United States
Environmental Protection Agency

Fiscal Year 2020

Justification of Appropriation Estimates for the Committee on Appropriations

Tab 14: Program Performance and Assessment

EPA-190-R-19-002

March 2019
www.epa.gov/ocfo

Table of Contents –Program Performance and Assessment

FY 2018 Annual Performance Report

Introduction

EPA's *FY 2018 Annual Performance Report* (APR) describes the first year of progress toward the strategic goals and objectives in the *FY 2018-2022 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/strategicplan. This APR presents results against the annual performance goals and targets in the Agency's *FY 2018 Annual Performance Plan and Congressional Justification* (APP/CJ) as updated in the FY 2019 APP/CJ. Please also refer to EPA's *FY 2018 Agency Financial Report* (AFR), available at https://www.epa.gov/planandbudget/fy-2018-agency-financial-report, for information on financial performance results.

In FY 2018, EPA's Chief of Operations introduced the EPA Lean Management System (ELMS), which has enhanced the Agency's performance management framework. ELMS is a set of practices and tools that supports Agency employees in identifying and solving problems for optimal performance results. As part of ELMS, the Agency's senior leaders hold monthly business meetings to discuss performance results and actions needed to make improvements.

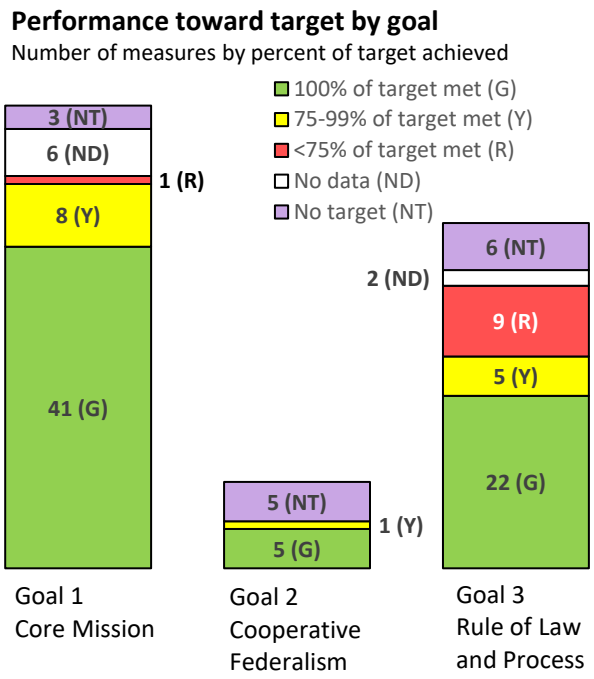
Organization of the FY 2018 APR

The Program Performance and Assessment section (Tab 14) is the primary component of EPA's FY 2018 APR. This section is organized by strategic goal. For each strategic goal, there is a Goal-at-a-Glance Overview and a detailed multi-year table with results, graphs, and key takeaways for the Agency's strategic objectives and annual performance goals. This section adopts the terminology and color coding used to measure progress under ELMS. FY 2018 performance results are also integrated throughout the FY 2020 APP/CJ.

FY 2018 Performance Data

FY 2018 Annual Performance Goal Results

EPA met 74% of the targets in their entirety for annual performance goals with FY 2018 targets and data available (68 of 92). For 14 of its annual performance goals (15%), the Agency achieved between 75-99% of the target. For 10 of its annual performance goals (11%), the Agency achieved less than 75% of the target.



The Agency strives to set ambitious, yet realistic targets. While EPA is making significant progress toward a broad range of policy outcomes, some results show less progress than expected due to delays in program implementation, Agency focus on other priorities, or factors outside of the Agency's control. More detail is available in the multi-year table that follows this introduction.

No data were available for 16 of the Agency's annual performance goals as of March 2019. Reasons for missing data include additional time needed for data collection from external sources, out of sync reporting cycles, and data quality assurance/quality control processes. As additional data are received for FY 2018 annual performance goals, the Agency will include the results in future APRs.

Fiscal Year 2017 Data Now Available

EPA has received final results for four of the 41 annual performance goals with missing data at the end of FY 2017. EPA met the targets in their entirety for three of these annual performance goals and achieved less than 75% of the target for the other annual performance goal. The Agency has no data for the other 37 annual performance goals.

Verification/Validation of Performance Data

EPA maintains Data Quality Records (DQRs) to ensure consistency and quality of data used for annual performance goal reporting. These DQRs outline the results being measured; data sources and limitations; methods for calculating results; and controls to ensure good data quality. The Agency has developed DQRs for all 26 of the long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/results.

FY 2018-2019 Agency Priority Goals

EPA met FY 2018 targets for three of the six FY 2018-2019 Agency Priority Goals (APGs) in the *FY 2018-2022 EPA Strategic Plan* (water infrastructure, site cleanups, and permitting decisions) and missed FY 2018 targets for two of the six APGs (air quality attainment, and chemical safety). Data are incomplete for one of the APGs (environmental compliance). Complete FY 2018-2019 APG Action Plans and Quarterly Progress Updates are available at https://www.performance.gov/EPA/APG_epa_1.html.

- **Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas.** *By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.*

  Missed FY 2018 target. At the end of FY 2018, the number of nonattainment areas was 159. EPA took final action on state requests to redesignate 11 areas to attainment with National Ambient Air Quality Standards (NAAQS) as projected, but fell short of meeting the FY 2018 target of 155 areas in nonattainment because four of the 11 redesignations became effective after September 30, 2018. Looking forward, EPA is poised to: (1) work with states to update nonattainment area projections and identify states that intend to submit

redesignation requests; (2) encourage states with eligible nonattainment areas that are eligible to seek redesignation to attainment through submission of approvable requests and accompanying 10-year maintenance plans, as required by the Clean Air Act (CAA); and (3) prioritize approval of state-submitted redesignation requests.

- **Empower communities to leverage EPA water infrastructure investments.** *By September 30, 2019, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act).*

  Met FY 2018 target. EPA and its partners leveraged $9.7 billion in non-federal dollars through the Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act (WIFIA) Program, exceeding the FY 2018 target of $8 billion. EPA deployed strategies to increase leveraging by conducting 25 water infrastructure community engagements; providing 15 tools, trainings, and resources; and conducting all 102 state reviews for the State Revolving Funds. EPA will continue to implement effective strategies to engage with partners to meet the two-year APG target of $16 billion.

- **Accelerate the pace of cleanups and return sites to beneficial use in their communities.** *By September 30, 2019, EPA will make an additional 102 Superfund sites and 1,368 brownfields sites ready for anticipated use (RAU).*

  Met FY 2018 targets. EPA returned 51 Superfund sites to RAU, meeting the FY 2018 target, and exceeded the brownfields target of 684 by making 861 brownfields sites RAU. The Agency continues to implement recommendations from EPA's Superfund Task Force Report, including completion of nearly 20 optimization projects and project scoping best management practices to accelerate site cleanup progress; launching a mapping tool to support redevelopment; and developing a Regional Best Management Practices document. Utilizing Lean practices, EPA reduced brownfields data entry backlogs and provided training to communities, states, and tribes on use of the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. The Agency has committed to conducting additional redevelopment training and providing brownfield communities with technical assistance for redevelopment plans.

- **Meet new statutory requirements to improve the safety of chemicals in commerce.** *By September 30, 2019, EPA will complete in accordance with statutory timelines (excluding statutorily-allowable extensions): 100% of required EPA-initiated Toxic Substances Control Act (TSCA) risk evaluations for existing chemicals; 100% of required TSCA risk management actions for existing chemicals; and 80% of TSCA pre-manufacture notice final determinations.*

  Missed FY 2018 target; some data not available. EPA achieved 58.4 of TSCA premanufacture notice final determinations within 90 days, falling short of the FY 2018 target of 65% due to the increased complexity of new chemical reviews under amended TSCA. The Agency streamlined processes by implementing recommendations from Lean

events, which yielded significant performance improvements with 33% of final determinations made within 90 days in FY 2018 Q4, and 71.4% made within 90 days in September 2018. EPA maintains a perfect record of completing final determinations within the timeframe allowable by law, including any EPA-approved submitter requests for suspension of review.

FY 2018 results are not reported for risk evaluations or risk management actions because the first of these are not expected until FY 2019.

- **Increase environmental law compliance rate.** *Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21% from a baseline of 24%.*

  Incomplete data. EPA is updating the baseline and related targets due to the discovery of facilities erroneously included in the universe of regulated entities counted in the denominator. The Agency will update the APG baseline and targets based on these revisions. The Agency also established an EPA-state workgroup to outline strategies for achieving long-term reductions while addressing permits with significant impacts on the environment. Some challenges include EPA's and the states' limited capacity to inspect, enforce, or provide compliance assistance; and infrastructure needs and availability of skilled operators for publicly-owned wastewater facilities which constitute a large portion of the facilities in significant noncompliance with their permit limits. EPA has identified a problem with the data used to calculate the baseline and targets for this measure and is working to revise these calculations. we will update the APG baseline and targets once we are able to correct for the erroneous data.

- **Accelerate permitting-related decisions.** *By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.*

  Met target. EPA reduced the number of backlogged permit decisions in FY 2018 to 136, an 18% reduction from the baseline of 166 as of June 30, 2018. Building on experience in EPA and state environmental agencies, the Agency developed strategies and shifted resources to address the backlog of new applications. Specifically, EPA created standard work templates for use by permit writers, established communities of practice, and work-sharing agreements for improved utilization of permit writers' expertise. EPA has developed a centralized system to track pending permit applications and an approach to render timely decisions on incomplete permit applications to improve permitting efficiency agencywide.

Evidence and Evaluation

Summaries of program evaluations completed during FY 2018, and additional FY 2018 contributions to EPA's portfolio of Evidence are available at https://www.epa.gov/planandbudget/results. EPA uses program evaluations and other evidence to

ensure programs are meeting Agency goals, to improve mission delivery, and to bring evidence to bear in decision making. Program evaluations and other evidence 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.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE ADMINISTRATOR

Reliability of the EPA's Performance Data

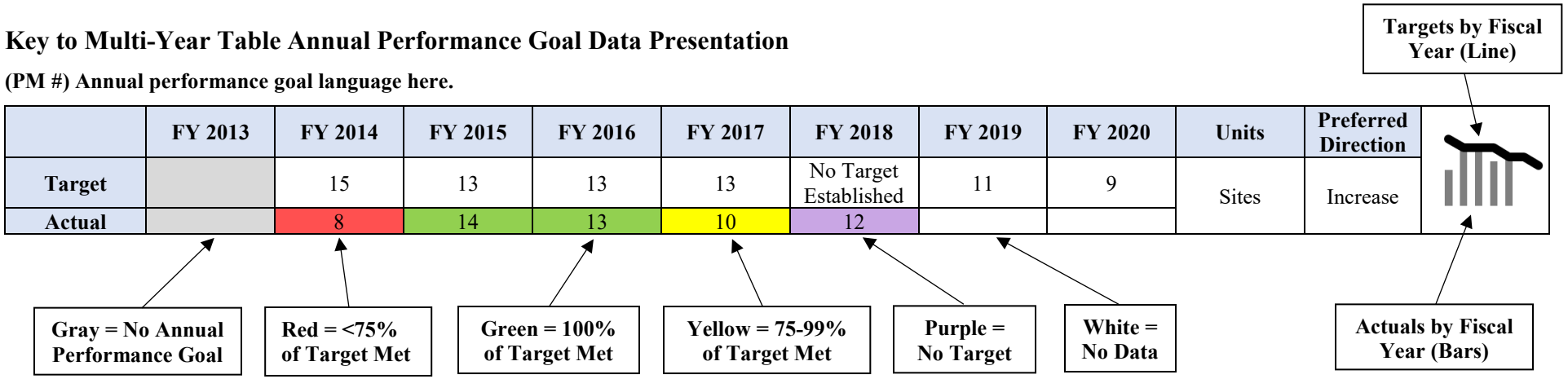
I attest to the reliability and completeness of the performance data presented in the U.S. Environmental Protection Agency's Fiscal Year 2018 Annual Performance Report. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data for some 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 2018.

Andrew R. Wheeler
Administrator

MAR - 7 2019
Date

Key to Multi-Year Table Annual Performance Goal Data Presentation

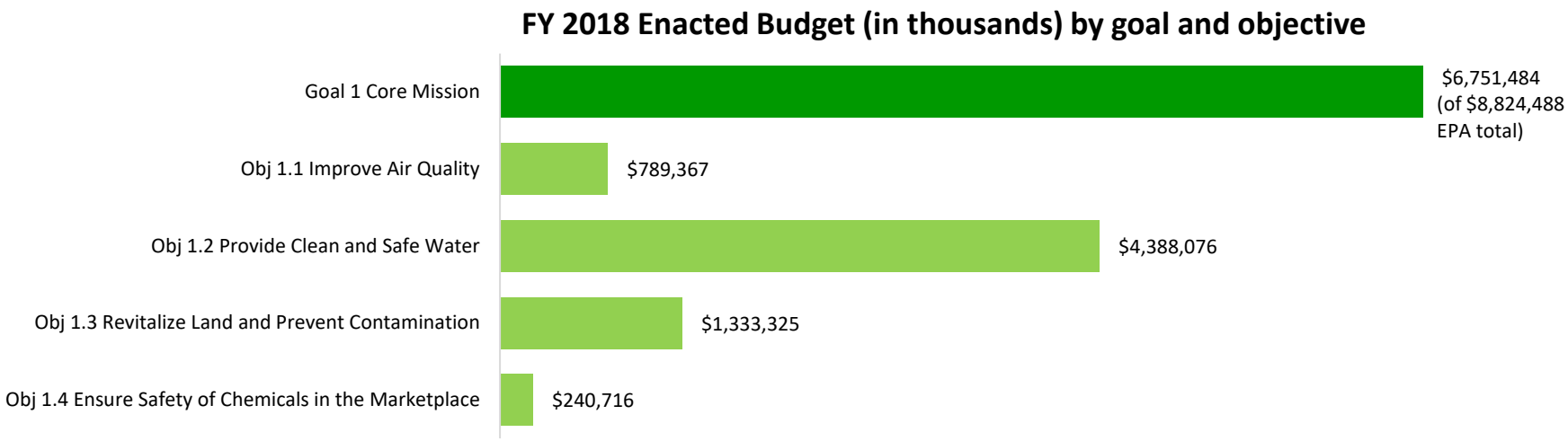
(PM #) Annual performance goal language here.

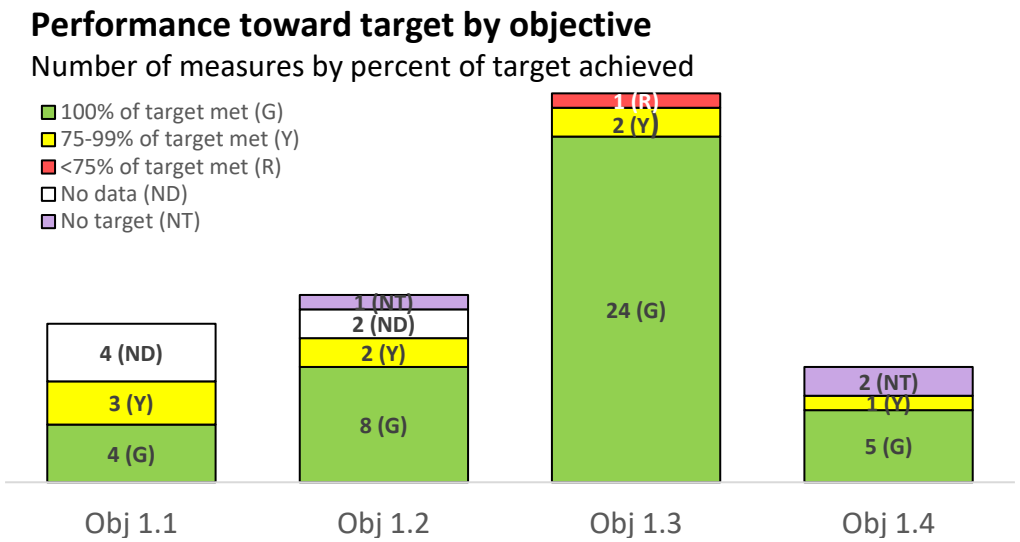


	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction
Target		15	13	13	13	No Target Established	11	9	Sites	Increase
Actual		8	14	13	10	12				

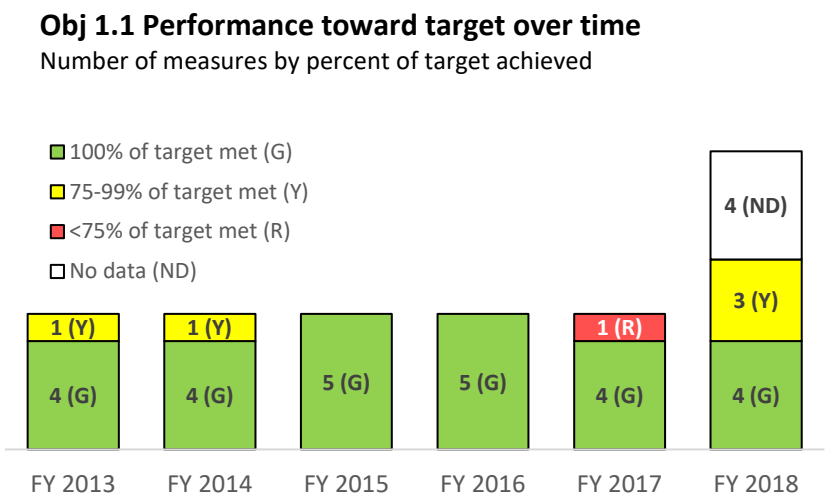
Goal 1 at a Glance

Core Mission: *Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.*




Performance toward target by objective
Number of measures by percent of target achieved
100% of target met (G)
75-99% of target met (Y)
<75% of target met (R)
No data (ND)
No target (NT)
4 (ND)
3 (Y)
4 (G)
1 (NT)
2 (ND)
2 (Y)
8 (G)
1 (R)
2 (Y)
24 (G)
2 (NT)
1 (Y)
5 (G)
Obj 1.1
Obj 1.2
Obj 1.3
Obj 1.4

Objective 1.1 – Improve Air Quality: Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Took final action on state requests to redesignate 11 areas to attainment with National Ambient Air Quality Standards (NAAQS), as projected. Four of the redesignations became effective after September 30, 2018 (FY 2018-2019 APG).
- More than 85% of counties in the U.S. met the 2015 ozone NAAQS and 94% of counties met the 2010 sulfur dioxide (SO2) NAAQS.
- Took timely action on State Implementation Plans (SIPs) consistent with Clean Air Act (CAA) deadlines and reducing the SIP backlog by working closely with state and local air agencies. Acted on 360 SIPs, 182 of which were in the backlog.
- Issued over 4,800 certificates of conformity for engines, vehicles, and complementary pieces of equipment allowing manufacturers to enter products into commerce in the U.S.
- Hydrochlorofluorocarbons (HCFCs) consumption is well below levels required by Montreal Protocol, showing that the U.S. continues to outperform international commitments. U.S. consumption has fallen more than 74% in the past five years.
- Proposed Affordable Clean Energy (ACE) Rule, which would reduce carbon dioxide (CO2) emissions in 2025 by up to 30 million short tons.
- Proposed Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, to adjust national automobile fuel economy and greenhouse gas (GHG) emissions standards.
- Proposed targeted improvements to 2016 New Source Performance Standards for oil and gas industry that streamline implementation, reduce duplicative EPA and state requirements, and decrease burdens on domestic energy producers.
- Reviewed New Source Review (NSR) Program and identified opportunities for streamlining and clarifying regulatory permitting requirements.
- In 2016, ENERGY STAR helped Americans save over $30 billion in energy costs and 400 billion kilowatt hour (kWh) of electricity with reductions of 320 million metric tons of GHG emissions, 300,000 short tons of SO2, 220,000 short tons of NOX, and 23,000 short tons of fine particulate matter (PM2.5) (most recent data).

Challenges:

- While EPA is making steady and expected progress redesignating areas to NAAQS attainment, under the CAA, states are responsible for initiating the redesignation process, a process that demands time and resources from states.

Long-Term Performance Goal - By September 30, 2022, reduce the number of nonattainment areas to 101[1].

Annual performance goals that support this long-term performance goal:

(PM NA1) Number of Nonattainment Areas.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						155	138	136	Nonattain-ment Areas	Decrease	
Actual						159					

Key Takeaways:

- In FY 2018, EPA took final action on state requests to redesignate 11 nonattainment areas to attainment as projected. The effective date for seven of these areas occurred in FY 2018, and the effective date for four of those areas occurred in the first month of FY 2019.
- Focusing efforts on reducing the number of nonattainment areas helps ensure that states and EPA, in the spirit of cooperative federalism, prioritize taking timely and necessary actions to improve air quality in nonattainment areas through the implementation of permanent and enforceable pollution control measures, so that states can submit, and EPA can approve, redesignation requests for areas once they attain a NAAQS.
- Looking ahead, EPA will: (1) work with States to update FY 2019 - FY 2022 nonattainment area projections to identify which states intend to submit approvable redesignation requests; and (2) continue to encourage states with nonattainment areas that are eligible for redesignation to attainment to develop and submit approvable redesignation requests and accompanying 10-year maintenance plans, as required by the CAA.

