013. In FY 2013, 127,594 acres were protected or restored.)

(PM 202) Acres protected or restored in National Estuary Program study areas.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Actual	89,985	62,213	114,575	127,594	93,557	111,584			Acres

**Explanation of Results:** Factors contributing to the number of acres protected and restored each year by the NEPs and their partners are numerous and complex making it difficult to accurately forecast with any degree of certainty. We exceeded our target this year due to factors such as additional Sandy funding for restoration work, permits coming in ahead of schedule, land acquisition negotiations concluding sooner than expected, and good weather conditions.

Additional Information: 2013 Baseline: 1,295,323 acres of habitat protected or restored; cumulative from 2002-2013.

# (3) Increase

Wetlands

**Strategic Measure:** By 2018, working with partners, achieve a net increase of wetlands nationwide, with additional focus on coastal wetlands, and biological and functional measures and assessment of wetland condition. (2012 baseline: 110.1 million acres of wetlands in the conterminous United States, and 62,300 wetland acres were lost over 2004-2009.) ("No net loss" of wetlands is based on requirements for mitigation in CWA Section 404 permits and not the actual mitigation attained.)

(PM 4E) In partnership with the U.S. Army Corps of Engineers, states, and tribes, achieve no net loss of wetlands each year under the Clean Water Act Section 404 regulatory program. ("No net loss" of wetlands is based on requirements for mitigation in CWA 404 permits and not the actual mitigation attained.)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	No Net Loss								
Actual	No Net Loss			Acres					

Additional Information: EPA receives data for this measure from the Army Corps of Engineers (ACE). ACE finalized its database and was able to collect actual data for the first time in FY 2009.

# (PM 4G) Number of acres restored and improved under the 5-Star, NEP, 319, and great water body programs (cumulative).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	110,000	150,000	170,000	190,000	220,000	230,000	290,000	305,000	
Actual	130,000	154,000	180,000	207,000	221,000	275,555			Acres

**Explanation of Results:** Exceeded commitment due to an unexpected increase in acreage in NEP program. It is often difficult to predict the completion date of protection and restoration projects because of the many factors, or steps required for each project such coordinating with numerous partners, negotiating with landowners, obtaining all the funding from multiple sources, having the necessary permits approved, and weather variability.

Additional Information: This measure describes the wetland acres restored through only EPA programs. Information on the national status of wetland gains and losses regardless of the cause is provided every five years by the U.S. Fish and Wildlife Service (USFWS). The most recent report (U.S. Fish and Wildlife Service, Status and Trends of Wetlands in the Conterminous United States 2004 to 2009: http://www.fws.gov/wetlands/Status-And-Trends-2009/index.html) noted an annual net loss of 13,800 acres.

**Strategic Measure:** By 2018, implement all management actions necessary for later delisting at 12 Areas of Concern in the Great Lakes (cumulative). (2012 baseline: 2.)

(PM 625) Areas of Concern Beneficial Use Impairments removed (cumulative).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	20	26	33	41	46	60	65	72	BUIs
Actual	12	26	33	41	52	60			Removed

(4) Great Lakes Additional Information: Results from this measure are achieved through GLRI funding as well as other non-GLRI federal and/or state funding. Universe is 255. An intensive review of this metric conducted during the preparation of GLRI Action Plan II in FY 2014 determined that the number of beneficial use impairments removed prior to the implementation of the GLRI was overstated by two. The 2014 review determined that the delisting of the Oswego Area of Concern in 2006 resulted from the removal of four BUIs, not six. Consequently, the number of "actual" BUIs reported in the table for FYs 2009 through 2013 included the six BUIs believed to have been removed at the Oswego Area of Concern. For FY 2014, the number of actual BUIs reported as removed was corrected to reflect the true number of BUIs removed at the Oswego Area of Concern. However, the number of actual BUIs reported in FY 2010 is accurate since the intensive review also revealed that two BUIs had been removed in FY 2010 but had not been reported until FY 2011.

(PM 626) Number of Areas of Concern in the Great Lakes where all management actions necessary for delisting have been implemented (cumulative).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		1	3	4	5	8	9	11	
Actual		2	2	3	7	7			AOCs

*Explanation of Results:* The performance goal was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance. The program will report a cumulative total of 8 AOCs (the target) at which management actions have been completed by the end of calendar year 2015. This target was missed for the fiscal year because construction season goes beyond the end of the fiscal year. Management actions for the St. Clair AOC (the 8th AOC) will be implemented by the end of calendar year 2015.

Additional Information: Universe of 31; baseline of 1. Results from this measure are achieved through GLRI funding as well as other non-GLRI federal and/or state funding.

(PM 628) Number of acres controlled by GLRI-funded projects (cumulative).

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	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		1,500	15,500	34,000	38,000	94,500	110,000	120,000	
Actual		13,045	31,474	35,924	84,500	101,392			Acres

*Explanation of Results:* Target was previously raised to 94,500 during FY 2016 budget development because the FY 2014 end-of-year result exceeded the previously set cumulative target for FY 2016. Result exceeds actual target by about 7.3%.

Additional Information: There were zero acres managed for populations of invasive species controlled to a target level in 2005.

(PM 629) Number of GLRI-funded Great Lakes rapid responses or exercises conducted.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		4	12	26	35	8	8	8	Number
Actual		8	23	30	38	21			Responses/Pl ans

*Explanation of Results:* The 8 Great Lakes States have committed to conducting annual training exercises, but prioritize activities to respond to detections of new invasive species. In FY 2015 multiple state agencies and others completed 2 training exercises and 19 actual responses. The responses helped prevent establishment in the Great Lakes of self-sustaining populations of invasive species, such as Red Swamp Crayfish and silver, bighead, and black carp.

Additional Information: There were zero multi-agency rapid response plans established, mock exercises to practice responses carried out under those plans, and/or actual response actions in 2005. Measure changed to annual (non-cumulative) measure beginning in FY 2015, per GLRI Action Plan II.

(PM 638) Projected phosphorus reductions from GLRI-funded projects in targeted watersheds (measured in pounds).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						130,000	310,000	525,000	,
Actual						160,117			Pounds

Additional Information: Cumulative measure of average annual projected reduction, starting in FY 2015.

### (PM 639) Projected volume of untreated urban runoff captured or treated by GLRI-funded projects. (Cumulative)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						30	70	120	Gallons
Actual						37			(millions)

Additional Information: Cumulative measure of average annual projected reduction, starting in FY 2015.

**Strategic Measure:** By 2018, implement and evaluate actions necessary to protect, restore, or enhance 20 percent of U.S. Great Lakes coastal wetlands greater than 10 acres. (2012 baseline: 0.)

### (PM 640) Number of miles of Great Lakes tributaries reopened by GLRI-funded projects. (Cumulative)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						2,200	4,200	4,500	2.61
Actual						3,855			Miles

*Explanation of Results:* The cumulative result now includes tributary miles that were not previously being included due to data collection restraints. 380 miles were realized in FY 2015.

Additional Information: Baseline: 1,900; Universe: N/A

# (PM 641) Number of miles of Great Lakes shoreline and riparian corridors protected, restored, and enhanced by GLRI-funded projects. (Cumulative)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						75	350	400	
Actual						313			Miles

*Explanation of Results:* In FY 2013 and FY 2014 GLRI Regional Working Group (RWG) agencies funded additional projects that contribute results for the measure, in anticipation that results from previously funded projects would be insufficient to meet targets. The additional projects more than made up for earlier projected shortfalls.

Additional Information: Baseline: 0; Universe: N/A

# (PM 642) Number of acres of Great Lakes coastal wetlands protected, restored, and enhanced by GLRI-funded projects. (Cumulative)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						7,000	15,000	30,000	
Actual						7,033			Acres

Additional Information: Baseline: 0; Universe is 260,000 acres.

(PM 643) Number of acres of other habitats in the Great Lakes basin protected, restored, and enhanced by GLRI-funded projects. (Cumulative)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						127,000	167,000	187,000	
Actual						146,815			Acres

*Explanation of Results:* In FY 2013 and FY 2014 GLRI Regional Working Group (RWG) agencies funded additional projects that contribute results for the measure, in anticipation that results from previously funded projects would be insufficient to meet targets. The additional projects more than made up for earlier projected shortfalls.

Additional Information: Baseline is 117,000 acres. Universe is 1,290,000 acres.

**Strategic Measure:** By 2018, achieve 45 percent attainment of water quality standards for dissolved oxygen, water clarity/underwater grasses, and chlorophyll a in Chesapeake Bay and tidal tributaries. (2011 Baseline: 40 percent.)

(PM 234) Reduce per capita nitrogen loads (pounds per person per year) to levels necessary to achieve Chesapeake Bay Total Maximum Daily Load allocations.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target				15.17	15	14.5	14	13.5	Pounds/Pers
Actual				14.92	14.7	14.8			on/Year

(5) Chesapeake Bay **Explanation of Results:** The seemingly backward direction of this measure is from introducing new data from the Agricultural Census since last year. High commodity prices for corn, for example, led to more acres of this crop, which uses considerably more fertilizer and retains less compared to the acres of low-loading hay and pasture it replaced. This didn't happen in a single year, but is an adjustment based on new information for that 5 year time period.

Additional Information: FY 1986 baseline is 27 pounds of nitrogen/person/year. Universe is 11 pounds of nitrogen/person/year by December 31, 2025 (FY 2026). This measure replaced PM 233 starting in FY 2013.

(PM cb6) Percent of goal achieved for implementing nitrogen reduction actions to achieve the final TMDL allocations, as measured through the phase 5.3 watershed model.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		1	15	22.5	30	37.5	45	52.5	Percent Goal
Actual		8	21	25	27	21			Achieved

**Explanation of Results:** The direction of this measure is from introducing new data from the Agricultural Census. High commodity prices for corn, for example, led to more acres of this crop, which uses considerably more fertilizer and retains less compared to the acres of low-loading hay and pasture it replaced. This didn't happen in a single year, but is an adjustment based on new information for that 5 year time period.

Additional Information: The FY 2010 baseline is 0 percent. The universe is 100 percent goal achievement by December 31, 2025 (FY 2026).

(PM cb7) Percent of goal achieved for implementing phosphorus reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		1	15	22.5	30	37.5	45	52.5	Percent Goal
Actual		1	19	27	43	71			Achieved

**Explanation of Results:** This jump in progress is also due to introducing new data from the Agricultural Census. This improvement is due to a change in animal populations that was less than originally projected. Less manure means less phosphorus. This didn't happen in a single year, but is an adjustment based on new information for that 5 year time period.

Additional Information: The FY 2010 baseline is 0 percent. The universe is 100 percent goal achievement by December 31, 2025 (FY 2026).

(PM cb8) Percent of goal achieved for implementing sediment reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		1	15	22.5	30	37.5	45	52.5	Percent Goal
Actual		11	30	32	37	25			Achieved

**Explanation of Results:** The direction of this measure is from introducing new data from the Agricultural Census. High commodity prices for corn, for example, led to more acres of this crop, which uses considerably more fertilizer and retains less compared to the acres of low-loading hay and pasture it replaced. This didn't happen in a single year, but is an adjustment based on new information for that 5 year time period.

Additional Information: The FY 2010 baseline is 0 percent. The universe is 100 percent goal achievement by December 31, 2025 (FY 2026).

## (6) Gulf of Mexico

**Strategic Measure:** By 2018, support best management practices and projects to reduce releases of nutrients throughout the Mississippi River Basin to aid in the reduction of the size of the hypoxic zone in the Gulf of Mexico to less than 5,000 km², as measured by the 5-year running average of the size of the zone. (Baseline: 2005-2009 running average size is 15,670 km².)

(PM xg1) Restore water and habitat quality to meet water quality standards in impaired segments in 13 priority coastal areas (cumulative starting in FY 2007).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	96	202	320	360	360	360			Impaired
Actual	170	286	316	339	346	411			Segments

Additional Information: In 2008, the Gulf of Mexico coastal wetlands habitats included 3,769,370 acres.

()	PM xg2) Restore, enhance, or protect a cumulative number of acres of important coastal and marine habitats.										
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit	
	Target	27,500	30,000	30,600	30,600	30,600	30,800	30,800	30,800		
	Actual	29 552	30.052	30 248	30 306	30 319	30 574			Acres	

*Explanation of Results:* In FY 2015, the GMP protected, enhanced or restored a total of 254.90 acres. This is a significant increase over the 14 acres reported for FY 2014; yet it does not meet our cumulative target of 30,800. The Gulf Program supports communities in one of the largest watersheds within the US, the Mississippi River – at approximately 1,467,182 square miles.

Additional Information: In 2008, 25,215 acres were restored, enhanced, or protected in the Gulf of Mexico.

(PM xg3) Improve and/or restore water and habitat quality to meet water quality standards in watersheds throughout the five Gulf States and the Mississippi River Basin.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target							2	4	Watersheds
Actual									(12 digit HUC)

Additional Information: New measure replacing PM xg1. The measure will track improved and/or restored watershed annually. A 12 digit HUC watershed will be counted as having an improvement when there is a five percent or more positive change in at least one water quality parameter. Water quality parameter(s) appropriate to the 12 digit HUC watershed include dissolved oxygen, temperature, pH, turbidity, total suspended solids, salinity, chlorophyll, freshwater inflow, oil/grease, floatables, nutrients, and invasive species.

### (7) Long Island Sound

**Strategic Measure:** By 2018, reduce the maximum area of hypoxia in Long Island Sound by 15 percent from the pre-TMDL average of 208 square miles as measured by the 5-year running average size of the zone. (Baseline: Pre-total maximum daily load (TMDL) average conditions based on 1987-1999 data is 208 square miles. Post-TMDL includes years 2000-2017. Universe: The total surface area of Long Island Sound is approximately 1,268 square miles; the potential for the maximum area of hypoxia would be 1,268 square miles.)

(PM li5) Percent of goal achieved in reducing trade-equalized (TE) point source nitrogen discharges to Long Island Sound from the 1999 baseline of 59,146 TE lbs/day.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	52	72	74	76	85	91.5	95	100	TE
Actual	70	69	83	88	94	Data Avail 9/2016			TE Pounds/Day

Explanation of Results: Nitrogen discharge data is collected by the states of New York and Connecticut on a calendar year basis from the 106 treatment plants discharging to Long Island Sound. December data is reported with a 30 day lag time and that data is reviewed for quality assurance and confirmed then entered into EPA's Discharge Monitoring Report system by the states in early March. Nitrogen discharge data for calendar year 2015 will be available in September 2016. Full calendar year data is required in order to capture seasonal variations in processing nitrogen through biological means. Temperature variations (fall/winter vs. spring/summer) and precipitation levels affect the ability of the treatment plant operators to control nitrogen discharges.

Additional Information: The 2000 TMDL baseline is 59,146 Trade-Equalized (TE) pounds/day. The 2014 TMDL target is 22,774 TE pounds/day. The Long Island Sound Nitrogen Total Maximum Daily Load is an enforceable document with a 15-year timetable. There are no annual targets in the TMDL. The 'annual targets' in the strategic plan are for presentation purposes only and are estimates based on the 15 year total nitrogen reduction target. New York City and Westchester County STPs are under Consent Orders that extended their TMDL compliance deadline to 2017. EPA will continue to monitor these post-2014 for compliance, as well as Connecticut STPs for anti-backsliding compliance with their final 2014 TMDL limits, or as renegotiated with EPA.

(PM li8) Restore, protect or enhance acres of coastal habitat from the 2010 baseline of 2,975 acres.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			218	420	410	135	95.8	318	
Actual			537	336	410	1,678			Acres

Explanation of Results: The program target of 135 acres for restoration and protection was significantly exceeded due to Long Island Sound Study partners finally closing on several large tract protection projects, including a 1,000 acre and a 298 acre property in Connecticut. The 1,000 acre Preserve property was acquired by a coalition of federal, state and local partners during a multi-year negotiation process that raised more than \$8.0 million for the acquisition. The Preserve was the largest parcel of undisturbed coastal forest remaining between Boston and New York with a connection to Long Island Sound. The total acres closed under protection in 2015 was 1,552 and the habitat restoration acres totaled 126 in both Connecticut and New York Long Island Sound coastal areas. EPA funds two habitat specialists in the states to coordinate development and implementation of restoration and protection projects and to develop funding partnerships to complete projects.

