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United States Environmental Protection Agency

Fiscal Year 2016

Justification of Appropriation Estimates for the Committee on Appropriations

EPA-190-R-15-001

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Environmental Protection Agency
2015 Annual Performance Plan and Congressional Justification

Table of Contents – Appendix B

INTRODUCTION

EPA's *FY 2014 Annual Performance Report (APR)* is integrated throughout EPA's *FY 2016 Annual Performance Plan* and the *Congressional Justification*. The APR reports environmental and program performance results achieved in FY 2014 against the performance measures and targets established in the Agency's *FY 2014 Annual Performance Plan* and the *Congressional Justification* and discusses progress for the first time under the five goals, thirteen strategic objectives, and four cross-agency strategies established in EPA's *FY 2014–2018 Strategic Plan*

EPA's FY 2014 *APR* complies with requirements of the Government Performance and Results Modernization Act of 2010 and Office of Management and Budget implementing guidance. In compliance with this law and implementing guidance, in FY 2014 EPA conducted its first round of strategic reviews as an integral part of its performance management practices. Results from these reviews are discussed in the Summary of Progress section under each of EPA's thirteen strategic objectives.

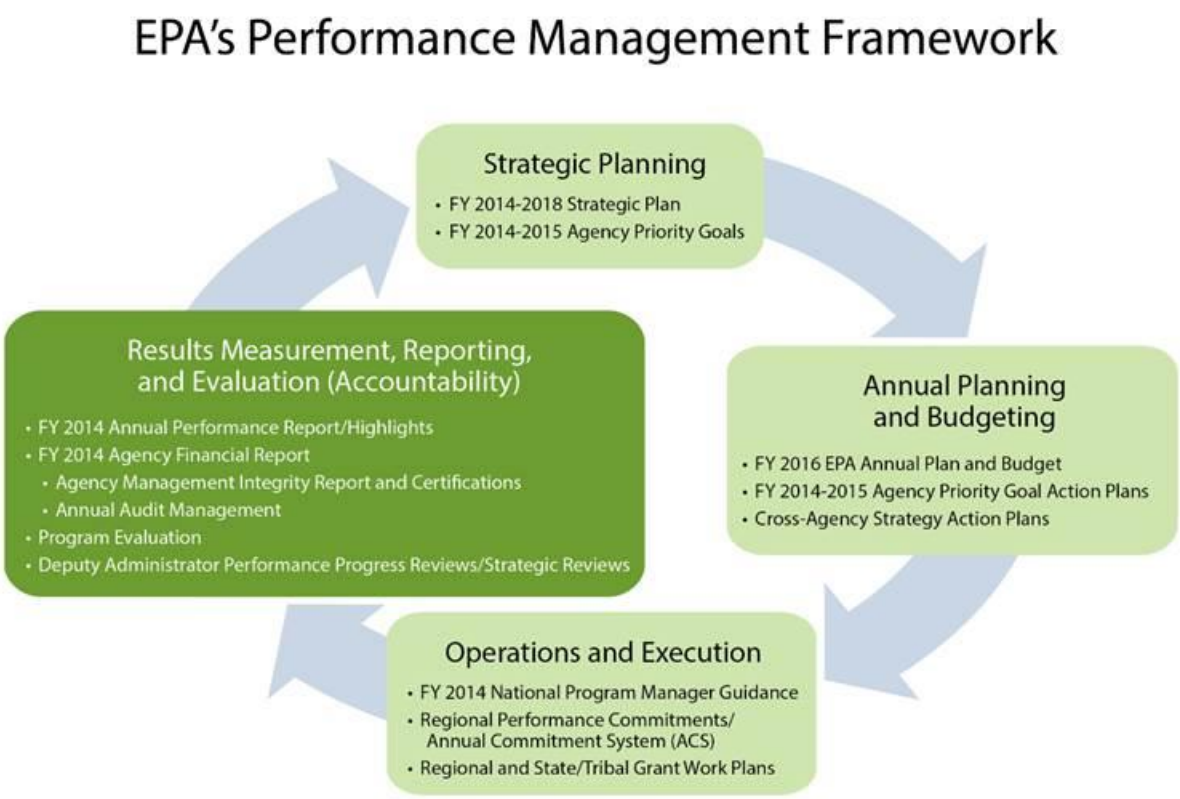
This "**Overview of FY 2014 Performance**" highlights key FY 2014 program and performance accomplishments and challenges, illustrating how annual progress impacts longer term goals. EPA's FY 2014 performance results are also incorporated in the following sections of the *FY 2016 Annual Performance Plan* 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 2014 performance results to help explain future directions.
- Appropriation Program/Project Fact Sheets include FY 2014 performance results and trend data to provide context for budget decisions.
- The "Program Performance and Assessment" section presents a detailed 8-year table of performance data—displayed by strategic goal and objective—which provides results for each measure established in the Agency's *FY 2014 Annual Performance Plan* and includes explanations for missed or exceeded targets.

To supplement the *FY 2014 APR*, please refer to EPA's *FY 2014 Agency Financial Report (AFR)*, which discusses EPA's FY 2014 financial performance, and its web-based *FY 2014 Highlights*, which presents key financial and performance information from both the *AFR* and *APR* and provides links to additional information.

Performance Management in FY 2014

To promote achievement of its goals and objectives, EPA establishes a suite of annual performance measures in its *Annual Performance Plan and Budget*. The Agency reports its results against these annual performance measures and discusses progress toward longer-term objectives and measures in its *APR*. EPA assesses performance results as the basis for formulating and justifying its resource requests. Below is an overview of EPA's Performance Management Framework:



FY 2014 Advances in Performance Management

During FY 2014, EPA designed and implemented a number of key initiatives to further strengthen its performance management.

The *FY 2014-2018 EPA Strategic Plan*: EPA's *FY 2014-2018 Strategic Plan*, transmitted to the President and the Congress and released to the public on April 10, 2014, updated our five strategic goals and thirteen objectives and established four cross-agency strategies. During the development of the Plan, EPA engaged with partners and stakeholders, regularly briefed the Local Government Advisory Committee and the Environmental Council of the States, formally consulted with Native American tribes, and held information sessions during the public comment period.

Strategic Reviews: EPA conducted its first round of strategic reviews as an integral part of its performance management practices. The strategic reviews considered a wide array of data and evidence to assess longer-term progress toward each of EPA's thirteen strategic objectives and four cross-agency strategies. Senior leaders met in spring 2014 to assess the agency's long-term progress and to discuss the most important successes and challenges to inform planning, budgeting, and program management decisions. The Agency summarized strategic review findings for each objective and discussed them with the Deputy Administrator, the Acting Chief Financial Officer, and the Office of Management and Budget. The results of the Agency's strategic reviews are reflected in EPA's *FY 2014 Annual Performance Report* and *FY 2016 Congressional Budget Justification and Annual Performance Plan.*

Agency Priority Goals*:* In FY 2014, EPA established six FY 2014–2015 Agency Priority Goals (APGs) as part of the *FY 2014–2018 Strategic Plan* and made steady progress implementing the APG action plans. EPA also contributed to Cross-Agency Priority (CAP) Goals across the federal government, notably for Cybersecurity, Benchmarking, and Infrastructure Permitting. In addition to quarterly internal discussions, EPA reported APG/CAP progress on http://www.performance.gov and discusses end-of-year progress for APGs in its FY 2014 Annual Performance Report.

Agency Performance Reviews: EPA's Deputy Administrator and Chief Financial Officer meet quarterly with senior leadership to discuss progress on APGs and twice a year (mid-year and end-of-year) to discuss progress toward the Agency's five goals and four cross-agency strategies. EPA officials use this forum to discuss performance information, policy/programmatic issues, and the impact of resource levels on Agency priorities and strategies. The reviews also help inform program strategy and budget initiatives moving forward. During the FY 2014 mid-year review, EPA focused on its new strategic reviews and how mid-year results inform and complement the longer view.

Transition to Two-Year National Program Manager (NPM) Guidance: In FY 2014, the Agency convened a workgroup of state, regional, and national program representatives to strengthen and make more meaningful state and tribal engagement in Agency programs; increase flexibility for states and tribes; streamline the workload associated with planning activities; and where possible, align the Agency's NPM and grant guidances. A key part of this effort has been transitioning to two-year NPM guidances. NPM guidances identify program priorities, strategies, and operational measures consistent with EPA's *Strategic Plan* and *Annual Plan and Budget* and serve as a national framework for regions to use as they negotiate work plans and develop work-sharing strategies with states and tribes. The new cycle for the NPM Guidance process began with implementation of the new exceptions-based FY 2015 Addendums to the FY 2014 NPM Guidances. The FY 2016-2017 NPM Guidances will reflect earlier engagement with EPA partners, identify the most important environmental and human health work, and outline opportunities for state and tribal flexibilities during work planning.

Enhanced Stewardship: To increase attention to the Agency's stewardship responsibilities for managing programs and resources effectively and efficiently, EPA institutionalized Management Accountability Reviews. In FY 2014, EPA conducted reviews in the Office of the Administrator, Office of Solid Waste and Emergency Response, and EPA Regions 9 and 10. Onsite visits, conducted each year in selected program and regional offices, focus attention on the Agency's responsibilities for audit management and implementation of the Federal Managers' Financial Integrity Act, helping to ensure that EPA programs and activities are managed to prevent waste, fraud, and abuse.

Program Evaluations

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 2014 are available at http://www2.epa.gov/planandbudget/fy-2014-program-evaluations.

THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

Reliability of the EPA's Performance Data

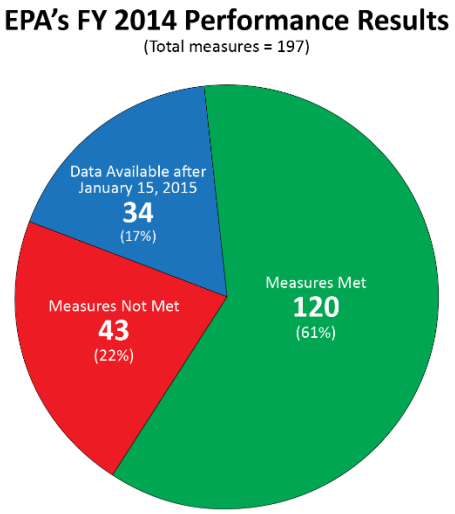
Data used to report performance results are reliable and as complete as possible. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data 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 2014.

Gina McCarthy
Administrator

1/20/15
Date

Summary of FY 2014 Performance Results

In its *FY 2014 Annual Performance Plan* and the *Congressional Justification*, EPA committed to 197 annual performance measures/targets. These performance measures/targets and EPA's results are presented in the 8-year table included in the "Program Performance and Assessment" section of the *FY 2016 Congressional Justification*. The 8-year table also provides 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 2014 results and adjust its program strategies and approaches accordingly.



Targets Met

As of January 15, 2015, data are available for 163 of these annual budget performance measures/targets. The Agency met 120 of its FY 2014 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.

One of the top domestic achievements this year included EPA's first ever proposed standards to address carbon pollution from existing power plants. By 2030, the standards will cut carbon emissions from the power sector by 30 percent nationwide below 2005 levels. Additionally, EPA expects the proposed standards will cut particle matter pollution, nitrogen oxides, and SO_2 by more than 25 percent as a co-benefit, avoiding up to 6,600 premature deaths and up to 150,000 asthma attacks in children—providing up to $93 billion in climate and public health benefits.

In efforts to protect America's waters, the EPA and the U.S. Army Corps of Engineers released a proposed rule to clarify protection under the Clean Water Act for streams and wetlands that form the foundation of the nation's water resources. The proposed rule will increase efficiency in determining Clean Water Act coverage, a request made by members of Congress, state and local officials, industry, agriculture, environmental groups and the public for nearly a decade.

In efforts to clean up communities and advance sustainable development under EPA's Sustainable Materials Management (SMM) programs, participants in the Food Recovery Challenge diverted 375,000 tons of food from landfills; participants in the Electronics Challenge increased electronic waste collection by 7.5 percent from FY 2013; and federal agencies participating in the Federal Green Challenge reduced their environmental footprint, resulting in $42 million in cost savings. To ensure the safety of chemicals, EPA expanded the ChemView database to include more than

8,300 chemicals, including 298 Consent Orders, 73 test rule chemicals, and an additional 1,000 New Chemical Significant New Use Rules.

Achieving goals for safe drinking water, swimmable and fishable streams, cleaner air, and healthier communities and neighborhoods requires not only new strategies and compliance, but also vigorous enforcement. Under its national enforcement initiatives, EPA addressed pollution problems that make a difference in communities, including overburdened communities. For example, Minnesota Power agreed to install pollution control technology and meet stringent emission rates to reduce harmful air pollution from three coal-fired power plants. The settlement requires the company to pay a civil penalty of $1.4 million to resolve Clean Air Act violations and spend more than $500 million on required measures to reduce harmful air emissions by over 13,350 tons annually and at least $4.2 million on environmental projects to benefit local communities, including a large-scale solar installation system to benefit a local tribe known as the Fond du Lac Band and $200,000 to the National Park Service to restore wetlands at Voyageurs National Park.

Targets Missed

Despite its best efforts, the Agency missed 43 of its FY 2014 performance measures/targets. There are a number of reasons for missed targets, including an unexpected demand for resources or competing priorities; the impact of sequestration and 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 2015 and FY 2016 programmatic approaches and targets as necessary.

Data Not Available

Because final end-of-year data for some measures were not available when this report went to press, EPA is not able to report on 34 of its 197 performance measures. Often environmental results do not become apparent within a fiscal year, and assessment is a longer-term effort requiring information over time.

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 reported biennially are not available for this report, though they will be available in the Agency's FY 2015 and FY 2016 *APR*s.

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. Where EPA cannot obtain complete end-of-year information from all sources in time for this report, additional FY 2014 results will be available in the Agency's FY 2015 *APR*, which will be included in the *FY 2017 Annual Performance Plan* and the "Program Performance and Assessment" section of the *Congressional Justification* published in 2016.

Previous Fiscal Year Data Now Available

EPA can now report data from FY 2013 that became available in FY 2014. In summary, final performance results became available for 29 of the 37 FY 2013 performance measures (out of a total 196 FY 2013 performance measures) for which data were unavailable at the end of FY 2013. Of these 37 performance measures, EPA met 23 and did not meet seven. Data remain unavailable for seven [1] measures and EPA, in agreement with the Office of Management and Budget retroactively deleted one measure.[2]

[1] Performance Measure A01: Annual emissions of sulfur dioxide (SO2) from electric power generation sources; Performance Measure G16: Million metric tons of carbon equivalent (MMTCO2E) of greenhouse gas reductions in the industry sector; Performance Measure R51: Percentage of all new single-family homes (SFH) in high radon potential areas built with radon reducing features; Performance Measure 630: Five-year average annual loadings of soluble reactive phosphorus (metric tons per year) from tributaries draining targeted watersheds; Performance Measure Mw2: Increase in percentage of coal combustion ash that is beneficially used instead of disposed; Performance Measures SM1: Tons of materials and products offsetting use of virgin resources through sustainable materials management; Performance Measure 143: Percentage of agricultural acres treated with reduced-risk pesticides.

[2] Performance Measure R22: Estimated annual number of schools establishing indoor air quality management plans consistent with EPA guidance.

Strategic Goal 1:

ADDRESSING CLIMATE CHANGE AND IMPROVING AIR QUALITY

Goal 1 at a Glance

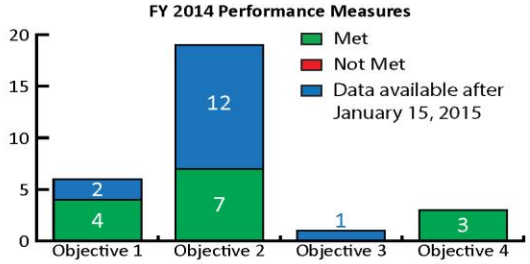
ADDRESSING CLIMATE CHANGE AND IMPROVING AIR QUALITY

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

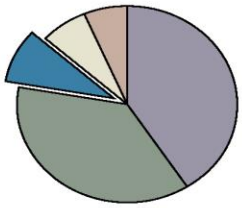
FY 2014 Performance Measures

Met: 14 Not Met: 0 Data Unavailable: 15

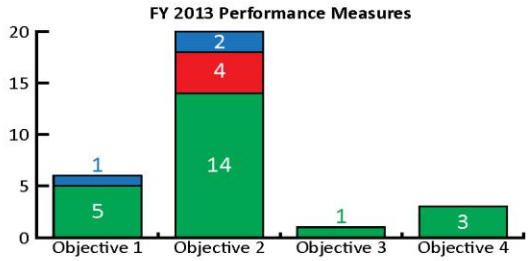
(Total Measures: 29)



FY 2014 Obligations*



- **Taking Action on Climate Change and Improving Air Quality, $1,031,180.0**
- Protecting America's Waters, $4,752,188.6
- Cleaning Up Communities and Advancing Sustainable Development, $4,297,969.8
- Ensuring the Safety of Chemicals and Preventing Pollution, $733,537.0
- Enforcing Environmental Laws, $793,179.0



Strategic Objective Overview	FY 2014 Obligations*	% of Goal 1 Funds
Objective 1.1: Address Climate Change. EPA is developing common-sense GHG regulatory programs to curb emissions, working with state and local agencies to address sources of GHG emissions; building on its successful partnerships in such areas as the buildings, industry, and transportation sectors; and developing climate adaptation strategies to address the challenges of a changing climate.	$198,738.1	19%
Objective 1.2: Improve Air Quality. EPA has acted to dramatically improve America's air quality by finalizing air quality standard, implementing health-based ambient air quality standards, proposing regulations to reduce particulate matter for new wood heaters, and proposing that communities neighboring refineries monitor emission are not being exposed to unintended emissions.	$783,135.1	75%
Objective 1.3: Restore and Protect the Ozone Layer. EPA continues to make progress to restore and protect the ozone layer by reducing U.S. consumption of hydrochlorofluorocarbons (HCFCs)—chemicals that deplete the earth's protective ozone layers.	$17,675.7	2%
Objective 1.4: Minimize Exposure to Radiation. EPA is on track to meet its strategic objective of minimizing exposure to radiation by maintaining readiness, both in personnel and assets, to support federal radiological emergency response and recovery operations by minimizing unnecessary exposures to radiation, including operating and maintaining RadNet, providing oversight at the Waste Isolation Pilot Plant, and developing important rules and guidance documents.	$41,627.7	4%
Goal 1 Total	**$1,041,176.6**	**100%**

*All figures in thousands

EPA Contributing Programs

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 Programs

STRATEGIC 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.

EPA implements both partnership and regulatory programs to reduce greenhouse gases (GHGs) that contribute to the warming of the planet's climate. Businesses and other organizations have partnered with EPA through voluntary climate protection programs to pursue common-sense approaches to reducing GHGs. In conjunction with its partnership programs, EPA pursues regulatory approaches to reduce emissions from mobile and stationary sources. EPA's strategies to address climate change reflect the President's Climate Action Plan (June 2013), which, among other initiatives, tasks EPA with setting carbon dioxide (CO_2) standards for power plants and applying its authorities and other tools to address hydrofluorocarbons (HFCs) and methane through the Interagency Methane Strategy.

Summary of Progress

EPA continues to address the challenges of a changing climate and is on track to meet its strategic measures supporting this objective. EPA is developing common-sense GHG regulatory programs to curb emissions, working with state and local agencies to address sources of GHG emissions; building on its successful partnerships in such areas as the buildings, industry, and transportation sectors; and developing climate adaptation strategies.

At the macro level, environmental indicators show an overall increase in GHG emissions since 1990.[3] At the program level, EPA's efforts are achieving real emission reductions; in 2012, EPA worked with the building, industry, and transportation sectors to avoid 638.9 million metric tons of CO_2 equivalents. In June 2013, the President released the Climate Action Plan, which outlined various actions the United States will undertake to cut carbon pollution, prepare the country for the impacts of climate change, and lead international efforts to address climate change. As part of the President's Climate Action Plan, EPA is actively developing and implementing regulations in a number of areas, including the electricity generation and transportation sectors—the two largest sources of carbon pollution in the United States.[4] Also as part of the Climate Action Plan, the President released the Interagency Methane Strategy in March 2014. This comprehensive strategy tasks EPA to cut methane emissions from key sectors—landfills, coalmines, agriculture, and oil and gas.

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[3] Despite increases in U.S. GHG emissions from 1990 to 2012 overall, emissions decreased between 2007 and 2011. This decline was seen for nearly all gases and sectors. The decrease in emissions can largely be attributed to lowered energy use due to slower economic growth and to fuel switching from coal to natural gas—a less carbon-intensive fuel—as the cost of natural gas decreased compared with the cost of coal. For more details, see EPA. 2014. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2012.* http://epa.gov/climatechange/ghgemissions/usinventoryreport.html

[4] Executive Office of the President. 2013. *The President's Climate Action Plan.* http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf
White House. 2013. "Presidential Memorandum—Power Sector Carbon Pollution Standards." http://www.whitehouse.gov/the-press-office/2013/06/25/presidential-memorandum-power-sector-carbon-pollution-standards

EPA continues to make significant progress integrating climate adaptation planning into its programs, policies, rules, and operations in support of executive order 13653. The goal of these efforts is to ensure that EPA continues to fulfill its mission to protect 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 and respond to the impacts of climate change. EPA supports climate-resilient investments in communities across the country, and provides data, other information, and tools communities need to integrate climate adaptation into the work they do.5

GROUNDBREAKING CLEAN POWER PLAN OUTREACH

EPA Regions 4 and 10 served as regional leads partnering with the National Program for unprecedented outreach on the President's Clean Power Plan, a groundbreaking plan to reduce greenhouse gases from existing electric generation facilities for the first time on a national level. EPA regions met with groups of stakeholders across the U.S. to explain the proposed rule that incorporates energy efficiency, renewable energy, and flexibility.

Key FY 2014 Performance Results

FY 2014–2015 Agency Priority Goal

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

This Agency priority goal focuses on implementing EPA's light-duty (model year 2012–2016) and heavy duty (model year 2014–2018) vehicle GHG standards. The primary strategy for implementation consists of certifying new vehicles as meeting the standards, receiving and reviewing manufacturer final GHG reports to ensure that manufacturers meet their vehicle fleet requirements, and ensuring that the certified GHG results are achieved under actual in-use operation**.**

As of September 30, 2014, EPA issued a total of 843 certificates for both light-duty and heavy-duty vehicles and conducted a total of 177 confirmatory tests and 20 surveillance tests of both light-duty and heavy-duty vehicles at the Ann Arbor Laboratory test track, fully achieving its FY 2014 annual performance targets. For more information, see http://www.performance.gov/content/reduce-greenhouse-gas-emissions-cars-and-trucks.

Clean Power Plan Proposal

States, cities, and businesses across the country are taking action to address the risks of climate change. In June 2014, EPA proposed a common-sense plan to cut carbon pollution from power plants. EPA's proposal builds on those actions and is flexible—reflecting the important role of states as full partners with the federal government in cutting pollution and acknowledging that

[5] See http://www.epa.gov/climatechange/impacts-adaptation/ for EPA adaptation actions that fulfill commitments made in the President's *Climate Action Plan.*

states have different mixes of sources and opportunities. This proposal will maintain an affordable, reliable energy system, while cutting pollution and protecting human health and the environment now and for future generations.

FIRST-EVER PERMITS TO SEQUESTER CARBON FROM COAL-FIRED POWER PLANTS

Region 5 issued the nation's first permits to sequester carbon from a coal-fired power plant. Four Underground Injection Control Program (UIC) Class VI permits were issued to allow the FutureGen project— an oxy-combustion coal plant in Illinois—to inject over 25 million metric tons of carbon dioxide into a deep geologic formation. Additionally, Region 5 issued a Class VI permit to sequester carbon dioxide at an Illinois ethanol plant.

Power plants account for roughly one-third of all domestic GHG emissions in the United States. While there are limits in place for the levels of arsenic, mercury, sulfur dioxide, nitrogen oxides, and particle pollution that power plants can emit, there are currently no national limits on carbon pollution levels. Full implementation of the Clean Power Plan will lead to climate and health benefits worth an estimated $55 billion to $93 billion in 2030, including avoiding 2,700 to 6,600 premature deaths and 140,000 to 150,000 asthma attacks in children. The Plan will put Americans to work while cutting emissions from the U.S. electricity system and making our homes and businesses more efficient, shrinking electricity bills by roughly 8 percent in 2030 relative to the projected baseline.