Metric Details: This measure tracks the status of 166 areas that were designated nonattainment and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017 are not included. Nonattainment areas are areas that EPA has determined do not meet a primary or secondary NAAQS, or that contribute to air quality in a nearby area that does not meet a non-revoked primary or secondary NAAQS. Areas are considered redesignated based on the effective date of the redesignation. For multi-state nonattainment areas, all state portions of the area must be redesignated to attainment for the area to be removed from the list of nonattainment areas. Under the CAA, states are responsible for initiating the redesignation process and EPA's authority to approve a state's request to redesignate nonattainment areas hinges on the state meeting the minimum requirements of the CAA, which include: (1) a demonstration that the area has air quality that is attaining the NAAQS; (2) establishing that pollution reductions are due to implementing permanent and enforceable measures; (3) a 10-year maintenance plan that includes contingency measures to be triggered in the event of a re-violation of the NAAQS; and (4) satisfying any other applicable and outstanding attainment planning and emissions control requirements. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM NA2) Percentage of U.S. Population Living in Nonattainment Areas.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						36			Percent	Decrease	
Actual						37					
Numerator						114,329,000			People		
Denominator						308,746,000					

[1] The baseline is 166 nonattainment areas as of 10/1/2017.

Key Takeaways:

- As described in PM NA1, EPA took final action to redesignate 11 nonattainment areas to attainment. The effective date for seven of these areas occurred in FY 2018, and the effective date for four of those areas occurred in the first month of FY 2019.
- Most of the seven areas that were redesignated to attainment effective in FY 2018 were small population centers.

Metric Details: The percentage of the U.S. population living in a nonattainment area represents the number of people out of the total U.S. population living in an area that is designated nonattainment for at least one of the NAAQS. If an area is designated nonattainment for multiple NAAQS, the population residing in the area is counted only once. For example, the Los Angeles area is currently in nonattainment for five NAAQS, but the population living in the area is counted only once. This measure tracks population living in areas that remain in nonattainment from the baseline population of 37 percent living in nonattainment areas and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated nonattainment after October 1, 2017, and areas designated nonattainment for revoked NAAQS, are not included in this measure. The data source for this measure is EPA's "Summary Nonattainment Area Population Exposure Report," available at (https://www.epa.gov/green-book), which groups nonattainment areas by geographic locations and estimates the total population for nonattainment areas for a single NAAQS, and across all NAAQS. The percentage of the estimated population for nonattainment areas and across all NAAQS is calculated based on the U.S. population from the 2010 census.

(PM DV) Percent of measured air quality improvement in counties not meeting the NAAQS from the 2016 baseline.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						2			Percent	Increase	
Actual					3	Data Avail 12/2019					

Key Takeaways:

- EPA continues to make progress in reducing pollutant concentrations in counties not meeting one or more NAAQS.
- The 2017 average design value concentration among the baseline counties improved for all pollutants, except for ozone which remained the same, resulting in an aggregate improvement of 3% from the 2016 baseline.
- A design value is a statistic that describes the air quality status of a given location relative to the level of the NAAQS.

Metric Details: This measure shows progress in reducing pollutant concentrations in counties not meeting one or more NAAQS relative to the 2016 calculated baseline. The measure is presented as the aggregate percent change in design value concentrations – a statistic that describes the air quality status of a given location relative to the NAAQS – since the baseline year. The aggregate percent change is weighted by the number of counties violating for each pollutant, so more weight is given to pollutants with more violating counties. All counties met the NAAQS for carbon monoxide and nitrogen dioxide in 2016, so those two pollutants are not considered in this measure. The other criteria pollutants (ozone, PM2.5, PM10, SO2, and lead) are part of this measure. For ozone and PM2.5, targets are based on predictions of future year concentrations resulting from the Community Multi-Scale Air Quality model which estimates the impact of existing and future control strategies. For the other pollutants (PM10, SO2, and lead), such modeling predictions are unavailable. Therefore, targets for those pollutants are based on a regression curve using historical data. The results for this measure are updated annually based on design values computed from actual monitored concentrations. Counties are used for this measure to provide finer resolution in the air quality data.

(PM SIP) Number of SIPs acted on by the regional offices.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						150			SIPs	Increase	
Actual						360					

Key Takeaways:

- In FY 2018, EPA acted on 360 SIPs. Of those 360, 182 were backlogged at the time of final action (about 51%).
- Over the past year, EPA worked collaboratively with state and local air agencies on setting priorities to ensure EPA took action on the SIPs that matter most for cleaner air.
- The Agency also focused on improving the efficiency of the SIP review and approval process, including development of an electronic system to facilitate SIP submittal and processing.
- Looking ahead, EPA expects that implementation of 2018 Lean event recommendations will result in more consistently timely SIP approvals and further reductions in the SIP backlog.

Metric Details: The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to EPA for approval. SIPs vary in type and complexity. The CAA requires EPA to review SIP submittals consistent with applicable requirements, and to take action on submissions within 18 months of receipt before they are considered backlogged (The CAA provides EPA six months to determine submission completeness and an additional 12 months to act upon the submission.). Each year, EPA identifies the number of active SIPs, current and backlogged, and considers a range of anticipated incoming SIPs for that year. The number of SIPs in the pipeline changes year to year depending on actions taken in the prior year as well as new SIP submittals. The estimated number of actions will also vary year to year depending on the status of EPA rulemakings, state priorities identifying the SIPs on which they want actions taken, and potential new SIPs or SIP revisions.

(PM M92) Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	80	80	80	81	83	67			Percent	Increase (Greater Reduction)	
Actual	74	79	82	82	62	Data Avail 12/2019					
Numerator					7.0 Billion				Days		
Denominator					11.2 Billion						

Key Takeaways:

- The overall trend is largely driven by national ozone and PM2.5 concentrations which have generally decreased at a rate consistent with the estimated impacts of existing and future control strategies, continuing the trend of long-term improvement. The national 2017 result was influenced by large wildfires in the northwestern U.S. and parts of California in 2017 which contributed to higher AQI values.
- Results can also vary from one year to the next because meteorological and exceptional events, like wildfires, can play a significant role in ozone and PM2.5 formation, both of which impact the respiratory system.

Metric Details: The AQI is an index for reporting daily air quality. An AQI value of 100 generally corresponds to the NAAQS standard and are generally thought of as satisfactory for each of the five pollutants (ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide) included in the index. When AQI values are above 100, air quality is considered unhealthy for certain sensitive groups of people and then for everyone as AQI values get higher. This measure assigns more weight to higher AQI values and counties

with more people. Because ozone and PM2.5 typically account for the vast majority of AQI values above 100, this measure largely tracks changes in those two pollutants. The targets for this measure are based on a regression curve using historical data. The results are updated annually based on the actual monitored concentrations. (Note: Since the original development of this measure, three data inputs have changed, and this measure reflects those new inputs, starting with the calculation of the FY 2017 result (data became available in December 2018) and FY 2018 and subsequent targets. First, EPA has revised the ozone and PM2.5 standards, along with their respective AQI breakpoints. An AQI value or breakpoint of 100 generally corresponds to the national air quality standard for the pollutant, which is the level EPA has set to protect public health. The AQI is revised when the air quality standards are revised and if the standards are more stringent, the AQI breakpoints are lower, effectively increasing the number of days with AQI greater than 100. Second, the population numbers used for weighting are now updated to 2010 census data from 2000 census data. Third, data from continuous PM2.5 monitors are now included. Data from these monitors was not included when the measure was initially developed, but they now make up a large part of the PM2.5 network.

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						5,200	5,000	5,000	Certificates	Increase	
Actual		4,225	4,360	4,453	5,109	4,869					

Key Takeaways:

- The total number of certificates issued by EPA in FY 2018 was 240 less than in FY 2017 (when 5,109 certificates were issued) and reflects approximately 220 fewer manufacturer applications for certification.
- EPA continues to issue vehicle and engine certificates of conformity in a timely manner and in pace with the numbers of requests received.

Metric Details: This measure reports the number of certificates of conformity issued in a given year. The CAA requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction to U.S. commerce. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer has demonstrated compliance with all applicable requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is dictated by the product planning of manufacturers and will fluctuate from year to year.

(PM NOX) Ozone Season emissions of nitrogen oxides (NOx) from electric power generation sources.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						590,000			Tons	Decrease	
Actual	735,799	683,409	616,815	554,206	466,237	Data Avail 04/2019					

Key Takeaways:

- These reductions have occurred while electricity demand (measured as heat input) remained relatively stable, indicating that the emission reductions were not driven by decreased electric generation.
- These emission reductions are a result of actions taken at affected sources such as power generators installing or improving operation of controls, switching to lower emitting fuels, or otherwise reducing their ozone season NOx emissions while meeting relatively steady electricity demand.

Metric Details: EPA operates seven nationwide and/or multi-state Clean Air Allowance Trading Programs that help address air pollutants from large stationary sources. This measure tracks the ozone season NOx emissions from sources in four of those programs: an annual NOx Budget Trading Program and two ozone season NOx Budget Trading

Programs operated by EPA on behalf of 27 states in the eastern U.S. under Title I of the CAA, as well as a national NOx Emissions Reduction Program for the power sector operated by EPA under Title IV of the CAA, the Acid Rain Program. NOx emissions are precursors for PM2.5 and ground-level ozone (O3). Researchers associate PM2.5 and O3 exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to PM2.5 and O3 contributes to human health benefits. The ozone season corresponds to the warm summer months when ozone formation is highest (May 1 – September 30). Reductions in NOx emissions during the ozone season help areas attain ozone standards.

Other Core Work supporting Objective 1.1

Annual performance goals:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	93	95	95	95	95	65			Percent	Increase	
Actual	96	98	97	97	96	97					
Numerator						7,827			Reports		
Denominator						8,061					

Key Takeaways:

- EPA continues to meet its performance targets for this activity, providing high quality, timely, and verified data to the public.

Metric Details: The GHG Reporting Program requires reporting of GHG data and other relevant information from large GHG emission sources, fuel and industrial gas suppliers, and CO2 injection sites in the U.S. These data can be used by businesses and others to track and compare facilities' greenhouse gas emissions, identify opportunities to reduce pollution, minimize energy use, and save money. The GHG Reporting Program has 41 sectors that include more than 8,000 facilities and suppliers. Both facilities and suppliers are required to report their data annually by March 31st. After submission of the data, the Agency conducts a verification review that lasts approximately 150 days and includes a combination of electronic checks; staff review; and follow-up with facilities to identify any reporting errors and have them corrected before publication. The 150-day period includes 60 days for EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for EPA to review responses or resubmitted reports. EPA typically publishes the data by October 1st each year (see: https://www.epa.gov/ghgreporting).

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	3,700	3,700	1,520	1,520	1,520	1,520			Tons	Decrease	
Actual	1,640	1,374	584	486	375	Data Avail 12/2019					

Key Takeaways:

- FY 2017 results show that the U.S. continues to significantly outperform international commitments under the Montreal Protocol, and is on track to meet future obligations.
- The results are achieved primarily through limits achieved by EPA in cooperation with industry on the amount of HCFCs that can be produced and imported in a given calendar year.

- EPA supports the transition to safer alternative to HCFCs by reviewing and listing alternatives for HCFCs under the Significant New Alternatives Policy (SNAP) Program, as well as developing regulations establishing refrigerant management, labeling, and other HCFC requirements.
- Industry innovation in developing new alternatives to meet the needs of consumers and industry sectors continues to be critical as the U.S. adopts and promotes these new alternatives in the transition from ODS.

Metric Details: The base of comparison for assessing progress is the domestic consumption cap of Class II HCFCs as set by the Parties to the Montreal Protocol. Each ozone-depleting substance is weighted based on its ODP, the damage it does to the stratospheric ozone layer. The natural layer of ozone in the stratosphere shields and protects the Earth's surface from the sun's harmful ultraviolet (UV) rays, which can lead to more cases of skin cancer, cataracts and other health problems. Beginning on January 1, 1996, the cap was set at the sum of 2.8% of the domestic ODP-weighted consumption of chlorofluorocarbons (CFCs) in 1989 plus the ODP-weighted level of HCFCs in 1989 (a total of 15,240 tons). As defined by the Montreal Protocol, the amount of consumption equals the amount of production plus imports minus exports.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	90	93	93	93	93	80			Score	Increase	
Actual	99	94	93	95	96	83.4					

Key Takeaways:

- The decrease in readiness from FY 2017 to FY 2018 is a function of the changes in the assessment methodology upon which this measure is based and does not indicate an actual year-to-year drop in emergency response readiness.
- At a score of over 83, the FY 2018 results show that EPA continues to be ready for a radiological emergency.

Metric Details: The emergency response readiness assessment provides a measure of key aspects of EPA's Radiological Emergency Response Program. The level of readiness of radiation personnel and assets is based on preparedness metrics such as exercise and drill performance, training completed, procedures developed, and equipment maintained. The level of readiness is based on a score ranging from 0-100 and is dependent upon an annual evaluation of specific criteria that identify progress in six categories: (1) RadNet; (2) Field Support; (3) Analytical Support; (4) Public Information; (5) Data Management; and (6) Science Team. In FY 2018, EPA refined the measure methodology for determining OAR readiness of radiological assets to more accurately reflect EPA's current Radiological Emergency Preparedness and Response Program's resources, readiness and better identify areas for improvement.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	0.5	0.5	0.3	0.3	0.3	0.3			Days	Decrease	
Actual	0.3	0.3	0.3	0.1	0.1	0.1					

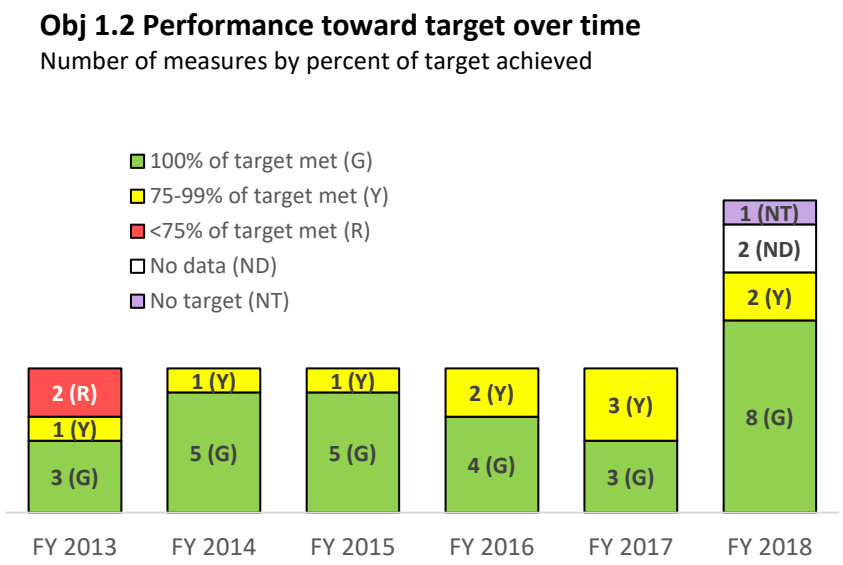
Key Takeaways:

- Over time, improvements in data processing and review processes have reduced the time to release data to the public.

Metric Details: EPA's RadNet system has 140 radiation air monitors in 50 states. RadNet runs 24 hours a day, seven days a week collecting near-real-time measurements of gamma radiation. Over time, RadNet sample testing and monitoring results demonstrate the normal background levels and fluctuations of environmental radiation. RadNet has tracked radiation from both atmospheric nuclear weapons tests and nuclear reactor accidents, including Chernobyl (Ukraine) and Fukushima (Japan). During a radiological incident, public officials use RadNet data to help make science-based decisions about protecting the public. In emergencies, EPA provides quality assured data as quickly as

possible. Scientists use RadNet air monitoring data to help estimate the potential radiation dose to humans. In 2005, the average time between collection and availability of data for release by EPA during emergency operations was 2.5 days.

Objective 1.2 – Provide for Clean and Safe Water: Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Leveraged $9.7 billion in non-federal funds for water infrastructure, exceeding $8 billion target. Of the $9.7 billion, the Water Infrastructure Finance and Innovation Act (WIFIA) Program leveraged $1.1 billion in nonfederal funds (creating up to 5,500 jobs) and the State Revolving Funds leveraged $8.6 billion in non-federal funds. (FY 2018-2019 APG)
- The backlog of EPA-issued new Underground Injection Control (UIC) and National Pollutant Discharge Elimination System (NPDES) permits decreased from 44 to 36 and 106 to 62 after EPA Lean improvements.
- Assisted emergency response during Hurricanes Harvey, Irma and Maria by assessing public health risks and water sector damages.
- Trained more than 6,000 utilities, state officials, and federal emergency responders on resilience to natural or manmade events that endanger water and wastewater services.
- Initiated several rulemakings to provide clarity and regulatory certainty regarding the jurisdictional scope of "Waters of the US" under the Clean Water Act (CWA).
- Planned potential rulemaking to advance state and tribal assumption of the CWA 404(g) Program to protect wetlands from dredge and fill.

Challenges:

- The 2015 Drinking Water Needs Survey, released in FY 2018, showed $472.6 billion is needed to maintain and improve the nation's drinking water infrastructure over the next 20 years.
- Nutrient pollution remains an EPA priority because it is one of America's most widespread, costly and challenging environmental problems. EPA worked with all states to help them make progress on this challenging problem.
- EPA's enhanced oversight of the Lead and Copper Rule for drinking water has resulted in an increased rate of non-compliance with this rule.
- Drinking water rule compliance is more difficult during warmer months due to microbial growth and greater use of disinfection chemicals, leading to harmful disinfection by-products. Extreme weather events add additional pressures.
- The rate at which new waters are listed for water quality impairments exceeds the pace at which restored waters are removed from the list.

Long-Term Performance Goal - By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700[2].

Annual performance goals that support this long-term performance goal:

(PM DW-01) Number of community water systems out of compliance with health-based standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						3,510	3,380	3,280	CWSs	Decrease	
Actual						3,480					

Key Takeaways:

- EPA met the FY 2018 target but faces challenges relative to the Long-Term Performance Goal due to increased oversight of the Lead and Copper Rule implementation. Of the 3,508 community water systems (CWS) with health-based violations in FY 2017, 1,919 had all their FY 2017 health-based violations corrected in FY 2018, and 216 had at least 1 corrected. Separately, 1,416 had at least one new health-based violation since July 1, 2017. These two sets are not mutually exclusive.
- Lead enters drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage. The treatment technique for the rule requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 15 parts per billion in more than 10% of customer taps sampled, the system must undertake additional actions to control corrosion.
- Drinking water rule compliance is more difficult during warmer months due to microbial growth and greater use of disinfection chemicals, leading to harmful disinfection by-products.

Metric Details: This measure tracks CWSs out of compliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year. A CWS is a public water system that supplies water to the same population year-round. There are approximately 50,000 CWSs. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations by public water systems as reported to EPA by the primacy agencies (states and tribes with EPA-delegated enforcement responsibility).

(PM DW-02) Number of community water systems without a sanitary survey within the last three years (five years for outstanding performance).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						4,473			CWSs	Decrease	
Actual						3,281					

Key Takeaways:

- EPA and states are working together to identify ways to accelerate the completion and reporting of sanitary surveys into SDWIS. This effort is evident by the fact that reporting of sanitary surveys tripled in the last quarter. The Agency will continue to work with states to provide sanitary survey training and address questions regarding rule requirements.
- States consistently prioritize sanitary surveys as a tool to encourage, and assist, drinking water systems to use proper monitoring and sampling procedures.

[2] Baseline is 3,508 community water systems out of compliance with health-based standards as of FY 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

Metric Details: A sanitary survey is an on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water. The Interim Enhanced Surface Water Treatment Rule (IESWTR) and the Ground Water Rule (GWR) require primacy agencies to conduct a sanitary survey of each CWS at least once every three years (or every five years for CWSs with outstanding performance).

(PM DW-03) Percentage of population served by CWSs that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	92	92	92	92	92	92			Percent	Increase	
Actual	92	93	91	91.2	91.8	91					
Numerator						282,504,970			People		
Denominator						310,445,023					

Key Takeaways:

- Six out of 10 EPA regions had above 92% population served that met all standards. However, Region 2 faced additional compliance challenges exemplified by a system violation in New York City which serves 8.2 million customers.
- The Stage 2 Disinfectants and Disinfection Byproduct Rule can pose challenges to consecutive water systems, those who purchase treated water from another public water system, as they have little control over the treatment processes of the water they receive, yet they must comply with maximum contaminant levels for total trihalomethanes and haloacetic acids. Approximately 30% of the CWSs are categorized as consecutive systems. EPA continues to work jointly with our state and tribal partners to evaluate this compliance challenge and share lessons learned and best practices among primacy agencies.

Metric Details: This measure tracks percentage of population served by CWSs not out of compliance with health-based drinking water standards during any part of the year. Data are derived from SDWIS-FED.

(PM DW-04) Percentage of population in Indian Country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	87	87	87	87	87	87			Percent	Increase	
Actual	77	89	88	88	90.5	89.1					
Numerator						918,562			People		
Denominator						1,030,934					

Key Takeaways:

- The tribal population affected by GWR violations in EPA Region 6 increased from 5,945 in FY 2017 to 36,419 in FY 2018.
- Many of the additional GWR violations stem from completion of sanitary surveys which identified more significant deficiencies at tribal water systems. Deficiencies that require funding often aren't corrected until financial resources become available.
- Small ground water systems face limited financial capacity to hire certified/qualified operators that can address the degradation of sources of drinking water, pressures from extreme weather events and the ability to make operational changes to the water treatment to address unexpected changes in water quality that will result in finished water that meets the national primary drinking water regulations.

Metric Details: This measure tracks percentage of population served by CWSs not out of compliance with health-based drinking water standards during any part of the year. Data are derived from SDWIS-FED.

Long-Term Performance Goal - By September 30, 2022, increase by $40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA)[3].