Additional Information: EPA revised this measure in FY 2012 to measure acres instead of percent of goal achieved. EPA establishes annual targets with partners to measure annual progress. Out-year estimates are based on continued state progress, feasibility, and funding for habitat restoration projects.

(PM li9) Reopen miles of river and stream corridors to diadromous fish passage from the 2010 baseline of 17.7 river miles by removal of dams and barriers or by installation of bypass structures.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			28	75	1.5	30	76.95	46.4	3.611
Actual			72.3	56	21.6	0			Miles

Explanation of Results: The Long Island Sound Study (LISS) partners did not complete any projects to reopen rivers to fish passage in 2015 although work continued on several ongoing projects. One significant project that was scheduled for completion was delayed due to unavoidable construction factors, but the US Fish & Wildlife Service (USFWS), the lead on the White Rock Dam removal project, indicated that it will likely complete in 2015, just after the internal EPA reporting deadline of September 30. When completed the project will open up 70 miles of river corridor to fish passage that is impeded by dams. Other projects in the pipeline were delayed because of technical and policy issues among permitting agencies. Under the LISS program, EPA funds two habitat restoration specialists in the states of New York and Connecticut and a USFWS wildlife biologist to develop projects and coordinate funding among many federal, state and local partners with interests in restoring fish passage in the Long Island Sound watershed.

Additional Information: EPA revised this measure in FY 2012 to report river miles instead of percent of goal achieved. The EPA will establish annual targets with partners to measure annual progress. Out-year estimates are based on continued state progress, feasibility, and funding for fish passage and bypass projects.

**Strategic Measure:** By 2018, improve water quality and enable the lifting of harvest restrictions in 6,000 acres of shellfish bed growing areas impacted by degraded or declining water quality in the Puget Sound. (2013 baseline: 3,203 acres of shellfish beds with harvest restrictions in 2006 had their restrictions lifted. Universe: 30,000 acres of commercial shellfish beds with harvest restrictions in 2006.)

(PM ps1) Improve water quality and enable the lifting of harvest restrictions in acres of shellfish bed growing areas impacted by degrading or declining water quality.

#### FY 2014 FY 2015 FY 2016 FY 2017 FY 2010 FY 2011 FY 2012 FY 2013 Unit **Target** 1.800 4,953 3.878 7.758 4,000 4,700 4,750 6.350 Acres Actual 4,453 3,203 3,277 1,525 2,489 3,249

### (8) Puget Sound Basin

*Explanation of Results:* The EPA missed its FY 2015 target due to administrative project delays in approving the upgrading of shellfish harvest areas in Dungeness Bay growing area. In addition, 496 acres in a previously approved area in Portage Bay were downgraded due to unanticipated nonpoint source issues in upland waters draining to the growing area.

Additional Information: The Puget Sound has approximately 143,000 acres of approved shellfish harvest beds that require federal, state, local and tribal partners working together to ensure that adjacent water quality and safe harvesting conditions are preserved. Additionally, there are approximately 10,000 acres of potentially recoverable shellfish beds in Puget Sound closed due to nonpoint source pollution. The performance measure reports the net gains (losses) of recovered harvest areas minus any loss of currently approved acres. The Puget Sound Program works to both protect the existing approved shellfish harvest beds, and to improve water conditions so that recoverable harvest areas can be approved for harvest. In 2010, 4,453 acres (cumulative) of shellfish-bed growing areas had improved water quality, resulting in the lifting of harvest restrictions. In 2011, a downgrading of approximately 4,000 acres in Samish Bay occurred due to non-point pollution exacerbated by La Niña weather conditions. Protecting water quality in existing approved areas is critical to the achievement of the performance measure for lifting harvest restrictions. The Puget Sound Program strategically directs resources to address the pathogen pollution problems impacting shellfish harvest in Puget Sound both in the near term - focusing on specific geographical locations (e.g. Samish Bay), and in the long term for existing approved harvest areas and potentially recoverable shellfish acres basin-wide.

(PM ps3) Protect or restore acres or shoreline miles of aquatic habitats including: estuaries, floodplains, marine and freshwater shorelines, riparian areas, stream habitats, and associated wetlands.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	6,500	12,363	19,063	31,818	33,818	43,006	45,500	48,500	
Actual	10,062	14,629	23,818	30,128	41,006	43,002			Acres

*Explanation of Results:* The protection and restoration of habitat is one of the three priority areas for the Puget Sound NEP. We missed our commitment by a small margin due to project delays. Future focus on this measure will likely be on protection efforts as the Elwha Dam decommissioning has been completed.

Additional Information: In 2008, 4,413 acres (cumulative) of tidally- and seasonally-influenced estuarine wetlands were restored. The protection and restoration of habitat is one of the three priority areas for the Puget Sound NEP. The target for this measure has been exceeded every year from FY 2008 - FY 2012 resulting in the protection and/or restoration of 23,818 acres during that period. This is critical to meet salmon recovery goals of viable, harvestable populations of this tribal treaty protected resource. Moving forward, the focus will be on critical floodplain, nearshore, and riparian habitat.

**Strategic Measure:** By 2018, provide access to safe drinking water and adequate wastewater sanitation to 75 percent and 90 percent, respectively, of the homes in the U.S.-Mexico Border area that lacked access to either service in 2003. (2003 Universe: 98,515 homes lacked drinking water and 690,723 homes lacked adequate wastewater sanitation based on a 2003 assessment of homes in the U.S.-Mexico Border area. 2018 target: 73,886 homes provided with access to safe drinking water and 621,651 homes with adequate wastewater sanitation.)

(PM 4pg) Loading of biochemical oxygen demand (BOD) removed (million pounds/year) from the U.S.-Mexico border area since 2003.

### (9) U.S.-Mexico Border Environmental Health

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
•	Target		108.2	115	121.5	137.3	141.1	150.3	151.3	Million
l	Actual		108.5	119	128.3	131	142.9			Pounds/Year

Additional Information: The 2003 baseline is zero pounds of biochemical oxygen demand (BOD) removed.

(PM xb2) Number of additional homes provided safe drinking water in the U.S.-Mexico border area that lacked access to safe drinking water in 2003.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	28,434 (Cumulative)	54,130 (Cumulative)	1,000 (Annual)	3,000 (Annual)	1,700 (Annual)	600 (Annual)	500 (Annual)	20 (Annual)	
Actual	52,130 (Cumulative)	54,734 (Cumulative)	5,185 (Annual)	3,400 (Annual)	1,468 (Annual)	878 (Annual)			Homes

Additional Information: Units and Baseline: "Additional homes" represents the number of existing households that are provided access (i.e., connected) to safe drinking water as a result of Border Environment Infrastructure Fund (BEIF)-supported projects. The program measures from a baseline of zero additional homes since this measure was developed in 2003. Universe: The known universe is the number of existing households in the U.S.-Mexico border area lacking access to safe drinking water in 2003 (98,515 homes). The known universe was calculated from U.S. Census and the Mexican National Water Commission (CONAGUA) sources. This measure was modified from cumulative to annual beginning in FY 2012 to better capture annual program progress.

## (PM xb3) Number of additional homes provided adequate wastewater sanitation in the U.S.-Mexico border area that lacked access to wastewater sanitation in 2003.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	246,175 (Cumulative)	461,125 (Cumulative)	10,500 (Annual)	27,000 (Annual)	39,500 (Annual)	40,750 (Annual)	53,000 (Annual)	6,100 (Annual)	
Actual	254,125 (Cumulative)	513,041 (Cumulative)	31,092 (Annual)	25,695 (Annual)	12,756 (Annual)	44,070 (Annual)			Homes

**Explanation of Results:** The program continues to identify opportunities for expediting construction schedules whenever feasible, resulting in the FY 2015 completion of a project originally scheduled to be completed in FY 2016. In addition, preliminary connection estimates on a large project were exceeded and additional homes in need of services were connected.

Additional Information: Units and Baseline: "Additional homes" represents the number of existing households that are provided access (i.e., connected) to adequate wastewater sanitation as a result of Border Environment Infrastructure Fund (BEIF)-supported projects. The program measures from a baseline of zero additional homes since this measure was developed in 2003. Universe: The known universe is the number of existing households in the U.S.-Mexico border area lacking access to adequate wastewater sanitation services in 2003 (690,723). The known universe of unconnected homes was calculated from U.S. Census and the Mexican National Water Commission (CONAGUA) sources. This measure was modified from cumulative to annual beginning in FY 2012 to better capture annual program progress.

#### EPA Programs and Activities Contributing to Goal 3

- RCRA Waste Management
- RCRA Corrective Action
- RCRA Waste Minimization and Recycling
- Superfund Emergency Preparedness
- Superfund Remedial
- Superfund Enforcement
- Superfund Emergency Response and Removal
- Environmental Response Laboratory Network
- Federal Facilities Restoration and Reuse
- Oil Spill Prevention Preparedness and Response
- Leaking USTs
- UST Prevention and Compliance
- Homeland Security
- Brownfields and Land Revitalization
- Commission for Environmental Cooperation
- Community Action for a Renewed Environment
- Global Change Research
- Homeland Security Research
- Human Health and Ecosystem Protection Research
- Human Health Risk Assessment
- National Environmental Monitoring Initiative
- Smart Growth
- Research Fellowships
- State and Local Prevention and Preparedness
- U.S.-Mexico Border
- Sector Grant Program
- State and Tribal Pollution Prevention Grants
- Tribal Capacity-Building
- Tribal General Assistance Program
- Risk Management Program

#### GOAL 3: CLEANING UP COMMUNITIES AND ADVANCING SUSTAINABLE DEVELOPMENT

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

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

#### Summary of progress towards strategic objective:

EPA has determined that performance toward this objective is progressing as planned. EPA continues to make progress with most key performance measures on pace to achieve the 2018 targets. As of the end of FY 2015, brownfields federal funding has leveraged more than 106,000 jobs and raised \$23.3 billion from both public and private sources, and these results have generally increased over time. Challenges include meeting the demand for brownfields assistance, and making sure the funds from brownfields revolving loan funds are available for additional projects. EPA has made significant progress advancing the Executive Order on Improving Chemical Facility Safety and Security (E.O. 13650). There has been a significant decline in accidents reported at Risk Management Program (RMP) facilities. However, EPA is projecting that it will be able to inspect less than 4% of the universe of RMP facilities each fiscal year.

Program Area		Performance Measures and Data												
	of the end	d of FY 2012	•	ed 19,154 pro		nents at 26,35	0 (cumulative	e) brownfield	properties.	(Baseline: As				
FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 20														
	Target													
(2) Assess and Clean Up	Actual													
Brownfields	data cleanup several years program's Practivities. T numbers in t	efforts, and revies, the program accroject Officers ha hat backlog is no he next two to the Measure: B	ew of pending associated associat	essments comple e anticipated to b through several y . Second, funding e an addition	ted. While the nue more closely ali ears of backlogge g for assessments al 16,800 acre	om 1,300 to 1,400 imbers of assessme gned with the targed d work packages, has gone down the es of brownfie s ready for reu	ents completed ha et going forward i which resulted in e past several year eld properties	ve been higher the for at least two re- increased accomps, which will resu	an the performanasons. First, the blishments data fill in lower accon	ce targets for Brownfield rom prior years'				

#### (PM B32) Number of properties cleaned up using Brownfields funding. FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit **Target** 60 60 120 120 120 120 130 130 **Properties** Actual 109 120 122 132 150 130

Explanation of Results: Additional data cleanup efforts to reduce the backlog of open work packages, and approval of additional work resulting from previous years' activities.

Additional Information: The FY 2016 target for this measure has been revised from 120 to 130 properties cleaned up based on current estimates of cleanups nearing completion during FY 2016. This target is sufficiently ambitious in light of lower program funding in the past five years. Results are expected to fluctuate every other year as new Revolving Loan Fund grants are awarded on a two year cycle beginning in FY 2014.

(PM B33) Acres of Brownfields properties made ready for reuse.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	1,000	1,000	3,000	3,000	3,000	4,000	5,500	5,500	
Actual	3,627	6,667	3,314	4,644	6,389	7,817			Acres

Explanation of Results: Additional data cleanup efforts to reduce the backlog of open work packages, and approval of additional work resulting from previous years' activities.

Additional Information: The FY 2016 target for this performance measure has been increased from 4,000 to 5,500 to better reflect recent performance trends and review of pending cleanups and assessments completed. This measure is very difficult to target since there is no programmatic control of the size of a brownfield site, which typically is 1-3 acres in size. EPA is working to develop a methodology to better predict accomplishments by looking at the numbers of assessment, cleanup and Revolving Loan Fund grants awarded in a particular year and then projecting expected ready for use determinations from those funding vehicles.

(PM B34) Jobs leveraged from Brownfields activities.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	5,000	5,000	5,000	5,000	5,000	5,000	7,000	7,000	
Actual	5,177	6,447	5,593	10,141	12,376	11,229			Jobs

*Explanation of Results:* Grantees reporting large amounts of jobs leveraged at several large redevelopment projects. The Atlanta Beltline project totaled 4,233 jobs leveraged (54% of total).

Additional Information: EPA has revised its FY 2016 target from 5,000 to 7,000 jobs to better reflect past performance and review of pending assessment and cleanups completed. Jobs leveraged is difficult to predict and varies from year-to-year as it is dependent on the final use of the brownfield sites. The relatively large accomplishment numbers in FYs 2013, 2014 and 2015 were due to improved reporting, and several very large projects.

	(PM B37	) Billions of	dollars of cl	eanup and r	edevelopmen	t funds lever	aged at Brov	vnfields sites	<b>5.</b>						
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit					
	Target	0.9	0.9	1.2	1.2	1.2	1.1	1.1	1.1	Dollars					
	Actual	1.40	2.14	1.2	1.54	1.29	1.71			(Billions)					
	Explanation	anation of Results: Higher than expected results at several large redevelopment projects. Specifically, three Atlanta Beltline totaling over \$500M.													
		<b>trategic Measure:</b> By 2018, conduct 2,300 inspections at risk management plan (RMP) facilities. (Baseline: Between FY 000 and FY 2012, more than 7,400 RMP inspections were completed.)													
(3) Reduce	(PM CH	PM CH2) Number of risk management plan inspections conducted.													
Chemical		FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit													
Risks at	Target	400	560	530	500	460	460	460	460	_					
Facilities and	Actual	618	630	652	539	466	376			Inspections					
Communities	increased for action items  Additional 1	Explanation of Results: The decrease in inspections is a result of several factors including a greater focus on high risk facilities (which are more resource intensive), the increased focus on compliance assistance and outreach, and the diversion of inspection FTE and contractor resources for emergency planning and accident prevention action items committed to under the E.O. on Chemical Facility Safety and Security.  Additional Information: Between FY 2000 and FY 2015, more than 8,600 Risk Management Plan (RMP) inspections were completed. Of the 460 RMP facility inspections targeted for FY 2017, 36 percent will be conducted at high-risk facilities.													

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

### **Summary of progress towards strategic objective:**

EPA has determined that performance toward this objective is progressing as planned. EPA is making steady progress with most key performance measures on pace to achieve the 2018 targets. Underground storage tank (UST) facilities in significant operational compliance has increased to 72.6%, the number of UST releases has decreased 10% over the past seven years, and EPA has achieved the Sustainable Materials Management 2018 target with 8,795,750 tons of virgin materials offset in FY 2013. Furthermore, in FY 2015 EPA completed significant rules such as the revised Definition of Solid Waste and the UST leak prevention and detection rules. Challenges include the 2.5 billion tons of solid, industrial, and hazardous wastes produced each year. Moreover, tank owners and operators are mostly small businesses and frequent presence by regulators is needed to keep them focused on UST compliance concerns. The long-term vision of this objective is to prevent accidental releases which contaminate land, air, and water. Preventing the contamination of land and preserving critical resources will be vital to creating healthy and vibrant communities.