New Source Performance Standards and Emission Guidelines for Municipal Solid Waste Landfills

In July 2014, the Agency proposed updates to its new source performance standards for municipal solid waste landfills to reduce emissions of methane-rich gas from landfills constructed, modified, or reconstructed in the future. The proposal is part of EPA's methane strategy under the President's *Climate Action Plan.* In addition, the Agency issued an advance notice of proposed rulemaking seeking public feedback on options for further reducing methane emissions from existing landfills.

Under the proposal, landfills subject to the rule would capture two-thirds of their methane and air toxics emissions by 2023—13 percent more than they must capture under current regulations. Methane, in addition to its significant global warming potential, is also a precursor to ground-level ozone, a health-harmful air pollutant associated with health effects including premature mortality, lung damage, asthma aggravation and other respiratory symptoms. Nearly 30 organic hazardous air pollutants have been identified in uncontrolled landfill gas, including benzene, toluene, ethyl benzene and vinyl chloride.

Regulatory and partnership programs have helped reduce methane emissions from landfills by 30 percent from 1990 to 2012; however, landfill methane emissions remain a concern and are the third-largest source of human-related methane emissions in the United States, accounting for 18 percent of methane emissions in 2012.[6]

[6] Total U.S. methane emissions were just below 600 $MMTCO_2E$ in 2012. See EPA. 2014. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2012.* http://www.epa.gov/climatechange/ghgemissions/gases/ch4.html.

Oil and Gas White Papers

In April 2014, the Agency released five technical white papers for external peer review on potentially significant sources of emissions in the oil and gas sector. The white papers focus on technical issues covering emissions and mitigation techniques that target methane and volatile organic compounds (VOCs).

As noted in EPA's Methane Strategy under the President's *Climate Action Plan*, the Agency will use the papers, along with the input we receive from the peer reviewers and the public, to determine how to best pursue additional reductions from the oil and gas sector. The five white papers cover: compressors, emissions from completions and ongoing production of hydraulically fractured oil wells, leaks, liquids unloading, and pneumatic devices. The white papers and the comments received are posted at http://www.epa.gov/airquality/oilandgas/whitepapers.html.

Greenhouse Gas Reporting Program

Established in October 2009, the Greenhouse Gas Reporting Program (GHGRP) covers 41 industry sectors, with approximately 8,000 reporters. This program includes data on direct emissions from large stationary sources (which account for about half of total U.S. GHG emissions) and also data from suppliers of materials that would emit GHGs when burned or released.

In September 2014, EPA released new GHG data for 2013. According to these data, GHG emissions declined by 3.9 percent for those sources covered by GHGRP in the past three reporting years (2011–2013). However, they increased by 0.62 percent from 2012 to 2013. The increase was driven by an increase in power plant emissions. Power plants are the largest source of U.S. GHG emissions, with over 1,550 facilities emitting over 2 billion metric tons of CO_2—roughly 32 percent of total U.S. GHG pollution. Power plant emissions have declined by 9.8 percent since 2010, but an increased use of coal caused an uptick in emissions of 13 million metric tons in 2013.

Petroleum and natural gas systems were the second largest stationary source in 2013, reporting 224 million metric tons of GHG emissions, a decrease of 1 percent from the previous year. Reported methane emissions from petroleum and natural gas systems have decreased by 12 percent since 2011; the largest reductions came from hydraulically fractured natural gas wells, which decreased by 73 percent during that period. EPA expects to see further emission reductions as its 2012 standards for the oil and gas industry are implemented.

Performance Challenges

Delivering the Clean Power Plan

EPA is striving to meet the demands of delivering the Clean Power Plan, President Obama's top priority for EPA and the central element of the U.S. domestic climate mitigation agenda. In the latter part of 2015, the Agency will finalize standards for new power plants under §111(b), standards for existing power plants under §111(d), and a supplemental proposal covering tribes and territories. This is a huge undertaking involving multiple complex regulatory processes and

extensive and unprecedented work with states, tribes, and territories to ensure successful implementation. In addition, EPA must respond to an extraordinary number of public comments on rules and continue to work through an increasing number of court-ordered deadlines, often with the same at-capacity staff.

STRATEGIC OBJECTIVE 1.2: IMPROVE AIR QUALITY.

Achieve and maintain health- and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants.

EPA's clean air programs, including those addressing indoor air and outdoor air (six common criteria pollutants, acid rain, and air toxics) focus on some of the highest risks to human health and environment faced by the country. EPA estimates that federal, state, local, and tribal indoor and outdoor air quality programs established under the Clean Air Act (CAA) are responsible every year for preventing many thousands of premature mortalities, millions of incidences of chronic and acute illness, tens of thousands of hospitalizations and emergency room visits, and millions of lost work and school days.

Summary of Progress

EPA is on track to meet its strategic targets supporting this objective. By way of context, between 1980 and 2013, gross domestic product increased 145 percent, vehicle miles traveled increased 95 percent, energy consumption increased 25 percent, and the U.S. population grew by 39 percent. During the same period, total emissions of the six principal air pollutants dropped by 62 percent. Environmental indicators related to air toxics show improving outdoor air quality trends,[7] and continued progress in preventing lung cancer deaths from radon exposure and reducing adverse asthma health outcomes. Despite significant progress in improving air quality, in 2013 approximately 75.4 million people nationwide lived in counties with pollution levels above the primary National Ambient Air Quality Standard (NAAQS) and emissions of air pollutants continued to impact air quality and human health.

In recent years, EPA has acted to dramatically improve America's air quality by designing and developing national programs that, when fully implemented, will achieve significant gains in human health. These actions include finalizing standards that will improve air quality and save money at the gas pump, implementing health-based ambient air quality standards grounded in the best available scientific research, proposing regulations to ensure that all new wood heaters will emit significantly less particulate matter into communities, and proposing for the first time that refineries monitor emission in such a way that neighboring communities are not being exposed to unintended emissions. EPA also helped reduce risks of indoor air pollution by characterizing the risks to human health, developing techniques for reducing those risks, and educating the public and key sectors about actions they can take to reduce risks from indoor air.

[7] See EPA's *2014 Report on the Environment* for data related to: "Ambient Concentrations of Particulate Matter," "Ambient Concentrations of Ozone," and "Air Toxics Emissions."

Key FY 2014 Performance Results

Tier 3 Vehicle Emission and Fuel Standards Program

In March 2014, EPA finalized Tier 3 Motor Vehicle Emissions and Fuel Standards for cars and gasoline that will significantly reduce harmful pollution, preventing thousands of premature deaths and illnesses, while also enabling efficiency improvements in cars and trucks. The Tier 3 program is part of a comprehensive approach to reducing the impacts of motor vehicles on air quality and public health. The vehicle standards will reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty vehicles.

The final fuel standards reduce gasoline sulfur levels by more than 60 percent—down from 30 to 10 parts per million in 2017. By 2018, EPA estimates the cleaner fuels and cars will annually prevent between 225 and 610 premature deaths, significantly reduce ambient concentrations of ozone, and reduce nitrogen oxide emissions by about 260,000 tons. By 2030, EPA estimates the standards will help avoid up to 2,000 premature deaths; 50,000 cases of respiratory ailments in children; 2,200 hospital admissions and asthma-related emergency room visits; and 1.4 million lost school days, work days, and days when activities would be restricted due to air pollution. The final standards, when fully implemented, are expected to provide more than 13 dollars in health benefits for every dollar spent to meet the standards.

Near-Road Monitoring Network

As part of the revised 2010 nitrogen dioxide (NO_2) NAAQS, states are required to establish a near-road monitoring network to determine their attainment status for NO_2. In January 2014, the first phase of the Near-Road Monitoring Network became operational. EPA has been working with its state partners to bring the second phase of the network online in January 2015.

In addition to establishing this network, EPA required that 40 monitoring sites be located in areas near susceptible and vulnerable populations. Moving forward, states will also monitor other pollutants at these sites, including carbon monoxide and fine particles. This will expand our understanding of air quality issues in these heavily populated areas where people live, work, and play.

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

New Source Performance Standard for Residential Wood Heaters

On January 3, 2014, EPA proposed updates to Clean Air Act standards for residential wood heaters to make new wood heaters significantly cleaner than current models. The proposed updates strengthen the emissions standards for new wood stoves, while establishing federal air standards for

other new wood heaters, including outdoor and indoor wood-fired boilers (also known as hydronic heaters).

Smoke from residential wood heaters, which are used around the clock in some areas, can increase particle pollution to levels that pose serious health concerns. The proposed standards for residential wood heaters are expected to reduce emissions of fine particle pollution from new manufactured woodstoves, pellet stoves, hydronic heaters, and forced air furnaces by an estimated 4,825 tons per year—an 80 percent reduction over estimated emissions without the rule.

Rules for the Refinery Sector

On May 15, 2014, EPA issued a proposed rule that would further control toxic air emissions from petroleum refineries as well as set emission control requirements for storage tanks, flares, and coking units at petroleum refineries.

When fully implemented, the provisions in this rule will result in a reduction of 5,600 tons per year of toxic air pollutants and 52,000 tons per year of VOCs. Also, as a co-benefit of these proposed standards, EPA projects that emissions of approximately 700,000 metric tons of CO_2 equivalents will be eliminated.

Reducing Risk from Diesel Emissions in Communities

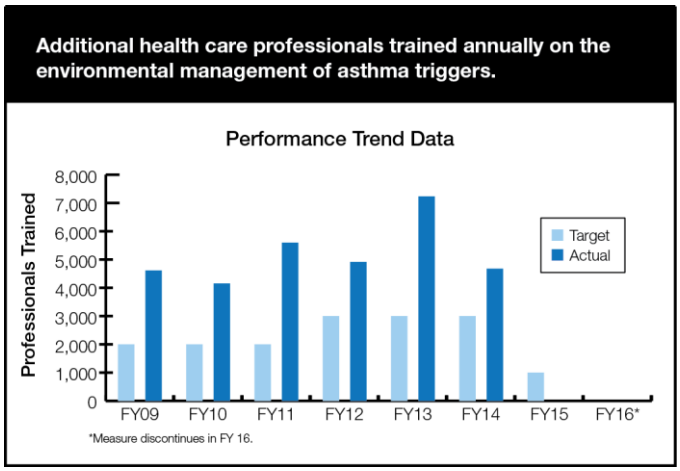
Between 10 and 11 million older diesel engines in use today emit large amounts of nitrogen oxides and particulate matter. Health impacts from these pollutants are most acute in populations that are near these engines in use. The Diesel Emissions Reduction Act Grant Program supports immediate, cost-effective emission reductions to communities overburdened by poor air quality and disproportionate diesel exhaust. In 2014, EPA targeted special grant opportunities for tribes and communities near ports. Fenceline communities near ports suffer disproportionately from exhaust emitted from diesel vehicles, equipment, and vessels used in the movement of goods. In 2014, EPA addressed these emissions through a ports-only grant opportunity to upgrade or replace equipment that will generate thousands of tons of criteria pollutant reductions, along with fuel savings and GHG reductions.

In 2014, EPA responded to requests from tribes by implementing a tribes-only grant program. Tribal applications more than doubled from the previous year, and four tribal grants went forward for award. These grants will lower diesel exhaust by repowering older diesel engines on tribal fishing vessels and upgrading school buses used to transport children on tribal lands. The estimated lifetime health benefits for these ports and tribal projects are up to $140 million.

CLEARING THE HAZE

EPA Region 9 developed three federal implementation plans for air quality that will reduce emissions of sulfur dioxide (SO_2) by 29,300 tons per year and nitrogen oxides (NOx) by 22,100 tons per year. The plans will improve visibility in 18 protected national parks in the Pacific Southwest, protect public health, and help transition the region to cleaner power. The two Arizona federal plans reduce pollution from seven facilities, and the Navajo Nation plan will reduce emissions of NOx from the Navajo Generating Station by 80%. In developing the plans, Region 9 conducted extensive outreach with the State and Tribe, the public, and the impacted facilities; held five public hearings and over 50 consultation meetings with tribes; and, responded to 77,000 public comments.

Childhood Asthma Risk Reduction



In 2014, EPA successfully completed a 10-year initiative to train health care professionals to address environmental asthma management as part of comprehensive asthma care and launched a new initiative to address the next important gap in comprehensive asthma care: equipping housing, environmental, and health insurance programs to effectively support delivery, infrastructure and sustainable financing of environmental asthma interventions at home and school.

Over the last decade, EPA has worked to build health care providers' capacity to deliver guidelines-based asthma care that includes a focus on environmental asthma trigger management. As a result of EPA's investment, approximately 45,700 healthcare professionals—8,000 in FY 2014—have now been directly trained to address environmental asthma management as part of comprehensive asthma care; national clinical practice guidelines now include indoor environmental interventions; and sustainable systems are now in place to support ongoing training, including accredited online continuing education courses.

EPA/STATE IMPLEMENTATION PLAN EFFORT

EPA Region 7 led the development of a national framework for coordinating SIP planning with states, including development, submittal, and EPA final action. This framework, or 4-Year Plan, provides a planning tool for the reduction of SIP backlogs and supports EPA in meeting Clean Air Act timeframes. Region 7 manages AirTrax, a national database that populates the National SIP Tracking Report, an integral tool the air program uses to manage SIPs.

Cleaner Cookstoves Research

Cookstove smoke is a major contributor to indoor air pollution in developing countries, causing approximately 4 million premature deaths annually and a wide range of illnesses according to the World Health Organization. Still, nearly half of the people in the world depend on burning coal and biomass (wood, charcoal, crop residues, and dung) in rudimentary cookstoves or open fires to cook their food. EPA is an international leader in research efforts to develop and encourage adoption of cleaner-burning stoves and fuels and in FY 2014 supported over $15 million worth of research on the environmental and health implications of cookstoves. The outcome of the research will be healthier air for millions, and a more stable climate.

Performance Challenges

Impact of Legal Challenges

EPA faces ongoing legal challenges as it strives to meet its responsibilities under the CAA. For example, 12 rulemakings representing 18 stationary source categories are currently under court-ordered deadlines, and the Agency is in negotiation with litigants regarding a notice of intent to sue on 46 additional standards.

Due to resource constraints, EPA is precluded from addressing all regulatory reviews statutorily mandated by the CAA. Work is prioritized to meet court-ordered deadlines. There are over 80 stationary source (air toxics) rules due for review under Section 112 of the CAA, and the Agency is expecting litigation over already-missed deadlines. The Agency also faces a heavy workload related to implementation of the NAAQS, including citizen petitions opposing state-issued operating permits, designating areas not attaining the NAAQS, and challenges approving State Implementation Plans.

STRATEGIC OBJECTIVE 1.3: 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.

EPA's Stratospheric Ozone Protection Program implements the provisions of the CAA and the Montreal Protocol on Substances That Deplete the Ozone Layer that reduce and control ozone-depleting substances (ODS) and facilitate the transition to substitutes that reduce GHG emissions and save energy.

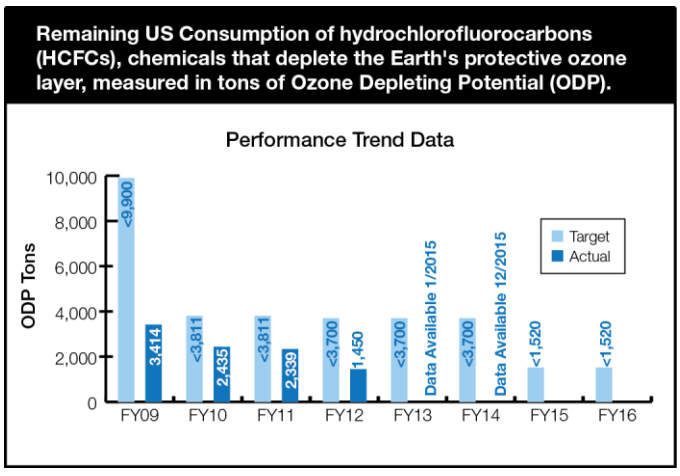
Summary of Progress

The EPA, in consultation with the Office of Management and Budge, has determined that performance toward this objective is making noteworthy progress. EPA continues to lead progress domestically and internationally in efforts to restore and protect the ozone layer. Domestically, the Agency is making progress as anticipated in the *FY 2014–2018 EPA Strategic Plan*, which states that 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 (ODP) from the 2009 baseline of 9,900 tons per year. Final FY 2013 data indicate that the United States has reduced HCFC consumption to 1,640 tons. EPA expects that, as a result of worldwide reduction in ODSs, the level of "equivalent effective stratospheric chlorine" in the atmosphere will have peaked at 3.185 parts per billion (ppb) of air by volume by 2015, and begun its gradual decline to less than 1.800 ppb (the 1980 level).

Key FY 2014 Performance Results

Phaseout of ODSs

As a party to the Montreal Protocol, the United States must incrementally decrease HCFC consumption and production, culminating in a complete HCFC phaseout in 2030. The major milestones for the United States and other developed countries are a reduction in 2015 to at least 90 percent below the HCFC ODP weighted baseline and in 2020 to at least 99.5 percent below that baseline. Working with industry, NGOs, and public sector stakeholders, the Agency is making more progress than originally anticipated in the performance measures associated with the strategic plan, which states that by 2013, U.S. consumption of HCFCs will be less than 3,700 tons per year of ODP.



Final 2013 data indicate that the United States has reduced HCFC consumption to 1,641 tons—a level that is over 50 percent lower than the performance measure level. In FY 2014, the program ensured compliance with CAA and Montreal Protocol requirements restricting U.S.

consumption of HCFCs through regulations established in 2013 that allocated HCFCs through 2014. EPA ensured compliance with these regulations through data reporting requirements that monitor the availability of consumption and production allowances. In partnership with Customs and Border Protection, EPA validated regulatory compliance of HCFC imports and worked to stop illegal shipments.

EPA must ensure that ODS production and import caps under the Montreal Protocol are met by continuing to implement the domestic rulemaking agenda for reduction and control of ODS. During 2014, actions toward this end included developing a final rule that sharply reduced HCFC allocations for 2015–2019 and in 2020 phases out HCFC-22, the most common HCFC.

As the allowed amount of ODSs continues to decline, the demands for flexibility and specific, tailored solutions to key problems grow. For example, EPA manages ongoing exemption programs to allow low-quantity continued production of ODS in areas of critical need. In FY 2014, EPA developed a proposed rule to continue to allow for small quantities of ODSs for essential laboratory and analytical uses. In 2014, EPA also developed critical-use nominations for methyl bromide; in July, EPA published a final rule that allocated critical-use methyl bromide for 2014 and 2015.

Performance Challenges

Challenges in the Phaseout of ODSs

HCFC-225 is a solvent used in aerospace and limited national defense applications by the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA). HCFC-225 was slated for a use ban beginning in 2015 under the CAA. However, development of, and transition to, HCFC-225 alternatives has proceeded slowly, due to the highly demanding technical requirements of the defense and aerospace applications at issue. In 2014, in order to support the needs of NASA and DoD, EPA worked to establish a de minimis exemption within HCFC phaseout regulations that would allow for the continued use of existing stocks of HCFC-225 by NASA and DoD.

By allowing the continued use of existing stocks of HCFC-225 beyond December 31, 2014, EPA helped avoid significant decommissioning of otherwise useful aerospace and national defense assets. This provides significant savings and mission support. Existing regulations do not allow for additional production of HCFC-225, so EPA does not expect a negative environmental outcome of the exemption.

STRATEGIC OBJECTIVE 1.4: MINIMIZE EXPOSURE TO RADIATION.

Minimize releases of radioactive material and be prepared to minimize exposure through response and recovery actions should unavoidable releases occur.

EPA works with local, national, and international stakeholders to develop and use voluntary and regulatory programs, public information, and training to reduce public exposure to radiation. EPA conducts radiation risk assessments, including updating its scientific methodology, modeling, and technical tools for generating radionuclide-specific cancer risk coefficients to address sensitive population groups. Risk managers across the country use this information to assess health risks from radiation exposure and determine appropriate levels for cleanup of radioactively contaminated sites.

Summary of Progress

EPA is on track to meet its strategic objective of minimizing exposure to radiation by maintaining readiness, both in personnel and assets, to support federal radiological emergency response and recovery operations. EPA's regulatory and non-regulatory activities support its 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.

Key FY 2014 Performance Results

EPA Regulatory Oversight at the Department of Energy's Waste Isolation Pilot Plant

In February 2014, a small amount of radioactive material was released into the air from the Department of Energy's (DOE's) Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. WIPP is a deep geologic repository for transuranic waste: equipment, debris, soil, and other items contaminated with radioactive elements from the nation's nuclear defense program. EPA provided critical oversight in the response and recovery at WIPP, verifying that there were no significant offsite releases, that there was no threat to public health, and that the facility remains in compliance with EPA regulations. Additional investigation into the cause of the release, along with other oversight actions, need to be completed before WIPP will resume normal operations.

EPA continues to coordinate closely with the New Mexico Environment Department and other affected stakeholders to share information and facilitate communications with DOE.

As follow-up to the incident, DOE must provide to EPA a written plan for addressing the areas for improvement identified in EPA's summary report. In response, DOE has issued a general recovery plan for WIPP outlining what it will do to re-open the facility and resume normal operations, and has begun developing a more detailed recovery plan.

In its lead role in response to this radiation release incident, EPA successfully demonstrated its ability to respond quickly, assess the situation, reach out to federal and state partners, and

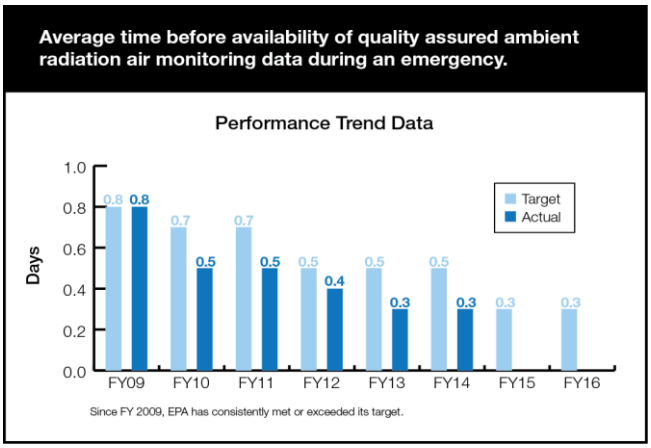
coordinate with stakeholders to ensure and to verify that the radiation release to the environment was minimal and posed no threat to public health and the environment. Completed reports related to the release are posted at http://www.epa.gov/radiation/wipp.

Performance Challenges

Maintaining EPA's Radiation Emergency Response Program Readiness

Recent events, including the WIPP incident and Fukushima, emphasize the importance of maintaining our radiation emergency response preparedness. Radiation incidents are unexpected and could represent a significant public health threat. Through its personnel and assets, EPA plays an important role in emergency response. Maintaining a high level of readiness requires a steady level of funding to support both personnel and assets, which can be a challenge in a time of fiscal constraint.

In particular, EPA's RadNet monitors the nation's air, drinking water, and precipitation to determine levels of radiation in the environment. In a radiological incident, RadNet provides important baseline data on background levels of radiation in the environment as a point of comparison to detect increased radiation. It is critical that EPA maintain its emergency response readiness, including updating the RadNet monitor technology and associated communications capability, to ensure provision of timely, quality-assured data.



Responding to radiation incidents is complex and requires coordination across all levels of government. EPA continues to cultivate existing relationships and establish new ones in support of the Agency's role in the National Response Framework, which provides context for how the response community works together and how federal response efforts should be coordinated.

