Past Program Evaluations and Applied Research
Supporting Development of the FY 2014-2018 EPA Strategic Plan

Strategic Area	Name of Program to be Evaluated/Office/ Link to Report	Scope of Evaluation/Research	Policy, process, or organizational changes that have been implemented as a result of the evaluation or research findings, and if applicable, how evaluation or research informed EPA strategy
1, 2, 3, 4	Office of Research and Development (ORD) research programs ORD http://yosemite.epa.gov/sab/sabproduct.nsf/3822EB089FCCB18D85257A8700800679/$File/EPA-SAB-12-012-unsigned.pdf	Beginning in 2012, ORD realigned its research into six new program areas: Air, Climate and Energy; Safe and Sustainable Water Resources; Sustainable and Healthy Communities; Chemical Safety for Sustainability; Human Health Risk Assessment; and, Homeland Security Research. ORD requested that the Science Advisory Board (SAB) and the Board of Scientific Counselors (BOSC) provide advice on implementation of these new program areas.	ORD is working to implement the SAB/BOSC's recommendations, specifically: 1) identifying more clearly how each research program links to the concept of sustainability; 2) developing strategies to address the social, behavioral, and decision science research needed to accomplish the goals of ORD's major programs; 3) developing "roadmaps" depicting key linkages across ORD programs; and, 4) using the innovation program to address some of the most challenging research questions.
1	Acid Rain Program (ARP), created under Title IV of the 1990 Clean Air Act Amendments (CAAA) Office of Air and Radiation Clean Air Markets Division http://ny.water.usgs.gov/projects/NAPAP	Under Title IX of the 1990 CAAA, the National Acid Precipitation Assessment Program was asked to periodically assess and report to Congress on: (1) implementation of the ARP; (2) the most recent scientific information related to acid deposition and its effects; and, (3) additional decreases in acid deposition necessary to prevent adverse ecological effects.	EPA measures and reports on progress in achieving the environmental objectives of Title IV through its Clean Air Status & Trends Network (CASTNET) ambient/deposition and Temporally Integrated Monitoring of Ecosystems (TIME) and Long-Term Monitoring (LTM) surface water monitoring programs, publishing annual progress reports on ARP and related programs. EPA looks for and tracks complementary reductions furthering Title IV objectives through other titles of the 1990 CAAA (e.g., sulfur content in fuels in Title II, NOx reductions for ozone NAAQS in Title I).

1	ENERGY STAR Product Labeling Program Office of Air and Radiation, Climate Protection Partnerships Division http://www.energystar.gov/ia/partners/publications/pubdocs/2011_AnnualReport_Final_low-res_12-13-12.pdf?087a-7d1e	• Estimating energy and environmental savings of the program • Understanding the market penetration of ENERGY STAR products • Furthering the understanding, knowledge, and perception of the ENERGY STAR label by U.S. consumers	This assessment has been conducted annually in some form for a decade or longer. Coupled with in-depth subject matter expertise of products, market barriers, and strategies, this annual review informs adaptive management and business planning for the program. Illustrative changes as a result of these efforts include: • Understanding which products are delivering greatest program savings and which product categories have untapped potential for greater energy savings helps inform marketing and communication priorities. • Understanding market penetration of ENERGY STAR labeled products helps inform the need for specification revisions or the need for enhanced marketing or communication efforts. • Understanding how and where consumers learn about ENERGY STAR and which products they associate with the label, helps adapt marketing and communications strategies and priorities accordingly.
1	Air Quality Office of Air and Radiation/Office of Air Quality Planning and Standards http://www.epa.gov/airtrends/2011/	Each year EPA tracks the levels of the Clean Air Act defined criteria pollutants in the air and how much of each pollutant (or the pollutants that form them) is emitted from various pollution sources. The Agency looks at these numbers year after year to see how the pollutants have changed over time.	This information informs the regulatory development process and is helpful in identifying issues that need to be addressed at the national or state level.

1	SmartWay Transport Partnership Program Office of Air and Radiation/Office of Transportation and Air Quality http://epa.gov/oig/reports/2012/20120830-12-P-0747.pdf	EPA's Office of Inspector General (OIG) sought to determine how EPA ensures the validity of the SmartWay Transport Partnership Program results.	EPA has implemented a number of measures to strengthen the SmartWay program and enhance the integrity of its data, data collection methods, and reporting. EPA took these steps to safeguard the integrity of the SmartWay program and to ensure the robustness and accuracy of partner-reported data. EPA proposed a five- step process to better ensure the accuracy of partnership data. OAR noted it had recently started a partnership data quality project to address the OIG recommendation and enhance the quality of SmartWay partner self-reported data.
1	Air Toxics/National Air Toxics Assessment (NATA) Office of Air and Radiation/Office of Air Quality Planning and Standards http://www.epa.gov/nata2005	The purpose of NATA is to identify and prioritize air toxics, emission source type, and locations that are of greatest potential concern in terms of contributing to population risk. The 2005 NATA provides information on 177 of the 187 Clean Air Act air toxics plus diesel particulate matter.	NATA helps air agencies focus resources on geographic areas, pollutants, and types of emission sources for closer investigation. Once risks are further characterized, agencies can determine steps to reduce air toxics emissions where necessary.
1	Black Carbon Office of Air and Radiation http://www.epa.gov/blackcarbon/	EPA has conducted an intensive effort to compile, assess, and summarize available scientific information on the current and future impacts of black carbon and to evaluate the effectiveness of available black carbon mitigation approaches and technologies for protecting climate, public health, and the environment.	This report will influence how the U.S. interacts with international partners to address black carbon.