Program Area					Performance	Measures and	Data							
	of waste pro	products thro ducts will be	ugh the use or reused or re-	of sustainable cycled throug	materials magh sustainable	nagement. (Ba materials mar	aseline: In F nagement pra	Y 2013, an esactices.)	stimated 8,50					
	(PM SM1) Tons of materials and products offsetting use of virgin resources through sustainable materials mana FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017													
	TD 4	F Y 2010	FY 2011	FY 2012	FY 2013	FY 2014	F Y 2015	FY 2016	FY 2017	Unit				
	Target			8,549,502	8,501,537	8,603,033	9,346,830	9,450,000	9,550,000	T				
	Actual			9,002,588	8,795,750	Data Avail 5/2016	Data Avail 5/2017			Tons				
(1) Waste		rategic Measure: By 2018, increase by 50 the number of tribes covered by an integrated waste management plan compared												
Generation and Recycling	to FY 20	13. (Baseline		•		ribes covered ally recognized				-				
		PM MW8) Number of tribes covered by an integrated solid waste management plan.												
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit				
	Target	23	14	3	3	10	10	10	10	T '1				
	Actual	23	17	13	26	20	16			Tribes				
	Additional I available. He Technical as	<i>Information:</i> Beg owever, the perfo sistance to the tri	inning in FY 201 rmance target is a	2, RCRA program achieved with the provided through	assistance of othe	apporting the devel or funding sources,	including tribes,	other EPA progra	ıms, or other fede					
(2) Minimize Releases of Hazardous Waste and	approved facilities universe	<b>Strategic Measure:</b> By 2018, prevent releases at 500 additional hazardous waste management facilities by issuing initial approved controls or updated controls resulting in the protection of an estimated 20 million people living within a mile of all facilities with controls. (Baseline: At the end of FY 2013, an estimated 1,220 facilities will require these controls out of the universe of 6,600 facilities, with over 20,000 process units.)												
Petroleum Products	(PM HW	1		1		v or updated	ı	EN7 2016	EW 2015	TT .*4				
Troducts	Towast	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit				
1	Target	100	100	100	100	100	110	115	115					

Actual	140	130	117	114	129	120		Facilities	

**Strategic Measure:** By 2018, prevent exposures at polychlorinated biphenyl (PCB) sites by issuing 750 approvals for PCB cleanup, storage, and disposal activities

(PM PCB) Number of approvals issued for polychlorinated biphenyl (PCB) cleanup, storage and disposal activities.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target					150	200	200	200	
Actual					254	218			Approvals

*Additional Information:* This measure tracks all approvals issued by EPA under Section 761 of the Toxic Substances Control Act (TSCA) for PCBs. The EPA issued 1,275 approvals between FY 2008 and FY 2015.

**Strategic Measure:** Each year through 2018, increase the percentage of underground storage tank (UST) facilities that are in significant operational compliance (SOC) with both release detection and release prevention requirements by 0.5 percent over the previous year's target. (Baseline: This means an increase of facilities in SOC from an estimated 70 percent in 2014 to 72 percent in 2018.)

(PM ST6) Increase the percentage of UST facilities that are in significant operational compliance (SOC) with both release detection and release prevention requirements by 0.5% over the previous year's target.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	65.5	66	66.5	67	70	70.5	71	71.5	
Actual	69	71	71.3	71.6	72.5	72.6			Percent

Additional Information: There were 94,287 on-site inspections of underground storage tanks (UST) between October 2014 and September 2015 and 72.6 percent of those were found to be in significant operational compliance with both release detection and release prevention requirements.

**Strategic Measure:** Each year through 2018, reduce the number of confirmed releases at UST facilities to 5 percent fewer than the prior year's target. (Baseline: Between FY 2008 and FY 2012, confirmed UST releases averaged 6,500.)

(PM ST1) Reduce the number of confirmed releases at UST facilities to five percent (5%) fewer than the prior year's target.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	<9,000	<8,550	<8,120	<7,715	<7,330	<6,965	<6,615	<6,285	D 1
Actual	6,328	5,998	5,674	6,128	6,847	6,830			Releases

Additional Information: The UST prevention program works to ensure that underground sources of drinking water (groundwater) are protected from petroleum and associated chemicals leaking from USTs.

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

#### **Summary of progress towards strategic objective:**

EPA has determined that performance toward this objective is progressing as planned. EPA is making steady progress with most key performance measures on pace to achieve the 2018 targets. This objective includes the following programs: Facility Response Plans (FRP), Spill Prevention Control and Countermeasures (SPCC), emergency preparedness, superfund removals, superfund remedial, RCRA corrective action (RCRA CA), PCB cleanup, and leaking underground storage tank (LUST) cleanups. The long-term vision of this objective is to prepare and respond to emergencies and to cleanup up contaminated land so it can be safely reused or continued to be used, creating more resilient, healthy, and vibrant communities. As of the end of FY 2015, EPA's land cleanup programs were tracking over 540,000 sites and about 23 million acres, many of which are located in economically distressed communities that suffer from disproportionate and adverse environmental exposures. Under this objective, more than 81% of superfund and 90% of RCRA CA sites have eliminated unacceptable human exposure to contaminants, and over 463,000 LUST, RCRA CA, and superfund sites are now ready for anticipated use (RAU), which contributed to the FY 2014-15 Agency Priority Goal. However, future challenges are likely in the cleanup programs, since stagnated appropriations have caused delays in assessment, investigation, and design work that bring sites into the remedy construction stage. In addition, many of the remaining sites are more complex and are subject to stringent cleanup standards.

Program Area					Performance	Measures and	Data					
	Response headquar	(NAR) evaluers, regions,	uation criteria	a. (Baseline: eams prepare	In FY 2012,	5 percent of the the average Cling to emerge	Core NAR Sco			al Approach to A		
(1) Emergency		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit		
Preparedness and Response	Target	55	60	70	72	75	80	82	83			
una response	Actual	87.9	77.5	75.8	82.2	78.3	Data Avail 3/2016			Percent		
	Additional Information: The Core NAR score reported for this measure is based upon the combination of two scores, one which measures day-to-day response readiness and another that measures national preparedness for chemical, biological, radiological and nuclear incidents. Beginning in FY 2014, the Core NAR evaluation has taken place after the end of the fiscal year in order to capture a more complete picture of response readiness. Results will be reported in March of the following year.											

**Strategic Measure:** By 2018, complete an additional 1,395 Superfund removals. (Baseline: In FY 2013, there were 295 Superfund removal actions completed.)

### (PM 137) Number of Superfund removals completed.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						275	275	275	
Actual						278			Removals

Additional Information: Implemented in FY 2015, this measure combined the retired Superfund-lead (PM 132) and PRP-lead removals with EPA oversight (PM 135) measures. The EPA continues to internally report results for both Superfund-lead and PRP-lead removals with agency oversight. Between FY 2009 and FY 2014, the EPA completed an average of 367 removal actions per year.

**Strategic Measure:** By 2018, bring into compliance 60 percent of FRP inspected facilities found to be non-compliant. (Baseline: In FY 2010, 268 FRP facilities were inspected and 121 were found to be non-compliant, an initial compliance rate of 55 percent.)

(PM 337) Percent of all FRP inspected facilities found to be non-compliant which are brought into compliance.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	15	30	35	40	50	60	60	60	
Actual	48	48	73	78	79	79			Percent

Explanation of Results: Regions made strong effort to bring non-compliant FRP facilities into compliance consistent with OEM's high-risk facility strategy.

Additional Information: The EPA established this measure in FY 2010 to track Facility Response Plan (FRP) inspected facilities brought into compliance because oil spills at these facilities have a greater potential to cause harm to human health and the environment.

**Strategic Measure:** By 2018, bring into compliance 60 percent of SPCC inspected facilities found to be non-compliant. (Baseline: In FY 2010, 781 SPCC facilities were inspected and 456 were found to be non-compliant, an initial compliance rate of 42 percent.)

(PM 338) Percent of all Spill Prevention, Control and Countermeasure (SPCC) inspected facilities found to be non-compliant which are brought into compliance.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	15	30	35	40	50	60	60	60	
Actual	36	45	63	69	72	74			Percent

Additional Information: The EPA established this measure in FY 2010 to track SPCC facilities brought into compliance because oil spills at certain high-risk SPCC facilities have a greater potential to cause harm to human health and the environment.

**Strategic Measure:** By 2018, complete 95,500 assessments at potential hazardous waste sites to determine if they warrant Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial response or other cleanup activities. (Baseline: As of 2012, the cumulative total number of assessments completed was 91,300.)

#### (PM 115) Number of Superfund remedial site assessments completed.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		900	900	650	700	850	675	675	
Actual		1,020	1,151	772	794	869			Assessments

Additional Information: This measure accounts for all remedial assessments performed at sites addressed under the Superfund Remedial program. Through FY 2015, the EPA had completed a cumulative total of 93,901 remedial site assessments. The FY 2016 performance target has been decreased from 750 to 675 assessments completed to reflect resource constraints and a shift in focus from lower cost assessments at new sites to higher cost assessments at existing sites.

**Strategic Measure:** By 2018, increase to 92 percent the number of Superfund sites and RCRA facilities where human exposures to toxins from contaminated sites are under control. (Baseline: As of October 2013, an estimated 83 percent of Superfund sites and 85 percent of RCRA facilities had human exposures under control out of a combined universe of 5,451.)

#### (2) Clean Up Contaminated Land

#### (PM 151) Number of Superfund sites with human exposures under control.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	10	10	10	10	10	9	9	9	<b>a.</b>
Actual	18	10	13	14	9	10			Sites

Additional Information: Beginning in FY 2014, performance results have included non-NPL Superfund Alternative Approach (SAA) sites. Through FY 2015, the EPA ensured that 1,439 final and deleted NPL sites, including 32 non-NPL sites with SAA agreements in place, met the criteria to be determined human exposure under control.

#### (PM CA1) Cumulative percentage of RCRA facilities with human exposures to toxins under control.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	69	72	81	85	87	90	92	94	ъ.
Actual	72	77	81	85	87	90			Percent

Additional Information: Through FY 2015, the EPA achieved human exposures under control at 90 percent of RCRA corrective action facilities. There are a total of 3,779 corrective action facilities in the 2020 corrective action universe.

**Strategic Measure:** By 2018, increase to 86 percent the number of Resource Conservation and Recovery Act (RCRA) facilities with migration of contaminated groundwater under control. (Baseline: At the end of FY 2013, the migration of contaminated groundwater was controlled at 76 percent of all 3,779 facilities needing corrective action.)

(PM CA	(PM CA2) Cumulative percentage of RCRA facilities with migration of contaminated groundwater under control.												
	FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit												
Target	61	64	69	73	77	80	84	88	Percent				
Actual 63 67 72 76 79 82													

Additional Information: Progress for this measure was stronger than anticipated during FY 2015. In order to continue to push progress forward for this measure, the EPA increased the FY 2016 target from 82 to 84 percent.

**Strategic Measure:** By 2018, increase to 73 percent the number of RCRA facilities with final remedies constructed. (Baseline: At the end of FY 2013, all cleanup remedies were constructed at an estimated 51 percent of all 3,779 facilities needing corrective action.)

(PM CA5) Cumulative percentage of RCRA facilities with final remedies constructed.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	35	38	46	51	55	60	64	69	
Actual	37	42	47	51	56	60			Percent

Additional Information: Through FY 2015, the EPA constructed final remedies at 60 percent of RCRA corrective action facilities. There are a total of 3,779 corrective action facilities in the 2020 corrective action universe.

**Strategic Measure:** By 2018, increase to 25 percent the number of RCRA facilities with corrective action performance standards attained. (Baseline: At the end of FY 2013, performance standards were attained at an estimated 20 percent of all 3,779 RCRA facilities requiring corrective action.)

(PM CA6) Cumulative percentage of RCRA facilities with corrective action performance standards attained.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target					21	24	30	32	
Actual					24	28			Percent

Additional Information: Progress for this measure has been stronger than anticipated during FY 2015. In order to continue to push progress forward for this measure, the EPA increased the FY 2016 target from 25 to 30 percent.

**Strategic Measure:** Each year through 2018, reduce the backlog of LUST cleanups (confirmed releases that have yet to be cleaned up) that do not meet risk-based standards for human exposure and groundwater migration by 1 percent. This means a decrease from 16 percent in 2012 to 10 percent in 2018. (At the end of FY 2012, there were 82,903 releases not yet cleaned up.)

### (PM 111) Percent of confirmed releases pending cleanup completion at UST facilities.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	No Target Established	No Target Established	No Target Established	No Target Established	15	14	13	12	Percent
Actual	19	18	16	15	14	14			1 Creent

Additional Information: As of the end of FY 2015, there have been 528,521 releases reported, 456,660 (or 86.4 percent) of which have been cleaned up, leaving 71,861 remaining to be cleaned up.

# (PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	12,250	12,250	11,250	10,100	9,000	8,600	8,600	8,600	G1
Actual	11,591	11,169	10,927	11,582	10,393	9,869			Cleanups

Additional Information: Through FY 2015, the EPA completed a cumulative total of 456,660 leaking underground storage tank (LUST) cleanups. Current targets reflect a variety of challenges in cleaning up remaining sites, including the complexity of remaining sites, an increased state workload, a decrease in available state resources and the increasing costs of cleanups.

**Strategic Measure:** Each year through 2018, reduce the backlog of LUST cleanups (confirmed releases that have yet to be cleaned up) in Indian country that do not meet applicable risk-based standards for human exposure and groundwater migration by 1 percent. This means a decrease from 23 percent in 2012 to 17 percent in 2018.

# (PM 113) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration in Indian country.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	30	38	42	42	37	30	26	26	C1
Actual	62	42	47	18	26	32			Cleanups

Additional Information: Through FY 2015, the EPA completed a cumulative total of 1,105 leaking underground storage tank cleanups in Indian country, out of a universe of 1,396 confirmed releases. This is a subset of the national total of 456,660 leaking underground storage tanks cleanups completed.

**Strategic Measure:** By 2018, ensure that 946 Superfund sites are "sitewide ready for anticipated use." (Baseline: As of October 2012, 606 Superfund sites had achieved "sitewide ready for anticipated use" out of a universe of 1,742 sites.)

#### (PM 141) Annual number of Superfund sites with remedy construction completed.

(1 1/1 1-11	(11/11/1/) Annual number of Superfund sites with remedy construction completed.												
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit				
Target	22	22	22	19	15	13	13	13					
Actual	18	22	22	14	8	14			Completions				

Additional Information: Beginning in FY 2014, performance measure results have included non-NPL Superfund Alternative Approach (SAA) sites. Through FY 2015, the EPA has completed construction at 1,177 final and deleted NPL sites and 5 completions at non-NPL sites with SAA agreements in place.

(PM 152) Number of Superfund sites with contaminated groundwater migration under control.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	15	15	15	15	15	13	13	13	
Actual	18	21	18	18	11	15			Sites

Additional Information: Beginning in FY 2014, performance measure results have included non-NPL Superfund Alternative Approach (SAA) sites. Through FY 2015, the EPA ensured that 1,138 final and deleted NPL sites, including 22 sites with SAA agreements in place, met the criteria to be determined Groundwater Migration Under Control.

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		103	130	115	115	105	105	105	ъ.
Actual		132	142	121	115	104			Projects

*Explanation of Results:* At the close of FY 2015, the Program believed that the national target of 105 RAPCs was achieved. Upon further data review, the Program determined that one RAPC was improperly submitted by a region so the total RAPCs achieved in FY 2015 was adjusted accordingly to 104.

Additional Information: Beginning in FY 2014, performance measure results have included non-NPL Superfund Alternative Approach (SAA) sites. Accordingly, the measure text has been revised by removing the term "NPL." Through FY 2015, the EPA completed 2,252 remedial action project completions (RAPCs) at final and deleted NPL sites and 17 RAPCs at non-NPL sites with SAA agreements in place.

(PM FF1) Percent of Superfund federal facility sites construction complete.