Annual performance goals that support this long-term performance goal:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						8.0	8.0	8.0	Billions of Dollars	Increase	
Actual						9.7					

Key Takeaways:

- The WIFIA Program closed four transactions totaling over $1 billion in loans. The $1 billion in WIFIA loans leveraged a total of $1.1 billion in non-federal funds to help finance $2.1 billion for water infrastructure projects and create up to 5,500 jobs.
- The Clean Water State Revolving Fund (CWSRF) programs made 1,532 assistance agreements that provided $6.8 billion for wastewater infrastructure and other water quality projects, of which $5.5 billion were non-federal dollars leveraged by this Program. In addition to the $5.5 billion in non-federal CWSRF dollars, the Program leveraged $500 million in non-federal funds from sources outside the CWSRF, including state grants, local contributions, and other sources of non-SRF funding.
- The Drinking Water State Revolving Fund (DWSRF) programs made 814 assistance agreements that provided $2.8 billion for drinking water infrastructure, of which $2.2 billion were non-federal dollars leveraged by this Program. In addition to the $2.2 billion in non-federal DWSRF dollars, the Program leveraged $400 million in non-federal funds from sources outside the DWSRF, including state grants, local contributions, and other sources of non-SRF funding.

Metric Details: Combined, the three primary water infrastructure programs, DWSRF, CWSRF, and Water Infrastructure Finance and Innovation Act (WIFIA) Program, represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. Non-federal dollars are loans made from recycled loan repayments, bond proceeds, state match, and interest earnings. The baseline is $32 billion in non-federal dollars leveraged from the DWSRF and CWSRF between FY 2013 and FY 2017. SRF data are tracked in the Clean Water and Drinking Water National Information Management Systems (NIMS). The baseline does not include WIFIA leveraged dollars. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

[3] Baseline is $32 billion in non-federal dollars leveraged from the CWSRF and DWSRF between FY 2013 and FY 2017 (i.e., loans made from recycled loan repayments, bond proceeds, state match, and interest earnings). The baseline does not include WIFIA leveraged dollars because no loans were closed prior to FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

(PM INFRA-02) Fund utilization rate for the DWSRF.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	89	89	89	89	89	96			Percent	Increase	
Actual	91	92	94	95	96	96					
Numerator						38.2			Billions of Dollars		
Denominator						39.8					

Key Takeaways:

- The fund utilization rate continues to be strong. Since FY 2014 states signed a record amount of funds into new loans. This resulted from EPA and state implementation of the FY 2014 Unliquidated Obligation (ULO) Strategy, which led many states to develop agile cash flow models to more accurately balance fund inflows and outflows.

Metric Details: The fund utilization rate shows dollars of assistance provided for each dollar made available for projects. It measures all funds (federal and non-federal) signed into loans against all funds (federal and non-federal) made available for projects. Data are collected annually from all 51 state DWSRF programs (50 states and Puerto Rico), reported by municipal and other facility operators, and EPA's regional staff to the NIMS database.

(PM INFRA-03) Fund utilization rate for the CWSRF.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	94.5	94.5	94.5	95	95	98			Percent	Increase	
Actual	97	98	98	98	98	99					
Numerator						133.0			Billions of Dollars		
Denominator						134.7					

Metric Details: The fund utilization rate shows dollars of assistance provided for each dollar made available for projects. It measures all funds (federal and non-federal) signed into loans against all funds (federal and non-federal) made available for projects. Data are collected annually from all 51 state CWSRF programs (50 states and Puerto Rico), reported by municipal and other facility operators, and EPA's regional staff to the NIMS database. In FY 2002, the fund utilization rate was 91%.

(PM INFRA-04) Number of American Indian and Alaska Native homes provided access to safe drinking water in coordination with other federal agencies (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						148,100			Homes	Increase	No Trend Data
Actual						162,016					

Key Takeaways:

- EPA exceeded the target because the projects that were completed covered more homes than expected.

Metric Details: This measure tracks the number of homes provided with access to potable water as a result of receiving federal assistance, based on data obtained from the Indian Health Service's (IHS) Project Data System (PDS). Many benefiting communities are in remote regions that cannot easily connect to larger water systems and, due to their small population sizes, often lack economies of scale and capacities found in larger utilities. Additionally, many of these communities experience arid or permafrost conditions, which make water sources difficult to find. EPA's Drinking Water Infrastructure Grants Tribal Set-Aside (DWIG-TSA) is used to provide additional sources of drinking water, construct

or update treatment and storage facilities, install or upgrade transmission and distribution lines, provide homes with initial access to drinking water, and replace aged water system infrastructure. As of FY 2014, 113,656 American Indian and Alaska Native homes had access to safe drinking water. There were 400,096 American Indian and Alaska Native homes as of January 1, 2017.

(PM INFRA-05) Number of American Indian and Alaska Native homes provided access to basic sanitation in coordination with other federal agencies (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						105,764			Homes	Increase	
Actual						107,462					

Key Takeaways:

- EPA exceeded the target because the projects that were completed covered more homes than expected. 6,398 homes were provided access in FY 2018. The project types could range from a large wastewater treatment plant that will treat wastewater for hundreds of homes, to a smaller project to build on-site septic systems for 2 or 3 homes.

Metric Details: This measure tracks the number of homes provided with access to basic sanitation (wastewater treatment service) as a result of federal assistance, based on data obtained from IHS's PDS. There was a total of 400,096 American Indian and Alaska Native homes as of January 1, 2017.

Long-Term Performance Goal - By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles[4].

Annual performance goals that support this long-term performance goal:

(PM SWP-01) Reduction in the number of square miles of watershed with surface water not meeting standards (cumulative).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	9,000	18,000	Square Miles	Increase (Greater Reduction)	
Actual						N/A					

Key Takeaways:

- At the end of FY 2018, 50 state 303(d) lists of impaired waters remain to be submitted to EPA, out of a total of 70 outstanding lists (i.e., 14 from 2016 or prior + 56 303(d) lists, which were due April 1, 2018). EPA has been working to improve the reporting process and facilitate communication regarding water quality attainment by moving towards electronic reporting. During FY 2018, states began submitting integrated reports electronically.
- A baseline will be established in FY 2019.

Metric Details: This measure will track the progress of water quality standards attainment in waters previously identified as impaired in the Integrated Report as of October 1, 2018. Progress will be evident by a positive trend in previously impaired waters attaining water quality standards. Water quality standards attainment means that (1) the impairments have been effectively removed; and (2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for

[4] Draft baseline is 464,020 square miles of impaired waters as of September 2017, to be updated in FY 2019. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

which it had been impaired. Data will be tracked in the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS). States will submit to EPA their Integrated Report which will include information on the status of their waters, and state geospatial data will be used to calculate results.

(PM TMDL-01) Square miles associated with state priority waters addressed by a TMDL, other restoration plan, or protection approach.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						35,000			Square Miles	Increase	
Actual						33,135					

Key Takeaways:

- EPA increased the percentage of state priority water with progress toward putting a Total Maximum Daily Load (TMDL), alternative restoration or protection plan in place from 25% in May 2018 to 33% in September 2018, narrowly missing the target.
- Results were lower than expected as the target does not reflect shifting state priorities during the year. States requested an opportunity to update their long-term priorities under the State-EPA 303(d) Program Long-Term Vision to reflect shifting water quality needs and goals. EPA provided the states an "open season" to submit updated priorities.
- Some results may have been delayed by manual data entry and calculation of results. The Agency is updating the ATTAINS database to streamline reporting and calculate results automatically.

Metric Details: This measure tracks state priority waters projected to have a TMDL, alternative restoration or protection plan in place. EPA, states and tribes cooperatively developed a Long-Term Vision for Assessment, Restoration and Protection under the CWA Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by 2022. Data are tracked in ATTAINS. In 2017, there were 100,275 square miles of state priority waters.

(PM TMDL-02) Progress in putting priority TMDLs, Alternative Restoration plans, and protection approaches in place.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							50	67	Percent	Increase	
Actual											
Numerator									Square Miles		
Denominator											

Metric Details: This measure tracks state priority waters with a TMDL, alternative restoration or protection plan in place. EPA, states and tribes cooperatively developed A Long-Term Vision for Assessment, Restoration and Protection under the CWA Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by 2022. Data are tracked in ATTAINS. In 2018, 33.3% of state priority waters had TMDLs, alternative restoration or protection plans in place. The universe of waters associated with this measure is subject to change to better reflect state priorities.

(PM NPDES-01) Percentage of high-priority state NPDES permits that are issued in the fiscal year.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	80	80	80	80	80	80			Percent	Increase	
Actual	55	80	82	80	77.7	N/A					
Numerator									Permits		
Denominator											

Key Takeaways:

- No data are available for FY 2018 as this measure is discontinued. The Agency has shifted focus to making all permitting decisions within 180 days, with initial efforts focused on reducing the backlog of new EPA-issued permits.
- The priority permits measures focused on backlog reduction, but only for permits expired for two years or more that were deemed high priority. This limited focus is no longer sufficient to meet Agency goals as described in the *FY 2018-2022 EPA Strategic Plan*. As a result, data collection efforts and work planning have also shifted focus to examining all causes for delay in issuing permits, and EPA regions are developing backlog elimination strategies to address these for all EPA-issued permits.

Metric Details: Results are calculated by dividing the number of high-priority NPDES permits issued during the current fiscal year by the total number of permits selected by states as high-priority for that fiscal year. High-priority permits are those in need of reissuance that have been identified by states as environmentally or programmatically significant. Data are derived from EPA's Permit Management Oversight System (PMOS) database, which incorporates data from EPA's NPDES Database, and the Integrated Compliance Information System (ICIS-NPDES).

(PM NPDES-02) Percentage of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	80	80	80	80	80	80			Percent	Increase	
Actual	55	77	81	78	74.3	N/A					
Numerator									Permits		
Denominator											

Key Takeaways:

- No data are available for FY 2018 as this measure is discontinued. The Agency has shifted focus to making all permitting decisions within 180 days, with initial efforts focused on reducing the backlog of new EPA-issued permits.
- The priority permits measures were focused on backlog reduction, but only for permits expired for two years or more that were deemed high priority. This limited focus is no longer sufficient to meet Agency goals as described in the *FY 2018-2022 EPA Strategic Plan*. As a result, data collection efforts and work planning have also shifted focus to examining all causes for delay in issuing permits, and EPA regions are developing backlog elimination strategies to address these for all EPA-issued permits.

Metric Details: Results are calculated by dividing the number of high-priority NPDES permits issued during the current fiscal year by the total number of permits selected as high-priority for that fiscal year. High-priority permits are those in need of reissuance that have been identified by states or EPA regional offices as environmentally or programmatically significant. Data are derived from EPA's Permit Management Oversight System (PMOS) database, which incorporates data from EPA's ICIS-NPDES Database.

(PM NPDES-03) EPA Permit Backlog – Existing NPDES.

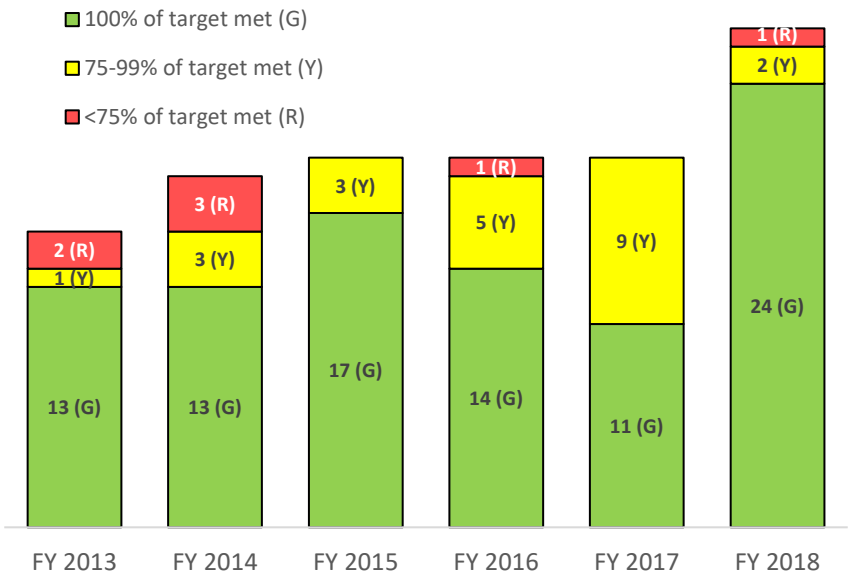
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							360	240	Permits	Decrease	
Actual											

Metric Details: This measure tracks existing EPA-issued NPDES individual permits that are administratively continued because they have passed their expiration date and are awaiting reissuance. The CWA limits the length of NPDES permits to five years. A permit can be administratively continued if the facility reapplies more than 180 days before the permit expires, and EPA does not renew the permit before its expiration date through no fault of the permittee. This means that the conditions of the expired permit continue in force until the effective date of the new or reissued permit. For purposes of this measure, permits are removed from the backlog as soon as the agency takes final action on the permit (issuance or denial). Data are tracked in EPA's ICIS-NPDES Database.

Objective 1.3 – Revitalize Land and Prevent Contamination: Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.

Obj 1.3 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Made 51 Superfund sites Ready for Anticipated Use (RAU), meeting the target, and 861 brownfields RAU, exceeding target of 684. (FY 2018-2019 APG). Also made 117 RCRA corrective action sites RAU, exceeding target of 75.
- Continued to implement the 42 Superfund Task Force recommendations to streamline and improve the cleanup process. Completed nearly 20 optimization projects and project scoping Best Management Practices; and launched a new site mapping tool to support site redevelopment.
- EPA brownfields funding leveraged 11,197 jobs (60% above target) and $2.2 billion in cleanup and redevelopment funding (100% above target).
- Used the EPA Lean Management System (ELMS) to improve effectiveness and efficiency: increased coordination among the Agency's national and regional offices on five-year reviews of federal facility National Priorities List (NPL) sites; improved the RCRA Facility Investigation (RFI) and Remedy Selection process; and reduced the backlog of brownfield grants' open work packages.

Challenges:

- Complex environmental problems persist at many contaminated properties, such as the presence or perceived presence of hazardous substances in soil, sediment, and groundwater, and can threaten the health of American families and hamper economic redevelopment. There are 188 million people living within three miles of a Superfund, RCRA Corrective Action, or brownfield site – equal to 59% of the U.S. population.
- EPA faces cleanup delays due to emerging contaminants. The Agency has activated a senior-level per- and polyfluoroalkyl substances (PFAS) workgroup to develop an action plan and is evaluating PFAS analytes to understand their toxic effects. Also, EPA has issued updated recommendations to address the effects of human exposures to lead contamination.
- Federal, state, tribal and local environmental land and emergency management programs face reductions in capacity.
- EPA completed 8,128 Leaking Underground Storage Tank (LUST) cleanups, missing the ambitious target of 11,200 cleanups. Many remaining LUST releases have greater challenges such as no responsible party, technically difficult cleanups and lack of available funds. EPA has intensively engaged state partners to identify long-term strategies to meet the long-term performance goal.

Long-Term Performance Goal - By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide[5].

Annual performance goals that support this long-term performance goal:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	60	55	45	45	45	51	51	51	Sites	Increase	
Actual	56	45	45	41	43	51					

Key Takeaways:

- EPA developed a Regional Best Management Practices document based on regional input and Site-Wide Ready for Anticipated Use (SWRAU) Lean event recommendations. Emphasis on early planning and a SWRAU team approach were critical to meeting the FY 2018 target; the team approach will continue to be critical for meeting the targets in FY 2019 and beyond.
- Institutional control implementation and/or the need for a site decision document calling for institutional controls present the greatest site barriers for achieving SWRAU. Headquarters, the SWRAU workgroup and the Office of Site Remediation Enforcement are continuing to work with EPA regions to determine what assistance can be provided and where informational institutional controls can be appropriately applied.
- As the Agency learns more about certain contaminants' human health effects and toxicity values, cleanup standard changes may be necessary for protectiveness; these changes could affect future targets and retractions.
- By the end of FY 2018, 887 Superfund sites had been determined to be SWRAU out of a total 1,836 Superfund sites: there were 1,338 sites on the NPL and 48 non-NPL sites with active Superfund Alternative Approach (SAA) agreements.

Metric Details: The SWRAU measure tracks EPA's progress in cleaning up and preparing Superfund sites for reuse, while ensuring human health and environmental protection. It measures the number of construction complete NPL or SAA sites for which all cleanup goals in the Record(s) of Decision (ROD) or other remedy decision document(s) have been achieved for media that may affect current and reasonably anticipated future land uses of the site, so that there are no unacceptable risks; and that all institutional or other controls required in the ROD or other remedy decision document(s) have been put in place. The SWRAU determination is made directly in Superfund Enterprise Management System (SEMS) once it is determined that the site meets all required criteria and has been approved by appropriate EPA regional personnel. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. Through FY 2017, EPA ensured that a total of 836 sites, including 828 final and deleted sites and 8 non-NPL sites with SAA agreements in place, met the criteria to be determined SWRAU. As of the end of FY 2017, there were 1,342 sites on the NPL and 51 non-NPL sites with active SAA agreements. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	650	700	850	675	675	650			Site Assessments	Increase	
Actual	772	794	869	703	747	664					

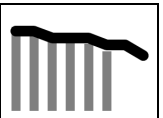
[5] By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.

Key Takeaways:

- Accomplishments under this measure were supported by implementation of Superfund Task Force recommendations development of the Administrator's Emphasis list, and a greater focus on reviewing assessments at federal facility Hazardous Waste Compliance Docket sites.
- States continue to perform a significant portion of the pre-NPL Superfund remedial site assessments: States accounted for 449 of the 664 (68%) assessments completed in FY 2018 with 276 of the 449 (76%) being pre-CERCLA screening assessments at new sites or sites residing in state programs.
- Of these 664 assessments, 386 (58%) resulted in no further federal Superfund interest; 226 (34%) require more complex assessment; and 52 (8%) were determined to need attention using a NPL or non-NPL cleanup approach.
- EPA expects resource constraints, both funding and staff, to reduce assessment production in FY 2019 and beyond.
- An expected FY 2019 decline in assessments may be partially offset by an anticipated increase in assessment reports submitted by other federal agencies. This measure includes EPA review and approval of these reports, a process that can often be completed with relatively fewer Agency resources.

Metric Details: This measure tracks the number of screening-level assessments at sites submitted to the Superfund Program for potential placement on the NPL. The measure includes the number of site assessment reports completed at non-federal sites by EPA and its state and tribal partners, and the number of EPA reviews of site assessment reports completed by other federal agencies at federal facility sites. Assessment data are tracked in SEMS. Assessment results are used to determine whether cleanup may be warranted under a Superfund managed or monitored program. The SEMS active site inventory included approximately 1,750 sites that needed one or more assessments at the beginning of FY 2018, plus around 300 new sites are assessed each year for potential inclusion in this inventory.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	115	115	105	105	105	95	95	80	Projects	Increase	
Actual	121	115	104	105	97	86					

Key Takeaways:

- The year-to-year performance variability reflects a variety of challenges, including the complexity of the remaining sites; funding and staffing reductions; emerging contaminants; and changing screening/toxicity values.
- More than 68% of remedial action project completions (RAPCs) over the last four years were federal facility and Potentially Responsible Party (PRP)-lead projects; EPA is dependent on remedial action work performed by third parties at these sites. EPA teams performed work on under 32% of RAPCs over the last four years.
- Challenges include limited construction seasons, reduced work force (e.g., attrition), uncertain remedial action funding and unpredictable weather-related events/disasters (e.g., hurricanes, fires).

Metric Details: This measure augments the construction completion measure and documents the completion of a discrete scope of activities supporting a Superfund cleanup. The measure documents incremental progress in reducing risk to human health and the environment at Superfund cleanups. Multiple remedial action projects may be necessary to achieve site-wide construction completion. Regional remedial action project completion (RAPC) data are tracked in SEMS. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements. The target decreases in FY 2020 due to lower funding levels.

(PM 141) Number of Superfund sites with remedy construction completed.

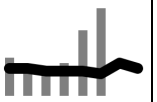
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	19	15	13	13	13	11			Sites	Increase	
Actual	14	8	14	13	10	12					

Key Takeaways:

- At the end of FY 2018, 1,205 NPL and eight SAA sites had reached the construction completion milestone. There are 545 NPL sites where studies are underway, remedies are being selected or designs are being developed. At 324 of these sites, active construction projects are ongoing.
- The performance trend reflects a variety of challenges, including the remaining sites' complexity; funding and staffing reductions; emerging contaminants; and changing screening/toxicity values.
- Challenges include limited construction seasons, reduced work force (e.g., attrition), uncertain remedial action funding and unpredictable weather-related events/disasters (e.g., hurricanes, fires).

Metric Details: This measure tracks site-wide completion of physical construction of all cleanup actions, including actions to address all immediate threats and to bring all long-term threats under control. EPA regional offices document construction completion (CC) in a Preliminary Close Out Report (PCOR) which is reviewed by EPA headquarters. The PCOR signature date is entered in SEMS by the region and EPA headquarters enters the achievement of the CC in SEMS. The universe includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	10	10	9	9	9	8	12	10	Sites	Increase	
Actual	14	9	10	12	24	32					

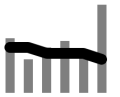
Key Takeaways:

- EPA significantly exceeded the target of eight with a net total accomplishment of 32. This achievement was primarily due to the elevated emphasis placed on sites where human exposure was not under control nationally as mandated in Superfund Task Force Recommendations.
- The Agency implemented several actions to bring additional sites under control: identifying sites where human exposure was not under control and steps to bring these sites under control; launching a public human exposure dashboard; and identifying best management practices to bring additional sites under control.
- Regions identified primary challenges to sites reaching key milestones, including: time required to eliminate remaining human exposure pathways (e.g., fish tissue contamination or lengthy remedy implementation); difficulties reaching consensus with other parties on cleanup implementation; and resources needed for site cleanup.
- Challenges include the health effects of emerging contaminants, the growing understanding of which may lead the Agency to adjust toxicity values and cleanup standards to ensure protectiveness.