Strategic Goal 2:

PROTECTING AMERICA'S WATERS

Goal 2 at a Glance

PROTECTING AMERICA'S WATERS

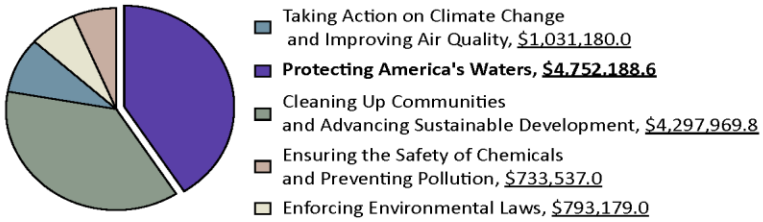
Protect and restore waters to ensure that drinking water is safe and sustainably managed, and that aquatic ecosystems sustain fish, plants, wildlife, and other biota, as well as economic, recreational, and subsistence activities.

FY 2014 Performance Measures

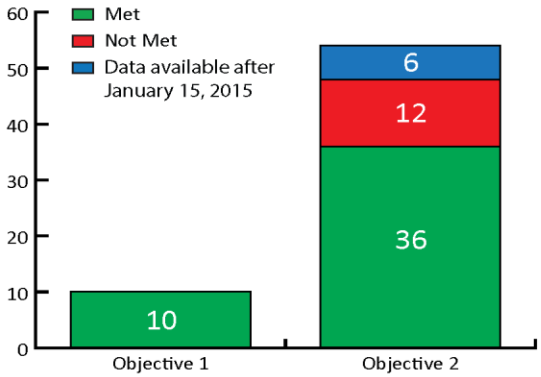
Met: 46 Not Met: 12 Data Unavailable: 6

(Total Measures: 64)

FY 2014 Obligations*



FY 2014 Performance Measures



Strategic Objective Overview	FY 2014 Obligations*	% of Goal 2 Funds
Objective 2.1: Protect Human Health. EPA has made progress addressing the safety of our nation's drinking water through collaborating between federal agencies, tribes, states and local water utilities to support the Drinking Water State Revolving Fund (DWSRF), development of recreational water quality criteria, evaluation of monitoring data, and working closely with states through capacity development and optimization programs to enhance small system sustainability, principally through optimization trainings and state-EPA workgroups and products.	$1,371,268.1	29%
Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems. EPA is making steady progress in protecting and restoring watersheds and aquatic ecosystems, despite the challenges from population growth, aging infrastructure, and climate change. Key activities include, updating water quality standards, implementing the National Pollutant Discharge Elimination System (NPDES) permit program, conducting monitoring and assessment, implementing practices to reduce pollution from agricultural and urban runoff (e.g., nonpoint sources), protecting wetlands and habitat, and developing total maximum daily loads (TMDLs) to reduce pollutants.	$3,380,920.5	71%
Goal 2 Total	**$4,752,188.6**	**100%**

*All figures in thousands

EPA CONTRIBUTING PROGRAMS

Analytical Methods
Beach Program
Coastal and Ocean Programs
Chesapeake Bay
Children's Health Protection
Clean Water State Revolving Fund
Columbia River Estuary Partnership
Commission for Environmental Cooperation
Cooling Water Intakes
Drinking Water and Ground Water Protection Programs
Drinking Water Research
Drinking Water State Revolving Fund
Effluent Guidelines
Fish Consumption Advisories
Great Lakes
Gulf of Mexico
Human Health and Ecosystem Protection Research
Human Health Risk Assessment
Long Island Sound
Mercury Research
National Environmental Monitoring Initiative
National Estuary Program/Coastal Waterways
National Pollutant Discharge Elimination System
Nonpoint Source Pollution Control
Other Geographic Programs (including Lake Pontchartrain and Northwest Forest), Lake Champlain, San Francisco Bay Delta Estuary, South Florida
Persistent Organic Pollutants
Pollutant Load Allocation
Puget Sound
Surface Water Protection Program
Sustainable Infrastructure Program
Total Maximum Daily Loads
Trade and Governance
Underground Injection Control Program
U.S.-Mexico Border
Wastewater Management
Water Efficiency
Water Monitoring
Water Quality Research
Water Quality Standards and Criteria
Watershed Management
Wetlands Marine Pollution

STRATEGIC 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.

A key component of this objective is to protect public health by ensuring that public water systems deliver safe drinking water to their customers. To achieve this objective, EPA must work to maintain previous gains: drinking water systems of all types and sizes that are currently in compliance will work to remain in compliance. The Agency will make efforts to bring non-complying systems into compliance and to ensure that all systems will be prepared to comply with the new regulations.

Summary of Progress

EPA has made progress addressing the safety of our nation's drinking water, with over 93 percent of the nation's population served by community water systems (CWSs) receiving drinking water that meets all applicable health-based drinking water standards in FY 2014. The following four examples highlight how EPA is making progress toward its drinking water objective in collaboration with states, tribes and local utilities:

1) Through the DWSRF, EPA helps ensure reliable delivery of safe water to people served by small water systems by funding infrastructure improvements, with 70 percent of assistance agreements going to drinking water systems serving fewer than 10,000 people. This funding supports EPA's cross-agency strategy of making a visible difference in communities, especially in rural and disadvantaged areas.
2) EPA is achieving its priority goal of working closely with states through capacity development and optimization programs to enhance small system sustainability, principally through optimization trainings and state-EPA workgroups and products. These activities improve the states' capability to help small systems, including drinking water systems on tribal lands, address their technical, managerial, and financial needs.
3) If adopted by states, EPA's 2012 recreational water quality criteria recommendations[8] will protect the public from exposure to harmful levels of fecal pathogens.
4) More than 2,000 public water systems participating in the Unregulated Contaminant Monitoring Rule[9] survey provided drinking water monitoring data for 30 unregulated contaminants; these data support decisions on whether to establish health-based standards to protect drinking water.

[8] For more information on recreational water quality criteria, see http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/

[9] For more information on UCMR, see http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/

FY 2014 Performance Accomplishments

FY 2014–2015 Agency Priority Goal

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

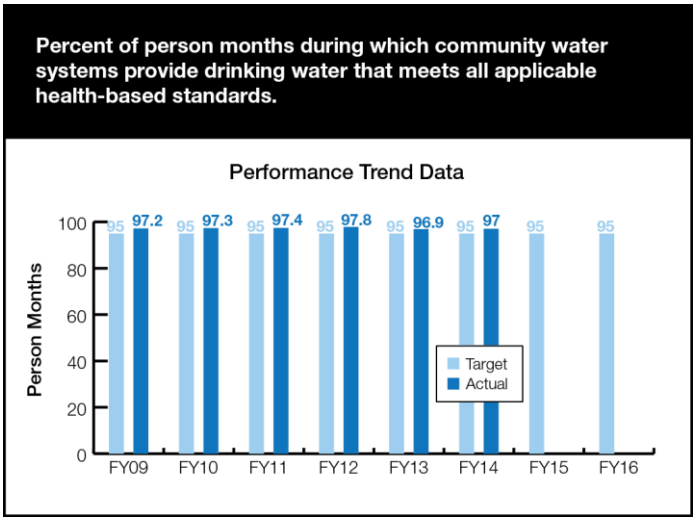
As of September 30, 2014, eight states have substantially increased their participation in capacity development program activities beyond previous levels or begun to participate in the treatment optimization program.

- In August, EPA launched a state-EPA workgroup to re-energize the operator certification program. Sixteen states volunteered to participate, indicating much enthusiasm for sharing best practices and identifying opportunities for program improvements.
- The tribal component of this Agency priority goal, intended to pilot state optimization program elements with several tribes in Region 4, has garnered tribal interest beyond the target group. Tribes outside Region 4—specifically Mandan, Hidatsa, and Arikara Nation affiliated tribes in North Dakota—have agreed to participate in water sector emergency readiness exercises.

States continued to be challenged by limited resources, which makes it difficult to engage with EPA through this goal. Meanwhile, staff limitations make it challenging for EPA to develop projects with states or hold webinars on state best practices and small system sustainability activities.

Challenges to small drinking water system compliance include aging infrastructure, increased regulatory requirements, workforce shortages/high turnover, increasing operational costs, declining rate bases, and extreme natural disasters/weather events.

Community Water Systems Performance



A primary gauge of community water system performance is the person-months measure. For this measure, person-months for each CWS are calculated as the number of months in the most recent four-quarter period in which health-based violations overlap, multiplied by the retail population served. The measure includes maximum contaminant level (MCL), maximum residual disinfection limit (MRDL), and treatment technique violations; it covers any violations from currently open and closed CWSs that overlap any part of the most recent four

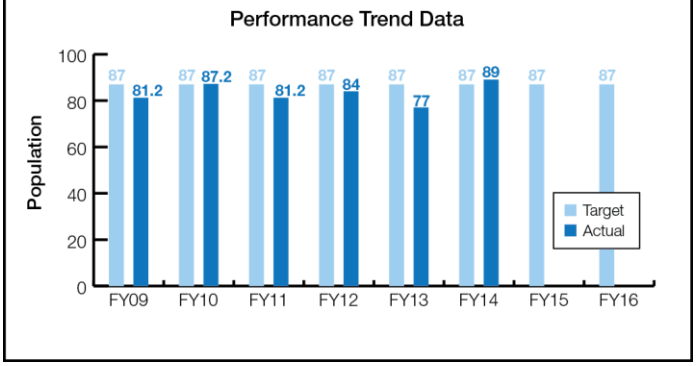
quarters. The EPA Office of Ground Water and Drinking Water (OGWDW) calculates the measure using data reported in the Safe Drinking Water Information System-Federal (SDWIS-FED).

The person-month measure achieved the 2014 target of 95 percent: during 96.7 percent of the person-months over a 12-month period, CWSs provided drinking water that met all applicable health-based drinking water standards. The success of the measure is attributed to a national decrease in treatment technique violations that occur at the largest water systems, as well as how states are addressing background drinking water contaminants (e.g., arsenic) that chronically challenge water systems. This performance also reflects the long-term efforts of the states and EPA to minimize any health-based violations, while building appropriate technical, managerial and financial system capability.

Drinking Water in Indian Country

EPA calculates this measure using data reported in EPA's Safe Drinking Water Information System/FED. This measure includes federally regulated MCL, MRDL, and treatment technique violations; it covers any violations from currently open and closed CWSs in Indian Country that happened during any of the most recent four quarters.

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.



The tribal population measure met the 2014 goal of 87 percent, with a FY 2014 end of year performance result of 88.6 percent. This is the first time since 2010 that this measure has met its annual target. EPA's success this year is attributed to the regional programs' diligence in completing sanitary surveys, which offered an opportunity to identify potential issues and provide technical assistance to tribal utilities. In addition, regional programs and HQ continued extensive coordination through our federal partnerships specifically with the Indian Health Service to assist tribally owned and operated public water systems deliver safe drinking water that meets all health-based standards to their customers.

DROUGHT RESPONSE STRATEGY

EPA Region 9 developed and began implementing a first-ever Drought Response Strategy to: (1) provide emergency relief for vulnerable tribes and small communities; (2) collaborate with water agencies to find and fix leaks in their water distribution systems through audits and infrastructure repairs; (3) partner with HUD and other federal agencies to encourage the installation of WaterSense fixtures in federal buildings and federally financed public housing; and, (4) expand water recycling and groundwater replenishment to increase resilience to the impacts of climate change. Region 9 will use the Strategy to drive transformational change in the way water is managed across the Pacific Southwest Region.

FY 2014 Performance Challenge

Tribal Water Systems

Tribal systems continue to face obstacles in achieving and maintaining managerial and financial capacity. Limited resources for direct implementation programs

restricts the Agency's ability to provide sufficient training and technical assistance for tribal utilities. EPA continues to work with our federal partners to target infrastructure assistance, conduct sanitary surveys at tribal systems to identify deficiencies, and fund circuit riders to work directly with tribal operators.

STRATEGIC OBJECTIVE 2.2:
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.

This objective captures EPA's efforts to protect and improve water quality in the nation's watersheds as well as ocean, coastal, and estuarine waters. It includes all of the major activities EPA undertakes to implement the Clean Water Act—for example, updating water quality standards, implementing the National Pollutant Discharge Elimination System (NPDES) permit program, conducting monitoring and assessment, implementing practices to reduce pollution from agricultural and urban runoff (e.g., nonpoint sources), protecting wetlands and habitat, and developing total maximum daily loads (TMDLs) to reduce pollutants. These activities have contributed to the steady progress EPA is making to protect and restore the nation's waters, despite challenges from population growth, aging infrastructure, and climate change.

Summary of Progress

EPA made significant progress in FY 2014 in protecting and restoring watersheds and aquatic ecosystems. A cumulative total of 3,866 waterbodies that were listed as impaired in 2002 were attaining water quality standards at the end of the year. EPA met its programmatic goals in FY 2014 by achieving its annual targets for sustaining a Clean Water State Revolving Fund utilization rate of over 97 percent, establishing or approving TMDLs, and maintaining 90 percent of non-tribal NPDES permits in current status. EPA and its partners also increased wetland acres restored and improved to a cumulative total of 221,000 acres.

EPA's geographic programs largely achieved their end of year goals. Key accomplishments include completing management actions at three areas of concern in the Great Lakes for a cumulative total of seven (the target was five), restoring over 41,000 acres of estuarine wetlands in Puget Sound, and restoring or protecting over 93,000 acres of habitat in National Estuary Program (NEP) study areas (just short of the target of 100,000 acres).

PUGET SOUND BASIN TREATY RIGHTS AT RISK

EPA Region 10's Puget Sound Program (State of Washington) addressed several issues related to Treaty Rights at Risk. EPA directed $2.8 million in 2014 funding and $3.0 million planned in 2015 to kick-start coordinated investments for riparian buffer restoration and permanent protection. In addition, EPA directed $1 million for culvert removal projects in the Puget Sound Basin and worked with federal and state partners to develop strategies to address fish passage barriers and reduce shoreline armoring. EPA, the National Oceanic and Atmospheric Administration, and the Natural Resources Conservation Service led the Puget Sound Federal Caucus in the early development of a coordinated investment strategy to accelerate the pace of salmon and shellfish recovery.

EPA also supported States and local water utilities in responding to the water related challenges posed by a changing climate. EPA deployed new tools to develop climate change adaptation plans on a watershed or estuary basis, to help water utilities improve preparedness for coastal and inland flooding, and to help local developers design stormwater practices that account for changing rainfall patterns. The National Water Program also released a final *Climate Change Adaptation Implementation Plan* (http://www.epa.gov/climatechange/Dounloads/OW-climate-change-adaptation-plan.pdf).

EPA awarded Urban Waters Small Grants of $40,000 to $60,000 each to 37 organizations, providing approximately $2.1 million to support projects helping communities in their efforts to access, improve, and benefit from their urban waters and the surrounding land. These local projects showcase how EPA is making a visible difference in underserved communities on the ground by helping to restore urban waters, improve water quality and support community revitalization and other local priorities.

FY 2014 Performance Accomplishments

FY 2014–2015 Agency Priority Goal

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

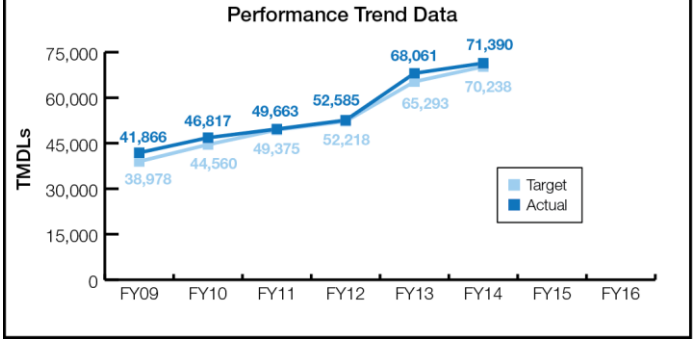
As of September 30, 2014, all of the states and Washington, D.C. are on track for meeting EPA's priority goal to update their nonpoint source management programs by September 30, 2015. Six state programs were already up to date when EPA established this goal. Of the other 45 (counting Washington, D.C.):

- 84 percent of states and Washington, D.C. with outdated NPS management programs have either an EPA-approved management program or submitted a draft to the EPA for review.
    - Twenty-three now have EPA-approved programs.
    - Fifteen have submitted drafts to EPA for review.
- Seven have made progress and expect to provide draft updates to EPA by December 2014.

EPA and State Development of TDMLs

National policy is to complete TMDLs for Section 303(d)–listed, impaired waters within eight to 13 years of their date of initial listing, on average, and to complete all consent decree TMDL commitments.[10] This measure tracks development of annual pace of TMDL completion in line with national policy on a state-by-state basis.

Number of TMDLs that are established or approved by the EPA [total TMDL] on a schedule consistent with national policy (cumulative). [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.]



Although the results of this measure include state and EPA TMDLs, states developed all of the TMDLs in FY 2014. In particular, Florida developed

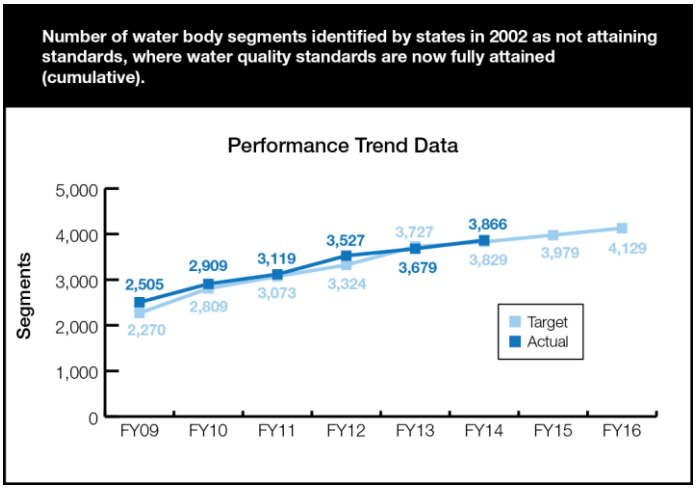
[10] A TMDL is a technical plan for reducing pollutants in order to attain water quality standards. The terms "approved" and "established" refer to the completion and approval of the TMDL itself.

over 1,200 TMDLs; Montana continued to work hard to complete its consent decree requirements; and Utah, Wyoming, New York, and California exceeded their commitments. To date, EPA and states have developed 71,390 TMDLs, of which 62,539 were developed by states.

FY 2014 will be the last year that the Clean Water Act 303(d) Listing and TMDL Program reports on this measure; the Agency has engaged with states to implement a new 10-year vision for the program.[11] As part of this effort, EPA will continue to work with states to identify priority waters for assessment, development of TMDLs and other restoration plans for impaired segments, and pursuit of protection approaches for unimpaired waters. In FY 2015, the program will transition from reporting on the number of TMDLs developed to the number of priority areas where TMDLs, alternative restoration, or protection plans have been completed. Development of these new measures was driven by the desire of both EPA and the states to more accurately report on the success of the program in line with the new 303(d) vision.

Meeting Water Quality Standards

This measure is designed to demonstrate cumulative successes of the surface water program in achieving water quality standards in waters formerly assessed as not meeting water quality standards.



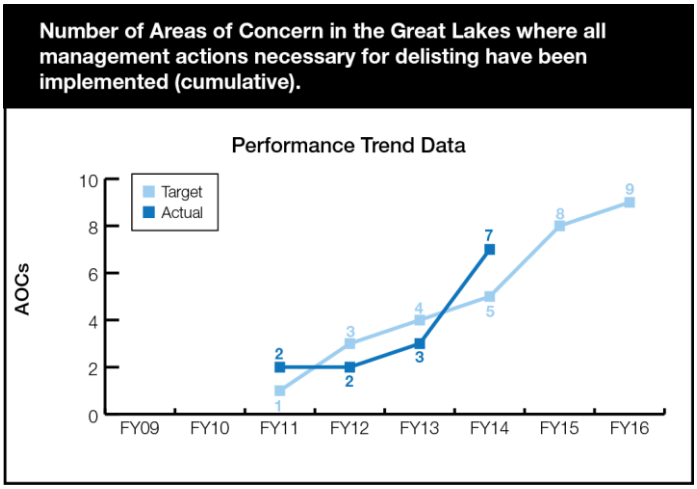
EPA exceeded its FY 2014 commitment for this measure. By attaining water quality standards, waters become safer for drinking, fishing, and swimming. EPA and state managers have given high attention and priority to this measure, contributing to its continued success. However, some challenges affect the ability of the states and EPA to sustain this level of progress: reduced state budgets are slowing the implementation activities needed to restore impaired waterbodies; it is more difficult to address pollutants for a waterbody segment with multiple pollutants than for just one or a few impairing pollutants; and many of the remaining impairments will take years before the water segment is fully recovered.

Great Lakes Areas of Concern

During the first five years of the Great Lakes Restoration Initiative (GLRI), federal agencies and their partners, led by EPA, completed all of the management actions required to remove five Areas of Concern (AOCs) from the list of areas designated as the most contaminated sites on the Great Lakes. Management actions were completed at four of those AOCs in FY 2014: Ashtabula River (Ohio), Deer Lake (Michigan), Waukegan Harbor (Illinois), and White Lake (Michigan). Since

[11] For more information, see:
http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/vision_303d_program_dec_2013.pdf

then, the Deer Lake and White Lake AOCs have been formally delisted. (Delisting is an international process to remove an AOC from the list of AOCs in the Great Lakes Water Quality Agreement.)



After decades during which only one U.S. AOC was delisted, federal agencies have accelerated cleanup actions during the past five years by strategically targeting GLRI activities at management actions identified by state partners and removal of beneficial use impairments (BUIs). For delisting, the management actions must be completed and the BUIs (indicators of poor environmental health such as restrictions on fish and wildlife consumption, fish tumors, restrictions on dredging, and loss of habitat) at the AOC must first be restored. AOC restoration will ultimately be measured by the removal of all BUIs at the contaminated site.

In FY 2014, the cumulative BUI removal total was 52, exceeding targets in the Government Performance and Results Act and the GLRI Action Plans. EPA prioritized restoration of AOCs within the GLRI. Prioritization included:

- A focus of multi-agency activities and funding to advance the pace and amount of work performed at AOCs, including, but not limited to, remediation of contaminated sediments.
- Enhanced project management related to the planning, coordination, and implementation of remediation and restoration actions in AOCs.

Stormwater Calculator

EPA researchers developed the National Stormwater Calculator to provide decision-makers and others with an online tool to assess the impact of incorporating green infrastructure features, such as rain gardens, rain barrels, cisterns, and open parks, into their projects. The free tool is designed to be used by anyone interested in reducing runoff from a property, including site developers, landscape architects, urban planners, and homeowners. The calculator provides estimates of the annual amount and frequency of runoff from any location in the United States (including Puerto Rico), based on information collected about the selected site, such as local soil conditions, slope, land cover, and historical rainfall records. In 2014, as part of President Barack Obama's Climate Change Action Plan, EPA researchers enhanced the Calculator with climate assessment capabilities.

FY 2014 Performance Challenges

Nonpoint Source Nutrient Runoff

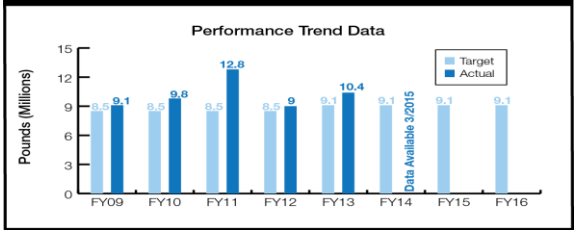
Nutrient runoff from nonpoint sources (e.g., agricultural lands and urban landscapes) is widespread. EPA must continue to work with state and federal partners to develop and implement effective solutions.

Nonpoint source pollution has been recognized as the largest remaining impediment to improving national water quality. Nutrient pollution is a national problem. National monitoring efforts, such as U.S. Geological Survey reports on surface water quality[12] and EPA's National Aquatic Resource Surveys,[13] document the widespread impacts of nutrients on our nation's waters.

Nutrient pollution is one of the most widespread, costly, and challenging environmental problems. It contributes to hypoxic areas in the Great Lakes, Gulf of Mexico, Chesapeake Bay, and the Long Island Sound.[14] It significantly affects drinking water supplies, aquatic life, and recreational water quality around the country, and these impacts occur in all categories of waters—rivers, streams, lakes, reservoirs, estuaries, and coastal areas.

Every U.S. state has nutrient-impaired waters, making it a national issue, for both surface water and groundwater. Over 15,000 waterways are listed for nutrient-related pollution (counting waters listed for nutrients specifically, as well as waters listed for organic enrichment and oxygen depletion or algal growth).[15] Awareness is also growing of the impacts of nutrient enrichment on drinking water and source waters.