(= =:= = =												
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit			
Target					86	87	88	88				
Actual					TBD	TBD			Percent			

Additional Information: In FY 2014, the EPA began implementing a percent construction complete measure to demonstrate national incremental construction progress at federally-owned Superfund NPL sites. This measure is based on the average of three specific factors: 1) Operable Unit (OU) percent complete; 2) Total cleanup actions percent complete; and 3) Duration of cleanup actions percent complete (national cumulative). While projected targets have been identified for fiscal years 2015-2017, the complete data set needed to accurately estimate targets and calculate results at federal Superfund NPL sites is not currently available through the agency's Superfund Enterprise Management System (SEMS). However, improvements planned for SEMS during FY 2016 will facilitate accurate results reporting that will inform performance estimates for this measure.

(PM S10) Number of Superfund sites ready for anticipated use site-wide.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	65	65	65	60	55	45	45	45	a.
Actual	66	65	66	56	45	45			Sites

Additional Information: Beginning in FY 2014, performance measure results have included non-NPL Superfund Alternative Approach (SAA) sites. Through FY 2015, the EPA ensured that 752 final and deleted NPL sites, including 4 non-NPL sites with SAA agreements in place, met the criteria to be determined site-wide ready for anticipated use (SWRAU).

Objective 4 - Strengthen Human Health and Environmental Protection in Indian Country: Directly implement federal environmental programs in Indian country and support federal program delegation to tribes. Provide tribes with technical assistance and support capacity development for the establishment and implementation of sustainable environmental programs in Indian country.

### Summary of progress towards strategic objective:

The EPA, in consultation with the Office of Management and Budget, has highlighted this objective as a focus area for improvement. An extremely small number of tribes have sought federal environmental program implementation authorities, under-staffed tribal environmental departments have program implementation limitations, data and information are inadequate, there are unique Indian law challenges, and EPA Tribal programs lack sufficient direct implementation resources.

All of these factors present challenges to protecting human health and the environment in Indian country. EPA plans to conduct a multi-pronged assessment of federally-regulated environmental and human health issues in order to effectively align the agency's direct implementation, and other resources to ensure that programs are as effective in Indian country as they are outside of Indian country. In FY 2015, the effort focused on understanding agency data systems, Tribal planning priorities, and current agency direct implementation work. While beginning the discussion of conducting this comprehensive assessment, EPA continues to take actions to respond to known, high priority environmental and human health issues (e.g., access to drinking water and basic sanitation).

Program Area					Performance	Measures and	Data				
	Strategic Measure: By 2015, increase the percent of tribes implementing federal regulatory environmental programs in Indian country to 25 percent. (FY 2009 baseline: 22 percent of 572 tribes.)  (PM 5PQ) Percent of Tribes implementing federal regulatory environmental programs in Indian country (cumulative).										
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit	
	Target	14	18	22	24	25	25	25	25	ъ.	
(1) Improve	Actual	14	17	21	19	19	20			Percent	
Human Health and the Environment in Indian Country	Additional Information: A total of 572 tribal entities, including tribes and inter-tribal consortia, are eligible for GAP funding.  Strategic Measure: By 2015, increase the percent of tribes conducting EPA-approved environmental monitoring and assessment activities in Indian country to 58 percent. (FY 2012 baseline: 54 percent of 572 tribes)  (PM 5PR) Percent of Tribes conducting EPA approved environmental monitoring and assessment activities in Indian country (cumulative.)										
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit	
	Target	42	52	54	57	58	58	58	58	D .	
	Actual	50	52	54	56.5	31	36			Percent	
	EPA is unde	rgoing an effort t	o enhance the Tri	bal General Assis	stance Program (C	rogram improveme GAP) performance i ribal consortia, are	management fran	nework that will r			

#### **EPA Programs and Activities Contributing to Goal 4**

- Chemical Risk Review and Reduction
- Chemical Risk Management
- Endocrine Disruptor Program
- Science Policy Biotechnology
- Protect Human Health from Pesticide Risk
- Protect the Environment from Pesticide Risk
- Realize the Value of Pesticide Availability
- Lead Risk Reduction and Lead Categorical Grant Programs
- Pesticides Program Implementation Categorical Grant Program
- Pollution Prevention
- Pollution Prevention Categorical Grant Programs

#### GOAL 4: ENSURING THE SAFETY OF CHEMICALS AND PREVENTING POLLUTION

Reduce the risk and increase the safety of chemicals and prevent pollution at the source

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

### Summary of progress towards strategic objective:

The EPA has made significant achievements within this objective. The agency published final risk assessments—the first in 28 years—for five chemicals on its TSCA Work Plan Chemicals list; expeditiously initiated the development of TSCA Section 6 rule makings to reduce risks identified for three of those chemicals; and reviewed approximately 1,000 new chemicals before they entered commerce. In the pesticides area, special emphasis has been made to accelerate the pace of docket openings and workplan development for pesticides in order to keep the program on schedule and meet the commitments of the Strategic Plan and its statutorily mandated deadlines. The agency published a science policy document, "Use of High Throughput Assays and Computational Tools; Endocrine Disruptor Screening Program; Notice of Availability and Opportunity for Comment," (June 2015) describing how the EPA will incorporate an alternative scientific approach to begin screening 1,000 chemicals per year for endocrine activity starting in FY 2017 and advancing the goal of providing sensitive, specific, quantitative and efficient screening using alternative test methods to assays in the Tier 1 battery to protect human health and the environment.

Several challenges remain. In the EPA's pesticide program, meeting program targets for compliance with the Endangered Species Act (ESA) could be delayed by lawsuits, petitions and the need to implement EPA's agreement with the National Academy of Sciences (NAS) on ESA compliance. The program is currently piloting several chemicals within the NAS framework. In recent years, while blood lead levels in children have declined overall, the disparity in elevated blood lead levels between low-income and non-low-income children has widened. Certified Lead RRP firms are also re-certifying at a much lower rate than expected, though there is no evidence of a lack of sufficient supply. In the Existing Chemicals Program, the EPA will not likely complete assessments of all of the original 83 TSCA Work Plan chemicals by 2018. In response, the program has refined its approach towards assessments and has developed a multi-year schedule for assessing as many TSCA Work Plan Chemicals as possible through FY 2018, while also assessing clusters of related chemicals that can be used by industry as substitutes for those Work Plan Chemicals.

Program Area	Performance Measures and Data
(1) Protect Human Health from Chemical Risks	organophosphates and carbamate insecticides in the general population. (Dasenne for moderate to severe exposure incidents

(PM J11) Reduction in moderate to severe exposure incidents associated with organophosphates and carbamate insecticides in the general population.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			10	15	25	30	30	30	,
Actual			16	13	20	25			Percent

Explanation of Results: We still expect to meet our 2018 strategic target but the declines in incidents are slowing now as we near the goal for carbamates.

Additional Information: Baseline for moderate to severe exposure incidents reported during 2008 is 316, as reported in the American Association of Poison Control Centers' National Poisoning Data System (NPDS) for organophosphates and carbamate pesticides. In FY 2011, 274 moderate to severe exposure incidents were reported for organophosphates and carbamate pesticides.

**Strategic Measure:** Through 2018, work to ensure that the percentage of children with blood lead levels above 5  $\mu$ g/dl does not rise above the 1.0 percent target for FY 2014 and work to make further reductions in blood lead levels. (Baseline is 2.6 percent of children ages 1-5 had elevated blood lead levels (5  $\mu$ g/dl or greater) in the 2007-2010 sampling period according to the Centers for Disease Control and Prevention's (CDC's) National Health and Nutritional Evaluation Survey (NHANES).)

(PM 008) Percent of children (aged 1-5 years) with blood lead levels (>5 ug/dl).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	3.5	No Target Established	1.5	No Target Established	1.0	No Target Established	1.0	No Target Established	<b>.</b>
Actual	2.6	Biennial	2.1	Biennial	Data Avail 10/2016	Biennial			Percent

Additional Information: Data released by CDC from the National Health and Nutritional Evaluation Survey (NHANES) for the 2007-2010 sampling period showed that an estimated 2.6% of children aged 1 - 5 had elevated blood lead levels (5 ug/dl or greater). Data for this measure are reported biennially.

**Strategic Measure:** By 2018, reduce the percent difference in the geometric mean blood lead level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old to 10.0 percent. (Baseline is 28.4 percent difference in the geometric mean blood lead level in low-income children ages 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old in 2007-2010 sampling period according to CDC National Health and Nutritional Evaluation Survey (NHANES).)

(PM 10D) Percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	28	No Target Established	13	No Target Established	20	No Target Established	25	No Target Established	_
Actual	28.4	Biennial	34.8	Biennial	Data Avail 10/2016	Biennial			Percent

Additional Information: Data released by CDC from the National Health and Nutritional Evaluation Survey (NHANES) for the 2007-2010 sampling period showed that the estimated difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old was 28.4%. Data for this measure are reported biennially.

**Strategic Measure:** By 2018, reduce the concentration of perfluoro-octanoic acid (PFOA) in blood serum in the general population by 20 percent. (PFOA baseline is based on 2009-2010 geometric mean data in serum (3.07 µg/L) from the CDC's NHANES.)

(PM D6A) Reduction in concentration of PFOA in serum in the general population.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			1	No Target Established	25	No Target Established	41	No Target Established	Percent
Actual			32	Biennial	Data Avail 10/2016	Biennial			Reduction

Additional Information: Derived from Centers for Disease Control's National Health and Nutrition Examination Survey (NHANES) on PFOA concentration in the general population. The geometric mean concentration in serum as determined from 2009-2010 sampling data is  $3.07 \,\mu\text{g/L}$ . Data for this measure are reported biennially.

**Strategic Measure:** By 2018, complete Endocrine Disruptor Screening Program (EDSP) decisions for 100 percent of chemicals for which complete EDSP data is expected to be available by the end of 2017. (Baseline is 15 decisions have been completed through 2012 for any of the chemicals for which complete EDSP information is anticipated to be available by the end of 2017. EDSP decisions for a chemical can range from determining potential to interact with the estrogen, androgen, or thyroid hormone systems to otherwise determining whether further endocrine related testing is necessary.)

(PM E01) Number of chemicals for which Endocrine Disruptor Screening Program (EDSP) decisions have been completed

•	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		3	5	20	59	0	0	1,000	~
Actual		3	1	0	3	54			Chemicals

*Explanation of Results:* Made public the DERs for the 52 chemical determinations and two exemptions, which were not originally considered in the FY 2015 target calculations.

Additional Information: Baseline is 15 decisions that have been completed through 2012 for any of the chemicals for which complete EDSP information is anticipated to be available by the end of 2017. EDSP decisions for a chemical can range from determining potential to interact with the estrogen, androgen, or thyroid hormone systems to otherwise determining whether further endocrine related testing is necessary. This measure tracks the number of chemicals with screening level decisions based on integrated scientific reviews of 1) Tier 1 assays; 2) other scientifically-relevant information (e.g., CFR158 data, published literature, high throughput endocrine activity and exposure information); and 3) decisions based on other information that determines whether further endocrine-related testing is necessary for a chemical (e.g., regulatory status of the chemical). In FY 2015, the Agency published a Federal Register notice incorporating ToxCast data for more than 1,800 chemicals that, combined with additional data, will be used to complete the EDSP screening decisions by FY 2017.

**Strategic Measure:** By 2018, reduce rodenticide exposure incidents by 75 percent in children ages 1-6. (The baseline total number of confirmed and likely rodenticide exposures to children ages 1-6 in 2011 is 10,259 according to data by the Poison Control Centers' National Poison Data System.)

#### (PM 012) Percent reduction of children's exposure to rodenticides.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		10	5	5	10	25	25	25	ъ.
Actual		0	5	12	17	24			Percent

**Explanation of Results:** The implementation of the rodenticide packaging agreement was delayed due to litigation, resulting in a missed FY 2015 target by 1%. Issue was resolved and the positive impact of the new rodenticide packaging agreement is now having the desired impact on results. We anticipate meeting the strategic goal for this measure.

Additional Information: The baseline for the total number of confirmed and likely rodenticide exposures to children is 11,674 in 2008, based data from the Poison Control Centers' National Poison Data System. By FY 2011, the number of confirmed and likely rodenticide exposures to children ages 1-6 was 10,259.

**Strategic Measure:** By 2018, EPA will have assessed all currently identified TSCA Work Plan Chemicals. (Baseline is zero assessments finalized for the 83 initially identified TSCA Work Plan Chemicals through 2012.)

# (PM RA1) Annual number of chemicals for which risk assessments are finalized through EPA's TSCA Existing Chemicals Program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target					3	7	12	21	G1 . 1
Actual					4	1			Chemicals

Explanation of Results: In FY 2015, the EPA finalized a risk assessment for NMP (n-methylpyrrolidone) which identified risks to people, particularly pregnant women and women of childbearing age, who have high exposures through paint or coating removal. EPA is acting expeditiously on a range of possible voluntary and regulatory actions to address those risks. The FY 2015 target was not achieved because risk assessments could not be finished for the two other original TSCA Work Plan Chemicals (TBB/TBPH) and five related/similar chemicals due to critical data gaps and uncertainties that limit EPA's ability to conduct quantitative risk assessments. Accordingly, a Data Needs Assessment was completed on these seven chemicals and made available to the public in FY 2015, commencing the agency's efforts to seek out the data necessary to complete a risk assessment.

In FY 2015, the EPA implemented an important improvement in the TSCA Work Plan chemical assessment process by developing and publishing Problem Formulation & Initial Assessment documents for four original Work Plan chemicals and seven related/similar chemicals. These documents serve to increase the transparency of EPA's thinking and analysis process and are expected to result in more refined risk assessments by providing opportunity for the public/stakeholders to comment on EPA's approach and provide additional data to supplement or refine assessments prior to EPA conducting detailed risk analysis.

Additional Information: The universe for this annual GPRA measure is comprised of TSCA Work Plan Chemicals and related/similar chemicals. The cumulative baseline is zero chemicals with completed risk assessments through FY 2013. The subset of the results reported for this measure that correspond to the 67 originally-identified TSCA Work Plan Chemicals remaining on the TSCA Work Plan Chemicals list that was refreshed in October, 2014, count as progress toward the FY 2018 Strategic Measure. All five of the chemicals for which the five risk assessments were completed in FY 2014 and FY 2015 are original TSCA Work Plan Chemicals.

### (PM 009) Cumulative number of active certified Renovation Repair and Painting firms

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	100,000	100,000	140,000	140,000	138,000	145,000	96,000	97,000	<b>T</b> .
Actual	59,143	114,834	126,323	133,587	139,702	108,623			Firms

**Explanation of Results:** The FY 2015 target was missed in large part because EPA's RRP program is reaching the end of the first 5-year cycle of initial certifications and firms have to make a decision about whether to recertify. To date only about 30% of firms have chosen to become recertified. It is worth noting that the Agency is not aware of an acute shortage of certified lead renovation firms.

Additional Information: The baseline is zero in 2009. Firms can become certified directly through EPA (tracked through Federal Lead-based Paint Program (FLPP)) or through an authorized State program (tracked through grant reports/internal database). FY 2010 was the first year that firms submitted applications to EPA to become certified. The EPA's RRP program reached the end of the first 5-year cycle of initial certifications and firms have to make a decision about whether to recertify in FY 2015. Cumulative number of active certified RRP firms is equal to the number of firms that remain certified, became certified, or recertified in a given Fiscal Year. A renovation firm may choose to not recertify for a variety of reasons including a decision to leave the industry, a decision to focus on new home construction rather than renovations, or a lack of local demand for lead safe renovation services. Alternatively, new renovation firms continue to emerge and seek certification.

### (PM 011) Number of Product Reregistration Decisions

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	1,500	1,500	1,200	1,200	900	600	550	600	
Actual	1,712	1,218	1,255	709	292	562			Decisions

Explanation of Results: The lack of necessary entomologists needed to review all the required efficacy data has affected meeting target.

Additional Information: By FY 2012, 18,208 product re-registrations decisions were made according to internal tracking as part of the product reregistration process. The product reregistration universe is 24,584 and the total completed at the close of FY 2014 is 19,216.

(PM 091) Percent of decisions completed on time (on or before PRIA or negotiated due date).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	99	99	99	99	97.0	96	96	97	
Actual	99.7	98.4	99.1	98.8	85	98.4			Percent

*Explanation of Results:* To have a fully loaded pipeline and meet the statutorily mandated 2022 deadline for registration review, the program put special emphasis on completing as many dockets and workplans as possible.