Metric Details: This measure documents progress achieved in controlling unacceptable human exposures to contamination at sites and denotes a site-wide accomplishment. Human exposure determinations for sites can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into SEMS. It is important to note that results express as a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The change in status often occurs when a previously unknown exposure pathway (e.g., vapor intrusion) or contaminant is discovered, and a reasonable expectation exists that people could be exposed or there is insufficient data to make such a determination until further investigation takes place. The universe of sites tracked for this measure includes final and deleted NPL sites and since FY 2014, non-NPL sites with SAA agreements. The FY 2019 target

increased from 8 to 12 sites due to higher performance in FY 2017 and FY 2018 because of the Superfund Task Force's emphasis placed on this measure. However, the target decreases in FY 2020 due to lower funding levels.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	15	15	13	13	13	11			Sites	Increase	
Actual	18	11	15	17	14	29					

Key Takeaways:

- EPA significantly exceeded the target of 11, with a net total accomplishment of 29. This was primarily due to work by two regions to define the extent of groundwater contamination at several additional sites based on the installation of additional wells coupled with the completion of other pipeline activities.
- Challenges include the complexity of remaining sites, resource reductions, emerging contaminants, and changing screening/toxicity values.

Metric Details: This measure documents progress achieved in controlling groundwater contamination to protective, risk-based levels or stabilizing the groundwater contamination so there is no unacceptable discharge to surface water. This measure denotes a site-wide accomplishment and reflects a net accomplishment as sites can shift between groundwater migration under control to groundwater migration not under control or to groundwater migration insufficient data determinations. Monitoring is conducted to confirm that affected groundwater remains in the original area of contamination. The change in status often occurs when data from a remedial investigation indicate that contaminated groundwater migration is occurring at a site. Regions enter groundwater migration determinations and supporting data into SEMS. The universe of sites tracked for this measure includes final and deleted NPL sites and, since FY 2014, non-NPL sites with SAA agreements.

(PM 137) Number of Superfund removals completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target			275	275	275	175	175	141	Removals	Increase	
Actual			278	226	255	242					

Key Takeaways:

- EPA responds to threats as they arise; predicting how many threats will arise in an individual year is challenging but the targets include assessment of longer-term trends, resource planning, and incorporation of new program approaches. Specifically, the target reflects recent years' shift in the expected allocation of resources toward large time critical removals that cannot be listed on the National Priorities List (NPL).
- The experience and expertise of EPA's On-Scene Coordinators allow EPA to quickly and effectively respond to emergencies as they occur.

Metric Details: This measure is a tabulation of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and PRP-lead. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Data are tracked in SEMS. The target decreases in FY 2020 due to lower funding levels.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		86	87	88	85	83			Percent	Increase	
Actual		84	84	84	85	82					
Numerator						430			Sites		
Denominator						522					

Key Takeaways:

- FY 2018 represents the lowest result in the past five years. The number of Operable Units (OUs) being addressed has increased recently due to site discovery, the Military Munitions Response Program, and emerging contaminants.
- In FY 2018, EPA used Lean techniques to streamline coordination among the Agency's national and regional offices on five-year reviews of federal facility NPL sites.
- In addition to meeting the national target, EPA selected actions at 51 federal facility NPL Sites through Decision Documents and completed construction or implementation of remedial actions at 24 sites. Tracking activity on 35 OUs were added to the national Superfund Program in FY 2018 through general site discovery and/or emerging contaminants such as PFAS.

Metric Details: This measure represents the percent construction complete covering the 174 federal facility Superfund NPL sites. The measure is calculated in SEMS using data from the 2,114 OUs at federal facilities. Results are calculated as the sum of: (1) the percentage of OUs construction complete for each individual federal facility Superfund NPL site, converted into a range of 1 to 0; (2) the percentage of actions within an OU complete for each individual federal facility Superfund NPL site, considering completed Remedial Investigation/Feasibility Studies (RI/FS), Decision Documents, Action Memos, ROD Amendments, Remedial Designs, Remedial Actions and FF lead Removals, converted into a range of 1 to 0; and (3) the sum of the percentage complete of the planned duration of those actions for each individual Superfund NPL site, converted into a range of 1 to 0; all divided by three times the number of facilities in the Program.

Long-Term Performance Goal - By September 30, 2022, make 3,420 additional brownfields sites RAU[6].

Annual performance goals that support this long-term performance goal:

(PM B30) Number of brownfields sites made ready for anticipated use.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						684	684	684	Sites	Increase	No Trend Data
Actual						861					

Key Takeaways:

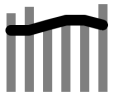
- Used Lean techniques to reduce a backlog of open work packages.
- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally RAU before FY 2018 contributed to the FY 2018 count of properties RAU.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.

[6] From FY 2006 through the end of FY 2017, 5,993 brownfields properties/sites had been made RAU. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.
- From FY 2006 through the end of FY 2018, a cumulative total of 6,854 brownfields properties/sites had been made RAU.

Metric Details: This measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This activity is expected to result in additional sites available for productive reuse, while also helping to quantify the impact of funding from EPA's Brownfields Program. Targets represent annual increments needed to reach the FY 2022 long-term performance goal. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM B29) Number of brownfields properties assessed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	1,200	1,200	1,300	1,400	1,400	1,300			Properties	Increase	
Actual	1,528	1,659	1,320	1,392	1,419	1,919					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally assessed before FY 2018 contributed to the FY 2018 count of properties assessed.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of properties that have been environmentally assessed for the first time using EPA brownfields funding, as reported by cooperative agreement recipients into the ACRES database. This activity will result in identifying which brownfields are ready to be redeveloped for productive reuse, and which brownfields need to be cleaned up to a regulatory risk-based standard prior to redevelopment.

(PM B32) Number of properties cleaned up using brownfields funding.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	120	120	120	130	130	130			Properties	Increase	
Actual	122	132	150	136	137	143					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally cleaned up before FY 2018 contributed to the FY 2018 count of properties cleaned up.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of properties that have been cleaned up to a regulatory risk-based standard using EPA brownfields funding, as reported by cooperative agreement recipients into the ACRES database. This typically occurs under one of two conditions: (1) a clean or no further action letter (or equivalent) has been issued by the state or tribe under its voluntary response program (or equivalent) for cleanup activities at the property; or (2) the cooperative agreement recipient or property owner, upon

the recommendation of an environmental professional, has determined and documented that on-property work is finished. Ongoing operation and maintenance activities or monitoring may continue after a cleanup completion designation has been made.

(PM B34) Jobs leveraged from brownfields activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	5,000	5,000	5,000	7,000	7,000	7,000			Jobs	Increase	
Actual	10,141	12,376	11,229	9,661	8,472	11,197					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, jobs leveraged from Brownfields activities before FY 2018 contributed to the FY 2018 jobs leveraged from Brownfields activities.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of cleanup and redevelopment jobs leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database. These are actual numbers reported by recipients that are based on jobs resulting from environmental work at the site or the redevelopment of the site.

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	1.2	1.2	1.1	1.1	1.1	1.1	1.3	1.3	Billions of Dollars	Increase	
Actual	1.2	1.54	1.71	1.47	1.7	2.2					

Key Takeaways:

- A data cleanup initiative allowed EPA to exceed this year's target. At the start of FY 2018, there was a large backlog of data awaiting EPA review and approval. EPA worked to reduce this backlog, and as a result, sites that were functionally cleanup and redevelopment funds leveraged before FY 2018 contributed to the FY 2018 cleanup and redevelopment funds leveraged.
- This initiative resulted in EPA starting to reduce the backlog of data in FY 2018, with targets to reduce the backlog by 50% by December 3, 2018 and 100% by June 30, 2019; the project also established standard operating procedures to ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

Metric Details: This measure tracks the number of additional dollars leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database. The FY 2019 target increased from $1.1 to $1.3 billion dollars based upon a review of results trends and data cleanup efforts. The data cleanup initiative has resulted in greatly exceeding the FY 2018 target for this measure and is anticipated to have an impact on FY 2019 results, as well. This effort, once completed, will clean up the backlog of data in ACRES to ensure data reported in future fiscal years is as up-to-date as possible.

Long-Term Performance Goal - By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU[7].

Annual performance goals that support this long-term performance goal:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						75	91	107	Facilities	Increase	
Actual						117					

Key Takeaways:

- EPA exceeded the target through improved data processing for previously unlogged sites.
- From FY 2017 through FY 2018, 1,349 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide.

Metric Details: This measure tracks the number of RCRA corrective action facilities made RAU. To be determined RAU, facilities must meet the following criteria: human exposure under control, final cleanup goals achieved for media that would impact the anticipated use, and if needed, controls in place to ensure long-term protectiveness. The universe for this measure is the Agency's list of 3,779 high priority facilities subject to RCRA corrective action. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups.

(PM CA1) Percentage of RCRA corrective action facilities with human exposures to toxins under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	85	87	90	92	94	94			Percent	Increase	
Actual	85	87	90	92	94	95					
Numerator	3,170	3,299	3,392	3,465	3,534	3,571			Facilities		
Denominator	3,779	3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in increased performance FY 2013 through FY 2018.
- By the end of FY 2018, 3,612 RCRA corrective action facilities had human exposures to toxins under control.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities that have met the RCRA environmental indicator for human exposure under control. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks an early step in the progression toward completing facility cleanup.

[7] From FY 1987 through FY 2017, 1,232 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

(PM CA2) Percentage of RCRA corrective action facilities with migration of contaminated groundwater under control.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	73	77	80	84	88	88			Percent	Increase	
Actual	76	79	82	84	87	89					
Numerator	2,840	2,991	3,097	3,191	3,276	3,347			Facilities		
Denominator	3,779	3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in increased performance FY 2013 through FY 2018.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities that have met the RCRA environmental justice indicator for groundwater migration under control. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks an early step in the progression toward completing facility cleanup.

(PM CA5) Percentage of RCRA corrective action facilities with final remedies constructed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	51	55	60	64	69	70			Percent	Increase	
Actual	51	56	60	64	67	70					
Numerator	1,925	2,114	2,290	2,420	2,547	2,630			Facilities		
Denominator	3,779	3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in increased performance FY 2013 through FY 2018.
- EPA achieved progress in FY 2018 (after slowed progress in FY 2017) by applying Lean improvements to the RFI and Remedy Selection processes; EPA will continue to develop program improvements using Lean tools.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities with final remedies constructed. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		21	24	30	32	33			Percent	Increase	
Actual		24	28	31	34	36					
Numerator		905	1,067	1,176	1,271	1,341			Facilities		
Denominator		3,779	3,779	3,779	3,779	3,779					

Key Takeaways:

- Program improvements initiated in past years continue to benefit this measure, resulting in the trend of improved performance through FY 2018; EPA will continue to develop program improvements using Lean tools.

Metric Details: This measure tracks the percentage of RCRA corrective action facilities with have met final corrective action standards. Facilities at this milestone may still require long-term controls to ensure protectiveness. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a late step in the progression towards completing facility cleanup.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							98	98	Facilities	Increase	
Actual											

Metric Details: This measure tracks the number of RCRA corrective action facilities with final remedies constructed. The universe is the Agency's list of 3,779 high priority facilities. Information is entered into RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

(PM HW4) Percentage of hazardous waste units with initial controls in place to prevent release.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						45			Percent	Increase	
Actual					35	55					
Numerator					188	254			Facilities		
Denominator					541	463					

Key Takeaways:

- At the end of FY 2018, 55% of units (254 of 463) in need of controls had initial controls in place. This is an increase over FY 2017, in which 35% of units (188 of 541) in need of controls had initial controls in place.

Metric Details: This measure tracks the facilities that need an initial permit or other initial control. The measure tracks the percentage of those units that have been permitted, clean-closed, or otherwise had initial controls to prevent release (using EPA's RCRAInfo system). Issuance of controls decreases the risk of future releases and enhances protection of human health and the environment. The baseline of facilities in need of controls was assessed in 2014.

(PM HW5) Number of permit renewals issued at hazardous waste facilities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						64	64	64	Facilities	Increase	
Actual	113	110	100	89	125	109					

Key Takeaways:

- At the end of FY 2018, 963 (72%) of a universe of 1,330 permitted facilities had permits not past expiration.

Metric Details: This measure tracks RCRA hazardous waste permit renewals or clean-closures in the universe of permitted facilities using EPA's RCRAInfo system. This does not include all permit maintenance since permit modifications cannot be projected and are not included. Maintaining updated permits ensures that permitted facilities have consistent and protective standards to prevent release; proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated substantial costs. Annual targets for the number of permit renewals or clean-closures are estimated from projections of available workload, such as pending permit applications.

Long-Term Performance Goal - By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration[8].

Annual performance goals that support this long-term performance goal:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	10,100	9,000	8,600	8,600	8,600	11,200	11,200	11,200	Cleanups	Increase	
Actual	11,582	10,393	9,869	8,977	8,775	8,128					

Key Takeaways:

- The states and EPA continue to complete cleanups but the trend in number of cleanups completed continued downward in FY 2018.
- As part of the ELMS process, EPA is working with the states to develop strategies to address issues regarding cleanup progress.
- As the universe of available cleanups decreases, many of the remaining releases are ones with greater challenges such as a lack of responsible party, technically difficult cleanups and lack of available funds.
- By the end of FY 2018, 478,080 LUST cleanups had been completed, out of a cumulative universe of 543,812 confirmed releases.

Metric Details: This measure tracks the number of petroleum-contaminated sites where the states, tribes and EPA have completed cleanup activities. The states and EPA regional offices report the number of cleanups completed within the reporting period (every six months based on the fiscal year). The state totals and EPA regional totals of cleanups completed in Indian country are added together to determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	42	37	30	26	26	16			Cleanups	Increase	
Actual	18	26	32	30	21	16					

Key Takeaways:

- EPA met the FY 2018 target of 16 cleanups completed in Indian country.

[8] By the end of FY 2017, 469,898 LUST cleanups had been completed.

- As part of the ELMS process, EPA is working to develop strategies to address cleanup progress. EPA conducted a study of the remaining open releases in Indian country to identify opportunities for additional cleanup completions in the coming years.
- By the end of FY 2018, 1,166 LUST cleanups had been completed in Indian Country.

Metric Details: This measure tracks the number of petroleum-contaminated sites in Indian country where EPA has completed cleanup activities. EPA regional offices report the number of cleanups completed within the reporting period (every six months based on the fiscal year). The EPA regional totals of cleanups completed in Indian country determine the national number of cleanups completed for the reporting period and the fiscal year. EPA uses the LUST4 database to track progress. The universe totals of confirmed releases pending cleanup will change over time as releases are found and cleanups are completed.

(PM 114) Number of confirmed releases at UST facilities in Indian country.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						11			Releases	Decrease	
Actual						11					

Key Takeaways:

- EPA met the target of 11 or fewer confirmed releases in Indian country. The cumulative number of confirmed releases in Indian country is 1,424.
- There is a potential for a higher number of confirmed releases over the next few years due the requirement to investigate additional parts of the tank under EPA's 2015 regulations. Most of these newly discovered releases are likely to be the result of prior contamination, not a new release.

Metric Details: This measure tracks the number of new confirmed releases at Underground Storage Tank (UST) facilities in Indian country. This measure has a direct relation to releases needing to be cleaned up ("backlog" of cleanup sites). EPA regional offices report the number of confirmed releases within the reporting period (every six months based on the fiscal year). EPA uses the LUST4 database to track progress. The universe totals will change over time as releases are found and confirmed.

Other Core Work supporting Objective 1.3

Annual performance goals:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target		150	200	200	200	160			Approvals	Increase	
Actual		254	218	182	190	194					

Key Takeaways:

- EPA improved results and met the FY 2018 target due in part to permit process improvements introduced as the result of a Lean event.
- Approval applications are submitted by the regulated community on an as-needed basis, making it very difficult to accurately estimate upcoming targets.

Metric Details: This measure tracks the number of PCB approvals under Section 761 of the Toxic Substances Control Act (TSCA). The approvals are issued by EPA and tracked by EPA regional offices and headquarters. There is no universe for the number of approvals because facilities choose to submit approvals, as needed. PCB permit approval activities are not delegated to the states.

(PM 438) Number of inspections conducted at oil facilities subject to the Spill Prevention, Control and Countermeasure regulation.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						410			Inspections	Increase	
Actual						465					

Key Takeaways:

- Percentage of inspected facilities found to be in compliance at initial inspection is low, at approximately 13%.

Metric Details: This measure tracks the number of EPA inspections occurring at Spill Prevention, Control and Countermeasure (SPCC) facilities. There are approximately 540,000 facilities in the SPCC universe. Data are tracked in EPA's Oil database.

(PM 437) Number of inspections conducted at oil facilities subject to the Facility Response Plan regulation.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						200			Inspections	Increase	
Actual						257					

Key Takeaways:

- Percentage of inspected facilities found to be in compliance at initial inspection is low, at approximately 35%.

Metric Details: This measure tracks the number of EPA inspections occurring at Facility Response Plan (FRP) facilities. There are approximately 4,600 facilities in the FRP universe. Data are tracked in EPA's Oil Database.

(PM CH2) Number of risk management plan inspections conducted.

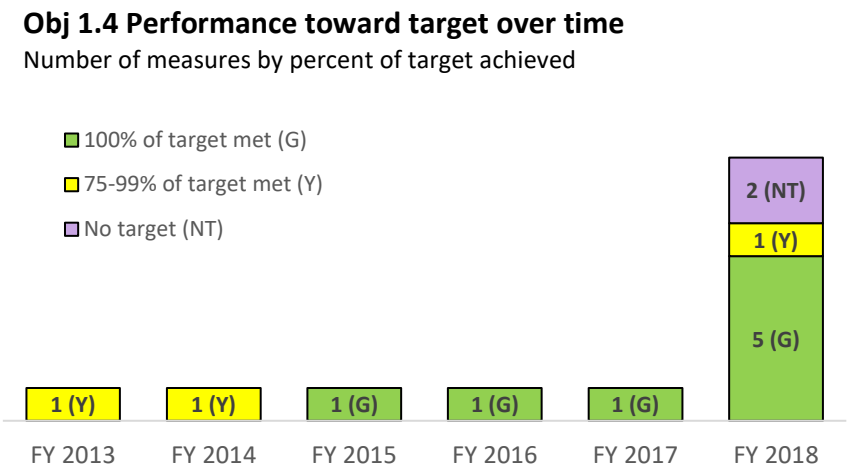
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	500	460	460	460	460	175			Inspections	Increase	
Actual	539	466	376	343	397	316					

Key Takeaways:

- EPA focuses inspection resources on high-risk Risk Management Plan (RMP) facilities (e.g., RMP facilities with a history of accidents or with very large quantities of regulated substances on site).
- Accidents at RMP facilities have declined since the inception of the Program by an average of approximately 3-4% per year.

Metric Details: The RMP Program implements section 112(r) of the 1990 Clean Air Act Amendments. The RMP Program requires facilities (approximately 12,500) that use extremely hazardous substances to develop a RMP. The information required from facilities under the RMP Program helps local fire, police, and emergency response personnel prepare for and respond to chemical emergencies. Data are tracked in EPA's RMP database. EPA aims to conduct inspections at 3% of approximately 11,000 RMP facilities each year.

Objective 1.4 – Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- On track to meet statutory requirements for timely completion of chemical risk evaluations and risk management actions under the Toxic Substances Control Act (TSCA), as amended. Released problem formulation documents for all 10 EPA-initiated risk evaluations released for public comment; and completed peer review for use, hazard, and exposure information for five Persistent, Bioaccumulative and Toxic (PBT) chemicals. Published a white paper explaining how it will identify the next group of chemicals for prioritization. (FY 2018-2019 APG)
- Making progress on all Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Act (PRIA) performance measures. EPA exceeded its percentage of decisions completed on time targets (on or before negotiated due date) on a monthly tracking basis, while beginning to reduce average PRIA registration timeframes through improved processes that will continue to evolve and ensure meeting the long-term performance goals.

Challenges:

- TSCA amendments instituted new requirements and ambitious schedules for reviews of existing chemicals and the requirement for an affirmative safety determination for new chemical reviews. Long-term performance targets for these technically complex review processes are ambitious.
- Completed 58.4% of TSCA pre-manufacture notice final determinations for new chemicals within 90 days, missing 65% target. Reached all final determinations within allowable statutory timeframes. Implementing Lean recommendations to improve performance. (FY 2018-2019 APG)
- EPA has developed a maintenance fee surplus due to FIFRA's "one-to-one" provision that requires every maintenance fee dollar expenditure to be matched with an appropriated dollar. PRIA 4 would eliminate this requirement but its prospects are uncertain.
- A potential lapse of PRIA authority and phase out provisions would impede registration review and result in impacts to personnel.
- Meeting the Endangered Species Act requirements for FIFRA risk assessments continues to be a significant challenge. EPA is working with the Fish and Wildlife Service and the National Marine Fisheries Services on the first three pilot nationwide pesticide endangered species consultations. Once those consultations have been completed, EPA plans to apply the knowledge gained from the first three pilot pesticides to subsequent consultations.

Long-Term Performance Goal - By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines[9].

Annual performance goal that supports this long-term performance goal:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	N/A	10	Evaluations	Increase	
Actual						N/A					

Metric Details: This measure tracks new risk evaluation activity under TSCA, as amended in 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. A risk evaluation is considered complete when the final risk evaluation is published in the Federal Register. The risk evaluation process is the second step, following prioritization and before risk management, in EPA's existing chemical process under TSCA. The purpose of risk evaluation is to determine whether a chemical substance presents an unreasonable risk to health or the environment, under the conditions of use. As part of this process, EPA must evaluate both hazard and exposure, and ensure decisions are based on the weight-of-scientific-evidence. To count toward the target, an evaluation must be completed within three years. While the statute allows for a six-month extension, this measure tracks performance against the initial deadline. Accordingly, the expected completion date for the first 10 risk evaluations, which were commenced on December 19, 2016, is December 19, 2019. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines[10].