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



Population growth is expected to exacerbate the nutrients problem. EPA needs continued near-term action and demonstrable progress in reducing nutrients—while states continue to develop and adopt numeric criteria for nutrient pollution, so they have clear metrics to guide their efforts to protect and restore waters from nutrient pollution.

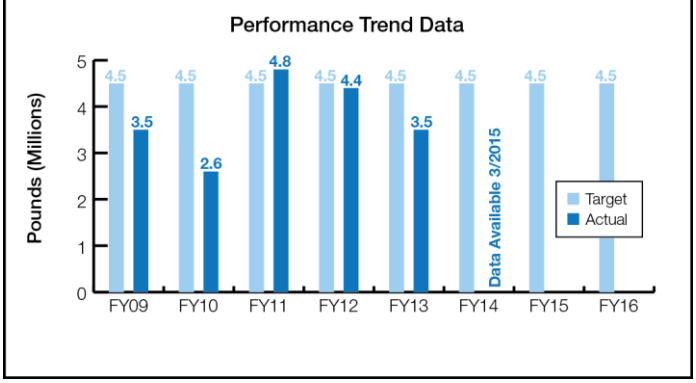
PROTECTING WATER QUALITY WITH STORMWATER MANAGEMENT

In response to Clean Water Act requirements and to protect water quality, EPA released for public comment a draft general permit for small "Municipal Separate Storm Sewer Systems" located in the Commonwealth of Massachusetts. To assist both first-time regulated municipalities and those already subject to stormwater regulations, EPA conducted outreach to help Massachusetts municipalities learn about the terms of the new draft permit, the use of green infrastructure and other sustainable best management practices for curbing stormwater pollutant discharges and runoff, and available financing options. When finalized, this permit will establish requirements for about 260 cities and towns and another 30 state- and/or federally-owned properties in Massachusetts to help develop, implement and enforce stormwater management programs thus reducing stormwater discharges across the state.

[12] USGS Circular 1350: Nutrients in the Nation's Streams and Groundwater.
[13] National Aquatic Resource Surveys
[14] For trend data on Gulf of Mexico and Long Island Sound hypoxia, see http://cfpub.epa.gov/roe/indicator.cfm?i=41
[15] http://iaspub.epa.gov/waters10/attains_nation_cy.control?p_report_type=T

EPA is working diligently with its partners across the country to combat the nitrogen and phosphorus pollution problems, including protecting and restoring surface and ground waters already degraded by nutrient pollution through:

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



- Working with states to develop and implement nitrogen and phosphorus pollution reduction frameworks that address all sources of nutrient pollution to achieve near-term reductions in nitrogen and phosphorus pollution.

- Helping develop states' numeric nutrient standards.

- Providing example approaches to states for assessing whether waters are attaining nutrient-related narrative criteria and/or supporting designated uses.

- Providing funding:
  - Awarding grants to states for operating nonpoint source management programs.
  - For building and upgrading municipal wastewater facilities and implementing both nonpoint source pollution control and estuary protection projects.

- Coordinating with EPA-USDA:
  - Example: the National Water Quality Initiative, with landowners in 174 small watersheds across the country. The agencies coordinate in voluntary private land conservation investments and support state-led water quality monitoring.

- Committing to science:
  - Assessing national and regional progress using National Aquatic Resource Surveys.
  - Conducting and/or supporting research on topics related to nitrogen and phosphorus pollution.
  - Promoting innovation toward cost-effective and practical solutions.

- Broadening outreach to stakeholders and the public on nutrient pollution and related issues as well as on the effects of nutrient pollution on human health, the environment, and the economy.

Strategic Goal 3:

CLEANING UP COMMUNITIES AND ADVANCING SUSTAINABLE DEVELOPMENT

Goal 3 at a Glance

CLEANING UP COMMUNITIES AND ADVANCING SUSTAINABLE DEVELOPMENT

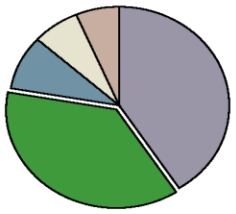
Clean up communities, advance sustainable development, and protect disproportionately impacted low-income and minority communities. Prevent releases of harmful substances and clean up and restore contaminated areas.

FY 2014 Performance Measures

Met: 23 Not Met: 7 Data Unavailable: 4

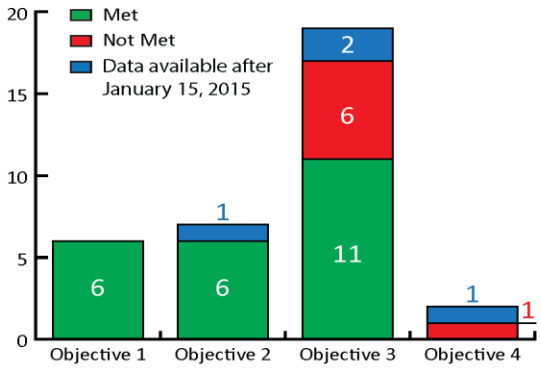
(Total Measures: 34)

FY 2014 Obligations*



- Taking Action on Climate Change and Improving Air Quality, $1,031,180.0
- Protecting America's Waters, $4,752,188.6
- **Cleaning Up Communities and Advancing Sustainable Development, $4,297,969.8**
- Ensuring the Safety of Chemicals and Preventing Pollution, $733,537.0
- Enforcing Environmental Laws, $793,179.0

FY 2014 Performance Measures



Strategic Objective Overview	FY 2014 Obligations*	% of Goal 3 Funds
Objective 3.1: Promote Sustainable and Livable Communities. EPA continued to make progress promoting sustainable communities by providing grants and technical assistance to communities under the Brownfields program and working with a variety of stakeholders to prevent accidents at chemical facilities.	$507,897.8	12%
Objective 3.2: Preserve Land. EPA continued to make progress developing and implementing targeted SMM programs (responsible management of used electronics, sustainable food management, and reducing the environmental footprint of the federal government); issued the E-Manifest One-Year Rule; and engaged in rigorous UST release prevention efforts.	$1,190,503.7	28%
Objective 3.3: Restore Land. EPA made progress toward its FY 2014 - 2015 Agency Priority Goal regarding efforts to prepare and respond to emergencies and clean up contaminated land; however, EPA faced challenges in the Superfund Remedial Program.	$2,512,443.0	58%
Objective 3.4: Strengthen Human Health and Environmental Protection in Indian Country. EPA continues to build tribal capacity through the implementation of the GAP Guidance and EPA's Tribal Consultation Policy. By developing new GAP performance measures and scoping out characteristics of a needs assessment, the agency will be able to identify problems, prioritize issues, and address the gaps in environmental protection in Indian Country.	$87,125.3	2%
Goal 3 Total	**$4,297,969.8**	**100%**

*All figures in thousands

EPA Contributing Programs

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

STRATEGIC OBJECTIVE 1:
PROMOTE SUSTAINABLE AND LIVABLE COMMUNITIES.

Support sustainable, resilient, and livable communities by working with local, state, tribal, and federal partners to promote smart growth, emergency preparedness and recovery planning, redevelopment and reuse of contaminated and formerly contaminated sites, and the equitable distribution of environmental benefits.

Since its inception in 1995, EPA's Brownfields Program has grown into a proven, results-oriented program that has changed the way contaminated property is perceived, addressed, and managed. It is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields; this supports the Agency's cross-agency strategy for "Working to Make a Visible Difference in Communities."

A brownfield is a property whose expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. It is estimated that there are more than 450,000 brownfields in the United States. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, puts existing infrastructure to use, takes development pressures off undeveloped open land, and both improves and protects the environment.

Also as part of this objective, EPA promotes accident prevention and preparedness activity under Section 112(r) of the Clean Air Act Amendments by publishing regulations and guidance for chemical accident prevention at facilities that use extremely hazardous substances. These regulations and guidance are contained in the Risk Management Plan (RMP) rule. The information required from facilities under RMP helps local fire, police, and emergency response personnel prepare for and respond to chemical facility emergencies and fosters communication and awareness to improve accident prevention and emergency response practices at the local level. The RMP rule was built upon existing industry codes and standards. It requires companies that use certain flammable and toxic substance to develop RMPs in order to assess risks, improve operations, and prepare response plans.

Summary of Progress

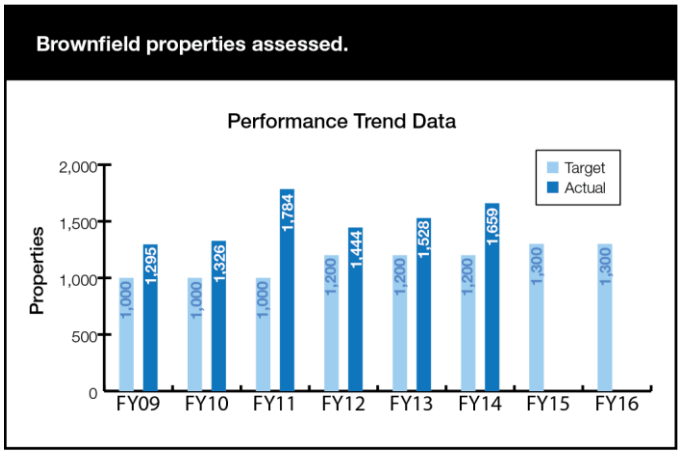
Throughout 2014, EPA continued to make progress toward the strategic targets in its *FY 2014–2018 Strategic Plan* for the Brownfields and Risk Management Programs. Specifically, in FY 2014, the Agency continued funding for brownfields cleanup activities by providing grants and technical assistance to communities, states, and tribes for the assessment, cleanup, and redevelopment of formerly contaminated properties, as well as leveraging thousands of jobs. To date, Brownfields funding has resulted in 22,336 brownfields properties assessed, 102,740 jobs leveraged, and more than 47,000 acres made ready for anticipated reuse. EPA worked closely with both existing and new Brownfields Area-Wide Planning (AWP) grantees across the country to help them involve the community, prepare their plans, and leverage investments toward site cleanup and reuse. The initial 23 Brownfields AWP pilots have leveraged over $400 million in federal, state, and private investments.

In addition to the environmental and health benefits of Brownfields cleanups, remediation has also been shown to have a positive economic impact within communities. A 2012 assessment by the National Bureau of Economic Research[16] of the economic impact of brownfields remediation demonstrated that homes within one kilometer of a brownfield site that has been cleaned up using brownfields funding might experience a 5.8 to 12.3 percent increase in residential property values.

In addition to the brownfields activities, EPA promoted sustainable communities through its efforts to prevent chemical accidents. In FY 2014, EPA continued to achieve its risk management plan inspections target to prevent chemical releases at facilities in communities and took critical steps implementing Executive Order 13650, "Improving Chemical Facility Safety and Security." bringing together federal regulatory representatives and stakeholders with a vested interest in reducing the risks associated with handling and storage of chemicals at stationary facilities within our communities. In May 2014, a multi-agency working group led by EPA, the Occupational Safety and Health Administration (OSHA), and the Department of Homeland Security (DHS) released the final report to the President highlighting progress and providing a plan to support and enable efforts by states, tribes, and local communities to improve chemical facility safety. Furthermore, EPA's Region 2 developed standard operating procedures for a unified federal, state, and local approach for identifying and responding to risks at chemical facilities and a plan to improve operational coordination. These procedures are now being used as a model for other EPA Regions across the nation. EPA also published a request for information on the risk management program in July 2014, describing 19 potential modifications to help streamline the program and improve safety requirements, requesting stakeholder feedback.

FY 2014 Performance Accomplishments

Brownfield Properties Assessed



In FY 2014, brownfields funding resulted in the assessment of 1,659 brownfields properties for environmental contamination, exceeding the target by 38 percent. EPA is on track to meet the strategic measure established in the *FY 2014–2018 Strategic Plan:* by 2018, conduct environmental assessments at 26,350 (cumulative) brownfield properties. Since FY 2012, the target for this measure has increased; still, the program continues to consistently outpace EPA's targets. Since the Brownfields Program awards more community-wide than site-specific assessment grants and the assessments are completed over the three-year period of the grant, the number of properties assessed varies each fiscal year.

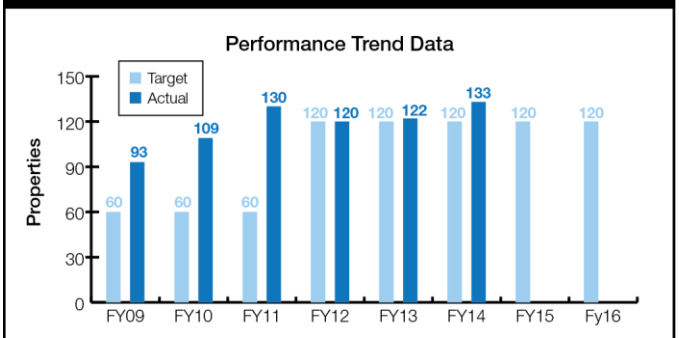
[16] Haninger, Kevin, Lala Ma, and Christopher Timmins. 2014. "The Value of Brownfield Remediation." NBER Working Paper 20296. http://www.nber.org/papers/w20296.

As of the end of FY 2014, EPA assessed 22,336 brownfields properties. Phase I funding for property assessments helps communities examine historical records to identify properties likely to be contaminated based on past uses, and indicates the need for additional environmental work, such as a Phase II assessment to characterize suspected contamination. This measure represents an important milestone in the overall cleanup process and can lead to a reuse/redevelopment outcome that would leverage local development sources to drive employment and enhance the livability of the community containing the property. Equally important, assessments can indicate that brownfield sites may not be contaminated and can therefore be safely reused without cleanup.

Brownfield Properties Cleaned Up

A fundamental purpose of EPA's Brownfields Program is to provide funding and resources to clean up properties with contamination that pose health or environmental risks, impeding property reuse and economic redevelopment. EPA's Brownfields Program provides communities with grants to help fund the cleanup of contaminated sites.

Number of properties cleaned up using brownfields funding.



In FY 2014, EPA completed 132 brownfields cleanups, an increase of 10 cleanups from FY 2013; this puts EPA on track to meet the strategic target established for the following measure in the *FY 2014–2018 Strategic Plan:* by 2018, make an additional 16,800 acres of brownfield properties ready for reuse from the 2012 baseline Since FY 2009, the Brownfields Program has averaged 118 cleanups per year and has funded 705 completed cleanups. There has also been an increased effort to ensure that grant recipients actively report cleanup activities and progress in ACRES (EPA's brownfields database).

PUBLIC, PRIVATE, AND INTERGOVERNMENTAL ROUNDTABLE: REVITALIZING FOUR OHIO RIVER COMMUNITIES

Region 3 facilitated a Manufacturing Community Roundtable in Beaver County, PA, focusing on public-private and intergovernmental partnerships to revitalize four communities along the Ohio River: Monaca, Midland, Alquippa, and Coraopolis. As part of the White House initiative to promote manufacturing, the Roundtable addressed brownfields reuse, infrastructure, workforce development, job training, job creation, and riverfront and community revitalization.

Developing Interactive Tools for the Public

In May 2014, EPA released EnviroAtlas, a multi-scale (national to community), Web-based, interactive mapping, visualization, and analysis tool that provides the first-ever picture of the distribution of ecosystem services for the mainland United States. EnviroAtlas integrates over 300 separate data layers developed through collaboration between EPA; the U.S. Geological Survey; the U.S. Forest Service; other federal, state, and nonprofit organizations; and several universities. The tool was designed to help decision-makers understand the implications of planning and policy decisions on our fragile ecosystems and the communities who depend on goods and services from these ecosystems.

Users can investigate land cover patterns, see how ecosystem services reduce pollution, and view closer to true scale data to compare them across selected communities. EnviroAtlas helps communities better understand the potential benefits and drawbacks of their decisions by providing tools to analyze relationships between nature, health and well-being, and the economy.

Performance Challenges

Implementation of Executive Order on Improving Chemical Facility Safety and Security

Implementing activities related to the "Improving Chemical Facility Safety and Security" Executive Order includes addressing the capacity and resources for state, tribal, and local preparedness organizations. Assisting these organizations with chemical incident preparedness involves addressing thousands of facilities of many types with hundreds of different chemicals. These facilities are often located in communities where funding is scarce and organizational structure of local emergency management organizations is often in a state of flux. EPA will focus on leveraging these resources by working with State Emergency Response Commissions and Tribal Emergency Response Commissions to develop online training on key requirements under the Emergency Planning and Community Right-to-Know Act. EPA will also develop guidance and training for Local Emergency Planning Committees and Tribal Emergency Planning Committees to reinforce their authorities, roles, and responsibilities and identify barriers to meet their requirements for development and implementation of local emergency response plans.

CHEMICAL FACILITY SAFETY OUTREACH

Region 7 conducted extensive chemical facility safety outreach in FY14, reaching thousands of agricultural community members and emergency responders. These efforts included:

- Posting a video on Region 7's Facebook page on the need to enhance communications between emergency responders and owners/operators of hazardous chemical storage facilities.
- Partnering with the Missouri Emergency Response Commission, OSHA, and DHS to conduct workshops on safely handling ammonium nitrate and other potentially hazardous agricultural chemicals.
- Designing and presenting two-day long webinars on the Chemical Accident Prevention Provisions (also known as the Risk Management Program).
- Partnering with the Fertilizer Institute and other non-profit organizations to help agricultural retailers with their risk management plans, required under the chemical accident provisions of the Clean Air Act.
- Addressed participants at the 2014 Kansas Local Emergency Planning Committee Conference on the requirements of Executive Order 13650, Improving Chemical Facility Safety and Security, and building capacity for increasing chemical facility safety locally.
- Conducted information sessions with eight state Emergency Response Commissions and 24 Local Emergency Planning Commissions on potential changes in chemical facility safety regulations and requirements.

STRATEGIC 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.

Preventing contamination and preserving critical resources is vital to creating healthy and vibrant communities and ecosystems. EPA, in partnership with states, currently oversees and manages a variety of programs that manage hazardous waste, prevent potentially dangerous releases, and promote approaches to change the way our society protects the environment and conserves our resources for future generations in a sustainable manner. These efforts support the Agency's cross-agency strategy for "Working Toward a Sustainable Future."

Summary of Progress

The long-term vision of this objective is to prevent accidental releases that contaminate land, air, and water and can adversely affect human health, and to change the way our society thinks about materials and their associated environmental impacts. Through a Sustainable Materials Management (SMM) approach, EPA is helping to change the way our society protects the environment and conserves resources for future generations. Building on the familiar "Reduce, Reuse, Recycle," concept, SMM aims to reduce negative environmental impacts across the life cycle of materials, from resource extraction and manufacturing to use, reuse, recycling, and disposal. SMM approaches can result in lower energy use; more efficient use of materials; more efficient movement of goods and services; water conservation; and reduced volume and toxicity of waste. While EPA is striving for SMM, EPA works to ensure that when materials reach the true end of life, they are disposed of properly and safely.

In FY 2014, EPA continued to make progress toward the strategic goals that advance this vision. Specifically, EPA continued to make significant progress developing and implementing a targeted SMM program centered on three challenge areas: responsible management of used electronics, sustainable food management, and reducing the environmental footprint of the federal government. Furthermore, the Agency completed a methodology to evaluate the potential uses of coal combustion residues (CCR), commonly known as coal ash, and applied this methodology to the two most common beneficial uses of CCRs—uses in concrete and wallboard. Reusing coal ash in a product replaces virgin raw materials removed from the earth, thus conserving natural resources. Not only were these products useful to ensure that reuse of CCRs is appropriate but they can be valuable tools for EPA, states, and other stakeholders in evaluating future beneficial uses of industrial materials moving the science and practice of beneficial use forward.

In FY 2014, EPA also issued the E-Manifest One-Year Rule to authorize the use of electronic hazardous waste manifests. This allows the current process (which requires paper forms) to be streamlined, greatly reducing the millions of paper manifests produced each year. EPA also completed an Agency-wide plan to provide solid waste management capacity assistance to Tribes that promotes the development and implementation of integrated waste management plans and describes how EPA will prioritize its resources to maximize environmental benefits. The Plan

implements the recommendations made by a March 2011 EPA Office of Inspector General Evaluation Report, *EPA Needs an Agency-Wide Plan to Provide Tribal Solid Waste Management Capacity Assistance*.

Finally, given that preventing underground storage tank (UST) releases is the best way to ensure that our communities are clean and safe, and also prevent sites from being abandoned, the Agency also engaged in rigorous UST release prevention efforts—as shown by the 2014 performance results for the two UST prevention measures. States have successfully implemented the new tools from the Energy Policy Act of 2005: requiring all new tank systems have secondary containment; using the new delivery prohibition enforcement tool; providing an annual "public record" for their tanks programs; and ensuring all operators are trained. Since the increase in frequency of tank inspections, compliance rates have increased to 71.6 percent—a 5.6 percent increase since FY 2009—and the number of new releases is generally trending downward.

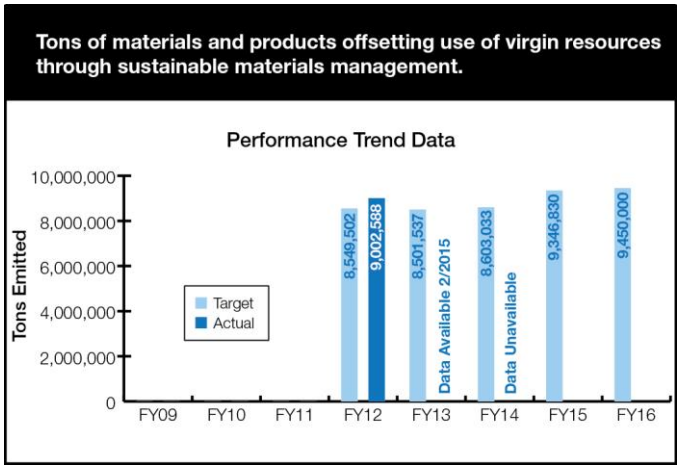
EPA Welcomes NCAA Final Four and Sustainability to Texas

EPA organized Educational Outreach and Food Recovery for the National Collegiate Athletic Association (NCAA) Final Four in Texas. During the events, EPA worked with two nonprofit organizations—Rock and Wrap It Up! and Food Source DFW—to facilitate food recovery at AT&T Stadium and the Kay Bailey Hutchison Convention Center. The partnership resulted in 2,800 pounds of leftover food delivered to homeless shelters. As a result, the Kay Bailey Hutchison Convention Center has established a program to provide leftover edible food from catered events to the nearby Dallas Life Shelter and has enrolled in the Food Recovery Challenge. Reducing, recovering, and recycling food at sporting events decreases environmental impacts by reducing the waste generated by large-scale food disposal and saving the energy required to dispose of that food.

FY 2014 Performance Accomplishments

Use of Virgin Resources Offset Through SMM

EPA continues to make significant progress developing and implementing a targeted SMM program centered on the three challenge areas. Achievements in FY 2014 include preventing food waste through the Food Recovery Challenge, with participants diverting 375,000 tons of food from landfills; diverting more than 220,000 metric tons of end-of-life electronics through EPA's Electronics Challenge; and reducing the environmental footprint of more than 400 federal facilities through the Federal Green Challenge by diverting 523,000 tons of waste from landfills, saving taxpayers an estimated $42 million.



These efforts support the associated strategic measure: by 2018, increase by 500,000 tons the amount of virgin materials that were offset by the reuse or recycling of waste products through the use of SMM.

In FY 2014, EPA reported the actual FY 2012 results—over 9.0 million tons of virgin materials offset. Given this success from the first round of reporting, EPA increased FY 2015 and FY 2016 targets to 9.347 million and 9.450 million tons respectively. The results for FY 2013 will be available in the spring of FY 2015; EPA anticipates exceeding the existing target of 8.5 million tons.