Additional Information: Baseline average percentage of decisions completed on time from 2010-2012 is 99.0% according to EPA internal data.

# (PM 10A) Annual percentage of lead-based paint certification and refund applications that require less than 20 days of EPA effort to process.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	92	92	95	95	95	95	95	95	,
Actual	96	95	97	99	100	99			Percent

**Explanation of Results:** Exceedance of this target reflects years of concerted and successful efforts to expedite handling of abatement individual certification and refund applications, ensuring that homeowners will have access to a sufficient pool of qualified abatement professionals to perform lead inspections, risk assessments and abatement work.

Additional Information: Baseline is 94%, as determined by averaging the annual performance results for this measure over the period 2008-2012. Data obtained from Federal Lead Based Paint Program (FLPP) information system.

#### (PM 143) Percentage of agricultural acres treated with reduced-risk pesticides.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	21	21	22	22.5	22.5	22.5	22.5	22.5	
Actual	21	22	22.5	23	Data Avail 10/2016	Data Avail 10/2016			Percent

Explanation of Results: Normal one year data lag.

Additional Information: The baseline for acres-treated is 22% of total acreage in 2011 when the reduced-risk pesticide acre-treatments was 315,000,000 and total (all pesticides) was 1,444,000,000 acre-treatments. Each year's total acre-treatments, as reported by USDA National Agricultural Statistic Service and private marketing research data sources, serve as the basis for computing the percentage of acre-treatments using reduced risk pesticides. Acre-treatments count the total number of pesticide treatments each acre receives each year. Results are reported end of calendar year and have a one-year reporting data lag.

(PM 164) Number of pesticide registration review dockets opened.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	70	70	70	72	73	73	66	11	6
Actual	75	81	79	77	75	84			Dockets

*Explanation of Results:* To have a fully loaded pipeline and meet the statutorily mandated 2022 deadline for registration review, the program put special emphasis on completing as many dockets and workplans as possible. Note that the targets for these measures ramp down in 2017 when more resources will be redirected to ramp up the work on risk assessments.

Additional Information: By 2012, total of 376 chemical case work dockets were opened according to EPA internal data. OPP planned this ramp down in targets for opening dockets and completing work plans so it could focus its resources on completing risk assessments and making decisions to meet its statutory deadline by 2022.

(PM 230) Number of pesticide registration review final work plans completed.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	70	70	70	72	73	73	75	40	*** 1 51
Actual	70	75	70	79	81	89			Work Plans

*Explanation of Results:* To have a fully loaded pipeline and meet the statutorily mandated 2022 deadline for registration review, the program put special emphasis on completing as many dockets and workplans as possible. Note that the targets for these measures ramp down in 2017 when more resources will be redirected to ramp up the work on risk assessments.

Additional Information: By 2012, total of 327 final workplans for registered pesticides were completed according to EPA internal data. OPP planned this ramp down in targets for opening dockets and completing work plans so it could focus its resources on completing risk assessments and making decisions to meet its statutory deadline by 2022.

# (PM 247) Percent of new chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers, or the environment.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	100	100	100	100	100	100	100	100	<b>D</b>
Actual	91	100	100	100	95	96			Percent

Explanation of Results: EPA's analysis of TSCA 8(e) notices received indicated that two chemicals would likely have been found to potentially pose unreasonable risk if the information found in the notices had been available to EPA at new chemical review. These two chemicals were submitted to EPA in the mid-1980s and mid-1990s. Although the target was not achieved, the information from the supporting annual study will potentially enable the agency to strengthen its Premanufacture Notice (PMN) review procedures.

Additional Information: Baseline is 97 percent, as determined by averaging the annual performance results for this measure over the period 2009-2012. Data obtained from the annual report, "Study Comparing PMNs/LVEs to Related 8(e) Chemicals." Baseline is calculated by comparing Section 8(e) notices received in the fiscal year to previously reviewed PMNs. If a risk identified in a new Section 8(e) notice would not have been identified and mitigated by the review, then the program has not met the performance target. Approximately 30 Section 8(e) notices submitted annually are compared to previous PMNs for purposes of determining the annual performance result for this measure.

# (PM C19) Percentage of CBI claims for chemical identity in health and safety studies reviewed and challenged, as appropriate, as they are submitted.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		100	100	100	100	100	100	100	D
Actual		100	100	100	100	100			Percent

Additional Information: Prior to August 2010, zero percent of approximately 500 TSCA CBI claims submitted per year for chemical identity, which potentially contain health and safety studies, had been reviewed or challenged, where appropriate.

#### (PM E04) Number of chemicals with Tier 1 screening assay results reviewed.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target					52	0			G:
Actual					52	0			Chemicals

Additional Information: FY 2012 baseline was zero List 1 chemicals for which Tier 1 screening assays results will have completed reviews according to EPA internal tracking. This performance measure accounted for those scientific data evaluation records that had undergone primary and secondary technical reviews for the chemicals that had screening data submitted to the Agency. Targets for EDSP performance measures E01, E04, and E05 were set at zero for FY 2015 in reflection of the time needed for issuance of test orders and completion of the scientific data review processes. Issuance of test orders is dependent on an OMB-approved information collection request (ICR) for the List 2 chemicals. Currently, the ICR is being reviewed by OMB for a decision on whether or not to approve the request and the decision is stipulated on the agency responding to the initial ICR terms of clearance. The agency projected to have an OMB-approved ICR by no earlier than FY 2015, which would have allowed the agency to issue test orders no earlier than late 2015. When recipients receive the Tier 1 test order, the agency allows 2 years minimum for data generation and 1 year for the agency's review of that submitted data, a total of 3 years. Based on these projections, the agency anticipates that results for E01, E04, and E05 would not be realized until 2017. This measure is no longer needed and is captured in E01.

#### (PM E05) Number of chemicals for which scientific weight of evidence determinations have been completed.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target					52	0			
Actual					0	52			Chemicals

Explanation of Results: Made public the DERs for the 52 chemicals determinations, which were not originally considered in the FY 2015 target calculations.

Additional Information: FY 2012 baseline was zero List 1 chemicals for which Tier 1 screening assay results will have completed reviews according to EPA internal tracking. This performance measure accounted for those scientific data evaluation records that had undergone primary and secondary technical reviews for the chemicals that had screening data submitted to the Agency. Targets for EDSP performance measures E01, E04, and E05 were set at zero for FY 2015 in reflection of the time needed for issuance of test orders and completion of the scientific data review processes. Issuance of test orders is dependent on an OMB-approved information collection request (ICR) for the List 2 chemicals. Currently, the ICR is being reviewed by OMB for a decision on whether or not to approve the request and the decision is stipulated on the agency responding to the initial ICR terms of clearance. The agency projected to have an OMB-approved ICR by no earlier than FY 2015, which would have allowed the agency to issue test orders no earlier than late 2015. When recipients receive the Tier 1 test order, the agency allows 2 years minimum for data generation and 1 year for the agency's review of that submitted data, a total of 3 years. Based on these projections, the agency anticipates that results for E01, E04, and E05 would not be realized until 2017. This measure is no longer needed and is captured in E01.

# (PM E06) Number of High Throughput Screening (HTS) assays and computational models validated for EDSP chemical prioritization and screening.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target					8	18			Assays and
Actual					8	18			Tools

Additional Information: FY 2012 baseline is zero assays or tools validated for EDSP screening, according to EPA internal tracking. There are several steps within the validation process including: preparation of detailed assay descriptions, performance reviews, validation by comparison to reference compounds, and peer reviews. A decision to discontinue validation efforts for a particular assay and/or tool could occur during any of these steps while a decision to accept an assay as validated occurs after all the steps are successfully completed. As HTS assays and computational models are validated for additional endpoints within the context of endocrine adverse outcome pathways, these tools will serve as alternatives for Tier 1 screening battery assays significantly increasing the number of chemicals addressed within the EDSP over time (linked to measure E01 and replaced by measure E07).

# (PM E07) Annual number of EDSP Tier 1 screening assays for which validated alternatives have been developed, based on high throughput assays and computational models.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target							2	2	Assays and
Actual									Tools

Additional Information: FY 2014 baseline was zero of the 11 Tier 1 assays for which EPA is developing alternative methods. The target represents the number of Tier 1 assays with newly-developed alternative methods. The total number of Tier 1 assays for which alternatives are to be developed is 11. If the science advances significantly, this measure may be modified in the future to reflect alternative method development for Tier 2 Tests. ToxCast high throughput screening data are now potential alternatives for the Tier 1 ER binding, ERTA, and uterotrophic assays in FY 2015. Not only are the high throughput assays more rapid and less expensive, but this advance also reduces animal use, as the Tier 1 ER binding and uterotrophic assays are animal-dependent assays. The goal is to have alternative data for all 11 Tier 1 assays; however, it is possible that a subset of chemicals may be screened for specific types of endocrine activity (e.g. estrogen) or a chemical class may be screened for estrogen, androgen, and thyroid activities prior to complete endocrine screening of all chemicals currently in the ToxCast chemical library. In FY 2015, high throughput assays (i.e., ER model) alternative was developed for three of the eleven Tier 1 assays.

Strategic Measure: By 2018, no watersheds will exceed aquatic life benchmarks for targeted pesticides. (Data for 2012 provides the most recent percent of agricultural watersheds sampled by the USGS National Water Quality Assessment (NAWQA) program that exceeds the National Pesticide Program aquatic life benchmarks for azinphos-methyl (7 percent) and chlorpyrifos (7 percent). Urban watersheds sampled by the NAWQA program that exceeds the National Pesticide Program aquatic life benchmarks for diazinon (0 percent), chlorpyrifos (0 percent), and carbaryl (9 percent).)

(PM 268) Percent of selected urban watersheds that exceed EPA aquatic life benchmark maximum concentrations for three key pesticides of concern (diazinon, chlorpyrifos and carbaryl).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	5, 0, 20	No Target Established	5, 0, 10	No Target Established	0, 0, 0	No Target Established	0, 0, 0	No Target Established	Percent
Actual	6.7, 0, 33	Biennial	0, 0, 9	Biennial	7, 0, 0	Biennial			1 Creciii

### (2) Protect **Ecosystems** from Chemical **Risks**

Additional Information: Urban watersheds sampled by the USGS National Water Quality Assessment (NAWQA) program that exceed the National Pesticide Program aguatic life benchmarks in 2012 for diazinon, chlorpyrifos and carbaryl is 0 percent, 0 percent, 9 percent, respectively. Data for this measure are reported biennially. The number of sampling and the sampling points in USGS data were constantly changing year to year, depending on their funding. Results from previous reports showed that the exceedances were at different monitoring sites. Starting in FY 2015, the agency is using data from 10 specified sites for urban from the USGS national monitoring sites in the future to provide consistency in data reporting. The monitoring sites were selected based on history of monitoring results, and anticipated consistency in reporting from these national sampling sites. The 10 selected Urban Streams in National Network sites are: Norwalk River at Winnipauk, CT; Accotink Creek near Annandale, VA; Swift Creek near Apex, NC; Sope Creek near Marietta, GA; Clinton River at Sterling Heights, MI; Shingle Creek at Minneapolis, MN; Cherry Creek at Denver, CO; White Rock Creek at Dallas, TX; Little Cottonwood Creek at Salt Lake City, UT; Fanno Creek at Durham, OR. The exceedances are calculated based on the number of exceedances divided by the total number of watersheds. The USGS NAWQA sites selected are the best long term source of surface water monitoring data for a large number of pesticides and their degradates, with consistent QA procedures for both sampling and lab analysis, low detection limits, and have been used by OPP for risk assessment work for over the last 15 years. The most sensitive aquatic benchmark for the chemical are posted on the website:

http://www.epa.gov/oppefed1/ecorisk ders/aquatic life benchmark.htm: Diazinon: 0.105 ug/L; Chlorpyrifos: 0.040 ug/L; Carbaryl: 0.5 ug/L

(PM 269) Percent of selected agricultural watersheds that exceed EPA aquatic life benchmark maximum concentrations for two key pesticides of concern (azinphos-methyl and chlorpyrifos).

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	0, 10	No Target Established	0, 10	No Target Established	0, 0	No Target Established	0, 0	No Target Established	Percent
Actual	0, 8	Biennial	7, 7	Biennial	0, 0	Biennial			refeent

Additional Information: Agricultural watersheds sampled by the USGS National Water Quality Assessment (NAWQA) program that exceed the National Pesticide Program aquatic life benchmarks for azinphos-methyl and chlorpyrifos are 7 percent and 7 percent, respectively. Data for this measure are reported biennially. The number of sampling and the sampling points in USGS data were constantly changing year to year, depending on their funding. Results from previous reports showed that the exceedances were at different monitoring sites. Starting in FY 2015, the agency is using data from 10 specified sites for agricultural sites from the USGS national monitoring sites in the future to provide consistency in data reporting. The monitoring sites were selected based on history of monitoring results, and anticipated consistency in reporting from these national sampling sites. The 10 selected Agricultural Streams in National Network sites are: Canajoharie Creek near Canajoharie, NY; Contentnea Creek at Hookerton, NC; South Fork Iowa River near New Providence, IA; Maple Creek near Nickerson, NE; Bogue Phalia near Leland, MS; Orestimba Creek near Crows Landing, CA; Granger Drain at Granger, WA; Rock Creek at Twin Falls, ID; Zollner Creek near Mt. Angel, OR; Sugar Creek at New Palestine, IN. The exceedances are calculated based on the number of exceedances divided by the total number of watersheds. The USGS NAWQA sites selected are the best long term source of surface water monitoring data for a large number of pesticides and their degradates, with consistent QA procedures for both sampling and lab analysis, low detection limits, and have been used by OPP for risk assessment work for over the last 15 years. The most sensitive aquatic benchmark for the chemical are posted on the website: http://www.epa.gov/oppefed1/ecorisk\_ders/aquatic\_life\_benchmark.htm: Malathion=0.035 ug/L; Methomyl=0.7 ug/L.

(PM 240) Maintain timeliness of FIFRA Section 18 Emergency Exemption Decisions

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	45	45	45	45	45	45	45	45	,
Actual	50	52	43	27	44	45			Days

Additional Information: Baseline average number of days for Section 18 decisions from 2009-2012 is 46 days according to EPA internal data.

(PM 276) Percent of registration review chemicals with identified endangered species concerns, for which EPA obtains any mitigation of risk prior to consultation with DOC and DOI.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			5	5	15	5	5	5	
Actual			0	0	0	Data Avail 10/2016			Percent

Additional Information: The baseline is zero percent for each annual reporting period as percentages are not cumulative. The data is tracked by OPP using internal tracking numbers. The data is obtained from ecological risk assessments and effects determinations prepared to support a registration review case. Any mitigation of risk refers to label changes that are intended to reduce the environmental exposure and associated risk of pesticides to listed species and/or their designated critical habitat. This may include such mitigation measures as reduction in the pesticide application rate and/or frequency of application, changes to the timing of application, spray drift, buffers or more geographically specific mitigation measures via EPA's Bulletins Live! Two web-based tool in specific areas where listed species and/or critical habitat are known to co-occur with potential pesticide use based on labeled registered uses.

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

### **Summary of progress towards strategic objective:**

The EPA has continued to make progress in pollution prevention, increasing the number of chemicals on the Safer Chemical Ingredients List and the number of products recognized through the Safer Choice program. The EPA has also drafted and piloted federal procurement guidelines with the goal of creating a transparent, fair, consistent and results-oriented approach to selecting products that meet environmental performance and ecolabeling standards. The program continues to expand the number of assessments conducted through the Energy, Economy, and Environment (E3) Initiative and the Green Suppliers Network (GSN), aimed at reducing costs to business and industry, reducing greenhouse gas emissions and improving productivity and efficiency. The Presidential Green Chemistry Award Program has spurred over 1,500 nominations over its lifetime, and winning technologies have yielded significant environmental and cost savings.

Despite the successes, the P2 program continues to face challenges with data collection. For example, while the strategy with P2 grants is to collect useful performance data, grantees often report their results at an aggregated or partially-aggregated level, without a breakout of specific P2 practices and corresponding environmental and economic benefits. This has complicated the program's efforts to validate and understand P2 grant results. To address this challenge, the P2 grant applicants are now required to report facility-level results to increase transparency, and the program has developed a grant results tracking database to specifically address some of these concerns.