Annual performance goal that supports this long-term performance goal:

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	N/A	N/A	Actions	Increase	
Actual						N/A					

Metric Details: This measure tracks the number of risk management actions promulgated within statutory limits under TSCA, as amended by the Lautenberg Act. Statute requires EPA to propose a rule under TSCA Section 6 for certain PBT chemicals by June 21, 2019 (in FY 2019), with a final rule to be issued by December 21, 2020 (in FY 2021). For risk management actions following identification of unreasonable risk to human health or the environment in a risk evaluation, final risk management actions must be completed within two years after publication of the final risk evaluation. While the statute allows for a two-year extension, this measure tracks the performance against the initial deadline only. This measure also encompasses TSCA risk management actions promulgated for other reasons, such as to address risks from exposure to chemicals for which risk assessments were

[9] There is no baseline for this measure, as the program is operating under new statutory authority.
[10] There is no baseline for this measure, as the program is operating under new statutory authority.

completed prior to enactment of the Lautenberg Act. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines[11].

Annual performance goals that support this long-term performance goal:

(PM TSCA3) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the initial 90-day statutory timeframe.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						65	80	80	Percent	Increase	No Trend Data
Actual						58.4					
Numerator						45			Final Deter-minations		
Denominator						77					

Key Takeaways:

- EPA missed the FY 2018 target as TSCA amendments added more complexity to the new chemical review process. Specifically, an affirmative safety determination for all new chemical reviews greatly increased workload making it more difficult to achieve the performance target.
- Performance improved significantly over FY 2018, with 65.2% of final determinations made within 90 days during the 4th quarter. The number of new chemical cases over 90 days pending final determinations at the end of FY 2018 was 315.
- EPA will implement recommendations from a 2018 Lean event to expedite the risk assessment phase of the review process and will initiate a Lean event in FY 2019 to identify efficiencies in the risk management phase.

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. The statute requires a base review period of 90 days and allows EPA to extend this period another 90 days. While EPA has the authority to agree to voluntary suspensions at the request of a submitter to provide additional time to complete the required review pending receipt of additional information that is needed, this measure tracks performance against the initial 90-day deadline only. This measure tracks final determinations for submissions received by EPA in a single fiscal year. Additional information and statistics about the New Chemicals Program are available at: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

[11] Baseline is 58.4% of determinations made within 90 days in FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

(PM TSCA3b) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the full timeframes allowable by statute.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target							100	100	Percent	Increase	No Trend Data
Actual											
Numerator									Final Determinations		
Denominator											

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. EPA has the authority to agree to voluntary suspensions at the request of a submitter; these provide additional time to complete the required review pending receipt of additional information that is needed. This measure tracks performance against the full timeframes authorized under the statute. A performance result of 100% indicates that there were no instances in which EPA failed to complete a final determination within the period of review agreed to, including any voluntary suspensions. The baseline is 100% of determinations made within full timeframes allowable by statute in FY 2017.

Long-Term Performance Goal - By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program[12].

Annual performance goals that support this long-term performance goal:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						58	75	75	Decisions	Increase	No Trend Data
Actual						65					

Key Takeaways:

- EPA exceeded its FY 2018 target, now having completed 42% of the known universe of chemical cases at the close of FY 2018.
- The Program continues to look for process efficiencies to meet or exceed future targets.

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first 15-year cycle of registration review by October 1, 2022. The baseline is 239

[12] Baseline is 239 decisions completed by the close of FY 2017 out of the known universe of 725. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

decisions of a known universe of 725 cases (33%) completed through FY 2017. Universe is finite. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						70	72	75	Risk Assessments	Increase	
Actual						113					

Key Takeaways:

- EPA exceeded its FY 2018 target, now having completed 64% of the known universe of draft risk assessments at the close of FY 2018.
- This result was due in part to several assessments in the queue that were determined to require only minimal administrative actions to be marked final.
- The Program continues to look for process efficiencies to meet, if not continue to exceed, future targets.

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first 15-year cycle of registration review by October 1, 2022. The baseline is 351 draft risk assessments of a known universe of 725 cases (48%) completed through FY 2017.

Long-Term Performance Goal - By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days[13].

Annual performance goals that support this long-term performance goal:

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						643	631	619	Days	Decrease	
Actual						603					

Key Takeaways:

- EPA exceeded the FY 2018 target, demonstrating solid progress toward the long-term performance goal of reducing the PRIA registration timeframe for new active ingredients by an average of 60 days by September 30, 2022.

Metric Details: To expedite the review and licensing of pesticides' new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017. There are 36 different PRIA categories that relate to new active ingredients, with statutory time frames ranging from 7-24 months.

[13] Baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017.

(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where original PRIA due date was not met.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						303			Days	Decrease	
Actual						117					

Key Takeaways:

- EPA exceeded its target, demonstrating progress toward the long-term performance goal of reducing PRIA registration timeframes by an average of 60 days by September 30, 2022.
- EPA ensured consistent utilization of the preliminary technical screen, resulting in deficient packages being identified earlier in the review process. The applicant either corrected the identified deficiencies so that review could continue, or those applications were rejected under the screen. This allowed Agency resources to be directed to more complete applications.

Metric Details: To expedite the review and licensing of pesticides' new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average of 316 days exceeding the PRIA decision timeframes in the statute (range: 15-1,538 days) for 42 new active ingredients completed in FY 2015-2017.

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	99	97.0	96	96	97	99	99	99	Percent	Increase	
Actual	98.8	85	98.4	99	99	99.7					
Numerator	2,023	1,627	2,078	2,157	2,008	2,193			Decisions		
Denominator	2,048	1,919	2,111	2,174	2,026	2,199					

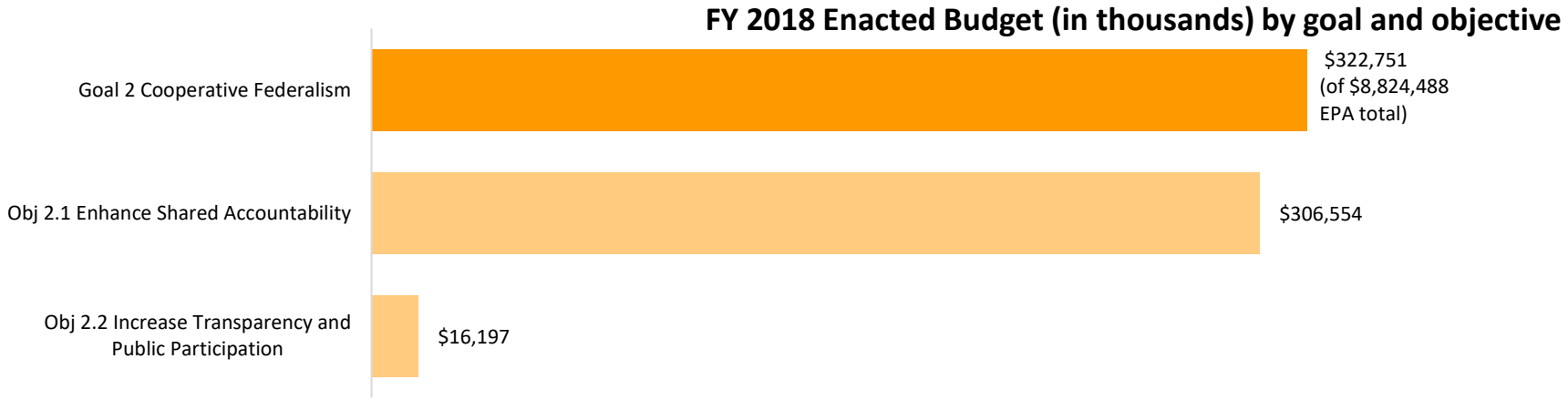
Key Takeaways:

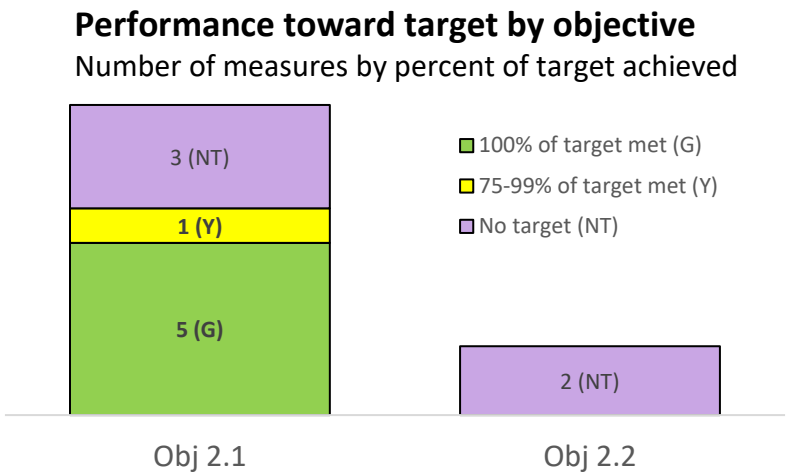
- EPA continues to meet its target of 99% of all PRIA decisions completed on time (on or before PRIA or negotiated due date). EPA exceeded the target for the fourth straight year while achieving the highest rate of on-time PRIA decisions to date: Only six decisions out of 2,199 were not completed on time for a completion rate of 99.7%.
- EPA has streamlined the registration process by using preliminary technical screening under PRIA of 2012 (PRIA 3), allowing the Agency to identify deficiencies early, and applicants to correct these deficiencies at the front end of the process.

Metric Details: Whereas PM PRIA1 and PM PRIA2 track performance for new active ingredient decisions only, this measure relates to all PRIA categories described in the fee tables in FIFRA section 33(b)(3). Additionally, FIFRA section 33(f)(5) allows that EPA and the applicant may mutually agree to extend a decision time review period. Decisions completed on or before the negotiated due date but after the original PRIA due date are still considered "on-time" under this measure. More information on PRIA can be found on https://www.epa.gov/pria-fees/pria-overview-and-history. The baseline is 94% average of decisions completed on-time from FY 2014-2016.

Goal 2 at a Glance

Cooperative Federalism: *Rebalance the power between Washington and the states to create tangible environmental results for the American people.*

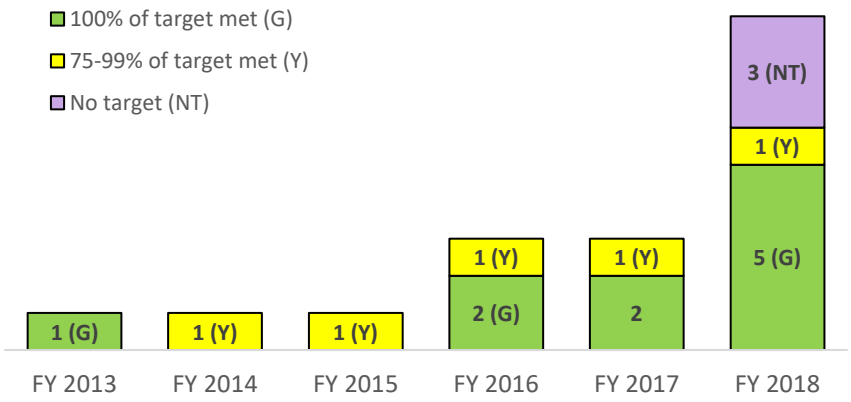



Performance toward target by objective
Number of measures by percent of target achieved
3 (NT)
1 (Y)
5 (G)
2 (NT)
100% of target met (G)
75-99% of target met (Y)
No target (NT)
Obj 2.1
Obj 2.2

Objective 2.1 – Enhance Shared Accountability: Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.

Obj 2.1 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given significant challenges in developing performance goals and baselines for grant commitments, and implementation plans to meet the objective.

Summary of progress toward strategic objective:

- Developed, in coordination with the Environmental Council of the States, a draft memo to guide Agency oversight of delegated federal programs. The memo underscores four principles: deference to states, effective communication, clear standards of review, and elevation of issues.
- After conducting an internal and external survey, EPA took steps to overcome potential barriers to the use of multi-media Performance Partnership Grants (PPGs) by developing an improved method to calculate state and tribal fiscal PPG utilization.
- Developed a model of shared governance with states on enforcement and compliance by issuing guidance to set consistent standards for joint planning, work sharing, and enhanced communication. EPA will become a true partner with states – sharing information, technology, and work.
- Completed an Indian Environmental General Assistance Program (GAP) evaluation procedure to identify opportunities to deliver environmental and health improvements in Indian country. The Agency consulted with hundreds of tribal representatives in developing the procedure.

Challenges:

- EPA and states share the challenge of determining an appropriate balance of federal and state responsibilities, given statutory authorities and available resources.
- EPA needs a broad, agencywide collaboration effort to determine and prioritize a measurable suite of national grant commitments. This work will continue in FY 2019.
- Shared governance between EPA and each of the 573 federally-recognized tribes requires active engagement to identify shared priorities, and coordination across EPA to determine roles and responsibilities.
- EPA retains responsibility for directly implementing federal environmental programs in much of Indian country where eligible tribes do not have delegable authorities.

Long-Term Performance Goal - By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities[14].

Annual performance goal that supports this long-term performance goal:

(PM ST1) Number of grant commitments achieved by states, tribes, and local communities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	TBD	Commit-ments	Increase	
Actual						N/A					

Key Takeaways:

- No results are available for FY 2018.
- In FY 2019, EPA will evaluate commitments associated with state grants to develop a measurable suite of commitments for this measure.
- The Agency is exploring the use of a new reporting tool which will reduce reporting burdens while enhancing transparency in commitment setting across EPA regions.
- Potential challenges include the initial transition to a new reporting tool.

Metric Details: Grant commitments are jointly negotiated by EPA and the state, tribal, or local grant recipient. The objective of this measure is to provide a clear and up-to-date report-out of state-EPA grant commitments. The universe (number of commitments contained in PPGs) and FY 2020 target will be determined in FY 2019. No target is established for FY 2019, but results will be reported.

Long-Term Performance Goal - By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews[15].

Annual performance goal that supports this long-term performance goal:

(PM ST2) Number of alternative shared governance approaches to address state, tribal, and local community reviews.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	3	3	Alternative Approaches	Increase	
Actual						0					

Key Takeaways:

- EPA established a set of key principles to guide Agency oversight of federal programs delegated to states and tribes, and a template to guide co-regulator discussions around oversight activities. The key principles include deference to states, effective communication, clear standards of review, and elevation of issues.

[14] Universe (number of commitments contained in Performance Partnership Grants) and FY 2020 target will be determined in FY 2019. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

[15] There is no baseline for this measure. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

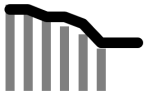
- EPA tested the template with three EPA region-state pairs for Clean Water Act National Pollutant Discharge Elimination System (NPDES) real-time reviews. For the Clean Air Act Title V Operating Permit Program, EPA looked retrospectively at the work done in FY 2018 and aligned the process with the new framework.
- In FY 2019, EPA will solicit feedback from states before launching the new framework in all 10 EPA regions (for NPDES real-time review and Title V), and work with states to select additional programs to target next. Each EPA region will use the template in at least one state, in both programs (for a total of 20 templates) in FY 2019.

Metric Details: This measure tracks the number of program areas where EPA has launched the new oversight framework. EPA will define, develop, pilot, evaluate, and launch a comprehensive system to evaluate state and local implementation of federal environmental programs by 2020. The "comprehensive system" is defined as the overarching principles as laid out in the principles memo, coupled with a template populated with state-and regional specific details on the review activity in question. The purpose of this effort is twofold: to begin to standardize EPA's oversight work across EPA regions, and to maximize state and federal resources by focusing on the most important work. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

Other Core Work supporting Objective 2.1

Annual performance goals:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	17,000	17,000	15,500	15,500	14,000	10,000	10,000	10,000	Inspections & Evaluations	Increase	
Actual	18,000	16,000	15,400	13,500	11,800	10,600					

Key Takeaways:

- Given the reduction in enforcement resources, EPA is using data to target its efforts so that fewer inspections are needed to find noncompliance. EPA also is expanding incentives for self-audit/disclosure.

Metric Details: This measure includes new data elements, such as off-site compliance monitoring activities (e.g., record reviews), not previously tracked or counted, and reflects a recognition that states conduct the vast majority of inspections and an EPA focus on direct implementation programs. The target is the same for FY 2019 and FY 2020 based on available resources.

(PM 426) Number of compliance assurance actions in accordance with EPA's civil enforcement response policies.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established			Actions	Increase	No Trend Data
Actual						N/A					

Key Takeaways:

- EPA used significant resources in FY 2018 to implement other new measures and was not able to finalize definitions such as "informal enforcement actions," a key component of this measure.

Metric Details: This measure includes both EPA's formal civil enforcement action conclusions and informal enforcement actions. Definitions of formal and informal enforcement vary depending on the statute. Formal actions are generally used to address more serious violations while informal actions are for less serious violations. An example of a formal enforcement action is a judicial action. An example of an informal enforcement action is a warning letter.

(PM 427) Number of regulatory sectors served by national web-based compliance assistance centers.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						17			Sectors	Increase	
Actual						16					

Key Takeaways:

- The food processing compliance assistance center has been deactivated because the grant expired, and additional funds were not available to re-compete the grant. EPA will explore opportunities for third-party partners interested in supporting a re-launch of a food processing compliance assistance center.
- EPA funded a cooperative agreement with the National Center for Manufacturing Sciences to develop a new compliance assistance portal to help small and medium-sized oil and natural gas extraction companies that may not have the resources to acquire their own environmental experts, to comply with their environmental regulatory options. This portal will become active in FY 2019.

Metric Details: As of FY 2017, EPA had 17 national web-based compliance assistance centers, providing access to information through web sites, telephone assistance lines, and e-mail discussion groups. This allows businesses; colleges and universities; tribes; local governments and federal facilities to understand and comply with environmental requirements and save money through pollution prevention techniques. These centers serve regulatory sectors, or facilities with similar operations, processes or practices that are subject to a similar set of regulatory requirements.

(PM 428) Number of in-person and live webinar trainings provided to states to expand capacity building.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						100			Trainings	Increase	
Actual						290					

Key Takeaways:

- Offered 150 free online training courses and 38 enforcement and compliance training webinars for state/federal regulators.
- Trained 100 state and federal personnel to identify cleanup parties.
- Held specialized compliance education workshops for federal partners.

Metric Details: This measure includes all in-person and live webinar trainings conducted throughout the fiscal year by EPA's Office of Enforcement and Compliance Assurance to grow infrastructure and leadership necessary for states to implement environmental enforcement programs.

(PM 429) Percentage of projects with early Environmental Impact Statement (EIS) engagement.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						60			Percent	Increase	
Actual						71					
Numerator						100			Projects		
Denominator						141					

Key Takeaways:

- Decisions to engage early are based on available resources and anticipated environmental impacts of the project.

Metric Details: This measure tracks the percentage of projects for which EPA participates with the lead agency on the proposed project prior to publication of the Draft EIS. EPA's policy is to participate early in National Environmental Policy Act (NEPA) compliance efforts of other federal agencies to the fullest extent practicable to identify EPA matters of concern and assist in resolving these concerns at the earliest possible stage of project development. EPA is making a concerted effort to resolve project concerns through early coordination, where possible, rather than rely on submission of critical comments on completed documents. Early engagement activities include, but are not limited to, the following: providing scoping comments; participating in Pre-DEIS project meetings or site-visits to understand project components and context; sharing EPA's pre-DEIS input and expertise through phone calls, emails, or in-person communications with the lead agency; providing feedback to the lead agency on drafts of project descriptions or plans; reviewing technical reports, administrative draft chapters, or drafts of DEIS; and reaching out to the lead agency to discuss significant comments prior to sending them in writing to ensure accuracy and to provide context and an opportunity for questions.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target				50	120	150			Partners	Increase	
Actual				50	120	395					

Key Takeaways:

- EPA has been particularly successful building the capacity of water utilities to increase their resilience to extreme weather events (e.g., more intense storms) using EPA's Climate Resilience Evaluation and Awareness Tool (CREAT).

Metric Details: A key goal of EPA's work on climate resiliency is to build and strengthen the capacity of states, tribes, and local communities to anticipate, prepare, and adapt to a changing climate. This measure focuses on providing the tools, training, technical assistance, data, models, and other information they need to build their adaptive capacity. EPA delivers these resources to all communities across the nation through its innovative web-based Climate Adaptation Resource Center (ARC-X).

(PM AD5) Cumulative number of state, tribal, and community partners that have incorporated climate resiliency into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements).

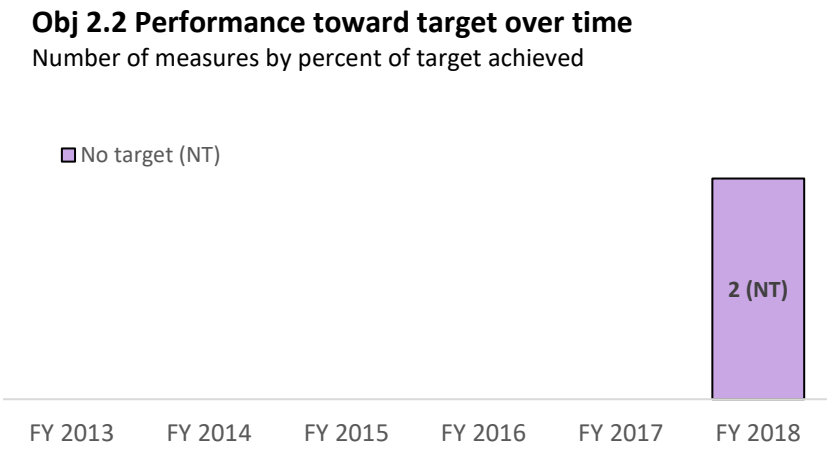
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target				50	100	150			Partners	Increase	
Actual				50	100	256					

Key Takeaways:

- EPA programs are successfully supporting climate-resilient investments by states, tribes, and local communities through existing grant mechanisms. These primarily include Brownfields grants, State Revolving Loan Funds (SRF), and Climate Ready Estuaries Partner Projects.