PACIFIC SOUTHWEST FEDERAL GREEN CHALLENGE

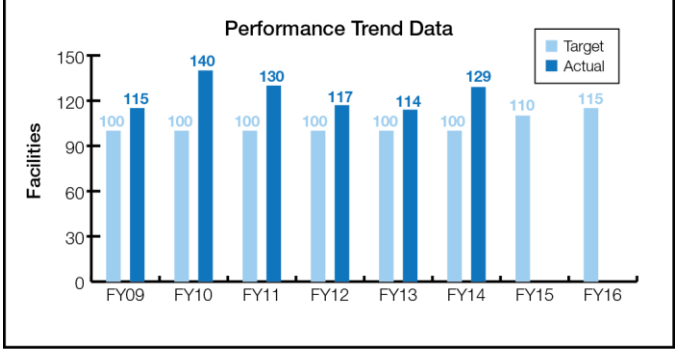
EPA's Pacific Southwest Region recruited and retained 63 Federal Green Challenge participants. The Green Challenge program encourages and recognizes participants for outstanding efforts in conservation and resource recovery in the target areas of waste, electronics, purchasing, water, energy, and transportation. Collectively, the area participants:

- Conserved 1.65 billion cubic feet of natural gas.
- Diverted 53,000 tons of materials from landfills to reduce greenhouse gas equivalents by 169,505 metric tons of carbon equivalent—equal to conserving 6.43 million gallons of gasoline.
- Purchased over 24 million sheets of 100% recycled paper to conserve over 1,800 40-foot trees.
- Saved $15.2 million in reduced waste disposal and utility costs.

More Hazardous Waste Facilities with New or Updated Controls

The Resource Conservation and Recovery Act (RCRA) permitting program is a core programmatic effort for protecting human health and the environment in communities that host RCRA facilities, and for ensuring compliance with waste management standards consistent with the proper handling and disposal of hazardous wastes. Preventing releases from RCRA facilities by issuing and maintaining permits also provides cost savings, as a typical RCRA corrective action to address a release into the environment from mismanaged wastes can easily cost $100,000 or more. EPA measures program progress by reporting the number of RCRA hazardous waste facilities with new or updated controls completed each fiscal year, as seen in the graph below. This annual measure contributes to the long-term goal of 500 additional facilities described in the Agency's *FY 2014–2018 Strategic Plan*. In FY 2014, EPA completed 129 accomplishments, surpassing the target by 20 percent. Since FY 2009, due to EPA's work, 745 facilities received new or updated controls.

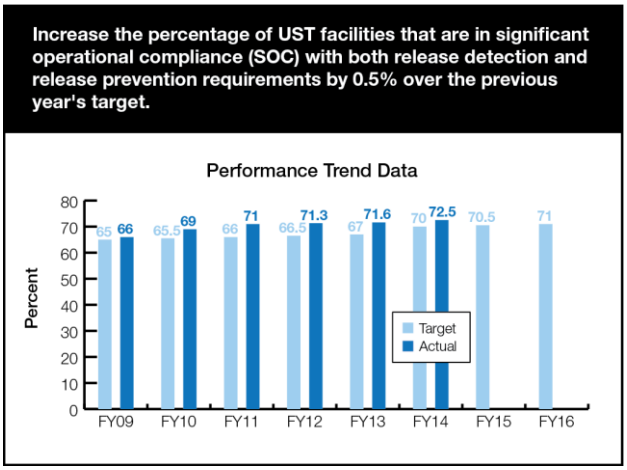
Number of hazardous waste facilities with new or updated controls.



To prevent future environmental contamination and to protect the health of the estimated 20 million people living within a mile of a hazardous waste management facility,[17] EPA and its partners issue, update, or maintain RCRA permits for approximately 20,000 hazardous waste units.

[17] Estimate drawn from the Office of Solid Waste and Emergency Response's Near Site Population Database, an internal EPA database that merges facility size and location information from RCRAInfo with population data, at the block and block group levels, from the U.S. Census Bureau's 2000 Census. The demographics were captured around

More UST Facilities in Compliance



In FY 2014, EPA increased to 72.5 percent the number of UST facilities that were in significant operational compliance, exceeding its goal of 70 percent. Since the enactment of the Energy Policy Act and the implementation of the requirement that USTs be inspected at least once every three years, EPA continues to see a steady increase in the number of UST facilities that comply with leak prevention and detection requirements. Since FY 2009, compliance rates have increased by 6.5 percent; the backlog of sites needing to be cleaned up is the lowest since 1990. The collaboration between EPA and states and tribes contributes to this success and supports the Agency's *A New Era of State, Local, Tribal, and International Partnerships* cross-agency strategy.

Performance Challenge

As noted in the accomplishment above, states report significant improvement in both compliance and release reduction since they began inspecting every tank at least once every three years. However, states have raised concerns that there might not be sufficient resources to enable them to meet the Energy Policy Act mandate to inspect tanks at least once every three years. In recent years, several states have been unable to maintain the three-year inspection rate, and in FY 2015 more are falling behind due to funding shortfalls.

the total number of facilities that have approved controls in place that result in the protection of this population (20 million people).

STRATEGIC OBJECTIVE 3: RESTORE LAND.

Prepare for, respond to accidental or intentional releases of contaminants, clean up, and restore polluted sites for reuse.

These programs reduce risks to human health and the environment by assessing contaminated sites, cleaning them up, and returning them to the community for economic or recreational use. In addition, EPA's Emergency Response and Removal program deploys resources to contain and respond to emergencies and stabilize hundreds of sites across the country per year. EPA's land cleanup programs track over 540,000 sites that cover slightly more than 23 million acres—slightly over 17 percent of all developed land in the United States.

Summary of Progress

Contaminated land can threaten human health and the environment, and potentially hamper economic growth and the vitality of local communities. Academic research has demonstrated that investment in Superfund cleanups reduces the incidence of congenital abnormalities by roughly 20–25 percent for those living within 2,000 meters (1.2 miles) of a site.[18] The long-term vision of this objective is to prepare and respond to emergencies and to clean up contaminated land so it can be safely reused or continue to be used, creating more resilient, healthy, and vibrant communities. EPA's land cleanup programs track over 541,000 sites and almost 23 million acres, many of which are located in economically distressed communities that suffer from disproportionate and adverse environmental exposures. Approximately 125 million people live within 3 miles of a Superfund or a RCRA Corrective Action site. Analyzing census data, EPA found that the population within three miles of these sites is more likely to be minority, low income, and linguistically isolated, and less likely to have a high school education than the U.S. population as a whole.[19] EPA and its partners have made over 453,000 contaminated sites Ready for Anticipated Use (RAU). Making sites RAU is one of the Agency's FY 2014–2015 priority goal. Once a property is remediated and redeveloped, the reuse or continued use,

COLORADO FLOOD RECOVERY

Immediately following the September 2013 Colorado flood, Region 8's first task was to address the hazardous materials releases. Response crews recovered 35 cars, 329 propane tanks, 259 refrigerators and freezers, 47 batteries, 198 drums, more than 9,000 containers, and many other items. Region 8 also stabilized and rebuilt the eroded slope of the tailings pile underlying Elysian Park, removed stream debris, and stabilized the stream channel through the town of Jamestown. A second cleanup site required Region 8 to stabilize and restore creek banks, saving Jamestown from being inundated by an estimated 25,000 cubic yards of mine remnants. Region 8's repair of these old cleanup sites and its response to the dangerous flooding provided critical support that the counties needed to recover from the storm.

[18] Currie, Janet, Michael Greenstone, and Enrico Moretti 2012. "Superfund Cleanups and Infant Health." *American Economic Review,* 101 (3):435–441.

[19] U.S EPA, Office of Solid Waste and Emergency Response Estimate. 2014. Data collected include: (1) site information as of the end of FY 2011 from CERCLIS and RCRAInfo; and (2) census data from 2007–2011 American Community Survey.

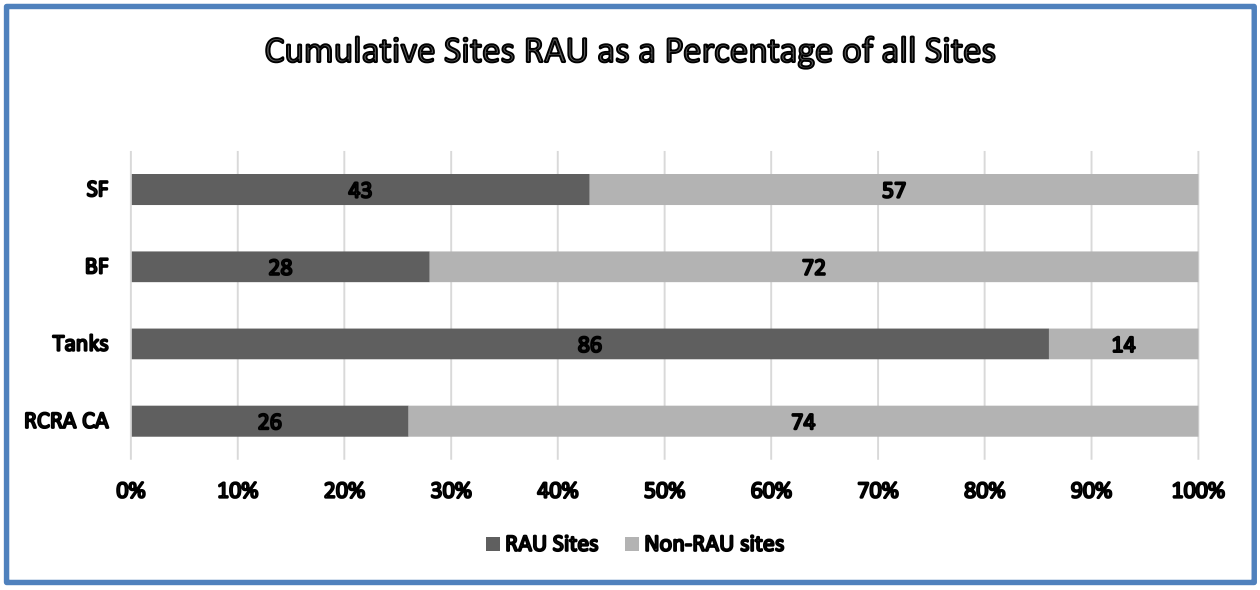
may result in new income to the community in the form of taxes, jobs to local residents or provides recreational or other services to make the community a better place to live. A study found that property values within three miles of sites where Superfund cleanups were completed increased approximately 20 percent.[20]

Overall in FY 2014, EPA achieved 14 of the 20 measures in this objective, with significant challenges for the Superfund program measures. The various reasons for missing the targets are described below. EPA expects continued challenges for the Superfund Remedial Program in the next few years and will continue to implement the Superfund Program Review, leverage special accounts, and pursue other strategies to drive performance.

FY 2014 Performance Accomplishments

FY 2014–2015 Agency Priority Goal

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



In FY 2014, 11,161 sites were made RAU, exceeding the FY 2014 interim milestone of 9,685 sites. To meet the overall priority goal of 18,970 sites RAU for the two-year time period, EPA will need to report 7,808 sites in 2015, which is less than the FY 2015 target of 9,285. EPA's Superfund, RCRA corrective action, leaking UST, and Brownfields cleanup programs all contribute to this priority goal. This measure is met when the responsible local, state, or federal agency determines that cleanup goals and engineering and institutional controls have been implemented for the media that affects current and reasonably anticipated future use and human exposure is under control. It is an internal performance measure, not an indicator of site-specific risk. The RAU measure is

[20] Gamper-Rabidron, Shanti, and Christopher Timmins. 2012. "Does the Cleanup of Hazardous Sites Raise Housing Values? Evidence of Spatially Localized Benefits." Duke Environmental Economics, Working Paper EE1203.

based on the information available when the determination is made, and may change if the site's conditions change or if more is discovered about the contamination or conditions at the site. Although each program establishes its own targets, the collective nature and combined overall target of the RAU priority goal offers an opportunity for EPA cleanup programs to work together to identify lessons learned, efficiencies, and opportunities to advance site cleanup.

Independent research indicates that cleaning up land so that it can be put to productive use provides many benefits to the community, including reduced morbidity and mortality risks, preservation of land, and increased property values.[21,22,23] At the end of FY 2014, there were 453,018 sites that were made RAU.

LOWER PASSAIC RIVER CLEANUP

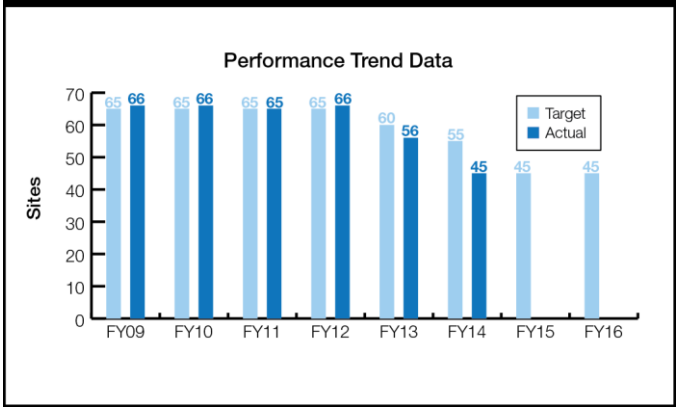
In April 2014, Region 2 announced the highest dollar volume plan proposed in Superfund history – the cleanup of the lower Passaic River in New Jersey. The Passaic, often described as one of the most polluted water bodies in the nation, is the victim of a century of industrialization and development. Its sediments are severely contaminated with dioxins, polychlorinated biphenyls, mercury, lead and other metals, as well as pesticides and other harmful chemicals.

Members of Congress and the acting mayor of Newark joined EPA Regional Administrator Judith Enck in announcing the removal of nearly 4.3 million cubic yards of tainted sediment and the capping of another 5.4 million cubic yards of sediment at an estimated cost of more than $1.7 billion.

FY 2014 Performance Challenges

Superfund Remedial Program

Number of Superfund sites ready for anticipated use site-wide.



The EPA's Superfund Remedial program protects the American public and the nation's resources by assessing and cleaning up some of the most contaminated sites in the United States. These actions protect and restore the nation's precious and limited groundwater and surface water resources. In addition, some construction activities help to build, replace, or sustain critical components of the nation's infrastructure (i.e., water, transportation, and recreation). The human health benefits of remediating contaminated sites include reduced mortality and reduced morbidity risk from asthma, cancer, birth defects, adverse reproductive or developmental disorders, and other illnesses or injuries. For example, elevated blood-lead levels can result in irreversible neurological deficits in young children (including lowered intelligence, attention-related behavioral problems, and poor academic achievement). In 1997, blood lead levels of children in Ottawa County and Tar

[21] Howland, Marie. 2007. "Employment Effects of Brownfields Redevelopment, What Do We Know from the Literature?" *Journal of Planning Literature*, 22:91–107.
[22] Currie, Janet, Michael Greenstone, and Enrico Moretti 2012. "Superfund Cleanups and Infant Health." *American Economic Review, 101 (3):435-441.*
[23] Gamper-Rabidron, Shanti, and Christopher Timmins. 2012. "Does the Cleanup of Hazardous Sites Raise Housing Values? Evidence of Spatially Localized Benefits." Duke Environmental Economics, Working Paper EE1203.

Creek, Oklahoma, were estimated to be 21.5 percent and 12.61 respectively. Following Superfund cleanup and education activities, 0 percent of children in these areas were showing elevated levels by 2013. Site cleanup can also be a significant economic driver. For 450 sites with available data, those sites now have approximately 3,470 operating businesses that generate annual sales over $65.1 billion and employ over 89,000 people, who earn a combined income of $6.0 billion.[24]

The Superfund Remedial program reports its activities and progress toward long-term human health and environmental protection via six performance measures that encompass the entire cleanup process. In FY 2014, the Superfund Remedial Program missed its national targets for four of its measures: Net number of sites with human exposures under control (achieved nine of its target of 10); number of sites with remedy construction completed (achieved eight of its target of 15); net number of sites with contaminated groundwater migration under control (achieved 11 of its target of 15); and net number of sites ready for anticipated use site-wide (site-wide RAU) (achieved 45 of its target of 55). In FY 2015, the program is reducing its targets for all four of these measures.

There are various factors contributing to missing the FY 2014 targets. The discovery of new exposure pathways during cleanup efforts (such as, vapor intrusion) moved sites to "Not Under Control" and posed challenges for site completion. The implementation of updated cleanup standards and/or improvements in sampling techniques increased the number of sites with unacceptable exposure pathways. Many of the remaining sites are large, complex, and technically challenging and require many years to bring them "Under Control" and achieve Construction Completion and Site-wide RAU. Finally, resource constraints have slowed some construction projects and prevented initiation of other projects impacting both the Construction Completion and Site-wide RAU measures.

The Superfund Remedial Program has undertaken a comprehensive review of its operations to identify ways to continue effectively protecting human health and the environment in the face of diminishing resources. The Remedial Program will continue to implement the technical and program management improvements recommended in this review so they are incorporated into the normal business practices of the program.

[24] For more information on Redevelopment Economics and in depth case studies please use the link below. http://www.epa.gov/superfund/programs/recycle/economicimpacts.html.

STRATEGIC OBJECTIVE 4:

STRENGTHEN HUMAN HEALTH AND ENVIRONMENTAL PROTECTION IN INDIAN COUNTRY.

Support federally recognized tribes to build environmental management capacity, assess environmental conditions and measure results, and implement environmental programs in Indian Country.

Under federal environmental statutes, EPA is responsible for protecting human health and the environment in Indian Country. The relationship between the U.S. government and federally recognized tribes is unique: we work closely with tribes on a government-to-government basis to ensure that environmental protection is being achieved across the country and that we work in true partnership with tribal leaders to fulfill our mission. EPA's 1984 Indian Policy provides the framework for EPA's relationship with federally recognized tribes and identifies the mechanisms EPA and tribes use to implement federal environmental laws in Indian Country. Building on the long-standing Indian Policy principles, EPA carries out the work under this objective through the implementation of federal environmental programs in Indian Country, building tribal capacity through the Indian Environmental General Assistance Program (GAP), and considers tribal interests in carrying out its programs through its Policy on Consultation and Coordination with Indian Tribes.

Summary of Progress

The EPA, in consultation with the Office of Management and Budget, has highlighted this objective as a focus area for improvement. Overall, progress is being made in discrete areas to protect human health and the environment in Indian Country; however, we continue to face internal and external challenges to protecting environmental and human health on tribal lands. For example, many tribal environmental departments lack capacity to regulate pollution, are often understaffed, and face unique jurisdictional and institutional challenges. Although core tribal capacities are being maintained (i.e., environmental presence), needs in Indian Country continue to grow in number and diversity. The majority of tribes are not implementing EPA-authorized regulatory programs and EPA's ability to fully implement programs on behalf of tribes remains a challenge.

EPA's national tribal programs and regional offices report insufficient staff resources for EPA to conduct the type of environmental technical assistance, oversight, and program implementation likely needed in Indian Country. There is general recognition that tribal governments' requests for grant dollars to implement programs far exceed the resources available.

In FY 2014, after internal discussions about the challenges associated with this objective, EPA determined that it should conduct a comprehensive needs assessment to better understand the scope and breadth of EPA's work in Indian country. Upon completion of such an assessment, EPA can determine resource needs to ensure compliance and environmental protection in Indian country. Such an assessment is a multi-year effort, requiring cross-agency participation. In FY 2015, EPA will develop some foundational information to inform what resources and level of effort will be needed to conduct such an assessment. Examples of information being developed include

identifying the scope of database changes that would be needed to fully integrate Indian country into key environmental data systems managed by EPA; and developing national guidelines for EPA's regulatory responsibilities in Indian country.

FY 2014 Performance Accomplishments

Tribal Capacity Building

EPA provides resources through grant funds and technical assistance for federally recognized tribes to create and maintain effective environmental program capacity. In FY 2014, EPA began to implement the revised Indian General Assistance Program "Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia" (GAP Guidance), which will strengthen tribal capacity building in FY 2015 and beyond.

Much of EPA's tribal programs work in FY 2014 focused on partnering with tribes to develop joint EPA-Tribal Environmental Plans (ETEPs) to reflect intermediate and long-term goals for planning, developing, establishing, and implementing environmental protection programs. Approved GAP work plans will contain capacity indictors that relate to goals identified in the ETEPs. The ETEPs help tribes and EPA identify mutual roles and responsibilities for addressing particular environmental priorities and issues, focusing on joint planning and priority-setting, increasing flexibility to direct resources to the most pressing environmental problems and measuring results. Long-term plans also provide a foundation for the shorter-term work plans for the Tribal GAP grants. In FY 2014, 39 tribes had developed ETEPs with EPA regional offices.

Tribal Consultation

In FY 2014, EPA continued to focus on implementation of its *Consultation and Coordination Policy with Indian Tribes.* Consultation is a process of meaningful communication and coordination between EPA and tribal officials prior to EPA taking actions or implementing decisions that may affect tribes. EPA's Tribal Consultation Policy has provided nationally consistent guidance for when consultation should be considered and an overall consistent process for early and meaningful tribal consultation.

In FY 2014, EPA completed 65 tribal consultations and initiated the tribal consultation process for 53 actions. Since 2011, the EPA has consulted with tribes on 245 actions. The majority of these actions pertain to EPA regulations and guidances (30 percent and 32 percent of consultation actions respectively). Another large part of consultation efforts focuses on EPA permitting (27 percent of consultation actions), as well as EPA response actions (6 percent) and tribal delegation (5 percent). EPA uses a Web-based database called the Tribal Consultation Opportunities Tracking System (TCOTS) to make information about upcoming and current EPA consultation opportunities publically available to tribal governments. The system also provides management, oversight, and a reporting structure to ensure accountability and transparency on EPA consultations with tribal governments.

FY 2014 was the second year that all EPA employees were required to take an online training to learn how the agency works effectively with Tribal governments. To support the Administrator's

theme of a new era of tribal partnerships, the agency continues to provide internal trainings to EPA employees to increase personnel awareness and understanding of EPA's Consultation Policy; including how and when it applies to their work within the Agency to ensure consistency in application of the policy.

Tribal ecoAmbassadors Program

Piloted in 2011, the Tribal ecoAmbassadors Program is the first program of its kind at EPA. The Office of International and Tribal Affairs is committed to strengthening relationships with our tribal partners, and to making a visible difference in tribal communities, and this program helps fulfill both priorities. Tribal college and university (TCU) professors serve as the principal investigators and work with a group of their TCU students, who earn college credit and a small stipend. Each Tribal ecoAmbassador was paired with an EPA scientist knowledgeable in the area of their proposal. The American Indian Higher Education Consortium, composed of the presidents of all 37 TCUs, serves as our partner and contractor.

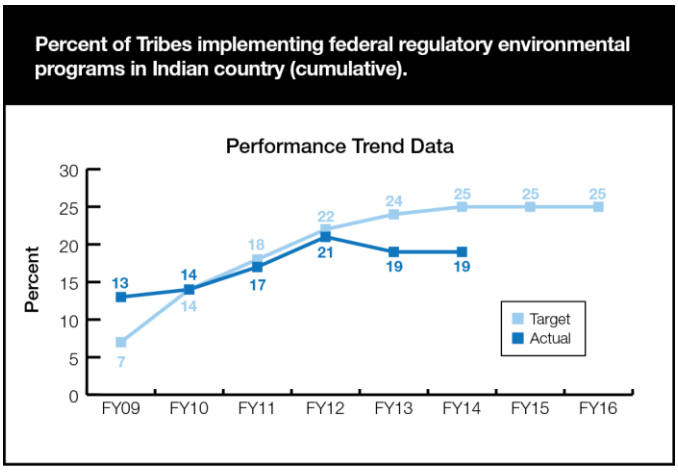
Through FY 2014, this program has given over 125 TCU students the opportunity to work with their professors and EPA scientists while solving environmental problems in their communities. Additionally, two transferable online courses, two lab courses, and two living laboratories are ready to share with other TCUs. In FY 2014, one of our Tribal ecoAmbassadors leveraged an additional grant from NASA using their work with solar energy analysis.

Over the past three years, EPA scientists have worked directly with the Tribal ecoAmbassadors and their students, resulting in 16 projects, including the creation of indoor air monitoring programs, curriculum on the collection of climate change data, and the creation of a recycled-material construction business. Within EPA, senior-level managers are using this program as a model for their work with TCUs; other external agencies and NGOs, including CDC, SBA, NOAA, U.S. Fish and Wildlife Service, the University of Colorado, Johns Hopkins University, and the University of Arizona have reached out to partner with the program.