Program Area					Performance	Measures and	Data			
(1) Promote Pollution	(Baseline that should results that	is 578 million is 578	on pounds red ected to conti states and ot	luced from Finue in future ther grant rec	Y 2008 throu years due to ipients.)	nazardous mat gh FY 2012, a atypical result	fter removing ts, and increa	g 626 million	pounds in re	ported results
Prevention		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
	Target	188.1	199.6	88.7	71.6	23.4	204.2	214.2	214.2	Dounda
	Actual	200.3	154.8	214.9	231.5	190.3	Data Avail 10/2016			Pounds (Millions)

Explanation of Results: Adjustments to prior year results (FY 2010 – FY 2013) were made to 1) remove results attributable to the Presidential Green Chemistry Challenge Award Program in accordance with recommendations made in a September 2015 IG report, and 2) to correct for a broken formula in the excel-based Electronics Environmental Benefits Calculator (EEBC). The recently launched web-based EEBC corrects this issue going forward. FY 2014 Results significantly exceed an outdated target that was based on results prior to correction.

Additional Information: There is a 1-year data lag. Baseline is 1,437 million pounds reduced from FY 2008 through FY 2012, after removing 626 million pounds in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2014, the Pollution Prevention Program reported "recurring results" of an additional 57 Million Pounds of Hazardous Materials reduced, highlighting the ongoing benefits of Pollution Prevention Program activities. "Recurring results" are environmental benefits produced in prior years that continue to deliver environmental benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the Pollution Prevention Program, there is not a fixed standard number of years that environmental benefit results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities.

**Strategic Measure:** By 2018, reduce 7 million metric tons of carbon dioxide equivalent (MMTCO2Eq.) cumulatively through pollution prevention. (Baseline is 7 MMTCO2Eq. reduced from FY 2008 through FY 2012, after removing 3.5 MMTCO2Eq in reported results that should not be expected to continue in future years due to atypical results, and increased quality assurance standards for the results that come from states and other grant recipients. The data from this measure are also calculated into the Agency's overall GHG measure under Goal 1.)

(PM 297) Metric Tons of Carbon Dioxide Equivalent (MTCO2Eq) reduced or offset through pollution prevention.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	2.11	2.19	1.74	1.46	1.0	2.0	2.2	2.2	MTCO2E
Actual	2.8	2.8	3.9	3.4	3.0	Data Avail 10/2016			MTCO2Eq (Millions)

Explanation of Results: Adjustments to prior year results (FY 2010 – FY 2013) were made to 1) remove results attributable to the Presidential Green Chemistry Challenge Award Program in accordance with recommendations made in a September 2015 IG report, and 2) to correct for a broken formula in the excel-based Electronics Environmental Benefits Calculator (EEBC). The recently launched web-based EEBC corrects this issue going forward. FY 2014 Results significantly exceed an outdated target that was based on results prior to correction.

Additional Information: Normal 1-year data lag. Baseline is 11.1 MMTCO2Eq. reduced from FY 2008 through FY 2012, after removing 3.5 MMTCO2Eq in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2014, the Pollution Prevention Program reported "recurring results" of an additional 2.8 Million Metric Tons of Carbon Dioxide Equivalent reduced, highlighting the ongoing benefits of Pollution Prevention Program activities. "Recurring results" are environmental benefits produced in prior years that continue to deliver environmental benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the Pollution Prevention Program, there is not a fixed standard number of years that environmental benefit results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities.

**Strategic Measure:** By 2018, reduce 6.9 billion gallons of water use cumulatively through pollution prevention. (Baseline is 6.9 billion gallons reduced from FY 2008 through FY 2012, after removing 24 billion gallons in reported results that should not be expected to continue in future years due to atypical results, and increased quality assurance standards for the results that come from states and other grant recipients.)

(PM 262) Gallons of water reduced through pollution prevention.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	781	783	785	771	932	1,156	1,390	1,390	Gallons
Actual	1,472	1,397	1,175	936	1,618	Data Avail 10/2016			(Millions)

Explanation of Results: FY 2014 increase in Water Savings results is attributable to 1) an increase in environmental benefits results stemming from the implementation of E3 recommendations, and 2) an increase in results from Regional STAG, SRA, and Direct results. The FY 2014 Target was based on a downward trend of Water Savings Results from FY 2010 – FY 2013 that indicated lower performance trend for Water Savings. The FY 2015 – 2017 targets reflect modest incremental annual increases in performance over the FY 2014 target that will be revisited when FY 2015 results become available (10/2016) and the results indicate that the higher FY 2014 performance level should be expected to continue. The program will continue to promote the implementation of E3 recommendations and this may continue to increase the level of water savings results in the coming years. However, it is difficult to predict the level of performance for this program as the identified environmental savings from E3 recommendations may vary significantly from facility to facility.

Additional Information: There is a 1-year data lag. Baseline is 6.9 billion gallons reduced from FY 2008 through FY 2012, after removing 24 billion gallons in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2014, the Pollution Prevention Program is reporting "recurring results" of an additional 3.5 Billion Gallons of Water reduced, highlighting the ongoing benefits of Pollution Prevention Program activities. "Recurring results" are environmental benefits produced in prior years that continue to deliver environmental benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the Pollution Prevention Program, there is not a fixed standard number of years that environmental benefit results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities.

**Strategic Measure:** By 2018, save \$ 1.3 billion in business, institutional, and government costs cumulatively through pollution prevention improvements. (Baseline is \$1.33 billion saved from FY 2008 through FY 2012, after removing \$231 million in reported results that should not be expected to continue in future years due to atypical results, and increased quality assurance standards for the results that come from states and other grant recipients.)

(PM 263) Business, institutional and government costs reduced through pollution prevention.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	253.9	268.5	196.9	195.6	133.3	362.6	445.6	445.6	Dollars
Actual	435.5	533.7	737.4	594.9	587.5	Data Avail 10/2016			Saved (Millions)

Explanation of Results: Adjustments to prior year results (FY 2010 – FY 2013) were made to 1) remove results attributable to the Presidential Green Chemistry Challenge Award Program in accordance with recommendations made in a September 2015 IG report, and 2) to correct for a broken formula in the excel-based Electronics Environmental Benefits Calculator (EEBC). The recently launched web-based EEBC corrects this issue going forward. FY 2014 Results significantly exceed an outdated target that was based on results prior to correction.

Additional Information: There is a 1-year data lag. Baseline is \$1.85 billion saved from FY 2008 through FY 2012, after removing \$231 million in reported results that should not be expected to continue in future years due to: 1) atypical results, and 2) increased quality assurance standards for the results that come from states and other grant recipients. For FY 2014, the Pollution Prevention Program reported "recurring results" of an additional \$420 Million Dollars saved, highlighting the ongoing benefits of Pollution Prevention Program activities. "Recurring results" are environmental benefits produced in prior years that continue to deliver environmental benefits over multiple years. By presenting solely new annual results for GPRA performance targets and results, the targets and results show a clearer alignment to the actual budget request and enacted levels. Within the Pollution Prevention Program, there is not a fixed standard number of years that environmental benefit results will recur; rather, each P2 activity has a recurring results formula specific to the type of results and activities.

**Strategic Measure:** By 2018, increase the number of safer chemicals and safer chemical products cumulatively by 1,900. (Baseline is 600 safer chemicals and 2,500 safer chemical products recognized in 2013 by the Design for the Environment program.)

### (PM P2X) Annual Number of Additional Products Recognized by the Safer Choice program

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						375	100	125	5
Actual						101			Product

*Explanation of Results:* FY 2015 results are 101 Safer Choice Products recognized and 77 chemicals listed on the Safer Chemical Ingredients List. Meeting this target has been affected by the program's recent, important focus on a variety of activities (redesigning and implementing the new Safer Choice logo, developing a new Salesforce data system, bringing existing partners into compliance, etc.) that are critical to making Safer Choice, in the long run, a model of environmental leadership.

Additional Information: Baseline is approximately 2,500 safer chemical products recognized in 2013 by the Safer Choice Program. More information about the Safer Choice program, including currently recognized products and the criteria manufacturers must meet to be recognized, is available at www.epa.gov/saferchoice. The list of products on the Safer Choice Products list is 171 in FY 2014 and 101 in FY 2015. P26 reported on the total of safer chemicals and safer chemical products and is replaced by measures P2X and P2Y, which report separately on safer chemicals and safer chemical products.

### (PM P2Y) Annual Number of Additional Chemicals Added to the Safer Chemical Ingredients List

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target						100	100	100	G1 : 1
Actual						77			Chemicals

*Explanation of Results:* FY 2015 results are 101 Safer Choice Products recognized and 77 chemicals listed on the Safer Chemical Ingredients List. Meeting this target has been affected by the program's recent, important focus on a variety of activities (redesigning and implementing the new Safer Choice logo, developing a new Salesforce data system, bringing existing partners into compliance, etc.) that are critical to making Safer Choice, in the long run, a model of environmental leadership.

Additional Information: Baseline is approximately 600 chemicals listed on the Safer Chemical Ingredients List in 2013 by the Safer Choice Program. More information about the Safer Chemical Ingredients List, including currently listed chemicals and criteria for listing, is available at http://www2.epa.gov/saferchoice/safer-ingredients. The list of products on the Safer Chemicals Ingredient List is 49 in FY 2014 and 77 in FY 2015. P26 reported on the total of safer chemicals and safer chemical products and is replaced by measures P2X and P2Y, which report separately on safer chemicals and safer chemical products.

GOAL 5: PROTECTING HUMAN HEALTH AND THE ENVIRONMENT BY ENFORCING LAWS AND ASSURING COMPLIANCE 969

#### **EPA Programs and Activities Contributing to Goal 5**

- Environmental Justice
- Compliance Assistance Program
- Environmental Technology Verification Program, Monitoring and Enforcement Program
- National Center for Environmental Innovation
- National Partnership for Environmental Priorities
- Economic Decision Sciences Research
- Pesticide Enforcement Grant Program
- Sector Grant Program
- Sustainable Materials Management
- Toxic Substances Compliance Grant Program
- Sustainability Research
- Superfund Enforcement
- RCRA Corrective Action

# GOAL 5: PROTECTING HUMAN HEALTH AND THE ENVIRONMENT BY ENFORCING LAWS AND ASSURING COMPLIANCE Protect human health and the environment through vigorous and targeted civil and criminal enforcement. Use Next Generation Compliance strategies and tools to improve compliance with environmental laws.

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

#### Summary of progress towards strategic objective:

EPA has determined that performance toward this objective is making steady progress. This progress has been achieved by focusing on high impact cases that tackle serious environmental problems in American communities. This work has been guided by the National Enforcement Initiatives (NEIs), other national priorities (e.g., drinking water), and regional enforcement priorities, as well as by vigorously pursuing environmental benefits, such as commitments to clean up contaminated sites and to install pollution control technologies. Given that EPA enforcement addresses the biggest sources of pollution first, the amount of pollution reduced through EPA's enforcement cases will, by design, decline over time.

EPA has been advancing the use of Next Generation Compliance strategies throughout its enforcement and compliance program. Examples include requirements for advanced monitoring equipment in case settlements and by providing infrared FLIR cameras to 11 states to better detect pollution. Also, on September 24, 2015, EPA finalized the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule. The final rule will require regulated entities and state and federal regulators to use existing, available information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) program instead of filing written paper reports. E-reporting necessitates major short-term investments to yield long term benefits.

Program Area				P	erformance :	Measures and	l Data						
	baseline:	21,000 annu	ally. Status f	for FY 2013:	18,000.)	ions and evalu	nations (5-yea	ar cumulative	). (FY 2005	-2009			
(1) M-:4-:	(PM 409)	PM 409) Number of federal inspections and evaluations.											
(1) Maintain Enforcement		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit			
Presence	Target			19,000	17,000	17,000	15,500	15,500	15,500	Inspections/			
	Actual			20,000	18,000	16,000	15,400			Evaluations			
	declined as a	Explanation of Results: The FY 2015 result is close but slightly lower than target. As EPA's budget and travel funds have declined, the total number of inspections has declined as a result.  Additional Information: FY 2005-2009 baseline: 21,000 annually.											

**Strategic Measure:** By 2018, initiate 14,000 civil judicial and administrative enforcement cases (5-year cumulative). (FY 2005-2009 baseline: 3,900 annually. Status for FY 2013: 2,400.)

#### (PM 410) Number of civil judicial and administrative enforcement cases initiated.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			3,300	3,200	3,200	2,700	2,700	2,700	G
Actual			3,000	2,400	2,300				Cases

Additional Information: FY 2005-2009 baseline: 3,900 annually.

**Strategic Measure:** By 2018, conclude 13,600 civil judicial and administrative enforcement cases (5-year cumulative). (FY 2005-2009 baseline: 3,800 annually. Status for FY 2013: 2,500.)

### (PM 411) Number of civil judicial and administrative enforcement cases concluded.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			3,200	3,000	2,800	2,400	2,400	2,400	G
Actual			3,000	2,500	2,300	2,400			Cases

Additional Information: FY 2005-2009 baseline: 3,800 annually.

**Strategic Measure:** By 2018, maintain review of the overall compliance status of 100 percent of the open consent decrees. (Baseline 2009: 100 percent. Status for FY 2013: 91 percent.)

#### (PM 412) Percentage of open consent decrees reviewed for overall compliance status.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	,
Actual			91	91	100	99			Percent

**Explanation of Results:** The total number of consent decrees to be reviewed annually is small. Therefore, a small number of unreviewed consent decrees results in a noticeable percentage shortfall compared to the target.

Additional Information: FY 2012 is the first year of collecting data for this measure.

**Strategic Measure:** Each year through 2018, support clean ups and save federal dollars for sites where there are no alternatives by: (1) reaching a settlement or taking an enforcement action before the start of a remedial action at 99 percent of Superfund sites having viable responsible parties other than the federal government; and, (2) addressing all cost recovery statute of limitation cases with total past costs greater than or equal to \$500,000. ((1) FY 2007-2009 annual average baseline: 99 percent of sites reaching a settlement or EPA taking an enforcement action. (2) FY 2009 baseline: 100 percent cost recovery statute of limitation cases addressed. (Status for FY 2013: 100 percent.))

(PM 078) Percentage of all Superfund statute of limitations cases addressed at sites with unaddressed past Superfund costs equal to or greater than \$500,000.

_	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	100	100	100	100	100	100	100	100	
Actual	100	100	100	100	100	100			Percent

Additional Information: In FY 2009, the Agency addressed 100 percent of Cost Recovery at all NPL and non-NPL sites with total past costs equal to or greater than \$200,000. The threshold for this measure was increased from \$200,000 to \$500,000 in FY 2013 to focus prioritization efforts.

(PM 285) Percentage of Superfund sites having viable, liable responsible parties other than the federal government where EPA reaches a settlement or takes an enforcement action before starting a remedial action.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	95	95	99	99	99	99	99	99	
Actual	98	100	100	100	100	100			Percent

Additional Information: In FY 1998 approximately 70 percent of new remedial work at NPL sites (excluding Federal facilities) was initiated by private parties. By FY 2003, that percentage had increased such that a settlement was reached or an enforcement action was taken with non-Federal PRPs before the start of the remedial action at approximately 90 percent of Superfund sites and now, in FY 2015, EPA reached a settlement or started an enforcement action at 100 percent of the non-Federal sites with viable PRPs.

(2) Support
Addressing
Climate
Change and
Improving Air
Quality

**Strategic Measure:** By 2018, reduce, treat, or eliminate 1,590 million estimated pounds of air pollutants as a result of concluded enforcement actions (5-year cumulative). (FY 2005-2008 baseline: 480 million pounds, annual average over the period. Status for FY 2013: 610 million pounds.)