Metric Details: This measure focuses on supporting climate-resilient investments across the nation.

Objective 2.2 – Increase Transparency and Public Participation: Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given significant challenges responding to FOIA requests, and developing performance goals and strategies to meet the objective.

Summary of progress toward strategic objective:

- Reorganized the Agency's national and regional Freedom of Information Act (FOIA) programs into the General Counsel's and Regional Counsel's offices to improve accountability and transparency. Required all managers with FOIA responsibilities to have performance appraisal language holding them accountable for FOIA response quality, staffing, and training.
- EPA's Office of Community Revitalization used an EPA investment of roughly $500,000 to leverage m
- ore than $1 million in funds from other agencies and deliver contractor-supported community workshops. The action plans that emerge from this work have enabled many communities to attract additional public and private sector funds for project implementation.
- Held two Children's Health Protection Advisory Committee (CHPAC) meetings. The Administrator and EPA's program offices worked to identify relevant and important issues for EPA and children's environmental health.
- Formed the Environmental Justice and Community Revitalization Council (EJCRC) with senior decision-makers to establish regional frameworks to improve internal coordination of EPA community-based activities and more efficiently identify resources to address community needs.

Challenges:

- EPA faced significant challenges in responding to FOIA requests including a significant increase in requests, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests. Data sources are incomplete as the Agency migrates to an updated tracking system.
- While EPA's Office of Community Revitalization held technical assistance workshops in 44 communities over the past year, the Agency was unable to satisfy the more than 300 letters requesting assistance.
- Sustained work is needed to improve coordination among EPA programs to advance environmental justice and meet community demand for public meetings.

Long-Term Performance Goal - By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests[16].

Annual performance goals that support this long-term performance goal:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established	25	50	Percent	Increase (Greater Reduction)	No Trend Data
Actual						-9					
Numerator						-224			Requests		
Denominator						2,537					

Key Takeaways:

- EPA's FOIA backlog increased from 2,537 to 2,761 (the increase is expressed in the result as a negative reduction), due to a significant increase in requests, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests.
- Laid a foundation to improve efficiency and accountability by increasing the centralization of FOIA work into a reorganized National FOIA Office (NFO).
- Developed a tool for implementation in early FY 2019 to provide requesters with immediate responses to initial site-specific FOIA requests.
- Began to enhance hiring, training, and management performance improvement to develop an efficient work force for managing FOIA requests.

Metric Details: For purposes of this measure, overdue requests are defined as those that are not indicated as closed in EPA's FOIAonline tracking system after 20 working days. EPA will focus on reducing the FOIA backlog the Agency has built up over the years, and enhancing the FOIA process which gives the public the right to make requests for federal agency records. The complexity and volume of electronic documents that must be searched, collected, and reviewed has increased over time. The Agency will ensure that it can support the timely searching and collection of electronically-stored information for purposes of responding to FOIA requests and other information needs in a cost-effective and sustainable manner. This should not only help the Agency provide the public with the information requested, but also reduce the fees and lawsuits the Agency incurs from missing FOIA response deadlines. As of April 2018, there were 2,537 overdue FOIA requests in the backlog. In FY 2019, EPA will reduce that number by 25% (635) to 1,902, and by 50% (1,269) to 1,268 in FY 2020.

(PM FO2) Percentage of FOIA requests completed within statutory deadlines.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established			Percent	Increase	No Trend Data
Actual						N/A					
Numerator									Requests		
Denominator											

[16] As of April 2018, there were 2,537 overdue FOIA requests in the backlog. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

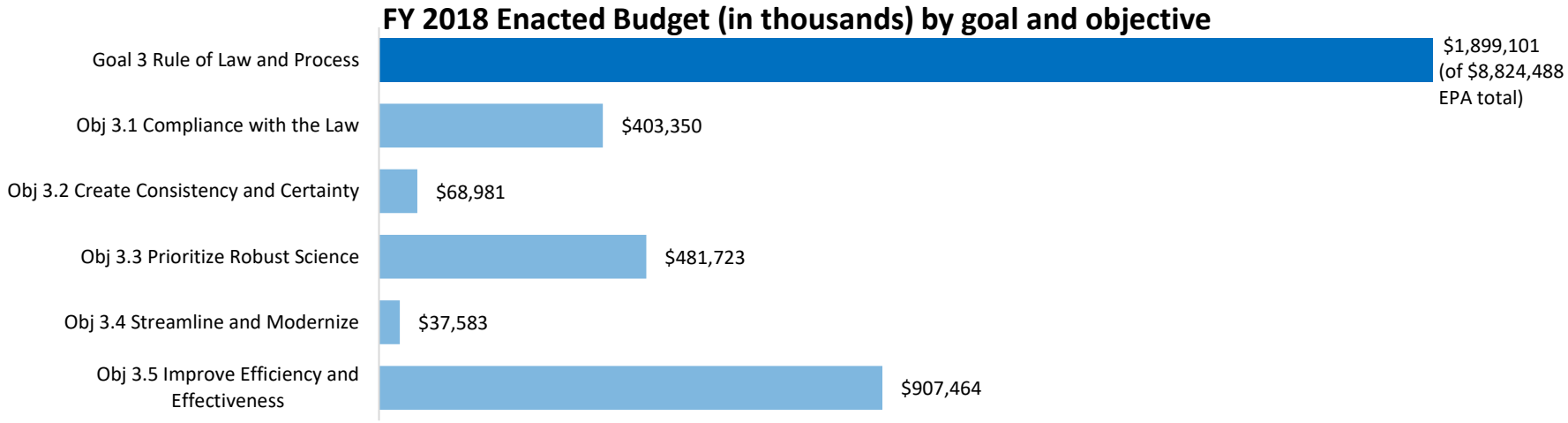
Key Takeaways:

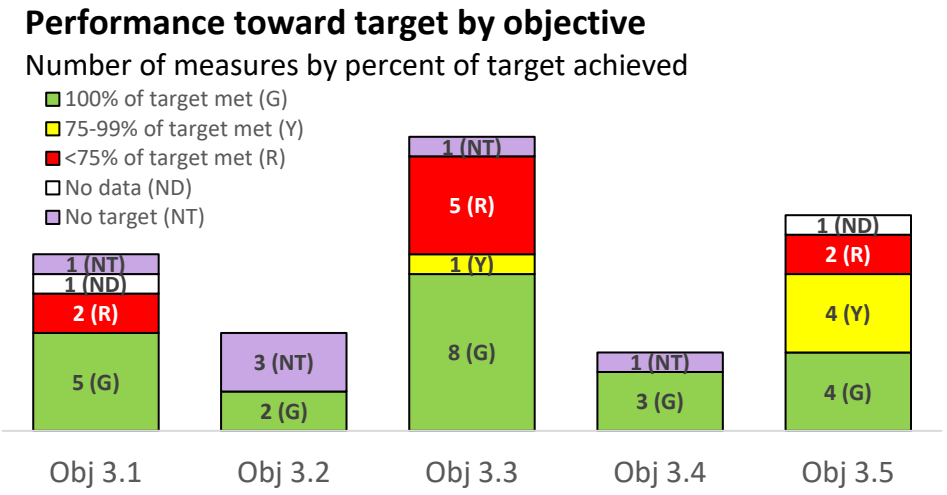
- EPA faced significant challenges in responding to FOIA requests including a significant increase in requests, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests.
- Laid a foundation to improve efficiency and accountability by increasing the centralization of FOIA work into a reorganized National FOIA Office (NFO).
- Developed a tool to be implemented in early FY 2019 to provide requesters with immediate responses to initial site-specific FOIA requests.
- Began to enhance hiring, training, and management performance improvement to develop an efficient work force for managing FOIA requests.

Metric Details: This measure tracks EPA's timeliness in responding to FOIA requests. Currently, data needed to establish a baseline are not available as the Agency upgrades to its updated tracking system, FOIAonline 3.0.

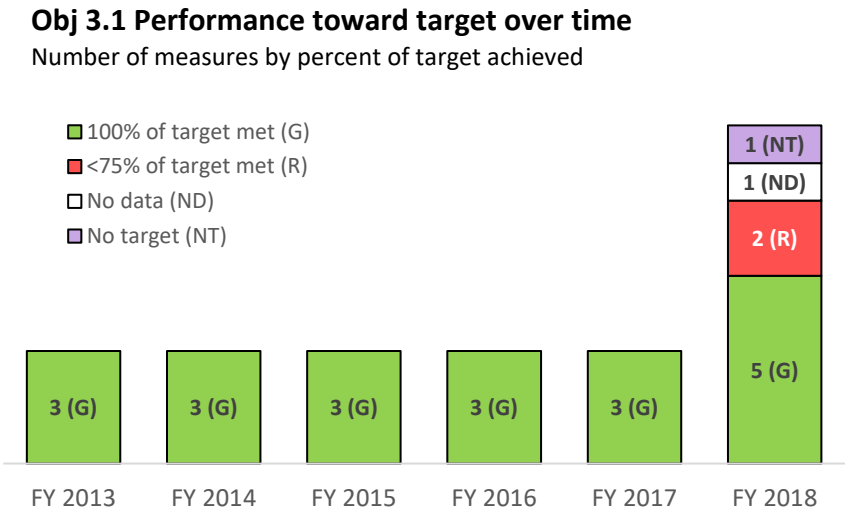
Goal 3 at a Glance

Rule of Law and Process: *Administer the law as Congress intended, to refocus the Agency on its statutory obligations under the law.*





Objective 3.1 – Compliance with the Law: Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Transformed National Enforcement Initiatives into National Compliance Initiatives (NCIs) to better align with Agency long-term performance goals, enhance engagement with states, and apply a broader set of compliance assurance tools.
- Issued guidance establishing clear, uniform timeframes for finalizing inspection reports to provide facilities with results, improving certainty and speeding up correction of violations.
- Far exceeded the target on pollutants and waste reduced, due to EPA's focus on high-priority cases with the most significant health and environmental impacts.
- Obtained over $500 million in new private potentially responsible party (PRP) commitments to fund site cleanups at 112 Superfund sites and reached agreements for cleanups at 32 federal facility National Priorities List (NPL) sites.
- Modified agreements with five municipalities to remedy sewer overflows at lower costs with greater environmental benefits: St. Louis, MO; Akron, OH; Evansville, IN; Northeast Ohio; and Lynn, MA.
- Reached $300 million settlement with ExxonMobil that will eliminate thousands of tons of harmful air pollution in TX and LA.
- Obtained 69 years of incarceration for criminal violators of environmental laws.

Challenges:

- Numbers of inspections and enforcement actions continue to decline. EPA and states are focusing on staff development and priority-setting for better results with limited resources.
- EPA did not begin activities under new enforcement pilot measures as planned. Instead, resources were put toward developing new measures for FY 2019.

Long-Term Performance Goal - By September 30, 2022, reduce the average time from violation identification to correction.

Annual performance goals that support this long-term performance goal:

(PM 430) Average time to move EPA civil cases referred to the Department of Justice in FY 2013 or later to settlement or having a complaint filed.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established			Years	Decrease	
Actual						2.25					

Key Takeaways:

- The civil judicial timeliness measure has been in place since June 1, 2018. The purpose of the measure is to reduce the time that a facility is in violation of an environmental standard by reducing the amount of time from the referral of an enforcement case to its conclusion.
- When EPA initiated this measure, there were 129 referred cases with no complaint filed (RNCF) more than 2.5 years old. By the end of FY 2018, EPA had reduced the number of RNCF cases to 109 under aggressive case management. Close cooperation between EPA headquarters and regions and with the U.S. Department of Justice (DOJ) ensures that cases move toward resolution at an appropriate speed. EPA is making progress to more quickly return violators to compliance.

Metric Details: This measure is calculated, for the civil judicial referrals settled during a given year, as the average time from the date of referral to the DOJ to settlement or having a complaint filed. Cases included in this measure are those referred in FY 2013 or later. Data for this measure are tracked in EPA's Integrated Compliance Information System. From FY 2010 through FY 2017, the average time to move EPA civil judicial referrals to settlement or having a complaint filed was 3.2 years.

(PM 436) Number of all referred no complaint (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							129	129	Cases	Decrease	
Actual											

Metric Details: This measure represents the number of all open civil judicial cases that are more than 2.5 years old without a complaint filed. 2.5 years is the average time from referral to complaint for a complaint filed between FY 2013 and FY 2017. Excludes Superfund, bankruptcy, collection action, and access order cases. This measure is still early in the implementation and therefore the target remains the same until it is demonstrated that results can be improved.

(PM 431) By FY 2018, identify one or two direct implementation programs that use administrative and informal enforcement tools to pilot for reducing the time between identification of a violation to correction. Also in FY 2018, gather data to establish baselines against which to measure progress.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						Identify Pilot Program(s) and Establish Baselines			N/A	N/A	No Trend Data
Actual						No Pilot Identified					

Key Takeaways:

- EPA did not identify a specific pilot. However, EPA instituted a number of activities to improve the timeliness between violation identification and correction, including: requesting that inspectors flag compliance concerns with a facility at the time of inspection; improving the timeliness of completing inspection reports; and providing the final reports to facilities.

Metric Details: Informal enforcement tools may include Notices of Violation (NOV), Notices of Noncompliance, and violation letters.

Long-Term Performance Goal - By September 30, 2022, increase the environmental law compliance rate[17].

Annual performance goals that support this long-term performance goal:

(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						24	TBD	TBD	Percent	Decrease	No Trend Data
Actual						Data Avail 09/2019					
Numerator									Permittees		
Denominator											

Key Takeaways:

- EPA worked with states to improve compliance data completeness in EPA's Integrated Compliance Information System (ICIS)-NPDES data system.
- EPA identified this goal as a NCI in August 2018. An EPA-state workgroup is developing additional strategies and an implementation plan to reduce noncompliance.
- EPA has identified a problem with the data used to calculate the baseline and targets for this measure and is working to revise these calculations.

[17] This concept will be piloted by focusing initially on decreasing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits. The baseline and targets will be determined in FY 2019. Other program areas may be included in this Long-Term Performance Goal during the FY 2018-2022 timeframe. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

Metric Details: This measure tracks the annual SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees. Major and minor permittees that were in SNC/Category 1 noncompliance at any time during the one-year period will be counted in the percentage denominator. SNC/Category 1 noncompliance are a specific type of violation, the severity of which are classified based on duration, severity, and type of violation. For more information, see: https://echo.epa.gov/help/facility-search/npdes-program-search-criteria-help. EPA is updating the baseline and related targets due to the discovery of facilities erroneously included in the universe of regulated entities counted in the denominator. The baseline and targets will be determined in FY 2019. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

(PM 433) By FY 2018, develop a compliance rate pilot in a second program (in addition to NPDES) and implement in FY 2019.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						Identify Pilot			N/A	N/A	
Actual						No Pilot Identified					

Key Takeaways:

- EPA did not develop a compliance rate pilot in a second program. Instead, resources were put toward developing PM 432 for implementation in FY 2019.

Other Core Work supporting Objective 3.1

Annual performance goals:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						325	325	325	Millions of Pounds	Increase	
Actual	1,425	1,221	1,030	62,223	461	810					

Key Takeaways:

- Results far exceeded target, due to a few larger than expected cases.
- The target for this measure is an estimate based on cases in development and past year results. Results in any given year are dependent on actual case outcomes, which are quite variable and difficult to predict.

Metric Details: This measure combines environmental benefits from pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions. Prior to FY 2018, pounds of pollutants reduced, treated, or eliminated for different media were tracked using separate measures.

(PM 435) Number of potentially responsible party (PRP) and other party commitments to perform or pay for cleanup and/or reuse of contaminated sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						110			Commit-ments	Increase	
Actual						158					

Key Takeaways:

- Superfund enforcement efforts resulted in cleanups and redevelopment at more than 110 sites. EPA obtained over $500M in private PRP commitments to carry out or fund site cleanups.
- Reached agreement on approximately 50 decision documents addressing extensive contamination at 32 federal facility Superfund NPL sites.
- Led efforts to implement 21 Superfund Task Force recommendations to incentivize settlements and engage PRPs.

Metric Details: The focus of this cleanup measure is to encourage Regions to complete orders, settlements and other agreements with responsible parties and third parties that facilitate the cleanup and reuse of contaminated Superfund sites and RCRA Corrective Action facilities. This measure counts the following: completed Superfund private party enforcement agreements for the performance of cleanup and agreements that make cash payments toward future site work (Judicial Consent Decrees, Administrative Orders on Consent, Unilateral Administrative Orders, "Cash out" Agreements, bankruptcy settlements and amendments); completed Superfund Bona Fide Prospective Purchaser Agreements with non-liable parties; assurances to parties interested in cleaning up, purchasing, and developing certain properties (comfort/status letters); RCRA Corrective Action cleanup orders; and Federal Facility Agreements, Records of Decision, and their amendments. PRPs and other parties made an average of 100 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2013 to FY 2016.

(PM 441) Number of enforcement tools completed to address cleanup and/or long-term protection, including reuse, of contaminated sites.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target							170	170	Tools	Increase	
Actual											

Metric Details: For Superfund private sites, this measure includes: completed private party enforcement agreements for the performance of site study and cleanup, agreements that make cash payments toward future site work cost recovery settlements with funds dedicated for future work; completed agreements with third-party prospective purchasers to help remove liability barriers to contaminated properties and facilitate redevelopment; and assurances to parties interested in cleaning up, purchasing and developing certain properties (comfort/status letter). This measure also counts Superfund Federal Facility Agreements (FFAs) and FFA amendments, Records of Decision (RODs) and ROD amendments, Explanation of Significant Differences (ESDs), and RCRA Corrective Action cleanup orders. Potentially Responsible Parties and other parties made an average of 170 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2014 to FY 2018. The target is the same for FY 2019 and FY 2020 based on available resources.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	43	43	45	45	45	65			Percent	Increase	
Actual	44	48	62	68	72	75					
Numerator						311			Cases		
Denominator						413					

Key Takeaways:

- EPA increased compliance with environmental laws by punishing and remediating harm associated with significant environmental offenses and deterring future violations.
- A defendant was sentenced to serve 63 months of incarceration for fraudulently obtaining fuel credits designed to reduce American dependence on foreign oil.
- A urea manufacturing plant in Oregon was convicted for failing to report ammonia releases that trigged numerous complaints of foul odors, eye irritation, and difficulty breathing from nearby citizens.
- A chicken processing plant in Missouri was sentenced to pay a $2 million criminal fine and pay $500,000 to directly remedy harm caused when it violated the CWA which led to the death of over 100,000 fish.
- As an example of a valuable case that does not fall into the higher tiered criteria, a former Suzuki employee was convicted for submitting false motorcycle emissions standards reports to EPA. The company also paid a separate $2 million civil penalty in FY 2017.

Metric Details: The mission of EPA's Criminal Enforcement Program is to investigate, help prosecute, and thereby deter the most egregious environmental offenders. The Criminal Enforcement Program collects data on a variety of case attributes to evaluate the range, complexity, and quality of our national docket. The Program uses a case selection methodology to ensure the identification, investigation, and prosecution of cases with significant environmental, human health, and deterrence impact. The data elements used in this tiering methodology include information about human health and environmental impacts, the nature of the pollutant and the release, and the profile and compliance history of the subject(s). Since EPA instituted the tiering system in 2010, the percentage of "higher tier" cases has steadily risen. Nevertheless, there are some valuable cases which do not fit into the higher tiered criteria. Tiering parallels U.S. sentencing guidelines for criminal cases.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	75	75	75	75	75	75			Percent	Increase	
Actual	80	87	83	85	90	87					
Numerator						52			Cases		
Denominator						60					

Key Takeaways:

- Through the prosecution of individuals for their illegal acts, EPA holds not only corporations accountable but those who make the conscious decisions to put human health and the environment in jeopardy by violating environmental laws. Often these individuals are placing profits over the safety of the communities where we live.
- Two individuals were convicted for illegally importing products, including pesticides that posed a serious risk to animals and humans.
- A Volkswagen senior manager was sentenced to 84 months in prison for his role in the conspiracy to cheat U.S. vehicle emissions tests.
- A Terminix branch manager pled guilty to illegally applying methyl bromide fumigant which caused permanent injuries to a family vacationing in the U.S. Virgin Islands.

Metric Details: Pursing criminal cases against individual defendants increases the deterrent value of EPA enforcement. EPA's Criminal Enforcement Program emphasizes prosecution of individual defendants as high up the corporate hierarchy as the evidence permits. The reason for this focus on individual liability is simple: corporate managers will think twice about deliberately breaking the law if they understand that they face incarceration and personal criminal fines for criminal conduct, rather than consequences that will be borne solely by the company. During the early years of EPA's Criminal Enforcement Program, organizational defendants made up approximately 70% of the total defendants charged and individual defendants made up the remaining 30%. By FY 2017, these figures had greatly changed: 90% of cases had an individual charged and 10% were cases where only an organizational defendant(s) was charged.

(PM 421) Percentage conviction rate for criminal defendants.