FY 2014 Performance Challenges

Implementing Federal Regulatory Environmental Programs in Indian Country

The Percent of Tribes Implementing Federal Regulatory Environmental Programs in Indian Country performance measure represents federally recognized tribes that have the capacity to implement federal programs in a manner similar to a state (TAS) and/or receive funding to support EPA program implementation activities through "Direct Implementation Tribal Cooperative Agreements" (DITCAs). Tribes differ broadly in population,



culture, income, geography, economic development, environmental program management expertise, and priorities, making it increasingly difficult to assess how many more tribes will implement federal programs in the future. Many tribes also face legal barriers to federal approval for program implementation, and, as federal resources decline or remain stagnant and the cost of living continues to increase, the real dollars available to support capacity development and implementation shrink. Another challenge to this measure is that results do not reflect individual tribes' increasing capacities (e.g., when a tribe takes over more than one TAS approval, or is implementing program activities under a TAS approval and a DITCA).

To better measure progress in Indian Country, in FY 2014 EPA convened a workgroup to focus on tribal performance measurement. The group developed a framework for new performance measures, when applied across all media programs, will report on the status of tribes' capacity development and whether they are implementing federal environmental regulatory programs. These measures will be directly linked to the work funded under GAP and include a separate indicator to report on the number of regulatory TAS established by tribes. These new measures will demonstrate progress over time, along the continuum of program capacity development and implementation, recognizing that not all tribes will implement all federal programs. Ultimately, these results and efforts will help inform EPA as to where it needs to prioritize its direct implementation resources in Indian Country. In FY 2015, EPA is developing these new performance measures, consistent with the framework, issuing them as part of the FY 2017 budget.

Tribal Program Needs Assessment

Drawing from the FY 2014 strategic review, it is evident that EPA should conduct a comprehensive needs assessment of the work in Indian Country to ensure that protection of human health and the environment there is equal to elsewhere in the United States. Part of a larger planning process, a needs assessment will identify and measure current conditions—for example, the regulated entities in Indian Country, the regulated media in Indian Country (e.g., waterbodies), current and planned TAS for regulatory programs that have been provided to tribes, and current EPA direct implementation activities in Indian Country. Additionally, EPA plans to assess major data systems' capacity to track relevant information about regulated entities and activities (e.g., monitoring, permitting) in Indian Country and use these data to find current program implementation gaps. The goal of this multi-phased approach is to clearly identify problems, prioritize issues, and address the gaps in environmental protection in Indian Country.

Conducting a program evaluation to quantify the unaddressed environmental regulatory issues in Indian Country, including identifying these gaps in environmental protection, will be a tremendous undertaking. Results from the evaluation may require EPA to consider options for realigning its resources to prioritize and address the highest environmental needs in Indian Country.

Strategic Goal 4:

ENSURING THE SAFETY OF CHEMICALS AND PREVENTING POLLUTION

Goal 4 at a Glance

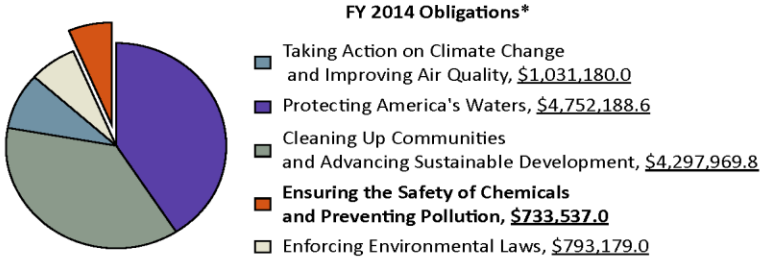
ENSURING THE SAFETY OF CHEMICALS AND PREVENTING POLLUTION

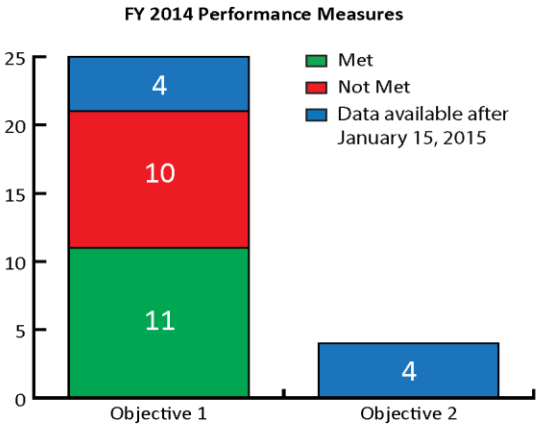
Reduce the risk and increase the safety of chemicals and prevent pollution at the source.

FY 2014 Performance Measures

Met: 11 Not Met: 10 Data Unavailable: 8

(Total Measures: 29)





Strategic Objective Overview	FY 2014 Obligations*	% of Goal 4 Funds
Objective 4.1: Ensure Chemical Safety. EPA is making significant achievements in chemical assessment and online public access, along with progress in additional areas as new chemical review, chemical risk management, review of existing CBI cases. EPA is advancing the use of ToxCast high-throughput screening data and continues to reduce the risk of lead through outreach and certification programs. Challenges included statutory constraints affecting chemical assessment, and the sheer number of chemicals in commerce for which data are lacking.	$676,964.2	92%
Objective 4.2: Promote Pollution Prevention. EPA is achieving significant environmental benefits through the development of P2 solutions (greener/leaner/safer chemicals, technologies, and practices) and promoting increased use of those solutions (e.g., increased institutional and consumer purchasing of greener products; increased industrial application of greener technologies and practices). P2 strategies are key elements of EPA's approach to achieving a sustainable future.	$56,573.1	8%
Goal 4 Total	**$733,537.3**	**100%**

*All figures in thousands

EPA Contributing Programs

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

STRATEGIC OBJECTIVE 1:
ENSURE CHEMICAL SAFETY

Reduce the risk and increase the safety of chemicals that enter our products, our environment, and our bodies.

EPA's chemical safety programs are at the forefront of its efforts to advance a sustainable future. Chemicals are often released into the environment as a result of their manufacture, processing, use, and disposal, and people are exposed to chemicals in their homes, where they work and play, and in their use of products. The Agency uses a variety of approaches to ensure chemical safety, including review of new chemicals before they enter commerce and, for the tens of thousands of existing chemicals already in commerce, obtaining and making public chemical health and safety information, using that information to screen and assess chemical risks and chemical alternatives, and taking risk management action to eliminate or reduce identified risks.

Summary of Progress

EPA is making significant achievements in chemical assessment and online public access, along with progress in additional areas such as new chemical review, chemical risk management and review of existing Confidential Business Information (CBI) cases. Challenges include statutory constraints affecting chemical assessment and the sheer number of chemicals in commerce for which data are lacking.

The Endocrine Disruptor Screening Program (EDSP) activities include the preparation and sending of test orders, review of responses to test orders and other scientifically relevant information, analysis of Tier 1 data, and creation of Data Evaluation Records. Some activities address challenges associated with reaching Weight of Evidence (WoE) determinations for chemical, including the importance of having standard evaluation procedures, data evaluation templates, and data entry spreadsheet templates; requesting copies of cited literature as part of 90-day test order responses; collecting and organizing all relevant Part 158 data during the 90-day responses; and staff experience.

In FY 2014, EPA's pesticides program exceeded its FY 2014 goals for docket openings and work plan completions, demonstrating its commitment to meeting the October 1, 2022 mandated completion date for the first 15-year cycle of registration review. The pesticides program also identified some challenges such as compliance with the Endangered Species Act (ESA), National Academies of Science (NAS) recommendations implementation, and the challenges posed by lawsuits and petitions. By identifying these challenges, the agency can better focus on achieving established goals while working to resolve them. The NAS recommendations concerning ESA consultation between EPA, Fish and Wildlife Service, and National Marine Fisheries Service are being piloted on select chemicals. Any unexpected issues will be evaluated with our partners with the goal of fully incorporating the NAS report[25] recommendations in FY 2015Likewise, we continue to work to resolve concerns raised in lawsuits and petitions.

[25] http://www.epa.gov/oppfead1/endanger/2014/esa-reporttocongress.pdf.

Meeting established goals and targets is a program priority; to that end, program management holds regular planning meetings to assess progress, discuss issues and their resolutions, and plan for more difficult/involved chemicals and how to deploy available resources to best meet the tasks at hand, while considering the additional resources that may be needed. Senior management and the appropriate program staff meet quarterly to review progress toward the strategic goals, the priority goal, key performance indicators, and annual measures issues that may affect goals and targets are raised at these meetings. Resolutions for these issues have included adopting workflow efficiencies, planning ahead to handle more challenging chemicals, and brainstorming measures that could best capture the accomplishments of the program.

Key FY 2014 Performance Accomplishments

FY 2014–FY 2015 Agency Priority Goal

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

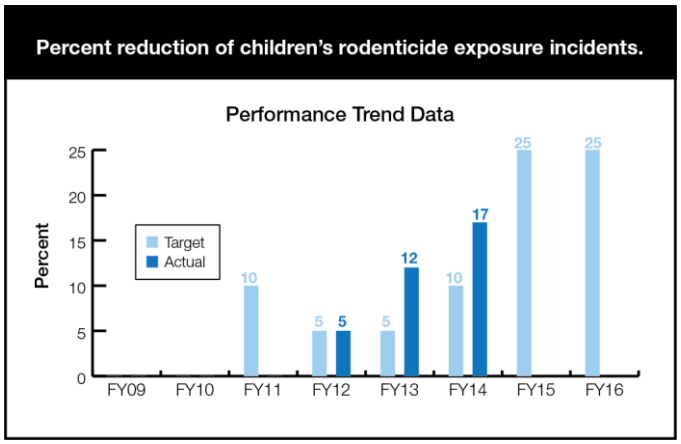
During FY 2014, EPA made progress in assessing the risks for pesticides and other commercially available chemicals. The agency continues to assess the safety of all active pesticide ingredients and ensure that pesticide products used across the country are safe for human health and the environment. The program has dedicated resources to ensure a robust pipeline of dockets and work plans, so that the agency can continue to keep pace to meet the FY 2015 risk assessment target and show its commitment and progress toward its statutory mandate to complete the first 15-year cycle of registration review by October 1, 2022.

The TSCA Work Plan was created in FY 2012; its implementation has evolved with the first set of draft risk assessments in 2013 and with problem formulation experience on individual chemicals and chemical clusters. In FY 2014 EPA focused on finalizing the first set of TSCA risk assessments in 28 years, with a better understanding of the landscape of data available or needed, and continued assessments begun in 2013 for several challenging flame retardant clusters involving interagency consultation and further cancer analysis.

WoE determinations and EDSP program decisions for additional chemicals are in progress, but not yet completed. WoE determinations have proven to be more complex than originally anticipated. EDSP decisions for another 52 chemicals on the first list for screening are now targeted for completion in FY 2015.

Selected Key Performance Results

Reduction in Children's Exposure to Rodenticides



EPA aims to reduce rodenticide incidents involving younger children and infants by requiring that new rodenticide products be placed in tamper-resistant bait stations. In support of this effort, the Office of Pesticide Programs initiated regulatory action to cancel and remove non-compliant rodenticide products from the consumer market. These planned actions were met with a legal challenge, which concluded with the Agency achieving voluntary cancellation of the products in question. EPA expects to see continued reduction in incidents involving children under six.

Lead RRP Active Certified Firms

EPA's strategy to reduce risks from lead-based paint in homes and child-occupied facilities has, as a major focus, the implementation of the Agency's RRP rule, which went into effect in April 2010. This regulation requires that firms performing RRP activities that disturb lead-based paint in homes or child-occupied facilities built before 1978 be certified by EPA (or an EPA-authorized state) to conduct RRP work, use certified renovators trained by EPA-approved training providers, and follow lead-safe work practices. These work practices are designed to protect children and others from harmful exposure to lead-based paint that may be disturbed in the course of RRP work.

As of the close of FY 2014, EPA has determined that 139,702 firms had active certification in place to perform lead-safe RRP work under the RRP rule, meeting the FY 2014 annual performance target for this measure. The total number of firms certified to conduct RRP work using lead-safe methods continues to increase steadily. Available information suggests that there are enough certified firms to meet current consumer demand.

Ensuring Online Public Access to TSCA Chemical Information

EPA's online ChemView database is designed to enhance public access to health and safety data on chemicals regulated under TSCA. This system is a key element of the Agency's efforts to address concerns about the lack of basic information on the exposure, hazards, and risks of chemicals. ChemView allows users to view information EPA receives and develops in both summary form and in detail, and includes links to documents submitted to EPA and regulatory documents and scientific assessments developed by EPA, significantly enhancing access to chemical information in a one-stop shop.

In FY 2014, EPA expanded the content and improved the functionality of ChemView, which provides public access to health and safety data on chemicals regulated under TSCA. Added content in FY 2014, which brought the total number of chemicals in the database to nearly 10,000, included:

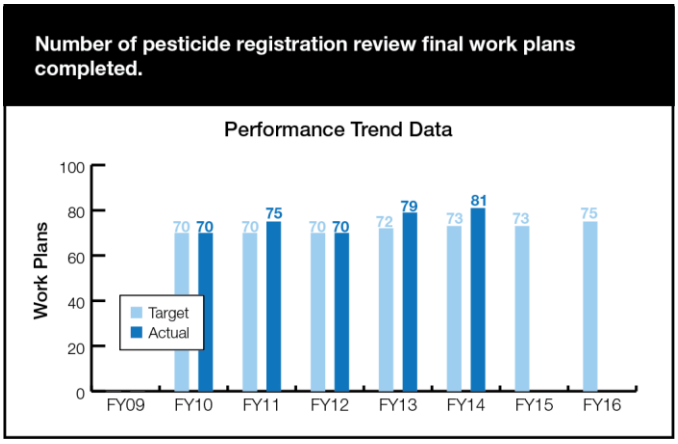
- 244 consent orders (the first time consent orders are in templates and posted).
- 72 test rule chemicals (for a total of 162, including data adequacy reviews).
- Over 1,000 new chemical Significant New Use Rules (SNURs), covering over 1,700 new chemicals.

Functional improvements included:

- Introducing accessibility to the Toxics Release Inventory (TRI) Program's Pollution Prevention tool for tracking source reduction and safer waste management practices from the ChemView user tab.
- Providing the functionality to search by Significant New Use Notices for SNUR-related information.
- Developing the administrative tools to quickly upload and provide information for public display.

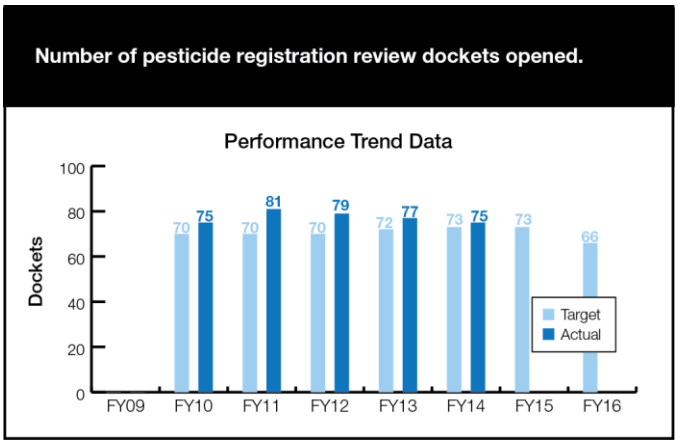
Furthermore, the Agency has made a customer satisfaction survey available to stakeholders to gather information on how the Agency can improve the functionality, content, and appearance of ChemView.

Annual Number of Pesticide Registration Review Dockets and Workplans Opened



EPA initiates a registration review by establishing a docket for a pesticide registration review case and opening the docket for public review and comment. The Agency publishes a *Federal Register* notice that announces the availability of the docket and provides a comment period of at least 60 days. Anyone may submit data or information in response. EPA will consider information received during the comment period in conducting a pesticide's registration review and complete a final work plan, which explains what information EPA has on the pesticide and the anticipated path forward for the remainder of registration review. By sharing this information in the docket, EPA anticipates that the public will be better able to see what types of new or available data or other information would be helpful as the Agency moves toward a decision.

Through registration review, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. In this way the Agency is ensuring that all registered pesticides do not cause unreasonable risks to human health, workers, or the environment when used as directed on product labeling. The scope and depth of the Agency's reviews are tailored to the circumstances, so registration reviews are commensurate with the complexity of issues currently associated with each pesticide.



By exceeding the number of planned docket openings and final workplans in FY 2014, EPA is demonstrating its commitment and progress toward its statutory mandate to complete the first 15-year cycle of registration review by October 1, 2022. Input received during the comment periods will help improve the accuracy and reliability of the risk assessments planned during registration review. This will allow EPA to fully assess the safety of all pesticide active ingredients and make sound regulatory decisions to ensure the continued safe use of pesticides.

Assessment of TSCA Work Plan Chemicals

EPA is carrying out its plans to assess TSCA Work Plan Chemicals identified in March 2012 for review and prospective risk management action if warranted. Considerable progress has been achieved with the release of final risk assessments for four Work Plan Chemicals in FY 2014 (exceeding the agency target of three) and further assessment work in progress.

The four Work Plan Chemicals assessed in FY 2014 were TCE, DCM, ATO, and HHCB. Following public comment and peer review of this first series of assessments, EPA has made further process improvements to structure and systematize problem formulation of subsequent work plan assessments. In response to findings of risk for both TCE and DCM, EPA has commenced dialogue with stakeholders to explore safer alternatives and risk reduction approaches, including both voluntary and regulatory actions. (The assessments of ATO and HHCB indicated low risks associated with the uses reviewed for those chemicals.) Additionally, in FY 2014, the Agency released an updated list of TSCA Work Plan Chemicals, taking into account the latest information obtained through Chemical Data Reporting and the TRI.

The Agency conducted workshops with stakeholders regarding possible approaches to manage the risks identified in the first of the final assessments released in FY 2014 (for TCE), and completed assessments of safer alternatives for TCE. These prospective actions would be in addition to the multiple risk management actions taken by EPA under TSCA for potentially harmful chemicals, including finalization of 65 SNURs covering 90 new chemicals in FY 2014.

Chemical Safety for Sustainability Dashboards

EPA's chemical safety researchers used rapid, automated (high-throughput) chemical screening technology to evaluate over 1,800 high priority chemicals for potential toxicity. The innovative chemical screening technology tests for different types of toxicity such as reproductive and developmental effects, and cancer. In FY 2014, EPA launched a beta version of the interactive Chemical Safety for Sustainability Dashboards to improve user experience in accessing chemical data. Having rapid, automated predictions for toxicity and exposure provides EPA with the means for efficient risk-based prioritization of chemicals. This research is taking the steps to implement the National Academies of Science recommendations in the *Exposure Science in the 21st Century: A Vision and a Strategy* report and the *Toxicity Testing in the 21st Century* report and is the first regulatory application of the technology.

BOTE release

As the lead federal entity for responding to biological, chemical, and radiological contamination events, EPA plays a major role in preparing the nation to respond to acts of bio-terrorism. In February 2014, EPA announced the results of a multi-year project called *Bio-Response Operational Testing and Evaluation* (BOTE), a two-phase demonstration project to test and advance decontamination methods that can be used after anthrax spores have been released into a building. The results of this research will help provide state and local leaders, on-scene coordinators, waste managers and others with a guideline for effective decontamination in the event of a biological threat. Because BOTE included partnerships among several government agencies, the methods developed and lessons learned have been shared throughout the homeland security community, continuing to expand the impact of EPA research efforts.

Release of PARIS III

In 2014, EPA released PARIS III, or "Program for Assisting the Replacement of Industrial Solvents, version 3.0," designed to help any environmentally-conscious individual effectively and efficiently find better and greener solvent mixtures for many different common industrial processes. Aiming to reduce that practice, EPA researchers developed this free software tool to help companies find alternate chemical mixtures or solvents that still improve their industrial processes but are not as harmful to our environment.

Performance Challenges

EDSP's WoE Determinations

EPA's performance measure, Number of Chemicals for which Scientific Weight of Evidence Determinations have been completed, represents an intermediate step leading to EDSP decisions. It accounts for the number of scientific WoE and hazard characterizations completed; these hazard characterizations are based on the integrated scientific reviews of the Tier 1 data, in combination with other scientifically relevant information and existing toxicity information (e.g., 40 CFR part 158). Integrating these streams of data to ascertain a chemical's potential to interact with endocrine systems has proven more complex than originally anticipated. Therefore, the agency will complete

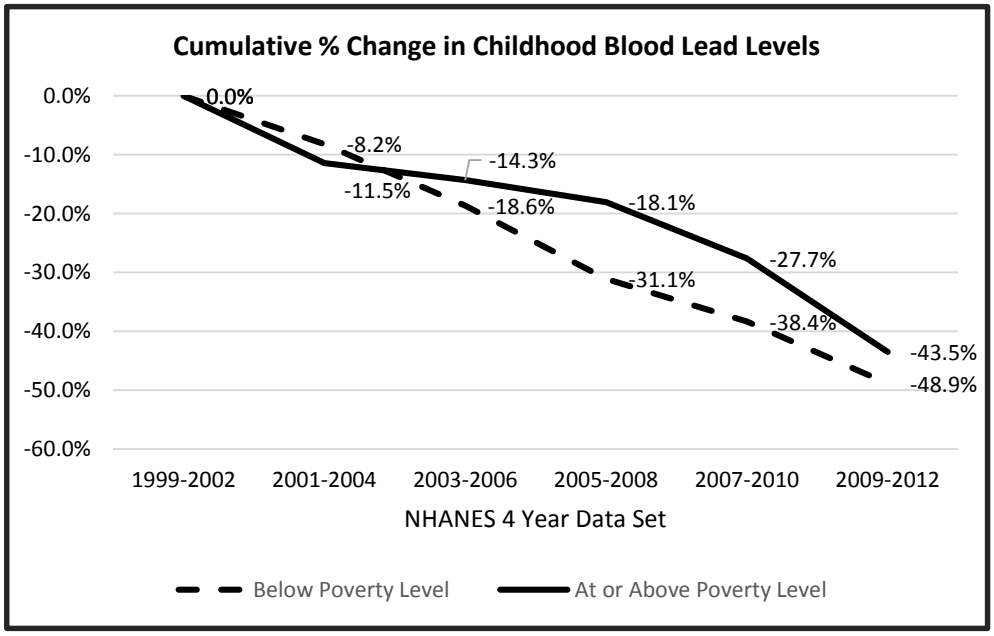
preliminary WoE determinations for 52 chemicals on the first list for screening and conduct a retrospective analysis and consistency check before finalizing the decisions. These decisions are now anticipated for completion in FY 2015.

Chemical Safety Work Hampered by TSCA Limitations

EPA's chemical safety work has been hampered for many years by widely recognized limitations in the extent of authority granted under TSCA. Both the General Accountability Office and EPA's Office of Inspector General have identified TSCA regulatory constraints as a key management challenge affecting the Agency's ability to regulate chemicals found to pose unreasonable risk to human health or the environment. Perhaps most significantly, TSCA limitations increase the difficulty of obtaining information needed to assess chemical hazard, exposure, and risk. EPA believes that statutory reform is needed to strengthen the tools available to increase confidence in the safety of chemicals in commerce. Until legislative action takes place, EPA is proceeding to the extent of its ability under current law to secure needed chemical data, implement chemical assessment work and, where indicated, take action to manage chemical risk.

Persistent Income-Related Disparities in Reducing Children's Blood Lead Levels

The NHANES survey data for 2009–2012 show that geometric mean BLLs decreased from the 2005–2008 value at a faster rate (31 percent) for non-low-income children than for low-income children (26 percent), increasing the income-related disparity. The EPA is assessing these data to determine if the underlying factors influencing these changes can be identified.



The NHANES data do indicate that BLLs among lower-income children have decreased substantially over time, nearly 50 percent cumulatively from the 1999–2002 geometric mean value (2.6 µg/dL down to 1.33 µg/dL). Thus, the persistent income disparity does not mean that lower-income children are failing to derive significant benefit from lead reduction efforts.

EDSP's Environmental Justice Activities

This activity was intended to broaden participation in environmental justice (EJ) awareness. During the July Scientific Advisory Panel (SAP), public comments from a well-recognized EJ scientist were entered into the pubic docket and other interested advocates in the EJ community provided suggestions/comments.