(PM 400) Millions of pounds of air pollutants reduced, treated, or eliminated through concluded enforcement actions.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	480	480	480	450	350	310	310	300	Million
Actual	410	1,100	250	610	140	430			Pounds

	pollution vio	olators, such as ut ollution. We are in	ilities, OECA's funcreasingly focus	iture annual enfor ed on large sourc	cement actions was													
<b>Strategic Measure:</b> By 2018, reduce, treat, or eliminate 1,280 million estimated pounds of water pollutants as a reconcluded enforcement actions (5-year cumulative). (FY 2005-2008 baseline: 320 million pounds, annual average period. Status for FY 2013: 660 million pounds.)																		
(-)	(PM 402) Millions of pounds of water pollutants reduced, treated, or eliminated through concluded enforcement actions FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 Unit																	
(3) Support		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit								
Protecting	Target	320	320	320	320	280	250	250	240	Million								
America's Waters         Actual         1,000         740         500         660         340         90																		
	Additional I contributed address non-and most ser	Explanation of Results: Results for this measure are highly variable from year to year because they are driven by a small number of very large cases.  Additional Information: FY 2005-2008 Average Baseline: 320 million pounds, annual average over the period. For FY 2010, two stormwater home builder actions ontributed to more than half of the one billion pound pollutant reduction result. As we complete work on compliance agreements with the largest cities and begin to ddress non-compliance in smaller cities, the total pounds of pollution is expected to decline. This reduction will be a combined result of addressing some of the largest and most serious violations and putting those dischargers on a path to remediation, as well as our focus on other sources of water pollution that are smaller in number of ounds but very important to protecting water quality.																
(4) Support Cleaning Up Communities	result of o	concluded en on pounds.)	forcement ac	tions (5-year	cumulative).(	spose of 14,60 (FY 2008 base treated, or el	eline: 6,500 r	million pound	ls. Status for									
and Advancing Sustainable		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit								
Development	Target	6,500	6,500	6,500	6,000	5,000	2,400	2,400	2,300	Million								
_	Actual	11,800	3,600	4,400	150	700	500			Pounds								

**Explanation of Results:** Results for this measure are highly variable from year to year because they are driven by a small number of very large cases. This results in substantial variability in this measure from year to year. For example, one large case lodged but not entered in FY15 would have made this the largest year ever in pounds of hazardous waste addressed.

Additional Information: Prior to FY 2016, this measure only included hazardous waste. Beginning in FY 2016, this measure will report (separately) both hazardous and non-hazardous waste subtotals addressed and remediated through EPA enforcement actions. Non-hazardous waste subtotals were previously included in PM 404. FY 2008 Baseline: 6,500 million pounds. The results for this measure are driven by a small number of very large cases and, therefore, can cause significant fluctuations in the results from year to year. For example, in FY 2010 over 99% of the total 11.75 billion pounds of hazardous waste reduced, treated, or eliminated came from two cases - CF Industries Inc. (9.87 billion pounds) and Exxon Mobil Oil Corporation (1.86 billion pounds). Given the types of cases that are nearing completion, OECA's shift in focus is expected to result in fewer millions of pounds of pollution reduced overall.

**Strategic Measure:** By 2018, obtain commitments to clean up 1,025 million cubic yards of contaminated soil and groundwater media [4] as a result of concluded CERCLA and RCRA corrective action enforcement actions (5-year cumulative). (FY 2007-2009 baseline: 300 million cubic yards of contaminated soil and groundwater media, annual average over the period. Status for FY 2013: 750 million cubic yards.)

(PM 417) Millions of cubic yards of contaminated soil and groundwater media EPA has obtained commitments to clean up as a result of concluded CERCLA and RCRA corrective action enforcement actions.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			300	275	225	200	200	200	Million
Actual			400	750	900	70			Cubic Yards

**Explanation of Results:** Results for this measure are highly variable from year to year because they are driven by a small number of very large cases. This results in substantial variability in this measure from year to year.

Additional Information: FY 2007-2009 baseline: 300 million cubic yards of contaminated soil and groundwater media, annual average over the period. Contaminated groundwater media, as defined for the Superfund and RCRA corrective action programs, is the volume of physical aquifer (both soil and water) that will be addressed by the response action. The results for this measure are usually driven by a small number of very large cases, which can cause a significant fluctuation in results from year to year depending on the types of cases concluded in any given year. For example, in FY 2011 75% of the 937.4 million cubic yards of contaminated soil and groundwater media to be cleaned up under concluded CERCLA and RCRA corrective action enforcement actions came from one case. Additionally, the FY 2013 target was adjusted (from 300 to 275) to reflect decreases in contributing program project areas in the FY 2013 budget.

(5) Support Ensuring the Safety of Chemicals and Preventing Pollution

**Strategic Measure:** By 2018, reduce, treat, or eliminate 14 million estimated pounds of toxic and pesticide pollutants as a result of concluded enforcement actions (5-year cumulative). (FY 2005-2008 baseline: 3.8 million pounds, annual average over the period. Status for FY 2013: 4.6 million pounds.)

(PM 404) Millions of pounds of toxic and pesticide pollutants reduced, treated, or eliminated through concluded
enforcement actions.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	3.8	3.8	3.8	3.0	2.5	2.3	2.3	2.3	Million
Actual	8.3	6.1	1,400	4.6	41	10			Pounds

Additional Information: Prior to FY 2016, this measure included non-hazardous wastes. Beginning in FY 2016, non-hazardous wastes addressed and remediated through EPA enforcement actions, which have been reported as part of this measure, will be reported as part of PM 405. FY 2005-2008 Average Baseline: 3.8 million pounds, annual average over the period. The results for this measure are usually driven by a small number of very large enforcement cases, which yielded the majority of the pounds addressed and can cause significant fluctuations in results from year to year, depending on the types of cases concluded in any given year. Note: the FY 2014 actual amount was decreased by 5 million pounds from previous submissions due to a reclassification of the pounds as hazardous waste (measure PM 405) instead of toxics.

**Strategic Measure:** By 2018, increase the percentage of criminal cases having the most significant health, environmental, and deterrence impacts to 45 percent. (FY 2010 baseline: 36 percent. Status for FY 2013: 44 percent.)

### (PM 418) Percentage of criminal cases having the most significant health, environmental, and deterrence impacts.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			43	43	43	45	45	45	<b>D</b>
Actual			45	44	48	62			Percent

(6) Enhance Strategic Deterrence through Criminal

**Enforcement** 

Additional Information: FY 2010 baseline: 36 percent.

**Strategic Measure:** By 2018, maintain 75 percent of criminal cases with an individual defendant. (FY 2006-2008 baseline: 75 percent.)

#### (PM 419) Percentage of criminal cases with individual defendants.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			75	75	75	75	75	75	
Actual			70	80	87	83			Percent

Additional Information: FY 2006-2008 baseline: 75 percent.

**Strategic Measure:** By 2018, increase the percentage of criminal cases with charges filed to 45 percent. (FY 2006-2010 baseline: 36 percent. Status for FY 2013: 38 percent.)

### (PM 420) Percentage of criminal cases with charges filed.

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
,	Target			40	40	40	45	45	45	j
	Actual			44	38	39	38			Percent

Explanation of Results: This result is within the expected annual variability for this measure.

Additional Information: FY 2006-2010 baseline: 36 percent.

**Strategic Measure:** By 2018, maintain an 85 percent conviction rate for criminal defendants. (FY 2006-2010 baseline: 85 percent. Status for FY 2013: 94 percent.)

(PM 421) Percentage of conviction rate for criminal defendants.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			85	85	85	85	85	85	ъ.
Actual			95	94	95	92			Percent
1									

Additional Information: FY 2006-2010 baseline: 85 percent.

#### NPM: OFFICE OF RESEARCH AND DEVELOPMENT

#### **Performance Measures and Data**

(PM AC1) Percentage of products completed on time by Air, Climate, and Energy research program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	
Actual			100	92	87	87			Percent

Explanation of Results: Explanation of Results: The Air, Climate and Energy Program met 87% of its planned products in FY 2015. Among the research not completed on time was: An inventory of wetland vulnerabilities based on integration of vulnerability assessment methods, resilience theory, and wetlands classifications (in 2014 the project was expanded to include data compilation, analysis and integration of an additional comparative wetland attribute into the larger framework, expanding the utility of the research; an internally reviewed journal is currently in revision for clearance); and; a final report of case study assessments of urban resilience to climate change (award of the contract was delayed 3 months; the report has gone through internal peer review and a final ERD was delivered August 31st and it is currently in process for clearance).

Additional Information: A research product is "a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use." This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

(PM AC2) Percentage of planned research outputs delivered to clients for use in taking action on climate change or improving air quality.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	,
Actual			77	83	92	74			Percent

Explanation of Results: Two research outputs were completed late but in calendar year 2015: a report on multipollutant air toxic exposures and health effects; and a review of the mitigation and adaptation approaches in GHG. Two research outputs will be completed after 2015: performance of technology for gasification of solid wastes (EPA merged this research with a product that will be delivered in Q2 FY 2016); and coupled meteorology/hydrology system for improved linkage to watershed models capable of assessing implications of climate change on ecosystems (additional time needed to complete unexpectedly complex research). Four research outputs will not be completed: synthesis document on potential ecological and human health risks of pollen associated with cellulosic biofuel feedstock production (lack of publishable results); profiles of criteria and toxic emissions from ethanol-blend gasoline and biodiesel combustion and potential toxicity differences (challenges in hiring necessary expertise); final report detailing the side-by-side comparison of biogas management technologies (resource reductions); and studies on innovative approaches to addressing links between particulate matter exposures, composition, sources, and health effects (challenges in acquiring data and hiring necessary expertise).

Additional Information: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

(PM CS	(PM CS1) Percentage of planned research products completed on time by the Chemical Safety for Sustainability research program.											
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit			
Target			100	100	100	100	100	100	,			
Actual			100	100	100	100			Percent			

Explanation of Results: Explanation of Results: The Chemical Safety for Sustainability Program met 100% of its planned products in FY 2015.

Additional Information: A research product is "a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use." This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products are needed to be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

# (PM CS2) Percentage of planned research outputs delivered to clients and partners to improve their capability to advance the environmentally sustainable development, use, and assessment of chemicals.

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Tar	rget			100	100	100	100	100	100	
Act	tual			50	100	100	100			Percent

Explanation of Results: The Chemical Safety for Sustainability Program met 100% of its planned outputs in FY 2015.

Additional Information: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

#### (PM HC1) Percentage of planned research products completed on time by the Sustainable and Healthy Communities research program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	
Actual			100	83	81	100			Percent

Explanation of Results: Explanation of Results: The Sustainable and Healthy Communities Program met 100% of its planned products in FY 2015.

Additional Information: A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

(PM HC2) Percentage of planned research outputs delivered to clients, partners, and stakeholders for use in pursuing their sustainability goals.

S	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	,
Actual			50	68	100	50			Percent

Explanation of Results: Explanation of Results: The Sustainable and Healthy Communities Program met 50% of its planned outputs in FY 2015. Among the research not completed on time was: Identification of the most prevalent environmental public health conditions in communities resulting in disparities in health and well-being between communities or populations for use in targeting and prioritizing research and generation of risk management methods (this output will not be delivered; it was adversely affected by a changeover in personnel in 2014; the new project plan has similar products and outputs that capture the research objectives for FY 2016 and FY 2017); and Implications of Decisions in Land Use, Transportation, Buildings, Infrastructure, Waste, and Materials Management on Community-Level Sustainability (expected completion is FY 2016 Q4).

Additional Information: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

(PM HS1) Percentage of planned research products completed on time by the Homeland Security research program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	
Actual			100	100	100	100			Percent

Explanation of Results: The Homeland Security Research Program met 100% of its planned products in FY 2015.

Additional Information: A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

(PM HS2) Percentage of planned research outputs delivered to clients and partners to improve their capabilities to respond to contamination resulting from homeland security events and related disasters.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	ъ.
Actual			78	100	100	100			Percent

Explanation of Results: The Homeland Security Research Program met 100% of its planned outputs in FY 2015.

Additional Information: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

(PM RA1) Percentage of planned research products completed on time by the Human Health Risk Assessment research program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	<b>.</b>
Actual			100	88	80	45			Percent

Explanation of Results: Explanation of Results: The Human Health Risk Assessment Program met 45% of its planned products in FY 2015. Among the research not completed on time was: Submit to Interagency review at least 5 drafts for public comment from the following list—diethyl phthalate (DEP), diisononyl phthalate (DINP), hexabromocyclododecane (HBCD), inorganic arsenic (iAs), or others (delay in finalization of IRIS Multi-Year Agenda and inconsistent information from program offices led to unclear prioritization regarding the importance of completing phthalates; in addition, developing a new IRIS Handbook, hosting public science meetings, and increasing the number of workshops being conducted by NCEA, provides a significant additional drain on the limited pool of people who both develop and review assessments); submit to Interagency review at least 4 external review drafts from the following: ethyl tert-butyl ether (ETBE); hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX); n-butanol, or others (delayed due to implementation of new ERC review step); release of 1st external review draft for SOx health (primary) ISA (delay per OAR request due to shift in regulatory schedule, expected completion is Q1 FY 2016); and release of first external review draft of the ecological (secondary welfare) ISA for NOx/Sox (delay per OAR request due to shift in regulatory schedule, expected completion is Q3 FY 2016).

Additional Information: A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products must be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

(PM RA2) Percentage of planned research outputs delivered to clients and partners for use in informing human health decisions.

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
	Target			100	100	100	100	100	100	
Ī	Actual			38	100	67	60			Percent

Explanation of Results: Explanation of Results: The Human Health Risk Assessment Program met 60% of its planned outputs in FY 2015. Among the research not completed on time was: Post at least 4 final assessments from the following on Libby Amphibole asbestos, Vanadium pentoxide, Ammonia, Trimethylbenzenes, or others (output partially met, completed final assessment on Libby amphibole asbestos; and release of final document of the updated primary health ISA for NOx (delay per program office request due to shift in regulatory schedule).

Additional Information: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs on the basis of partner utility.

## (PM RA6) Number of regulatory decisions in which decision-makers used HHRA peer-reviewed assessments (IRIS, PPRTVs, exposure assessments and other assessments)

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target				20	20	20	20	20	
Actual				140	100	100			Number

Additional Information: The measure calculates the number of Agency regulatory decisions for which clients use HHRA peer-reviewed health assessments. The measure is calculated by reviewing regulatory decisions and Records of Decision (ROD) made by EPA, determining how many quantitative health assessment values were used in these EPA program decisions, and what percentage of these values had been developed by the HHRA Program. This measure was piloted in FY 2013 and FY 2014 and was based on available information for FY 2010 that is unlikely to be reproducible. The feasibility of reliably reporting this measure is contingent upon timely completion of the overhaul of the Agency ROD database. This restructured database will not be available for analysis until approximately 2 years after decisions are recorded and will start with FY 2011 RODs. We will evaluate the feasibility of this measure over 3 years with FY 2012 & 2013 data being reported in FY 2015 & FY 2016, respectively.

### (PM RA7) Annual milestone progress score for completing draft IRIS health assessments.

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
,	Target			50	50	40	40	40	40	g
	Actual			8	17	30	7			Score

Explanation of Results: Delay in finalization of the IRIS multi-year agenda led to delays in initiating new IRIS assessments. In addition, significant resources assigned to major assessments (e.g., arsenic, formaldehyde), staff reductions, and commitment of resources to develop an IRIS Handbook and to host public science meetings on critical science issues, resulted in reduced performance.

Additional Information: At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that includes such factors as client interest, complexity of science, and level of effort required. Points are scored by multiplying the weight of each assessment by the number of milestones completed in the assessment process. The program targets represent a steady and timely completion of draft assessments throughout each fiscal year. Near-term targets are based on the large volume of ongoing assessments that have not been released in draft due to the change in the process for external review. This measure will be assessed as a rolling average with potential annual excess rolled over to the next target year so as to provide incentives for completion of more milestones.

(PM RA8) Annual progress score for finalizing IRIS health assessments.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			20	20	15	15	15	15	a a
Actual			17	8	0	5			Score

Explanation of Results: Explanation of Results: A major assessment, the Libby amphibole asbestos IRIS assessment, was completed in FY 2015. No other final IRIS assessment postings were possible due to delays in receiving final SAB Chemical Assessment Advisory Committee (CAAC) reports on ammonia and trimethylbenzenes (panels were held in Summer, 2014 but did not report until late FY 2015), and vanadium pentoxide was deferred to a more comprehensive evaluation of vanadium compounds.