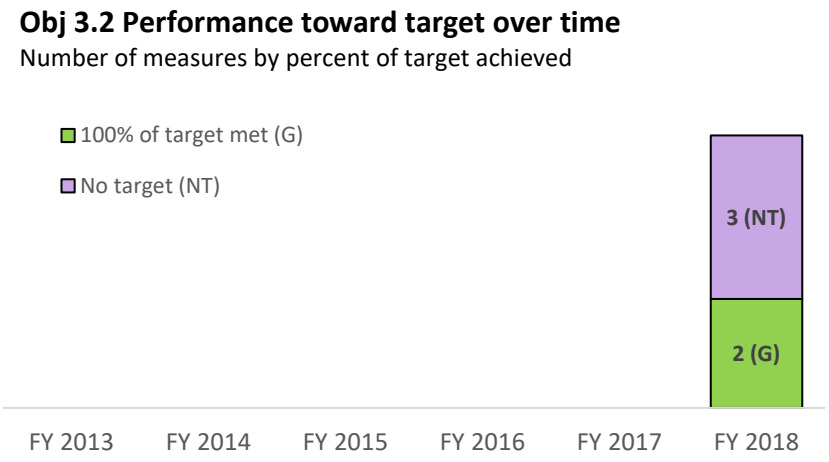
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	85	85	85	85	85	85			Percent	Increase	
Actual	94	95	92	94	91	92					
Numerator						88			Defendants		
Denominator						96					

Key Takeaways:

- EPA works to maintain the historically high conviction rate for defendants charged with environmental crimes, which is a critical ingredient of deterrence. The conviction rate for defendants consistently runs over 90%, a strong affirmation that the government is prosecuting the right cases.

Metric Details: While case outcomes fluctuate based on their specific characteristics, as well as the prosecutorial and sentencing decisions made by DOJ and federal courts, EPA has maintained a historically high conviction rate for defendants charged with environmental crimes.

Objective 3.2 – Create Consistency and Certainty: Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- Made progress by defining the scope of the long-term performance goal for legal deadlines to include statutory duties to propose/finalize regulations for which the statute has established date-certain deadlines. EPA will begin tracking and reporting results in FY 2019.
- Per EO 13771: Reducing Regulation and Controlling Regulatory Costs, EPA issued three regulatory actions and 10 deregulatory actions (see PM RG4), exceeding the EO 13771 two-for-one requirement.
- Met the annual target of reducing burden hours by 2,000,000.

Challenges:

- Burden hours change every month given changes to estimates, new rules, etc.
- While the trend in reducing burden hours is positive, high-level leadership involvement will be needed to maintain progress over the course of the FY 2018-2022 EPA Strategic Plan. Most efforts to reduce burden hours will require a regulation. The Agency might be unable to undertake a regulation for the sole purpose of reducing burden hours given other priorities and resources.

Long-Term Performance Goal - By September 30, 2022, meet 100% of legal deadlines imposed on EPA[18].

Annual performance goal that supports this long-term performance goal:

(PM RG1) Percentage of legal deadlines met by EPA.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established	No Target Established	TBD	Percent	Increase	No Trend Data
Actual						N/A					
Numerator									Legal Deadlines		
Denominator											

[18] Baseline will be determined in FY 2019. (No footnote in *FY 2018-2022 EPA Strategic Plan*.)

Key Takeaways:

- In FY 2018, EPA evaluated ways to develop an inventory of statutory and regulatory deadlines.
- Determining the scope of the inventory was more complex than anticipated. Consequently, original benchmarks were adjusted to allow for refinement of the measure's scope and accuracy of the baseline inventory.
- Results will be reported for FY 2019; and baseline and FY 2020 target will be determined in FY 2019.
- EPA met all of its court-ordered deadlines in FY 2018.

Metric Details: This measure tracks progress toward EPA meeting its statutory, regulatory, and court-ordered deadlines. EPA is reinvigorating its approach to regulatory development and prioritizing meeting legal deadlines to ensure that expectations for the regulated community and the public are clear and comprehensive and that the Agency can achieve its core mission in a manner that is defensible and consistent with its authorities. This measure will not track critical deadlines and duties reported elsewhere, e.g., legal obligations relating to: Clean Air Act (CAA) State Implementation Plans (SIPs), Title V Petitions, and Prevention of Significant Deterioration (PSD) Permits; Clean Water Act (CWA) Total Maximum Daily Loads (TMDLs); FOIA responses; and legal obligations under Consent Decrees. Baseline and FY 2020 target will be determined in FY 2019. No target is established for FY 2019, but results will be reported.

Long-Term Performance Goal - By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours[19].

Annual performance goal that supports this long-term performance goal:

(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						2,000,000	2,000,000	2,000,000	Hours	Increase (Greater Reduction)	
Actual						2,026,627					

Key Takeaways:

- EPA met the annual target of reducing record keeping and reporting burden by 2,000,000 hours. These reductions came from a variety of actions (consolidating Information Collection Rules, changes in estimates, court cases, etc.), but primarily from the CWA National Pollutant Discharge Elimination System (NPDES) and CAA New Source Review (NSR) Programs.
- To reduce reporting burden a regulation is usually, but not always, required.
- High-level management focus on reducing reporting and record keeping burden will be important if EPA is to continue meeting annual targets.
- EPA is able to use the Regulatory Reform Task Force to prioritize actions to reduce record keeping and reporting burden in ongoing or new regulatory actions

Metric Details: To promote the Agency's goal of efficiency, the measure will not track critical deadlines and duties reported in other Agency measures. These include, for example, legal obligations relating to: CAA SIPs, Title V Petitions, and the PSD permits; CWA TMDLs; FOIA responses; and legal obligations under Consent Decrees. EPA will engage in continuous improvement for managing the paperwork burden on regulated entities associated with EPA's Information Collection Rules and reduce the burden where possible with a goal of eliminating 2,000,000 hours of unnecessary or duplicative reporting per year toward the goal of 10,000,000 hours by the end of FY 2022. Annual

[19] Baseline is estimated at 173,849,665 information collection and reporting hours.

increments represent permanent changes in reporting burden. The data are tracked in OMB's RegInfo.gov database. Targets represent annual increments needed to reach the FY 2022 long-term performance goal.

Other Core Work supporting Objective 3.2

Annual performance goals:

(PM RG3) Number of EO 13771 regulatory actions issued.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	No Target Established	Actions	Increase	
Actual						3					

Key Takeaways:

- Per EO 13771, EPA issued three regulatory actions and 10 deregulatory actions (see PM RG4), exceeding the EO 13771 two-for-one requirement.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established, but results are reported.

(PM RG4) Number of EO 13771 deregulatory actions issued.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	No Target Established	Actions	Increase	
Actual						10					

Key Takeaways:

- Per EO 13771, EPA issued 10 deregulatory actions and three regulatory actions (see PM RG3), exceeding the EO 13771 two-for-one requirement.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established, but results are reported.

(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.

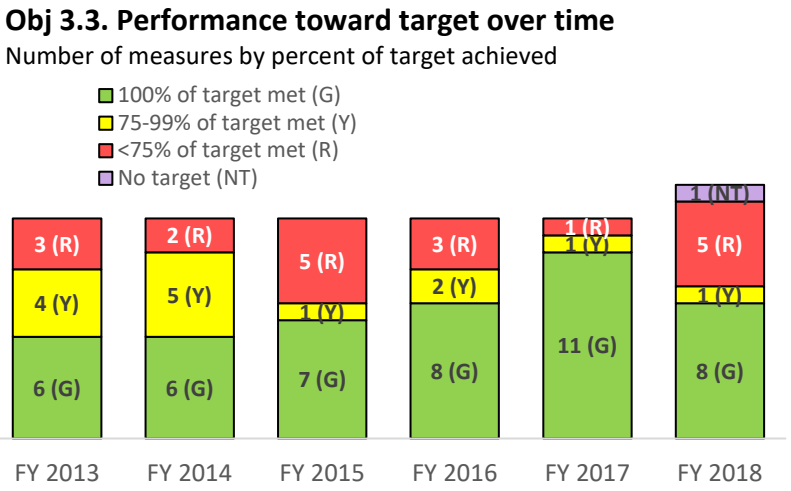
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						-40	-50	No Target Established	Millions of Dollars	Decrease	
Actual						-75					

Key Takeaways:

- EPA is committed to reducing the regulatory burden faced by the American people while still fulfilling its mission of protecting human health and the environment.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23. In FY 2017, the total incremental cost of all EO 13771 regulatory and deregulatory actions was -$21.5 million. The incremental cost values are annualized values in 2016 dollars applying a 7% discount rate, discounted to the year 2016 and assuming a perpetual time horizon. Incremental benefits are not included in this total.

Objective 3.3 – Prioritize Robust Science: Refocus the EPA's robust research and scientific analysis to inform policy making.



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

Summary of progress toward strategic objective:

- EPA has made significant progress to align its science and research portfolio with the needs of its customers, by engaging extensively within the Agency and with other federal, state, and local stakeholders to re-direct research priorities and improve research translation efforts.
- The Office of Research and Development (ORD) has developed draft FY 2019-2022 Strategic Research Action Plans, which will guide multi-year research efforts and facilitate stronger engagement with customers.

Challenges:

- EPA's research capabilities are at risk due to the challenge of sustaining its workforce and retaining specialized expertise in mission critical positions. EPA is aligning the hiring process with the most critical anticipated gaps in expertise, while considering overarching strategic direction and Administration priorities. Maintaining the Agency's Title 42 hiring authority in FY 2020 will contribute to recruiting and retention of world class environmental scientists and engineers.
- Delays in the award of contracts and other financial vehicles are introducing uncertainty and research delays. EPA is conducting a Lean event focused on targeted contract efficiencies such as the release of unliquidated obligations (ULOs) to provide greater support to the highest priority research projects.

Long-Term Performance Goal - By September 30, 2022, increase the percentage of research products meeting customer needs[20].

Annual performance goals that support this long-term performance goal:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting customer needs.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established	77	80	Percent	Increase	No Trend Data
Actual						77					
Numerator						171			Products		
Denominator						222					

[20] Measure text updated from "By September 30, 2022, increase the number of research products meeting customer needs." Based on a pilot survey, 77% of products were delivered in FY 2018 that met customer needs. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

Key Takeaways:

- Based on a pilot survey, ORD calculated that 171 products delivered in FY 2018 met customer needs. When statistically applied to the entire suite of products delivered in FY 2018, approximately 77% of products met needs of partners.
- For the purpose of the pilot survey, a research product qualifies as "meeting customer needs" based on a scoring system that takes account of usability, product quality, and timeliness.

Metric Details: Beginning in FY 2018, ORD initiated a survey to measure customer satisfaction of users of its research products. Customer satisfaction is derived through the distribution of over 200 surveys to key users of ORD products, evaluating the scientific rigor of the research products, relevance of the products, and timeliness of the product delivery to support the continuous improvement of research product development. The survey is estimated at a 90% confidence interval of ±10 products. ORD is evaluating modifications to improve its survey methodology and is considering modifications to the measure that will take effect beginning in FY 2020 reporting.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	92	87	87	100	100	91					
Numerator					11	10			Products		
Denominator					11	11					

Key Takeaways:

- Included among these products were upgrades to the Smoke Sense mobile application, which makes health risks of wildfire smoke more accessible to the public.
- Also included among these products was a collaboration with EPA's Chesapeake Bay Program Office to estimate air-to-water nutrient deposition to the Chesapeake Bay watershed for historical and future conditions.
- The one product, titled "Performance evaluation of high time-resolution, hyperlocal air quality monitoring platforms using multiple mobile monitoring vehicles," listed as "undelivered," was canceled due to unforeseen staff loss.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

(PM AC2) Percentage of planned research outputs delivered to clients for use in improving air quality.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	83	92	74	85	100	100					
Numerator					6	5			Outputs		
Denominator					6	5					

Key Takeaways:

- Among the research outputs delivered to customers was a report providing emission factors from spray guided, wall guided, and complex guided Gas Direct Injection (GDI) light-duty vehicles. These data will provide improvements to mobile source emissions factors for GDI light-duty vehicles and inform the MOtor Vehicle Emission Simulator (MOVES) model with respect to existing data gaps.
- The Air and Energy Program held a State of the Science webinar for an external audience on emerging technology research findings from the 2014-2018 period; conducted an internal synthesis summarizing current air sensor research; and released several publications. These were among the many efforts ORD initiated to communicate research and technology developments to key partners and stakeholders.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year to best meet EPA's and other partners' needs.

(PM CS1) Percentage of planned research products completed on time by the Chemical Safety for Sustainability research program.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					15	13			Products		
Denominator					15	13					

Key Takeaways:

- Among these products was a Toxic Substances Control Act (TSCA) chemical release database in support of EPA's Office of Chemical Safety and Pollution Prevention (OCSPP) conducting the evaluation phase of systematic source review activities.
- ORD added new tools to improve data mining, visualization and interpretability capabilities to the Agency's ECOTOXicology (ECOTOX) knowledgebase, which is a comprehensive, publicly available online application providing single chemical environmental toxicity data on aquatic life, terrestrial plants and wildlife. The ECOTOX knowledgebase is used by OCSPP to inform implementation of TSCA and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), by the Endocrine Disruptor Screening Program, and by EPA's Office of Land and Emergency Management (OLEM) for the implementation of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). ECOTOX data use includes support to develop and validate models to extrapolate data from in vitro (cell-based) to in vivo (whole organism) effects and across species to evaluate the safety of chemicals.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA and other partners' needs.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	0					
Numerator					3	0			Outputs		
Denominator					3	2					

Key Takeaways:

- The two outputs that were listed as "undelivered" were delayed for FY 2019 delivery due to unplanned work related to TSCA implementation. The output delivery dates were revised to FY 2019 Q1.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	83	81	100	100	100	100					
Numerator					16	10			Products		
Denominator					16	10					

Key Takeaways:

- Included among these products was the publication of a series of eco-health relationships in the EnviroAtlas interactive online tool. This project supports state-of-the-science reviews and original research on statistical relationships between both urban green space and natural environments, and critical health issues such as physical fitness; cognitive and mental health; and premature mortality.
- The Sustainable and Healthy Communities Research Program also conducted an analysis to identify gaps in decision science and tools to improve community sustainability assessment and inform management decisions.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	68	100	50	92	100	71					
Numerator						5			Outputs		
Denominator						7					

Key Takeaways:

- Among the research outputs delivered to customers was the development of a range of approaches and tools for communities to: (1) identify and prioritize environmental concerns; (2) assess options and inform alternative environmental management decisions related to their priority community concerns; (3) evaluate impacts of sustainable solutions on public health incorporating valuation approaches; and (4) reduce risks and promote public health and well-being.
- The two outputs that were listed as “undelivered” were delayed due to refocusing product development in response to customer engagement through Strategic Research Action Plan development. They are set to be delivered in FY 2019.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA’s and other partners' needs.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					4	4			Products		
Denominator					4	4					

Key Takeaways:

- Among these products was a report summarizing the latest in research and development on anthrax decontamination strategies.
- Also included among these products was a technical brief reporting out on the installation of the RTX:LINK tool in Flint, MI. This tool provides real-time modeling of the Flint, MI water system to improve drinking water management in evolving circumstances.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA’s and other partners' needs.

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

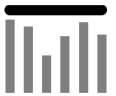
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					8	7			Outputs		
Denominator					8	7					

Key Takeaways:

- Among the research outputs delivered to customers was the development of the Waste Estimation Support Tool (WEST) that uses a Geographic Information System (GIS)-based approach to look at the tradeoffs between decontamination and waste management from a biological incident. WEST looks at the affected infrastructure and composition of biological incidents and helps assess the implications of decontamination.
- Improvements to the Decontamination Support Tool were also released in FY 2018. This tool provides decontamination experts with pros and cons, provides estimates of waste and cost, and compares different options for improved decision-making after chemical incidents.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

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

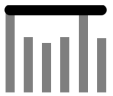
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	88	80	45	68	85	70					
Numerator					11	7			Products		
Denominator					13	10					

Key Takeaways:

- Among these high-priority products was a release of Integrated Risk Information System (IRIS) Assessment Plans; a new version of the Benchmark Dose Software (BMDS) to include additional analysis techniques; and a summary of the significant technical support provided to the Superfund Program.
- The Human Health Risk Assessment Program also integrated new systematic review tools into the Health and Environmental Research Online (HERO) database to improve literature search and screening protocols, including development of new modules, protocols, and capabilities.
- The three products listed as "undelivered" are associated with the IRIS Program. To meet the priorities of EPA programs, ORD instituted a process to reaffirm the needs of EPA programs and regions – outlining exactly what they need and why, plus a timeline. This new process ensures greater accountability from both ORD and program and regional offices and will bring further stability, confidence, and accountability to the IRIS Program in the long term. IRIS scientists provided support to high priority needs of EPA programs including per- and polyfluoroalkyl substances (PFAS) toxicity evaluations and TSCA risk evaluations.
- The outputs listed as not delivered have been off-ramped from the IRIS workflow and will not be developed.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	67	60	67	100	67					
Numerator					2	2			Outputs		
Denominator					2	3					

Key Takeaways:

- Among the research outputs delivered to customers was the release of the final Integrated Science Assessment for sulfur oxides to support the primary National Ambient Air Quality Standards (NAAQS) for SO2 and the final IRIS assessment for Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), to support numerous site-specific remediation efforts.
- The one output listed as "undelivered" is the finalization of provisional peer-reviewed toxicity value (PPRTV) assessments for Superfund. ORD completed its work on this output, but the final output was delayed by contracting issues. During this delay, staff were redirected to competing priorities (including addressing high priority, urgent needs of the Agency related to PFAS). This output will not be delivered as described. It will be recast as part of the new HHRA Strategic Plans.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

(PM RA8) Annual progress score for finalizing IRIS health assessments, Provisional Peer-Reviewed Toxicity Values, and Integrated Science Assessments.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	20	15	15	15	15	5			Score	Increase	
Actual	8	0	5	5	4	2					

Key Takeaways:

- The Agency finalized one assessment, RDX, in FY 2018. IRIS also provided a completed assessment of hexabromocyclododecane (HBCD) to OCSPP for use in the development of a TSCA risk evaluation.
- The missed target is associated with a process instituted by ORD to meet the priorities of EPA programs – outlining exactly what they need and why, plus a timeline. The new process ensures greater accountability from both ORD and program and regional offices and will bring further stability, confidence, and accountability to the IRIS Program in the long term.
- The outputs listed as not delivered have been off-ramped from the IRIS workflow and will not be developed.

Metric Details: This measure was designed to track EPA's progress in releasing (posting) final IRIS assessments. Based on an approach developed over 10 years ago (and prior to the 2011 NAS report), an annual score for final IRIS assessments was based on the relative weighting of each chemical using a 3-tier system (assigning a weight of 1, 2, or 5

points) that considered at that time, client interest, perceived complexity of the science, and level of effort estimated. In FY 2018, IRIS processes were changed to develop more targeted, timely, and responsive products, including assessment products that are not intended to produce finalized IRIS assessments such as interim products provided for support of TSCA or other statutory mandates.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	70	90	100	100	100	100					
Numerator					7	6			Products		
Denominator					7	6					

Key Takeaways:

- The Safe and Sustainable Water Resources (SSWR) Research Program completed 100% (6/6) of its high-priority research products as planned.
- Key among these products was a series of studies on emerging concerns in surface water chemical and microbial contamination. This work was completed thanks to several cross-agency collaborations and included research advancing the science on PFAS remediation.

Metric Details: A research product is a deliverable that results from a specific research project or task. Research products may require translation or synthesis before integration into an output ready for partner use. This secondary performance measure tracks the timely completion of research products. Working with its partners, the Program develops a list of planned research products and their associated outputs. The list reflects high priority products the Program plans to complete by the end of each fiscal year. The Program strives to complete 100% of its planned products each year so that it can best meet EPA's and other partners' needs.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	100	100	100	100	100	100			Percent	Increase	
Actual	100	100	100	100	100	100					
Numerator					1	2			Outputs		
Denominator					1	2					

Key Takeaways:

- The Safe and Sustainable Water Resources (SSWR) Research Program completed 100% (2/2) of its research outputs as planned.
- Key among these outputs was the integration of monitoring methods, modeling, and toxicity indicators to produce assessments that can be used to: (1) identify potential improvements needed in wastewater and drinking water treatment plants, and other water infrastructure; (2) target human disease-causing pathogens, weighing dosing with potential health burden, and integration of exposure/dose characterization with predictive models; and (3) securing and analyzing human health data to estimate a population-based, public health burden of waterborne disease.

Metric Details: Research outputs result from the translation or synthesis of one or more research products into the format compatible with the partner's decision needs. "Delivery of a research output" means that the output is transferred to ORD's research partner ready for the intended use. EPA identifies and describes the planned outputs in the Program's

Strategic Research Action Plan. At the end of the fiscal year, the Program reports on its success in meeting its planned annual outputs. The Program strives to complete 100% of its planned outputs each year so that it can best meet EPA's and other partners' needs.

(PM RD2) Number of peer-reviewed journal articles published.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						336			Articles	Increase	
Actual				654	619	562					

Key Takeaways:

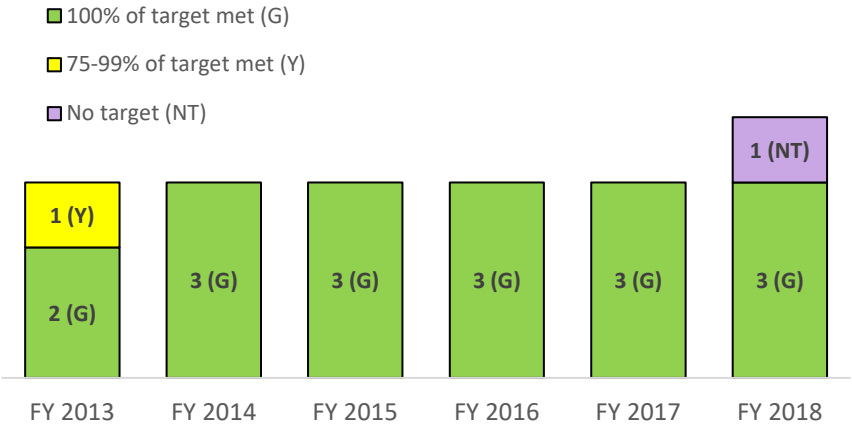
- ORD exceeded the target by publishing 562 peer reviewed journal articles, due to more resources available than were anticipated during target-setting.
- These articles include many that were published in high impact scientific journals, including five high-priority journal articles aimed at adding to the body of scientific knowledge surrounding Integrated Science Assessments (ISAs). ORD also published multiple journal articles focusing on the application of novel immunoassays to evaluate the health impacts of drinking water-related infections and support Agency actions to address contaminated drinking water exposure.