EPA identified several activities in FY 2014 to increase the incorporation of EJ or disproportionate impact considerations into EDSP and SAP activities. Public comments and scientific information reflecting EJ interests will help EPA decrease uncertainties and increase confidence in the scientific models that assess impacts on various demographic groups. Within the SAP, efforts are underway to expand outreach efforts within the EJ community to increase participation of scientists with EJ interests on FIFRA SAPs as ad hoc panel member experts, as well as to involve individuals and groups within the EJ community in the SAP evaluation process via public awareness of the Agency's activities.

Implementation of Endangered Species Act During Registration Review

EPA, the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and the U.S. Department of Agriculture (USDA) are continuing to develop—and work toward implementation of—interim scientific approaches for assessing the risks of pesticides to listed endangered species. Given this fact, and based on the recommendations from the April 2013 NAS report, current Registration Review preliminary risk assessments typically do not contain complete endangered species analysis that includes effects determinations for specific listed species or designated critical habitat.

Once the agencies have fully developed and implemented the scientific methods necessary to complete risk assessments for listed species and their critical habitats, these methods will be applied to subsequent analyses as part of completing Registration Review. In the meantime, EPA will conduct screening-level assessments for all taxa of non-target wildlife and plants that assume that listed species and designated critical habitats may be present in the vicinity of pesticide use. These screening-level assessments will allow EPA to focus its future evaluations on the types of species where the potential for effects exists once the scientific methods being developed by the agencies have been fully vetted.

STRATEGIC 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.

To advance pollution prevention (P2), EPA focuses on two key strategies: fostering the development of P2 solutions (greener/leaner/safer chemicals, technologies, and practices) and promoting increased use of those solutions (e.g., increased institutional and consumer purchasing of greener products; increased industrial application of greener technologies and practices). These strategies have demonstrated success in reducing the use of hazardous materials, energy, and water and reducing the generation of greenhouse gases (GHGs), while significantly increasing the use of safer chemicals and products and enabling businesses and governments to reduce their costs. These P2 strategies are key elements of EPA's approach to achieving a sustainable future.

Summary of Progress

With respect to fostering the development of new P2 solutions, significant accomplishments in FY 2014 included:

- Recognizing the FY 2014 Presidential Green Chemistry Award winners, including an award-winning display and lighting technology that could significantly reduce cadmium and toxic solvents and save the equivalent electricity consumption of 50,000 average American homes a year (over 600 million kilowatt-hours).
- Continuing to provide agency technical input for developing and promoting greener electronics and voluntary consensus standards for imaging equipment, televisions, computers, and servers, which will generate significant P2 results in future years as these products are purchased.

With respect to promoting increased use of P2 solutions, significant accomplishments in FY 2014 included:

- Convening the Green Chemistry Roundtable with Presidential Green Chemistry Award winners and other stakeholders, intended to increase the market penetration of green chemistry solutions.

Engaging with stakeholders and the public on possible label options for a redesigned Design for the Environment (DfE) logo intended to increase consumer awareness of the benefits of labeled products as well as consumer purchasing of such products. Expanding to a total of 27 states the Economy, Energy, and Environment (E3) program, through which EPA collaborates with five other federal agencies, states, and local communities to connect respective programs to deliver responsive, coordinated solutions in a manufacturing environment. The E3 program focuses on strengthening small to medium-sized American manufacturers, which represent the largest proportion of the manufacturing sector, and helps boost local economies to achieve sustainability goals. Nearly 200 additional E3 assessments were conducted in FY 2014.

The P2 program produced significant environmental benefits in FY 2013, indicating that the program will be able to achieve the strategic targets for reducing water use, GHG emissions, and hazardous materials and for increasing cost savings through pollution prevention. Due to regular lags in the data needed determine performance results, the P2 program's most currently available accomplishments associated with GPRA outcome measures are those achieved in FY 2013.

Key FY 2014 Performance Results

Environmentally Preferable Purchasing

The Environmentally Preferable Purchasing (EPP) program achieves significant environmental outcome results for the P2 program through its contribution to the development and promotion of voluntary consensus standards for environmentally preferable products. Recent efforts have focused on standards for greener electronics products such as computers, imaging equipment, televisions, and servers. By encouraging the purchase of these products by federal agencies, the EPP program reduces emissions of hazardous and non-hazardous materials from the manufacture, sale, and disposal of products. These products also deliver environmental benefits of reduced GHG emissions, especially through increased energy efficiency, which provides additional cost savings to manufacturers and consumers. Additionally, by promoting products with longer replacement cycles, the EPP program achieves lifecycle environmental benefits and promotes sustainability by avoiding the manufacture of replacement products.

In FY 2014, the EPP program provided technical input to efforts to update the Federal Acquisition Regulation (FAR) to require federal agencies to procure greener imaging equipment and televisions, in addition to computers. EPP program staff coordinated EPA technical input on the IEEE 1680.2 Standard for the Environmental Assessment of Imaging Equipment and the IEEE 1690.3 Standard for the Environmental Assessment of Televisions. EPP program staff also co-chaired the standard development working groups, and co-funded facilitation of these working groups. The addition of imaging equipment and televisions in 2013, and the amended FAR (updated June 2014) requiring federal agencies to procure greener imaging equipment and televisions, will lead to increased environmental results in FY 2015 and beyond. The EPP program is currently expanding its Electronics Environmental Benefits Calculator to quantify these results.

The program also continued in FY 2014 to bring the Agency's technical input to the development of new environmental performance standards for electronics. The program has been instrumental in developing a new standard for servers (expected to be finalized in 2015) and in the revision of the standard for computers. Program staff have also been involved with the development of a standard for mobile devices. In FY 2014, slates/tablets were added to the inventory of greener electronic products, which is expected to increase environmental results in FY 2015 and beyond.

The EPP program has also led the development of draft guidelines for assessing ecolabels and environmental performance standards. These standards were published as draft for public comment in FY 2014 and pilots will be conducted in FY 2015. These guidelines, once implemented, are expected to greatly enhance federal green purchasing by meeting the needs for clear guidance to purchasers for additional categories of products commonly purchased in the federal community.

Expanding the DfE Safer Product Labeling Program and Safer Chemical Ingredients List

The DfE program is continuing to make significant progress toward its FY 2018 strategic targets to recognize an additional 1,500 products under the Safer Products Labeling Program and list another 400 chemicals on the Safer Chemical Ingredients List. In FY 2014, the program recognized another 220 products and chemicals. The program is evaluating additional product categories for inclusion under the Safer Products Labeling Program, including personal care products and industrial/institutional categories, and adding new chemical categories for the Safer Chemical Ingredients List.

Additionally, in FY 2014 the program worked to develop a new logo for labeled products that will help consumers, businesses, and institutional buyers more easily recognize products that have earned the EPA Safer Product Label by meeting stringent health and environmental criteria. The program engaged with stakeholders in the chemical and product manufacturing industry, retailers, and environmental organizations in the development of the logo, and has sought public opinion on four draft logo proposals. EPA plans to launch the redesigned logo in FY 2015 in conjunction with an assessment of its effectiveness in influencing consumer knowledge and purchasing behavior.

Performance Challenges

Aggregating P2 Results

The P2 Program is currently experiencing a significant challenge in enhancing the transparency of and aggregating P2 results across the entire program, complicating the program's efforts to trace results back to their sources for purposes of validation. To address this, the program is developing the P2 GrantsPlus Database – a system that will allow regional offices to enter their grant and non-grant P2 projects, methodologies and results. It will also accommodate supporting documentation, and track when disaggregate results are updated in response to quality checking in headquarters. Aggregating results data will be much more efficient and transparent.

Strategic Goal 5:

PROTECTING HUMAN HEALTH AND THE ENVIRONMENT BY ENFORCING LAWS AND ASSURING COMPLIANCE

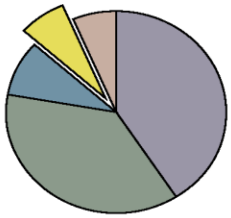
Goal 5 at a Glance

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.

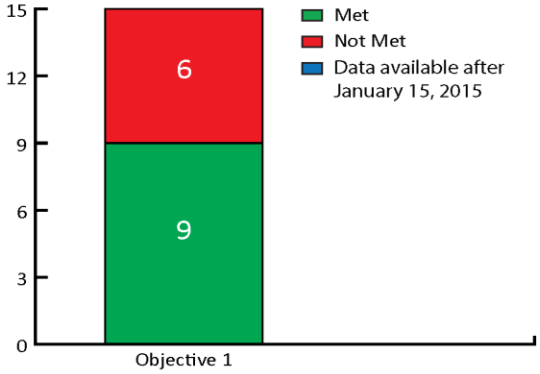
FY 2014 Performance Measures
Met: 9 Not Met: 6 Data Unavailable: 0
(Total Measures: 15)

FY 2014 Obligations*



- Taking Action on Climate Change and Improving Air Quality, $1,031,180.0
- Protecting America's Waters, $4,752,188.6
- Cleaning Up Communities and Advancing Sustainable Development, $4,297,969.8
- Ensuring the Safety of Chemicals and Preventing Pollution, $733,537.0
- **Enforcing Environmental Laws, $793,179.0**

FY 2014 Performance Measures



Strategic Objective Overview	FY 2014 Obligations*	% of Goal 5 Funds
Objective 5.1: Enforce Environmental Laws to Achieve Compliance. A wide range of activities enable EPA's enforcement and compliance offices to make progress towards this objective: applying new technology to better target inspections; focusing on cases that address the worst environmental problems, the highest risks, and significant noncompliance; and ensuring federal facility compliance and cleanup of Superfund sites.	$793,178.9	100%
Goal 5 Total	**$793,178.9**	**100%**

*All figures in thousands

EPA CONTRIBUTING PROGRAMS

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

STRATEGIC 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.

Vigorous enforcement to achieve compliance is critical to EPA's work to protect human health and the environment. EPA works with state, tribal, and territorial agencies as co-regulators to achieve compliance across the country. EPA will continue to focus federal enforcement on the most important environmental problems where noncompliance is a significant contributing factor and where federal enforcement attention has a significant impact; in 2014, this approach resulted in several landmark cases.

EPA focuses federal enforcement resources on high-impact cases using several means, including Next Generation Compliance, national enforcement initiatives (NEIs), and performance measures and goals. A wide range of activities enable EPA's enforcement and compliance offices to make progress toward strategic objective 5.1: applying new technology to better target inspections; focusing on cases that address the worst environmental problems, the highest risks, and significant noncompliance; and ensuring federal facility compliance and cleanup of Superfund sites.

Summary of Progress

Under this strategic objective, EPA has focused nationally on the worst environmental problems, highest risks, and most significant areas of noncompliance where federal enforcement can have a significant impact. The Office of Enforcement and Compliance Assurance (OECA) also uses injunctive relief and supplemental environmental projects as tools to achieve beyond-compliance results and benefit the public. For example, in FY 2013, EPA pursued justice for Gulf Coast residents through litigation of the *Deepwater Horizon* cases in coordination with the Department of Justice. Transocean Deepwater Inc. agreed to pay $1.4 billion in civil penalties, criminal fines, and court-ordered environmental projects for violating the Clean Water Act, as well as substantial injunctive relief to improve the safety of oil drilling practices, spill response, and preparedness. MOEX Offshore, LLC has agreed to pay $70 million in civil penalties and spend $20 million for supplemental environmental projects. BP Exploration and Production Inc. was sentenced to pay $4 billion in criminal fines and court-ordered environmental projects and the civil case against BP PLC continues. Since 2010, enforcement actions have reduced, treated, or eliminated about 7.3 billion pounds of pollution and required about $60 billion in injunctive relief and about $138 million in supplemental environmental projects.

OECA identifies and focuses on priority environmental risks and significant noncompliance problems through the NEIs. The six initiatives address some of the more complex pollution problems in our nation. To date, we have inspected approximately 59 percent of mineral processing facilities, addressed 92 percent of large combined sewer systems with untreated sewer overflows,

HIGH-IMPACT CIVIL AND CRIMINAL ENFORCEMENT CASES

Tonawanda Coke Corporation was ordered to pay a $12.5 million penalty and make $12.2 million in community service payments for criminal violations of the Clean Air Act and the Resource Conservation and Recovery Act.

P&W Waste Oil Services Inc. of Leland, North Carolina; CITGO Petroleum; and CITGO Refining and Chemicals Company LLP were sentenced to pay more than $2 million for illegal and dangerous chemical emissions from a refinery in Corpus Christi, Texas.

The Kerr-McGee Corporation and related subsidiaries of Anadarko Petroleum Corporation settlement has gone into effect (in FY 2015) and will provide more than $4.4 billion for cleanup at over 2,700 sites in 47 states, making it the largest recovery for the cleanup of environmental contamination in history.

Eastman Kodak Company committed to fund a trust with $49 million for cleanup at the Eastman Business Park site and the Genesee River.

SPT, Inc., agreed to put $3 million in a trust fund to clean up offshore contamination at Sparrows Point, Maryland.

inspected over 1,700 concentrated animal feeding operations, conducted over 2,600 energy extraction evaluations, evaluated over 1,700 air-toxic-emitting facilities, and controlled over 600 coal-fired electric utility units.

EPA has designed and is now implementing Next Generation Compliance efforts, which should yield: 1) regulations and permits with built-in compliance drivers; 2) more use of advanced emissions/pollutant detection technology; 3) a shift toward electronic reporting; 4) expanded transparency, which drives compliance; and 5) innovative enforcement approaches, such as fenceline monitoring and third-party certification/verification tools. As part of this work, EPA has trained hundreds of its staff and managers to design effective rules with built-in compliance drivers; developed rules that would require fenceline monitoring to provide emissions data; incorporated advanced monitoring technology into enforcement settlements; and proposed an electronic reporting rule for the National Pollutant Discharge Elimination System that would modernize environmental data reporting for thousands of facilities. To increase transparency, EPA has enhanced its Enforcement and Compliance History Online (ECHO) website, which allows the public to get information about the compliance record of over 800,000 facilities. EPA is also advancing other innovative projects in partnership with the states as part of the *E-Enterprise for the Environment* initiative.

To help municipalities meet their Clean Water Act obligations, EPA developed an integrated planning process that allows municipalities to optimize the benefits of their infrastructure improvement investments through the appropriate sequencing of work. This approach can also lead to more sustainable and comprehensive solutions, such as green infrastructure, that improve water quality and enhance community vitality. EPA has also developed tools to better target facilities for inspections and enforcement actions. For example, the Safe Drinking Water Enforcement Targeting Tool has helped to reduce by over 70 percent the number of public water systems with serious violations.

Key FY 2014 Performance Results

During FY 2014, federal enforcement focused on the most important environmental problems where noncompliance is a significant contributing factor, where federal civil or criminal enforcement actions can have a significant impact. Some important FY 2014 achievements that resulted from this focus are:

- Commitments in EPA enforcement cases to reduce, treat, or eliminate an estimated 1.2 billion pounds of pollution of air, water, pesticides, toxics, and hazardous waste pollution.
- Company investments of more than $9.7 billion in required actions and equipment to control pollution and redress harm from pollution, directly benefiting nearby communities.
- Agreements from companies to spend more than $17 million on supplemental environmental projects, which are projects that complement traditional fines and penalties to address harm to adjacent communities and the environment from illegal pollution.
- FY 2014 commitments from potentially responsible parties to spend more than $600 million cleaning up contamination at Superfund sites.
- Commitments to clean up 870 million cubic yards of contaminated soil and groundwater media as a result of concluded Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) corrective action enforcement actions.
- $163 million in criminal fines and restitution and civil penalties (administrative and judicial), and another $16 million in court-ordered environmental projects.
- A 95 percent conviction rate for criminal defendants and a combined total incarceration of over 155 years.
- EPA reviewed and commented on more than 300 draft and final Environmental Impact Statements as required by law, including several high-profile proposed federal actions.

High-Impact Civil and Criminal Enforcement Cases

Lowe's Home Centers agreed to implement a corporation-wide compliance program at 1,700 stores nationwide and will pay a $500,000 civil penalty due to violations of the Lead Renovation, Repair, and Painting Rule.

DuPont will pay a $1.275 million penalty and spend about $2.3 million as injunctive relief to complete required improvements to its safety and emergency response processes and pay a $1,853,000 penalty for violations of pesticide reporting and distribution laws.

Harrell's LLC agreed to pay a $1,736,560 penalty for pesticides production and distribution violations.

Elementis Chromium, Inc., was ordered to pay a $2,571,800 penalty for failing to disclose information about substantial risk of injury to human health from a known carcinogen used at the plant, as required by the Toxic Substances Control Act.

Newfield Production Company settled violations of the Safe Drinking Water Act in the Monument Butte Well Field in Duchesne County, Utah on the Uintah and Ouray Reservation.

The Omaha Tribe of Nebraska resolved longstanding violations of the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act.

In FY 2014, EPA conducted more than 15,600 federal inspections and evaluations. EPA initiated approximately 2,300 civil judicial and administrative cases and concluded approximately 2,300

cases. The case initiation and conclusion numbers were lower than the targets (3,200 and 2,800 respectively) as a result of focusing on the largest most complex cases. This approach best protects public health not only by addressing the most serious pollution problems, but also by directing EPA resources to cases that may not be addressed by states because the noncompliance is of such a large scale that EPA is best suited to take action. The number of cases was also impacted by the federal government shutdown in 2014, the employee furloughs in 2013, and the need to devote resources to the monitoring of ongoing consent decrees.

In the pursuit of public health protection, in FY 2014, EPA civil enforcement actions resulted in a total of $100 million in civil penalties (administrative and judicial) to achieve compliance, punish misconduct, and deter other violators. Maintaining the strong backbone of enforcement while advancing and implementing Next Generation Compliance approaches was a focus in FY 2014 as illustrated by the examples in this report.

Moving Next Generation Compliance from Design to Implementation

During FY 2014, EPA made progress implementing each of the five components of Next Generation Compliance.

1. **Regulation and permits design:**
   - In FY 2014, EPA proposed Petroleum Refinery Risk and Technology Review and New Source Performance Standards, which would require additional toxic air emission control requirements for storage tanks, flares, and coking units at petroleum refineries. The proposed rule includes fenceline monitoring to ensure that applicable air standards are being met and neighboring communities are not being exposed to unintended emissions.
   - During FY 2014, OECA trained more than 400 EPA and state staff and managers on the roles of EPA staff in improving rule effectiveness, and issued both guidance and a workbook on how to design more effective rules to maximize compliance and environmental benefits.

2. **Advanced monitoring:**
   - Beyond infrared cameras, EPA is using other advanced technologies such as Geospatial Measurements of Air Pollution (i.e., use of vehicles with measurement systems) to find emission leaks that would otherwise be difficult to detect.
   - Advanced monitoring requirements were incorporated into several enforcement settlements (AL Solutions Inc., and Calumet Shreveport Lubricants and Waxes, LLC).
   - EPA hosted a "Next Generation Compliance Advanced Monitoring Tech Demo Day" that convened some of these latest advances in pollution monitoring across the country. EPA, academia, industry, and nonprofit organizations presented many solutions, each with a unique approach to solve complex pollution challenges.

3. **Electronic reporting:**
   - During FY 2014, EPA drafted a Supplemental Notice in support of the NPDES Electronic Reporting Rule to provide additional clarity, describe other options under

consideration, and give the public another opportunity to comment after publication in the *Federal Register*.

- EPA developed new capabilities for the Electronic Notice of Intent tool, called the NPDES eReporting Tool (NeT), which supports reporting of NPDES data by applicants for general NPDES permits.
- EPA completed work necessary to move EPA's NPDES Multi-Sector General Permit to electronic reporting and integrate it with another EPA system, ATTAINS, which is used for receiving impaired waters information and data transfer to the Integrated Compliance Information System.
- In FY 2014, EPA Region 1 reissued the city of Chelsea's NPDES permit with requirements for electronic reporting of discharge monitoring reports (DMRs) using NPDES NeT DMR. As well, the final Vessel General Permit became effective, with several electronic reporting requirements.
- During FY 2014, EPA completed the modernization of the Air Facility System to a new air component of the Integrated Compliance Information System (ICIS-Air) and conducted training sessions with more than 150 state and local agency users.

4. **Expanded transparency:**
   - During FY 2014, EPA added functionality to ECHO—enhanced searches for data related to compliance, violations, enforcement cases, specific facilities, and/or pollutants for the Clean Water Act, Clean Air Act, RCRA, CERCLA, and multi-media enforcement programs.

5. **Innovative enforcement:**
   - The Next Generation Compliance components listed above are being incorporated into civil and criminal case resolution, making it easier to know if facilities are complying and providing more information to the communities affected.
   - Examples of innovative enforcement cases with Next Generation components are discussed throughout this report, including, for example, Alpha Natural Resources, Titanium Metals Corporation, Lowe's Home Centers, AL Solutions Inc., and Calumet Shreveport Lubricants and Waxes, LLC.
   - EPA has developed a Sharepoint site that identifies EPA settlements with Next Generation components.
   - EPA also evaluated the use of new data analytics technology and completed the enhanced analytic pilot for integrating OSHA and EPA data as another tool for targeting compliance monitoring.

National Enforcement Initiatives

EPA's six NEIs address some of the more complex pollution problems in our nation:

1. **Keeping raw sewage and contaminated storm water out of our nation's waters.** To date, EPA has addressed 196 large combined sewer overflow systems (19 in FY 2014) and 883 large sanitary sewer overflow systems (55 in FY 2014). Notable FY 2014 cases for this NEI include the East Bay Municipal Utility District, the city of Mishawaka, the

Metropolitan Water Reclamation District of Greater Chicago, the city of Shreveport, Miami–Dade County, and the San Antonio water system.

2. **Preventing animal waste from contaminating surface and ground water.** To date, EPA has concluded 387 enforcement actions for violations associated with concentrated animal feeding operations, as illustrated by County Edge Dairy Inc. This includes 26 concluded enforcement actions in FY 2014.

3. **Cutting toxic air pollution that affects communities' health.** To date, EPA has evaluated over 1,700 air toxic emitting facilities, as illustrated by DuPont. EPA also issued an industry-wide Flaring Efficiency Enforcement Alert and individual-facility flaring notice letters to the full universe of petroleum refineries and petrochemical and organic chemical manufacturers operating steam-assisted flares.

4. **Reducing widespread air pollution from the largest sources (especially the coal-fired plant, cement kiln, glass, and acid manufacturing sectors).** To date, the New Source Review/Prevention of Significant Deterioration initiative has begun investigations for 103 cement plant facilities, 127 glass facilities, 109 acid manufacturing facilities, and 863 coal-fired electric utility units. Notable cases in FY 2014 for this NEI include Minnesota Power, Cabot Corporation, and Consumers Energy.

5. **Reducing pollution from mineral processing operations.** EPA has inspected 107 mineral processors and addressed 61 to date. Notable FY 2014 cases for this NEI include Titanium Metals Corporation, the court decision in the Tronox bankruptcy, the EPA Region 9 settlement with Nevada Gold Mining Company Veris Gold USA, Inc., and the EPA Region 10 settlement with the Oregon Metallurgical of Albany and TDY Industries of Millersburg.

6. **Ensuring energy extraction sector compliance with environmental laws.** EPA has conducted 2,627 inspections/evaluations to date (723

Enforcing Environmental Laws at Federal Facilities to Ensure Compliance

EPA's FY 2014 federal facilities enforcement program included a record number of formal disputes with federal agencies at National Priorities List sites and emergency actions at other major cleanups nationwide. These cleanup disputes and actions, at nearly a dozen federal facilities, will help restore contaminated ground water, reinforce necessary cleanup remedies, address abandoned munitions and emerging contaminants of concern, promote public involvement, and enforce proper land use controls for any contamination left behind. Notable FY 2014 agreements include Camp Minden, Louisiana and Fort Gillem, Georgia. In addition, EPA commenced formal enforcement proceedings with respect to the Department of Energy's Hanford site for failure to meet remedial action milestones. These and other forceful EPA actions at federal facility cleanup sites affirmed the federal government's obligation to meet the same standards as others.