Additional Information: This measure tracks the program's ability to make progress in finalizing and releasing IRIS assessments. The annual score, tracked cumulatively throughout the year, is based on the relative weighting of each chemical. Chemicals are weighted using a 3-tier system that includes client interest, complexity of science, and level of effort required. Points are scored by multiplying the weight of each assessment by the number of milestones completed in the assessment process. The program targets represent a steady and timely completion of final assessments throughout each fiscal year. Near-term targets are based on the large volume of ongoing assessments that have not been finalized due to the change in the process for external review and completion. This measure will be assessed as rolling average.

(PM SW1) Percentage of planned research products completed on time by the Safe and Sustainable Water Resources research program.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	
Actual			86	70	90	100			Percent

Explanation of Results: The Safe and Sustainable Water Resources Program met 100% of its planned products in FY 2015.

Additional Information: A research product is "a deliverable that results from a specific research project or task." Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, each program develops a list of planned research products and their associated outputs. The list reflects high priority products the program plans to complete by the end of each fiscal year. The estimated completion date is based on when the output is needed for partner use and when the research products are needed to be transformed into the output. The actual product completion date is self-reported. The program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

(PM SW2) Percentage of planned research outputs delivered to clients and partners to improve the Agency's capability to ensure clean and adequate supplies of water that support human well-being and resilient aquatic ecosystems.

_	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target			100	100	100	100	100	100	
Actual			50	100	100	100			Percent

Explanation of Results: The Safe and Sustainable Water Resources Program met 100% of its planned outputs in FY 2015.

Additional Information: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended partner use. EPA identifies and describes the planned outputs in the program's Research Program Strategic Plan. At the end of the fiscal year, the program reports on its success in meeting its planned annual outputs. The program strives to complete 100% of its planned outputs each year so that it can best meet EPA and other partners' needs. To ensure the ambitiousness of its annual output measures, ORD has better formalized the process for developing and modifying program outputs, including requiring that ORD programs engage partners when making modifications. Involving partners in this process helps to ensure the ambitiousness of outputs for partner utility.

#### **ENABLING AND SUPPORT PROGRAMS**

#### NPM: OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT

#### **Performance Measures and Data**

#### (PM 009) No reduction in percentage of certified acquisition staff (1102).

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Targ	get			335 / 80	323 / 80	85	85	85	85	Number/
Actu	ual			323/85	285 / 85	93	95			Percent

Additional Information: As of October 1, 2015, there were 263 acquisition (1102) staff on board, of which 249 (95%) were certified. OARM will continue to strive to ensure that at least 85% of current 1102 staff are trained and certified.

### (PM 010) Reduction in Greenhouse Gas (GHG) Scopes 1 & 2 emissions below 2008 baseline.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	1.0	0.4	6.4	12.2	16.3	16.3	20.1	23.0	
Actual	79.5	59	54.1	57.4	59.5	Data Avail 02/2016			Percent

Additional Information: On March 19, 2015, the President signed Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade," which requires agencies to set new targets for reducing absolute greenhouse gas emissions by FY 2025 compared to the existing FY 2008 baseline. EPA's FY 2008 GHG emissions baseline is 142,010 metric tons of carbon dioxide equivalents (MTCO2e). Targets were developed based on estimates of future absolute Scope 1 and 2 GHG emissions. Between FY 2010 and FY 2014, the Agency was able to purchase Renewable Energy Certificates to offset a significant portion of Agency emissions, resulting in the actuals for those years. Absolute values for that time period were 1.6, 0.9, 7.5, 14.3, and 16.5, respectively.

#### (PM 098) Reduction in energy consumption below 2003 baseline.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	15	18	21	24	27	27	32.5	35	
Actual	18.3	18.1	23.7	25.6	28.9	Data Avail 02/2016			Percent

Additional Information: On March 19, 2015, the President signed Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade," which requires agencies to reduce energy consumption by 2.5 percent annually from FY 2016 through FY 2025 based on a new FY 2015 baseline. Prior to FY 2016, reductions were compared to the EPA's FY 2003 energy consumption baseline (398,315 British thermal units (Btu) per gross square foot (GSF)). For the sake of consistency on this reporting measure, the EPA will maintain the 2003 baseline.

#### NPM: OFFICE OF ENVIRONMENTAL INFORMATION

#### **Performance Measures and Data**

(PM 052) Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	60	60	67	75	80	77	80	90	G
Actual	60	64	68	73	89	107			Systems

Additional Information: The Central Data Exchange program began in FY 2001 to enable States, Tribes and others to send environmental data to EPA through a centralized electronic process. The CDX program estimates its targets as the sum of new systems using CDX services (increase) and retirement of older systems that are being phased out (decrease). As a result, these cumulative targets may increase or decrease in subsequent years.

# (PM 053) States, tribes and territories will be able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	65	65	80	95	98	103	140	140	**
Actual	69	72	92	97	102	104			Users

Additional Information: The Central Data Exchange program began in FY 2001 to enable States, Tribes and others to send environmental data to EPA through a centralized electronic process.

# (PM 998) EPA's TRI program will work with partners to conduct data quality checks to enhance accuracy and reliability of environmental data.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target				500	500	600	600	600	Quality
Actual				600	600	600			Checks

Additional Information: This metric allows EPA for the first time to report on performance of the Toxics Release Inventory (TRI) program. Data checks will improve the accuracy and reliability of environmental data.

# (PM 999) Total number of active unique users from states, tribes, laboratories, regulated facilities and other entities that electronically report environmental data to EPA through CDX.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target		Baseline Year	58,000	70,000	75,000	84,000	90,000	100,000	**
Actual		56,200	65,238	79,818	96,000	85,894			Users

Additional Information: This metric replaced PM 054 which was discontinued in FY 2011. PM 054 measured the number of users from states, tribes, laboratories and other entities that chose CDX to report environmental data electronically to EPA. The replacement measure PM 999 measures the total number of active, individual CDX users and more accurately measures CDX usage by screening out inactive users and multiple accounts from the same user. (Only users who have logged in within the previous two years are counted as active users, and each distinct user is counted only once regardless of the number of different accounts, roles or locations.)

#### NPM: OFFICE OF THE INSPECTOR GENERAL

### Performance Measures and Data

(PM 35A) Environmental and business actions taken for improved performance or risk reduction.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	334	334	334	307	248	268	268	274	
Actual	391	315	216	215	324	296			Actions

Explanation of Results: Results are based on completed agency actions. In FY 2015, the agency completed 296 actions to satisfy OIG recommendations.

Additional Information: This measure captures implemented corrective actions taken by the agency to improve EPA programs and/or processes. The implemented corrective actions are based on OIG recommendations. The average time to complete corrective actions on OIG recommendations is 2.3 years. As such, results are typically from prior years and may fluctuate depending on the agency's ability to complete agreed-upon corrective actions. The target for this measure is developed by taking the actual performance for two or three fiscal years and adjusted to reflect any significant changes in enacted budget that could accelerate or hinder performance.

#### (PM 35B) Environmental and business recommendations or risks identified for corrective action.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	903	903	903	786	687	967	1,094	1,094	Recommend
Actual	945	2011	1242	1003	944	1110			ations

Additional Information: This measure captures the number of OIG outputs (recommendations, briefings, best practices identified, etc.) during the fiscal year. The target reflects the average of actual performance for two or three fiscal years and is adjusted to reflect any significant changes in enacted budget that could accelerate or hinder performance.

#### (PM 35C) Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	120	120	110	125	132	220	220	220	
Actual	36	151	743	248	734	1656			Percent

Explanation of Results: A significant portion of ROI came from cost saved / avoided (\$595 million).

Additional Information: Results under this measure identify the potential return on investment and do not include actual recoveries. The OIG's role is to question cost and identify cost efficiencies and funds put to better use (recommended efficiencies). In FY 2012 and FY 2014 the OIG issued a single report with usually high recommended efficiencies (FY 2012-\$372M; FY 2014-\$230M). These were excluded from the average calculations given that reports with massive ROI do not materialize every year.

(PM 35D) Criminal, civil, administrative, and fraud prevention actions.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Unit
Target	75	80	85	90	125	175	145	145	Actions
Actual	115	160	152	256	213	304			

Additional Information: This measure captures criminal, civil, and administrative actions as a result of OIG investigations on fraud, waste and abuse. To a large extent, results are influenced by factors outside the control of OIG (judges, juries, etc.).

#### PROGRESS ACHIEVED UNDER EPA'S CROSS-AGENCY STRATEGIES

The table below summarizes progress longer term which the Environmental Protection Agency has achieved under each of the four cross-agency strategies established in its *FY 2014-2018 EPA Strategic Plan*. More detailed FY 2015 performance results for each strategy are available in FY 2015 "At-a-Glance" documents.

Working Toward a Sustainable Future—Advance sustainable environmental outcomes and optimize economic and social outcomes through Agency decisions and actions, which include expanding the conversation on environmentalism and engaging a broad range of stakeholders.

Performance under the Sustainability strategy is progressing as planned toward the long-term vision established in EPA's Strategic Plan. The Agency is focusing on four cross-program priority areas: Green Products, Green Infrastructure, Sustainable Materials Management, and Energy Efficiency. EPA issued guidance to contracting officers updating and clarifying information on purchasing environmentally preferable electronic equipment, helping the Agency continue to meet the federal acquisition 95 percent Green Products purchasing government-wide requirement. Working with seven federal agencies and the Council for Environmental Quality (CEQ), EPA developed the Green Infrastructure Collaborative to advance federal commitments to green infrastructure. In sustainable materials management, EPA took actions to reduce food waste that resulted in 375,000 tons of food diverted from landfills. Similar efforts under the Electronics Challenge increased electronic waste collection by 7.5 percent among participants. EPA has produced a set of 30 sustainability videos to engage and empower EPA staff. The videos demonstrate incorporation of sustainability into EPA's daily work using concrete examples. EPA also launched a platform for discussion and sharing of information and resources through an Agency-wide Sustainability Community of Practice site. To expand the conversation on environmentalism, EPA collaborated with CEQ, the Office of Management and Budget, the Department of Energy, and the General Services Administration to finalize Executive Order 13693 to cut federal greenhouse gas emissions. To make progress in this area and lead by example, EPA coordinated the Federal Green Challenge to challenge all federal agencies across the nation to reduce waste, water, and electricity usage.

**Working to Make a Visible Difference in Communities**—Align community-based activities to provide seamless assistance to communities, both urban and rural, while maximizing efficiency and results. Expand support of community efforts to build healthy, sustainable, green neighborhoods and reduce and prevent harmful exposures and health risks to children and underserved, overburdened communities.

In 2015, the Communities strategy progressed as planned toward the vision established in EPA's Strategic Plan, focusing on four areas: Target Communities, Community Resource Network, Empower Communities, and Tools. EPA's regional offices identified 50 overburdened and underserved communities and have begun delivering focused and coordinated to help address the pressing environmental issues they identified. EPA created a single Agency-wide Community Resource Network, with representation from national program and regional offices. The Network is using SharePoint to provide staff working in communities with access to a wide range of resources and peer contact. EPA incorporated Next Gen monitoring tools (e.g., air and water sensors) in five negotiated enforcement settlements, eight permits, and one Administrative Order in FY 2015. EPA finalized and launched a single landing page for communities on the Agency website. The Agency has released an interactive tool that will provide communities with ready access to EPA's resources and tools related to green infrastructure/stormwater management/integrated planning.

Launching a New Era of State, Tribal, Local, and International Partnerships—Strengthen partnerships with states, tribes, local governments, and the global community that are central to the success of the national environmental protection program through consultation, collaboration, and shared accountability. Modernize the EPA-state relationship, including revitalizing the National Environmental Performance Partnership System and jointly pursuing E-Enterprise, a transformative approach to make environmental information and data more accessible, efficient, and evidence-based through advances in monitoring, reporting, and information technology.

Performance under the Partnerships strategy is progressing as planned toward achieving the vison in EPA's Strategic Plan by focusing on the central role partnerships play in the success of the nation's environmental protection system. The Agency has successfully collaborated with its state, local, tribal, and international partners on several fronts and is beginning to see some positive early results. Over the last two years EPA has conducted an unprecedented level of consultation and outreach during development of key regulations, such as the Clean Water Rule and Clean Power Plan, and taken concrete steps to improve implementation of EPA's tribal consultation policy. The Agency has also made significant progress on building E-Enterprise for the Environment and making the National Environmental Performance Partnership System (NEPPS) more useful and effective for states and tribes. To enhance NEPPS, EPA collaborated with states and tribes to increase state and tribal involvement in the development of national priorities; institute a new 2-year planning horizon for National Program Manager (NPM) Guidances and many related programmatic grant guidances; develop a new grants policy and revise an existing policy to promote greater support for and use of Performance Partnership Grants and multiyear grant workplans as a means to increase flexibility and administrative efficiency; and work with states on a set of principles for efficient and effective oversight. Progress on E-Enterprise for Environment included completing the Integrated Management Plan and incorporating E-Enterprise projects and avenues for participation in the FY2016-2017 NPM Guidances. In addition, the Agency completed Phase 1 of the E-Enterprise Portal, designed to enhance services to the regulated community and the public and improve transparency, priority-setting, and program performance. EPA is also meeting targets for establishing EPA-Tribal Environmental Plans (ETEPs) with each tribe, and has begun work to incorporate the Agency's tribal identification data standard into select systems that did not have it. In the international arena, EPA has successfully leveraged its membership on the Commission for Environmental Cooperation and the Arctic Council to develop and implement cooperative projects to address various impacts of climate change.

Embracing EPA as a High-Performing Organization—Maintain and attract EPA's diverse and engaged workforce of the future with a more collaborative work environment. Modernize our business practices, including through E-Enterprise, and take advantage of new tools and technologies. Improve the way we work as a high-performing Agency by ensuring we add value in every transaction with our workforce, our coregulators, our partners, industry, and the people we serve.

Performance under the HPO strategy is progressing as planned toward achieving the long-term vision established in the EPA's Strategic Plan, focusing on two distinct areas: fostering employee development and streamlining business practices. Demonstrated progress to develop employees includes launching and sustaining the Skills Marketplace Program, providing training to first-line supervisors on human resource and financial management responsibilities, developing an online toolkit to identify best practices to enhance employee diversity and inclusion, and establishing a Senior Executive Service (SES) Candidate Development Program (CDP). In FY 2016, EPA will continue to build EPA University (EPA-U) to improve employee

access to training opportunities, as well as launch a second SES CDP recruitment. EPA is streamlining and modernizing business processes by implementing Lean activities across the Agency and improving IT systems, including migrating legacy databases from Lotus Notes to applications available through Microsoft Office 365. As it moves into FY 2016, EPA will continue to invest in technology improvements, ensuring employees have the tools and training to do their work.

#### VERIFICATION/VALIDATION OF PERFORMANCE DATA

The agency develops Data Quality Records (DQRs) to present validation/verification information for selected performance measures and information systems, consistent with guidance from the Office of Management and Budget. A DQR documents the management controls, responsibilities, quality procedures, and other metadata associated with the data lifecycle for individual performance measures, and is intended to enhance the transparency, objectivity, and usefulness of the performance result. EPA's program offices choose the measures for which to develop DQRs, consistent with the agency's goal to document quality procedures associated with at least one budget measure under each strategic measure in the Eight-Year Performance Array, a goal which has now been achieved. Each DQR can be considered current as of the most recent date for which the agency has published results for the performance measure. All of EPA's current DQRs are available in PDF format at the following URL: <a href="http://www.epa.gov/planandbudget/archive#dqr">http://www.epa.gov/planandbudget/archive#dqr</a>. (If this link does not work, please copy and paste the URL directly into your browser.)

Please note the PDF file includes DQRs that reference supporting documents, which are available upon request by sending an email with the name of the document and DQR to <a href="https://ocfoinfo.org/depa.gov">OCFOINFO@epa.gov</a>. The email should indicate the measure number and text associated with the DOR, and the filename shown underneath the icon for the attachment.