Metric Details: Publishing journal articles is one of the key methods through which EPA disseminates the results of its environmental research. Through the publication of journal articles, EPA can make its research findings available to the scientific community and the general public, and to contribute to the development of many scientific fields.

Objective 3.4 – Streamline and Modernize: Issue permits more quickly and modernize our permitting and reporting systems.

Obj 3.4 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given the backlog in permit approvals, the need to streamline the approval process, and challenges in the development of strategies to the meet the objective.

Summary of progress toward strategic objective:

- Reduced the backlog of new applications by nearly 18% (from 166 to 136 applications) between June and September 2018, through a series of targeted Lean events to improve the efficiency and effectiveness of permitting programs. (FY 2018-2019 APG)
- Developed a centralized system to track pending permit applications and an approach to allow the Agency to deny permits based on incomplete applications, to improve permitting efficiency agencywide.
- EPA's regional offices made significant shifts in resources to address the backlog of new applications.
- Created standard work products for permit writers, established communities of practice, and developed work-sharing agreements to better utilize permit writer expertise.
- Developed an electronic system to receive and collaborate on review of Clean Air Act (CAA) Title V operating permits from state air agencies, replacing a paper-based process. This system will significantly improve the efficiency and timeliness of EPA's reviews.
- Exploring the possibility of automating the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permit application form.
- Planning work with the U.S. Fish & Wildlife Service to elevate Endangered Species Act consultation issues related to permitting.

Challenges:

- FTE and contract resource challenges may prevent EPA from reaching its goal.
- Some permit applications may take more time due to complex issues, public interest, and required consultations.

Long-Term Performance Goal - By September 30, 2022, reach all permitting-related decisions within six months[21].

Annual performance goals that support this long-term performance goal:

(PM PE1) Percentage of permitting-related decisions issued within 6 months.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						No Target Established			Percent	Increase	No Trend Data
Actual						N/A					
Numerator									Decisions		
Denominator											

Key Takeaways:

- EPA is tracking the number of permit applications that are over six months old rather than the percentage of permitting-related decisions issued within six months. For this measure, the FY 2018 baseline number is 166 (as of June 30, 2018), and the actual is 136 (as of September 30, 2018).
- EPA conducted comprehensive Lean business process improvement events to streamline and optimize the Agency's key permitting programs: Safe Drinking Water Act (SDWA) Underground Injection Control (UIC); CWA NPDES; and CAA Title V operating permits and New Source Review (NSR). The permitting programs are continuing to implement recommendations to improve processes that were identified during those events.
- As part of this effort, the Agency has developed a central system to track pending permit applications. Each month the Agency tracks and reports the status of pending permits (date of application receipt, date of permit decision).
- EPA has identified incomplete information submitted by applicants as a key reason for delays in making permit decisions. EPA has improved internal procedures by developing an approach to allow the Agency to deny applications based on incomplete information. This approach is for applicants who refuse or are unable to provide information necessary for EPA to process a permit application.

Metric Details: The time for a permitting-related decision is calculated from the date a permit application is received to the date of a permit issuance or denial. This does not include renewals or modifications of existing permits.

(PM PE2) Number of permit applications in backlog.

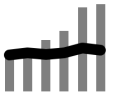
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target							No Target Established	TBD	Permits	Decrease	No Trend Data
Actual											

Metric Details: This measure tracks the sum of new permit applications that are over six months old, and existing permits that have passed their expiration date and are awaiting reissuance. The time for a permitting-related decision is calculated from the date a permit application is received or as soon as an existing permit passes its expiration date, to the date of a permit issuance or denial. No FY 2019 target is established, but results will be reported. The baseline and FY 2020 target will be determined in FY 2019. This measure tracks progress toward an FY 2018-2019 Agency Priority Goal.

[21] Baseline and FY 2020 target will be determined in FY 2019. (No footnote in *FY 2018-2022 EPA Strategic Plan*.)

Other Core Work supporting Objective 3.4

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

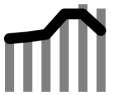
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	75	80	77	80	90	85			Systems	Increase	
Actual	73	89	107	125	174	181					

Key Takeaways:

- Among the new flows introduced were eManifest, the Electronic Permit System (EPS), Burial at Sea, Safe Drinking Water Information System (SDWIS) Virtual Exchange Services, and the Pesticide Submission Portal (PSP) Voluntary Data Submission Module.

Metric Details: The unit of measure "system" is defined as the number of data flows/exchanges that occur through EPA's Central Data Exchange (CDX) by EPA program offices, states and tribes. The CDX Program enables states, tribes and others to send environmental data to EPA through a centralized electronic process, enabling faster receipt, processing, and quality checking of data. The CDX Program estimates its results as the net of new systems using CDX services (increase) and retirement of older systems that are being phased out (decrease). As a result, these results may increase or decrease in subsequent years.

(PM 053) Number of states, tribes and territories able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.

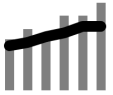
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	95	98	103	140	140	110			States, Tribes & Territories	Increase	
Actual	97	102	104	140	157	149					

Key Takeaways:

- Usage of Virtual Nodes increased by 10 while the number of Physical Nodes in operation remained constant. The number of Physical Nodes in a Test State was reduced by 18 as anticipated. EPA expects to see the shift toward virtual nodes continue in the future.

Metric Details: This measure tracks the total number of physical and virtual nodes in production and test.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	70,000	75,000	84,000	90,000	100,000	100,000			Users	Increase	
Actual	79,818	96,000	85,894	116,636	116,837	137,132					

Key Takeaways:

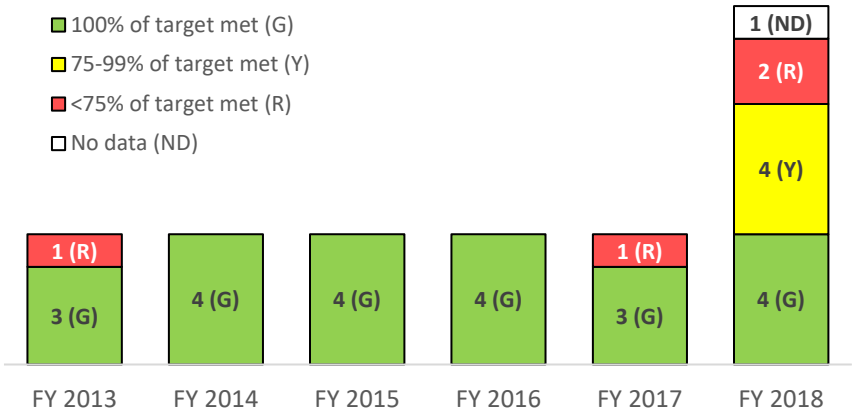
- The number of active users increased significantly as eManifest and NEPDES E-Reporting were brought online.

Metric Details: This measure tracks the number of unique users of the CDX system whose accounts have been active in the last two years and eliminates duplicate registrations under the same email address. Because many EPA regulations require periodic reporting, i.e., once every two, three or five years, a two-year span was utilized to capture the majority of users without overstating their "active" status.

Objective 3.5 – Improve Efficiency and Effectiveness: Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

Obj 3.5 Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2018. Chart does not include measures that previously existed but were eliminated prior to FY 2018.

EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement given significant challenges in meeting the Agency's contracting and procurement needs, and ongoing work to improve these processes.

Summary of progress toward strategic objective:

- Improved the percentage of simplified acquisitions (SA), competitive proposals (CP), and funding and administrative actions (FAA) processed within the Procurement Acquisition Lead Time (PALT).
- Released nearly 150,000 square feet of EPA space, for $5.9M in annual savings.
- Improved 25 Agency processes by deploying EPA Lean Management System (ELMS) principles to improve efficiency and cost effectiveness.
- Began or continued partnerships to implement shared services for Agency grants and security systems, for more efficient processes and more effective programs.
- Demonstrated the Continuous Diagnostic Monitoring (CDM) data exchange model; was the first federal agency to successfully exchange information with the Department of U.S. Homeland Security's federal CDM dashboard.
- Deployed systems and tools to streamline EPA business practices and save Agency resources, including OneDrive computer file storage, a cloud-based Business Automation Platform, EZ Desktop Records to manage electronic records efficiently, and advanced audio conferencing.
- Laid groundwork toward reorganization of the new Office of Mission Support, which was implemented in FY 2019 Q1.

Challenges:

- Deploying enterprise-wide systems and tools that balance business needs across the Agency and improve efficiency while meeting the Agency's goals.
- General Services Administration (GSA) delays in leasing actions and contract processing make it difficult to meet space consolidation goals. EPA is working with GSA to address the backlog of transactions and improve processing time.
- Late appropriations lead to an unbalanced workload during the fiscal year and pose a challenge for meeting PALT standards. EPA is implementing contracting process improvements to reduce delays.
- EPA continues to face delays in completing a plan to manage known high-risk cybersecurity vulnerabilities. However, the Agency has improved its capability to analyze open vulnerabilities and has identified additional steps it will take to improve operational readiness and responses.

Long-Term Performance Goal - By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet[22].

Annual performance goal that supports this long-term performance goal:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						241,000	163,626	146,477	Square Feet	Increase (Greater Reduction)	
Actual						149,278					

Key Takeaways:

- EPA released space at nine facilities for $5.9M estimated annual rent avoidance.
- EPA was unable to meet the target due to GSA delays on leasing actions and processing contracts which are required to support EPA's consolidation efforts. Approximately 128,000 square feet of space originally planned for release in FY 2018 will be released in FY 2019.
- EPA continues to work with GSA to identify obtainable space release goals given their backlog of transactions, as well as opportunities to improve transaction processing time.
- EPA expects planned releases for FY 2019, FY 2020, and FY 2021 to exceed targets and maintain progress toward the FY 2022 long-term performance goal.

Metric Details: This measure tracks usable square feet of office and warehouse space released with data collected from EPA facility manager notifications, and reports generated when there is a modification to an Occupancy Agreement. Space consolidation efforts will result in EPA becoming a more efficient and effective Agency by reducing lease, utility, security and other facility management costs, which will enable the Agency to direct resources to core environmental work.

[22] Baseline is 5,264,846 square feet as of FY 2017.

Long-Term Performance Goal - By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT)[23].

Annual performance goals that support this long-term performance goal:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target						SA: 75 CP: 65 FAA: 80	85	90	Percent	Increase	No Trend Data
Actual						SA: 70 CP: 88 FAA: 76					
Numerator						SA:704 CP: 21 FAA: 3,038			Actions		
Denominator						SA: 1,007 CP: 24 FAA: 4,002					

Key Takeaways:

- Though it did not meet all FY 2018 PALT targets, EPA made progress in processing more incoming actions within PALT and did not significantly add to the backlog of actions.
- EPA faces challenges meeting the PALT targets for two primary reasons: agencywide budgeting and funding practices that lead to an unbalanced workload during the fiscal year, and a lack of standard funding and administrative modifications that lead to processing inefficiencies and delays.
- EPA plans to complete deployment of the EPA Lean Management System (ELMS) across the Office of Acquisition Services (OAS) by the end of FY 2019 Q2. Use of ELMS is providing additional insights into business processes and is leading to increased knowledge sharing, standard work and timely processing of transactions.
- OAS is engaging Agency senior leadership on the challenges that current enterprise-wide budgeting and funding practices impose on acquisition processing.

Metric Details: For FY 2018, this measure tracked the timeliness of the Agency's processing of contract actions for Simplified Acquisitions (SA), Competitive Proposals (CP), and Funding and Administrative Actions (FAA) with data collected from EPA's Acquisition System (EAS) and information from EPA contract officer representatives (CORs) and contract officers (COs). Timeliness is measured in processing days from the time the procurement request (PR) is released in EAS to the date the contract is awarded. PALT Standards are outlined in Section 7.1.1 of the EPA Acquisition Guide. As a result of these efforts, EPA will become a more efficient and effective agency by reducing processing time and costs. Beginning in FY 2019, EPA will begin reporting results for all acquisition categories in a single percentage, not just SA, CP, and FAA. Baseline as of January 1, 2018 is: 47% SA; 65% CP; and 67% FAA. Baseline as of September 30, 2018 is 77% for all contract actions awarded within PALT.

[23] Baseline, as of September 30, 2018 is 77% for all contract actions awarded within PALT. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

(PM PR2) Acquisition costs avoided through use of strategic sourcing.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						3.0			Millions of Dollars	Increase	
Actual						2.7					

Key Takeaways:

- Acquisition costs avoided through the use of strategic sourcing came within 10% of meeting the FY 2018 target.
- The Agency did not launch any new strategic sourcing initiatives. The $2.7 million in avoided costs is a result of maintenance of prior-year strategic sourcing initiatives that continue to save the Agency money.
- Annual costs avoided through the use of strategic sourcing depend on EPA's contracting needs in a given year.
- EPA expects to see greater cost avoidance in the next few fiscal years as strategic sourcing is used in an increasing number of Agency acquisitions and as the Agency launches new strategic sourcing initiatives.

Metric Details: This measure tracks the Agency's avoided acquisition costs through use of the Strategic Sourcing Program (SSP) with data collected from EPA's spend-save tool. Avoided costs achieved by SSP contract vehicles result in EPA becoming a more efficient and effective agency by reducing expenditures, processing time and labor. This will enable the Agency to direct resources to core environmental work. In FY 2018, EPA obligated $1.521 billion in contracts.

Long-Term Performance Goal - By September 30, 2022, improve 250 operational processes.

Annual performance goal that supports this long-term performance goal:

(PM OP1) Number of operational processes improved.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						25	50	50	Operational Processes	Increase	
Actual						Data Avail 04/2019					

Key Takeaways:

- EPA made progress by improving processes across the Agency in mission and mission-support areas, including faster processing of permits, improved acquisitions, reduction in non-attainment areas, and increased numbers of formerly contaminated sites Ready for Anticipated Use (RAU).
- EPA experienced some challenges determining the methodology used for certifying that a process has improved. EPA has refined the criterion and now have multiple ways for determining if a process has improved, which includes monitoring the status of metrics in the "ELMS bowling charts" and counting those targets that have moved from severely behind (red) for several months to current (on-time/green) status.

Metric Details: EPA is applying Lean principles to improve the efficiency and cost effectiveness of its operations. An operational process is a sequence of activities that results in the delivery of a service. Initially, EPA counted an operational process as improved following a completed Lean/Kaizen event that meets a three-part test: (1) the work of the process has been standardized; (2) visual management has been put in place and used; and (3) performance has improved. EPA completed 11 of these events in FY 2018. EPA is currently refining the definition to include other key tools of ELMS, in addition to Lean/Kaizen events, to achieve process improvements that meet a more stringent requirement for improvement.

Long-Term Performance Goal - By September 30, 2022, increase enterprise adoption of shared services by four[24].

Annual performance goals that support this long-term performance goal:

(PM CF1) Number of administrative shared services.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						6	7	8	Shared Services	Increase	
Actual						5					

Key Takeaways:

- While EPA did not complete the adoption of any shared services in FY 2018, the Agency successfully migrated two existing operations to federal shared service providers in the first quarter of FY 2019: the U.S. Department of the Interior's FedTalent System (employee training); and the General Services Administration's USAccess Program (employee credentials).

Metric Details: EPA will use additional federal and/or internal shared services when supported by business case analysis. Enterprise adoption of shared services will ensure consistency and scalability in tools and services, enabling the Agency to standardize internal operational processes, control costs, and improve data quality. The five administrative shared services in place as of the end of FY 2017 were: Interior Business Center (HR/payroll), Concur (travel), Compass (core financial management), human resources shared service centers, and finance centers.

(PM CF2) Number of Agency administrative subsystems.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						24	22	20	Subsystems	Decrease	
Actual						26					

Key Takeaways:

- EPA did not complete the consolidation of the Agency's Document Collection System (DCS) and Assistance Information Management System (AIMS) into Grant Payment Allocation System (GPAS Consolidation Project), or consolidation of Interagency Agreements (IAs) into the new Payment Tracking System (PTS)-Interagency Document Online Tracking System (IDOTS) application in FY 2018 as planned. This work will be completed in FY 2019.

Metric Details: Reducing the number of administrative system interfaces allows EPA users to more easily input and access data and standardizes reporting as payment processing is moved to a federal shared service provider. This has a positive impact on streamlining operational processes and drives the integration of financial transactions across multiple administrative systems, reducing manual entry, and improving data quality. The focus is currently on establishing an integrated end-to-end delivery of financial transactions for contracts, grants, and Interagency Agreements into Compass. In FY 2017, the Agency had 26 administrative subsystems.

[24] Baseline is five administrative systems/operations shared services in FY 2017.

(PM CF3) Average cost per payment transaction.

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	No Trend Data
Target						34.99			Dollars	Decrease	
Actual						33.48					

Key Takeaways:

- EPA met the target through an emphasis on staff training and a strategic focus on cross-functional support during invoice payment peak weeks. Key staff met regularly to discuss and implement strategies to create efficiencies in the invoice payment process.

Metric Details: EPA is working to reduce the cost of contract and Simplified Acquisition Purchasing (SAP) transactions to the estimated cost level of an agencywide shared service solution by FY 2020. Data are tracked in the Agency's Compass system. In FY 2017, the cost per payment transaction was $38.28, which includes personnel and Information Technology (IT) costs for processing payments. The significant target reduction in FY 2020 is based on expected automation of the invoicing process, and additional IT modernization efforts underway.

Other Core Work supporting Objective 3.5

Annual performance goals:

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	307	248	268	274	274	196			Actions	Increase	
Actual	215	324	296	285	204	103					

Key Takeaways:

- The decrease in results and missed target are related to the increase in mandatory work combined with a decrease in resources. The mandatory work is often focused on compliance and not long-term environmental benefits, so the Office of the Inspector General (OIG) does not typically find significant issues that require recommendations to the Agency.

Metric Details: This measure captures implemented corrective actions taken by the Agency based on OIG recommendations to improve EPA programs and/or processes. Results are typically from prior years' recommendations and may fluctuate depending on the Agency's ability to complete agreed-upon corrective actions. The target is developed by taking the actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities.

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

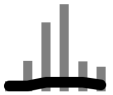
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	786	687	967	1,094	1,094	460			Risks	Increase	
Actual	1,003	944	1,110	1,127	1,150	759					

Key Takeaways:

- OIG identified 235 recommendations for improvement, including: preventing deaths and serious injuries from residential fumigations; improving oversight of purchase cards avoiding inappropriate purchases; reducing risk of information security breaches by conducting required background investigations for information systems contractor personnel; and periodic verification that air monitoring agencies are implementing EPA's recommended criteria for ambient air quality.
- OIG identified seven unimplemented recommendations to include properly reconciling tens of millions of dollars accounts receivable and properly recording millions in interest.
- OIG identified 462 findings in 119 external reports involving EPA for effective administration of millions of dollars in grants and assistance agreements throughout the U.S.

Metric Details: This measure captures the number of OIG outputs (recommendations for improvement; outreach activities to plan and promote OIG work; congressional testimonies delivered; best practices identified; and risks identified). One key activity during an OIG audit/evaluation is identifying risks to EPA operations and programs. Risk identification is based on federal standards for internal control. Internal control is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency; reliable reporting; and compliance with laws, regulations and policies. Ultimately effective internal controls assure that operations run efficiently and effectively. The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	125	132	220	220	220	160			Percent	Increase	
Actual	248	734	1,656	2,098	722	588					
Numerator	122.00M	380.00M	852.00M	1,070.00M	849.17M	473.07M			Dollars		
Denominator	49.19M	51.77M	51.45M	51.00M	117.58M	80.43M					

Key Takeaways:

- OIG questioned nearly $3.2 million on 11 grants and assistance agreements including $2.4M of unaccounted EPA funds.
- OIG identified more than $375 million in potential benefits, such as improved acquisition planning that will help EPA reduce hundreds of millions of dollars in high-risk contracts.
- OIG identified nearly $91 million of monetary actions were taken or resolved by the Agency prior to report issuance; this figure represents corrections during the EPA financial statement audit.
- EPA saved more than $935,000 in annual costs in response to OIG reports, including about $900,000 that the Administrator decided to stop providing for fitness centers in EPA space.
- OIG achieved cost savings totaling nearly $1.3 million due to investigative work.

Metric Details: Results under this measure identify the potential return on investment and do not include actual recoveries. The OIG's role is to question costs and identify cost efficiencies and funds put to better use (recommended efficiencies). The target reflects the average of actual performance for two or three fiscal years, adjusted to reflect any significant changes in priorities and removing reports from the average calculation with recommended efficiencies in excess of $200M. The reports excluded from the average are: FY 2014-$230 million; FY 2015-$571 million; FY 2016-$886 million; FY 2017-$774 million; and FY 2018-$375 million.

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

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Units	Preferred Direction	
Target	90	125	175	145	145	87			Actions	Increase	
Actual	256	213	304	181	298	330					

Key Takeaways:

- OIG recovered over $527,000 in administrative costs resulting from 87 administrative actions and 19 suspensions/debarments.
- OIG recovered over $1 million in fines related to 10 criminal actions, including 85 months total in prison time, 96 months total in probationary time and six months of home detention.
- OIG recovered nearly $362,000 resulting from one civil action.
- OIG conducted 128 fraud awareness briefings to internal and external stakeholders.

Metric Details: This measure captures criminal, civil, and administrative actions resulting from OIG investigations on fraud, waste, and abuse. To a large extent, results are influenced by factors outside the control of OIG (e.g., judges, juries).