Also in FY 2014, EPA released a new updated and electronic version of "Yellow Book," which is a guide to environmental enforcement and compliance at federal facilities. The Yellow Book serves as the primary information source on environmental compliance to thousands of federal environmental professionals and others across the nation, and is now available on the EPA website or through FedCenter.

in FY 2014) to ensure compliance with environmental laws in the burgeoning natural gas extraction sector across the United States. Notable FY 2014 cases under this NEI include Chesapeake Appalachia, LLC, and Gasco Energy Inc.

Performance Challenges

Electronic Reporting

To improve reporting efficiency, improve compliance, and increase publicly available compliance information, EPA is working to convert to electronic reporting as described above. This effort will require some short-term budget investments but is expected to provide substantial long-term benefits for industry, states, EPA, and the public. However, reductions of federal and state resources for environmental work over the past several years has slowed down the transition to electronic reporting and other aspects of Next Generation Compliance, thereby delaying the expected benefits.

The federal government shutdown in FY 2014 and employee furloughs in FY 2013 resulted in fewer federal cases overall due to disruptions in case work. In addition, the necessary focus on high-impact cases has contributed to a reduction in the total number of cases.

CROSS-AGENCY STRATEGIES

Introduction

This is the first year of the FY 2014-2018 EPA Strategic Plan's cross-agency strategies. Stemming from agency and Administrator priorities, these strategies outline how EPA plans to fundamentally change how it works, both within and outside the Agency, to achieve its mission results.

The strategies are national, multi-year, cross-program priorities that require collaborative engagement beyond traditional organizational boundaries. Agency efforts to advance the strategies are taking hold, buoyed by our experience over the last few years, as we implement a new set of strategies and a reconfigured governance structure.

EPA establishes annual action plans to implement these multi-year strategies to ensure meaningful and specific efforts each year. The FY 2015 action plans can be found at http://www2.epa.gov/planandbudget/strategicplan.

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.

This cross-agency strategy advances the national goal of achieving "conditions under which humans and nature can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations," as established in the National Environmental Policy Act of 1969. EPA will consider and apply sustainability principles to its work on a regular basis, collaborating closely with stakeholders. Our traditional approaches to risk reduction and pollution control cannot always fully achieve our long-term and broad environmental quality goals. The interplay between different environmental statutes and programs also requires renewed attention to improve "synergy" and long-term solutions. Activities that support this work include technology-based innovation, regulatory processes, incentive-based efforts to complement those regulations, and external outreach.

Summary of Progress

The Agency has made progress on the three major actions in the cross-agency strategy: identifying cross-program priority areas to advance sustainability objectives, engaging and empowering staff, and working to expand the conversation on environmentalism with stakeholders. Next steps in the FY 2015 Action Plan are to: 1) tell success stories of EPA sustainability work through videos to educate and empower all EPA staff to incorporate sustainability principles into their work; 2) continue improvement of sustainability considerations in facilities management; 3) Enhance use of sustainability indicators, metrics and tools.

Beginning in February and continuing to the present, the Agency has made significant progress identifying cross-program priority areas and leveraging opportunities, goals, lessons learned, and activities key to integrating sustainability in four priority areas. The four areas are identified priorities that each have a number of specific projects managed by several EPA program offices and are used to communicate sustainability principles.

- For **green products:** multi-stakeholder systems for defining and rating green products and sustainable purchasing.
- For **green infrastructure:** stormwater management.
- For **sustainable materials management**: food systems and projects.
- For **energy efficiency:** measures to enhance electric system efficiency that can support the President's Climate Action Plan.

To *engage and empower EPA staff,* the Agency has planned and implemented internal communications and knowledge management projects to help employees share knowledge and develop ideas that can lead to innovative programs. An internal EPA SharePoint site for community of practice work has been developed and is in use. EPA users can share a broad array of projects, information, case studies, and tools, thus reducing stovepiped communications and expanding the opportunities for ideas to flourish.

The EPA Regional Offices continue to collaborate and innovate in partnership with Headquarters program offices, and the Agency is investigating new opportunities for partnership *to expand the conversation on environmentalism with stakeholders* and identify more sustainable management of resources and the built environment. As one example, the Green Infrastructure Collaborative will build capacity for implementing green infrastructure through partnership between federal agencies, nonprofits, and the private sector.

Key FY 2014 Performance Results

Agency-Wide Staff Engagement via GreenSpark

Via an online ideation platform, staff from across the Agency shared 463 ideas on ways to conserve resources; reduce energy, water, and waste; and otherwise reduce the environmental footprint of EPA facilities, including actions to reduce their own environmental impact at work. Employees also "liked" their colleagues' ideas 5,024 times and commented on those ideas 417 times.

The ideas submitted by staff were evaluated for cost, feasibility, and popularity. The previous Deputy Administrator announced follow-up activities for the selected ideas, which are being implemented at Headquarters and across the Agency:

- To increase paperless correspondence, the Office of the Executive Secretariat developed an electronic letterhead and is exploring a more toner-efficient font. They are also exploring how to improve the use of the agency's Correspondence Management System for electronic document concurrence to increase paperless correspondence. The Office of Environmental Information is working to reduce the number of fax machines and install e-fax where needed.
- A composting program has been launched throughout the Headquarters William Jefferson Clinton (WJC) buildings to collect paper towel and food waste in pantries and restrooms.
- Filtered water dispensers will be installed throughout the WJC buildings in FY 2015 to encourage the use of reusable water bottles and decrease waste from disposable water bottles.
- Improvements have been made to WJC building bike facilities.

Regional submissions were also reviewed and are being implemented by staff in those locations.

Green Infrastructure Collaborative

The Green Infrastructure Collaborative consists of more than 20 organizations committed to advancing the adoption of green infrastructure as a means of supporting water quality and community development goals. This broad group of signatories includes academia, non-governmental organizations, and the private sector.

On October 8, 2014, EPA joined the Green Infrastructure Collaborative, along with six other federal agencies. These agencies signed a Federal Letter of Support committing to specific actions to promote green infrastructure. The cooperating agencies are EPA, the Department of Housing and Urban Development, the Department of Transportation, the Department of Agriculture, the

Department of the Interior, the Department of Defense, and the Department of Energy. Over the coming year, Collaborative members will work closely together to align public and private knowledge and resources to promote green infrastructure.

In the letter of support, each of the seven participating federal agencies identified specific actions that each agency can take to help local communities more fully realize their green infrastructure objectives. Example actions include:

- Providing technical assistance to provide on-the-ground support aimed at creating integrated green stormwater management and hazard mitigation plans.
- Recognizing innovative green infrastructure projects.
- Working with states to integrate ecosystems and transportation planning.
- Incorporating green infrastructure practices into agency facilities or lands.
- Emphasizing connections to green infrastructure in existing grant programs.
- Distilling and broadly disseminating the best ideas and lessons learned from existing grant programs.

Performance Challenges

Encouraging Knowledge Management in the New Community of Practice

Coordinating agencywide actions through the development and installation of the community of practice SharePoint site is challenging in that populating the site with the appropriate information from the vast set of EPA sustainability information takes time. The new community of practice site for EPA management and staff working on sustainability activities will require continued "championing" and "upstart" time to broadcast internally its existence before full benefits and regular use are achieved.

EPA is working to get more employees visiting, learning, and discussing in the SharePoint site by populating the site with useful information and encouraging regular users to tag topics and mention their colleagues to draw them to the site.

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.

While EPA efforts have a direct, positive impact on the health and environmental quality of communities, EPA will place additional focus on changing the way we work so that communities can easily identify and achieve their full potential. EPA promotes the idea that environmental progress can be better supported, demonstrated, and measured in communities—especially those with environmental justice (EJ) concerns—so that all equally receive the benefits of human health and environmental protection standards. Millions of minority, low-income, tribal, and indigenous individuals are at risk of having poor health outcomes because they live in underserved, overburdened communities. EPA can make a greater and more visible difference by embracing strategies that incorporate an Agency-wide focus on communities. Specifically, EPA will rely on a variety of approaches, including improved meaningful outreach to communities, better internal alignment and coordination of resources across community-based programs, increased incorporation of EPA community-focused approaches and analyses within regulatory and enforcement actions, and expanded technical assistance and research to improve public health and the environmental performance of communities. Partnering with federal, state, and local governments, as well as other entities, is key to cultivating healthy and sustainable neighborhood solutions that reflect effective land use, green development, and social and economic growth.

Summary of Progress

In FY 2014, EPA made significant progress under the community cross-agency strategy to make a visible difference in communities. A key component of the FY 2014 success was the ability of its newly created Agency-wide executive-level body (the Community Facilitation Team) to harmonize various Agency community-based efforts under one umbrella. Through the team, EPA was able to strengthen its "community of practice" through improvements to online tools such as EPA's Agency-wide project mapping platform called GeoPlatform and the Agency's internal community practitioner collaboration software tool using SharePoint. The GeoPlatform improvements have contributed to increased cross-office use of GeoPlatform for coordination and strategic planning purposes. The SharePoint site is now actively being used by staff implementing the Administrator's FY 2015 community cross-cutting strategy action plan.

EPA made significant progress toward a public release of its online EJSCREEN environmental justice mapping and screening tool. In 2015, EPA will launch a single Internet landing page for community stakeholders, including local governments, and make progress toward making EPA resources more easily accessible and navigable for community stakeholders.

EPA now actively seeks to leverage the presence of resources from other Federal agencies for work in communities: coordination with the Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), the Department of Agriculture (USDA), and other agencies increased in FY 2014. EPA provided comments to HUD on its most recent community block grants evaluation criteria; EPA participated directly in HUD and DOT grant

application reviews; EPA worked in partnership with USDA, the Appalachian Regional Commission, and CDC to launch the Local Food/Local Places initiative.

Key FY 2015 goals:

- EPA will seek to work in partnership with other federal agencies in 3-5 communities in each of EPA's 10 regions. The specific agency involved will depend on the nature of the problems each community is seeking to address.
- EPA will launch a single internet landing page for community stakeholders, including local governments.
- EPA will seek to incorporate the use of monitoring tools (e.g., air or water monitors) into negotiated enforcement settlements or EPA-issued permits in 1-2 environmentally overburdened communities per region.

Key FY 2014 Performance Results

The action plan developed for the first year of this five-year strategy has helped EPA identify key activities that promote a more complete and coordinated way to provide information, financial and technical resources, and services to communities; more effectively educate and inform Agency staff; and assist disadvantaged and EJ communities. EPA is learning and understanding what its programs and offices do to help communities and how their work and activities can contribute to coordinated community-based approaches needed to address environmental challenges.

GeoPlatform

GeoPlatform provides a common platform for mapping EPA investments and activities; it supports rapid deployment of public map views, as well as advanced applications such as EPA's EJSCREEN and NEPAssist. Many EPA program offices are using GeoPlatform, including to map community-level grants and technical assistance projects. The program has made minor improvements to improve end-user access and usability. Additional training has been made available to project-level staff on GeoPlatform.

EPA improved staff usability of GeoPlatform, resulting in an increase in users of over 1,300 (a 50 percent increase in overall usage). It now hosts 48 programmatic geospatial tools. The Agency conducted outreach and training on GeoGrants, an advanced application that is supported by GeoPlatform, to improve project officer utilization of the tool to map place of performance.

Community SharePoint Site

In July, 2014, EPA transitioned to SharePoint as the Agency-wide collaboration tool for all EPA staff. Concurrently, the OSWER community SharePoint pilot site has been scaled up for Agency-wide use supporting regional and program office staff implementing Task 1 of the community cross-agency strategy. Those staff now have access to the SharePoint site and are receiving SharePoint training.
The OSWER Community SharePoint site was expanded into an interactive platform for all EPA staff to connect with each other across programs and Regions—to exchange information, discuss issues in real time, and quickly identify community experts, training, and other useful resources.

Leveraging of Federal Resources

EPA has been working closely with its federal partners to better coordinate community work:

- EPA is providing significant input to HUD's Notice of Funding Availability for the Community Development Block Grant Disaster Recovery Funds.
- HUD/DOT/USDA are participating in EPA high-level strategy meetings to support implementation of Task 1.

Performance Challenges

Coordinating Actions Needed for Development and Installation of New Agency IT Systems

EPA is implementing several IT systems such as SharePoint, GeoPlatform, and broader internal use of EJSCREEN. Each of these systems poses technical challenges, end-user training needs, and a need to update Agency-wide policies for program and Regional Offices.

While implementation of new IT systems has its share of challenges, EPA has successfully addressed many implementation challenges, with SharePoint now being actively and increasingly used by EPA staff, GeoPlatform already widely used, and an improved version of EJSCREEN soon to be available publicly. The Agency continues to provide for staff training, technical support, and peer sharing groups to help end users integrate these tools into their programmatic operations.

Culture Change

A significant challenge for making "community" a framework for how EPA delivers its services is overcoming traditional stovepipe operations that do not necessarily promote more coordinated approaches, though they make more sense from the community perspective. To help overcome bureaucratic inertia, EPA is using key tools such as improved peer sharing through SharePoint, innovation discussions through EPA's GreenSpark, more cross-office community-based focus at the executive-management-level meetings, and geographically-focused efforts in which programs try out integrated approaches that leverage each other's presence in communities.

Internal vs. External Communication

Improving both internal and external communications is key to improving coordination and more effectively working with communities. Internally, EPA is placing heavy emphasis on the use of SharePoint to promote staff peer sharing of best practices, and help staff link with resources and knowledge experts on issues relevant to their projects or communities. Externally, EPA is developing a "community" site or "landing page" that lets community activists and local officials navigate quickly to a variety of information on resources, technical assistance, and other subjects that can empower them in addressing issues affecting their overburdened, underserved communities. EPA is working to reconcile these competing demands—internally teaching employees how to more effectively serve communities and externally educating the public about EPA services and ensuring that the work makes a visible difference in their lives.

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.

The practice of good government, as well as the reality of limited resources, means that EPA works in concert with its partners to improve coordination, promote innovation, and maximize efficiencies to ensure its continued success. Successful partnerships will be based on four working principles: consultation, collaboration, cooperation, and accountability. By *consulting*, EPA will engage its partners in a timely fashion as it considers approaches to its environmental work, so that each partner can make an early and meaningful contribution toward the final result. By *collaborating*, EPA will not only share information, but actively work with partners to develop innovative approaches that use and leverage all available resources to achieve its environmental and human health goals. As this work progresses, EPA and its partners will *cooperate*, viewing each other with respect as allies who must work together if their goals are to be achieved. Through shared *accountability*, EPA will ensure that environmental benefits are consistently delivered nationwide.

Summary of Progress

Working with states, tribes, local governments, and the international community, EPA completed a suite of activities to:

- Ensure frequent and meaningful consultations with intergovernmental partners on key regulations and policies through Federalism consultations with the "Big 10" intergovernmental associations required by Executive Order 13132, as well as through additional EPA outreach initiatives to reach intergovernmental partners for rules and policies not triggered by the Federalism executive order.
- Revitalize the National Environmental Performance Partnership System, the cornerstone of EPA's working relationship with states and many tribes.
- Improve the effectiveness and efficiency of state-federal interactions in overseeing state-delegated programs.
- Facilitate dialogue between members of the National Tribal Caucus and Environmental Council of the States (ECOS) executives regarding ECOS' relationship with tribal governments.
- Improve the coordination and implementation of the Agency's Tribal Consultation Policy.
- Support U.S. efforts to become first country to join the Minamata Convention treaty to protect human health and the environment from the adverse effects of mercury.
- Implement priority actions to support the agreements reached at the United Nations Conference on Sustainable Development in 2012.

EPA's FY 2015 partnership goals and activities:

- Continue consultation and outreach to state and local partners on regulations for the New Source Performance Standards for Greenhouse Gases, Waters of the U.S., and chemical facility safety; and improve the implementation of the Agency's tribal consultation policy through enhanced communication tools, training, and outreach.
- Implement additional improvements and recognize the 20th anniversary of the National Environmental Performance Partnership System and its role as a platform to revitalize EPA's working relationship with states.
- Advance E-Enterprise by taking steps to embed E-Enterprise principles in EPA-state work processes.
- Implement EPA's tribal identification data standard to help ensure the quality and consistency of EPA data and enhance our ability to exchange tribal information across the federal government.
- Strengthen EPA partnerships with the Canadian and Mexican governments to improve policies and implement cooperative projects that address climate change.

Key FY 2014 Performance Results

Consultations with State and Local Elected Officials on EPA Rulemakings, Guidance, and Policies

The Agency broadened federalism consultations to include other intergovernmental organizations and state and local officials - such as the Local Government Advisory Committee, the National Association of State Departments of Agriculture, the National Association of State Conservation Agencies, and the Association of State and Territorial Health Officials. National Program Managers (NPMs) and Regional Offices conducted additional outreach with intergovernmental partners on the New Source Performance Standards for Greenhouse Gases from existing Electricity Generating Units, Waters of the U.S., climate resilience, sustainability, and chemical facility safety. For example, EPA Region 7 provided chemical facility safety outreach to agriculture associations and emergency planners in 24 venues, reaching over 5,000 in the regulated community. In addition EPA continued collaborations with ECOS (begun in FY 2013) to ensure strong EPA-state engagement around Civil Rights Act Title VI grant management programs.

National Environmental Performance Partnership System

EPA collaborated with states and tribes to design a new NPM guidance process to shift from an annual to a two-year cycle that focuses on 1) establishing earlier and more meaningful engagement with states and tribes in the development of national priorities and 2) enhancing the flexibility provided to EPA Regions, states, and tribes.

Oversight of State-Delegated Programs

EPA assessed ongoing initiatives and near- and long-term ideas for improving the oversight process for NPDES, Title V, and RCRA Subtitle C permitting programs. Through discussions on advances and innovations in program management and oversight, EPA identified draft principles for effective oversight that will inform FY 2015 discussions with states. To continue improving its

ongoing oversight of state enforcement programs, EPA, in partnership with states, implemented the State Review Framework Round 3 efficiencies identified in FY 2013 and began a dialogue about the future direction of environmental enforcement oversight.

Government-Wide Collaboration with Tribal Partners

EPA established and Co-Chairs the Climate Change Subgroup of the White House Council on Native American Affairs. The Subgroup identified proposed pilots to further federal interagency cooperation and support working with tribal partners.

EPA also improved implementation of the Policy on Consultation and Coordination with Indian Tribes by conducting training across all NPMs and EPA Regions about how to implement the policy.

Provide EPA Leadership and Support to Strengthen International Collaborations

EPA finalized the U.S. position for the contents of a voluntary agreement on black carbon under the Arctic Council, which will be implemented during the U.S. Chairmanship of the Council in 2015; EPA also implemented a project on black carbon best practices with other Arctic Council countries.

EPA continued to build on the agreements reached at the United Nations Conference on Sustainable Development (Rio+20) in 2012 by implementing priority actions in support of the Ten-Year Framework of Programs on Sustainable Consumption and Production. Key accomplishments included hosting the first global practitioners' workshop on building an international partnership to improve life-cycle assessment and helping complete the Global Sustainable and Production Clearinghouse.

EPA worked with the Office of the U.S. Trade Representative on environmental aspects of trade policy, and with the Department of Treasury on the environmental impacts of multilateral development bank investments.

Performance Challenges

Oversight of State-Delegated Programs

- **Realizing the benefits of streamlining the State Review Framework.** Because of variability in regional organizational structures and in regional-state approaches to Framework review implementation, efficiency gains from Framework streamlining may not be fully realized in some instances.
- **Balancing consistency with flexibility.** An ongoing challenge is defining the appropriate balance between a nationally consistent baseline for state performance and the flexible approach needed to achieve environmental protection.
- **State Resources and Data Quality.** Resources are an increasing challenge for states seeking to attain program objectives and for EPA seeking to conduct appropriate oversight.

The completeness/quality of required state performance data is a challenge for conducting oversight and for using data to conduct oversight more efficiently.

International—Addressing Black Carbon in Arctic Countries

Methods for measuring black carbon emissions are evolving and may delay agreement on how to characterize project outcomes.

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 co-regulators, our partners, industry, and the people we serve.

As today's environmental challenges and solutions continue to increase in complexity, EPA's ability to respond creatively, flexibly, and effectively will demand that we embrace the latest approaches to problem-solving and the use of new tools and technologies. Toward this end, EPA is striving to be a high-performing organization (HPO) characterized by business practices that are modern, efficient, and cost effective, as well as a work environment that supports employee growth and development, is collaborative and is results driven. Becoming a high-performing organization will require that we actively engage and consult with external partners, as well as EPA employees, as we advance new tools and streamline approaches.

Summary of Progress

In FY 2014, EPA focused on fostering employee development and streamlining business practices. EPA is making steady progress to become a High- Performing Organization (HPO), as evidenced by key accomplishments in FY 2014: successfully launching Skills Marketplace, GreenSpark, and SharePoint to increase employee engagement and collaboration; piloting new workplace designs and reducing our environmental footprint; applying Lean techniques to streamline our business processes; and implementing new strategic sourcing approaches to achieve efficiencies and economies in our acquisition programs.

In FY 2015, the agency will continue to focus efforts on developing employees and streamlining and modernizing business processes as described in EPA's HPO FY 2015 Cross-Agency Strategies Action Plan, available at http://workplace.epa.gov/realizingoneepa/pdf/hpo-action-plan-fy15.pdf. New efforts in FY 2015 include: launching a succession management pilot to ensure a pool of talent for critical positions to advance EPA's mission; identifying best practices and establishing processes for assessing agency efforts to enhance employee inclusion and engagement; and, developing a training catalogue focused on enhance the supervisory development curriculum for new and aspiring leaders.

Key FY 2014 Performance Results

Launched One EPA Skills Marketplace Program

In FY 2014, EPA successfully launched the One EPA Skills Marketplace Program, a voluntary program that expands employee professional development and provides a nimble, innovative way to get our work done by enabling employees to participate in projects or tasks outside of their office unit for up to 20 percent of their time. The program bolsters career development opportunities for the workforce and increases employee knowledge and experience.

Prior to launching this program, EPA completed a pilot phase of the program in FY 2014 during which 60 projects were completed and 92 employees participated. Following the pilot, the agency offered 40 opportunities to support high-priority activities under the FY 2014 Action Plans for EPA's Cross-Agency Strategies; employees embraced this opportunity – over 100 applications for these limited assignments were submitted. Since the launch of the full-scale program, 155 projects have been posted, 199 applications have been submitted, and 30 employees have already started working on projects.

Redesigned, Sustainable Workplace

EPA is committed to managing its facilities with a focus on sustainability. In FY 2014, the agency redesigned and consolidated office space, particularly within buildings where leases were expiring, to reduce our environmental footprint.

Over 1,000 employees moved to new working spaces, which required focused, fast-paced collaboration within the agency to effectively plan, design, and implement the move. EPA released all its space at one of its Washington, D.C.-based facilities, 1310 L Street, and relocated 450 employees to the nearby Federal Triangle Complex (FTC). Through consolidation, EPA reduced its office space by 135,901 square feet, saving the agency an estimated $7 million in annual rent expenditures and additional savings of $1.5 million associated with costs for security, parking, shuttle service, fitness center, and the health unit. As the Agency reduces its physical footprint, it also reduces its environmental footprint, achieving on-going reductions in energy use, water use, waste generation, and greenhouse gas emissions.

Strategic Sourcing

EPA has made noteworthy progress on finding and maximizing efficiencies and economies in the Agency's acquisition programs. In FY 2014, EPA applied the lessons learned from a collaborative, structured process of critically analyzing EPA's spending on an agency-wide basis and used this information to make business decisions about acquiring commodities and services more effectively and efficiently. The Agency began to track and measure savings and efficiencies from implementing strategic sourcing for cellular service and print management. These efforts led to cost savings of $1.7 million and laid the groundwork for additional savings through upcoming negotiations with service providers.

Performance Challenges

Implementation Delays

There have been implementation delays of some of the key tools and technologies used to enhance communication, transparency, and cooperative problem solving. For example, Microsoft SharePoint, a collaborative software tool, was launched later in the year than expected, causing a ripple effect on projects depending on its availability, such as GreenSpark, a tool designed to give the EPA workforce a platform for sharing innovative activities, best practices, insights, and ideas to help make EPA stronger, more effective, and a great place to work.

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