2	Colonias Wastewater Treatment Assistance Program Office of Water(OW) http://www.epa.gov/oig/reports/2008/20080623-08-P-0184.pdf	The purpose of the evaluation was to determine whether EPA provided the necessary oversight to the Texas Water Development Board to implement the Colonias Wastewater Treatment Assistance Program.	Grants for this program were changed to include more specific information, with better project and financial controls. In addition, community residents are benefiting by receiving water and wastewater service in a more timely and efficient manner.
2	EPA's Clean Water and Drinking Water State Revolving Funds (SRF) and Special Appropriations Act Project grants. Office of Water http://www.epa.gov/oig/reports/2012/20120125-12-P-0231.pdf	The EPA Office of Inspector General (OIG) performed this audit as a result of observations made during an audit of Special Appropriations Act Project grants. Based on that review, the OIG assessed EPA's policy that allows states to use revolving fund capitalization grants to fund local reserve accounts.	As a result of the OIG's report, in February 2012, EPA's CWSRF program issued a memorandum notifying Regions that federal funds cannot be used to fund local security reserves. Also, as pointed out in the OIG report, these SRF federal funds will now be available to fund wastewater and drinking water projects which will help in meeting the strategic objective under Goal 2: Protecting America's Waters.
2	Ocean Dumping Management Program Office of Water http://www.epa.gov/evaluate/reports/index.htm	The Office of Policy led an evaluation of OW's Ocean Dumping Management Program to help the program better understand how resources and program activities are aligned with intended outcomes.	The evaluation was completed at the end of 2012. The Ocean Dumping Management Program is currently in the process of developing an action plan to implement recommendations from the evaluation, such as: 1. Clarify and communicate the importance of the program, focusing on why this program is essential to protecting ocean ecosystems. 2. Seek to foster improved communication and partnership with U.S. Army Corps of Engineers (which is a key stakeholder for the program). 3. Update program guidance and use the London Protocol ratification process as an opportunity to update the regulations.

			4. Strengthen program feedback mechanisms, building on a suite of performance measures that encompass both outcome and output measures. 5. Define the minimum requirements that HQ and the Regions must fulfill, and the resources needed to complete those tasks.
2	U.S. Mexico Border Water Infrastructure Program Office of Water/Office of Wastewater Management/Municipal Support Division/Sustainable Communities Branch http://www.epa.gov/oig/reports/2008/20080331-08-P-0121.pdf	The purpose of the audit was to determine whether EPA's U.S.-Mexico Border Water Infrastructure Program had adequate controls for obligating and using water infrastructure grant funds.	This audit identified process improvements that allow funds to be utilized more efficiently. The program now makes grants for planning and design separate from grants for construction. Grants for construction are not made until project development has been completed and the project has been certified as ready for construction. The average amount of time it takes for construction funding to be disbursed has decreased from seven years in early 2000 to less than three years.
2	Section 319 Grants Office of Water http://www.gao.gov/products/GAO-12-335	Under Section 319 of the Clean Water Act, each year EPA provides grants to states to implement programs and fund projects that address nonpoint source pollution. Section 319 includes minimum conditions that states must meet to receive grants. EPA's 10 regional offices oversee state programs and are to ensure that states' projects can be feasibly implemented. The U.S. Department of Agriculture (USDA) also has programs to protect water resources.	Findings and recommendations from the GAO report were considered as EPA led a Section 319 program reform effort to issue revised Section 319 grant guidelines. In addition to considering these findings, EPA also referred to findings from its internal review of the Section 319 program, A National Evaluation of the CWA Section 319 Program (November 2011), which included recommendations for program improvements from an EPA/State Water Division Director Workgroup. In April 2013, EPA published new Section 319 grant guidelines, which apply to all Section 319-funded grant activities beginning in FY 2014. The revised guidelines reflected EPA's expectation that states coordinate with USDA on the National Water Quality

		GAO examined: (1) states' experiences in funding projects that address nonpoint source pollution: (2) the extent to which EPA oversees the Section 319 program and measures its effectiveness; and, (3) the extent to which key agricultural programs complement EPA efforts to control such pollution.	Initiative, including through the commitment of appropriate monitoring resources.
2	Section 319 Nonpoint Source Program Office of Water http://water.epa.gov/polwaste/nps/upload/319evaluation.pdf (April 15, 2013)	A primary goal of this study was to gain a detailed, fact-based understanding of how states have used their base and incremental Section 319 funding to advance water quality goals and to identify ways to strengthen program implementation and accountability.	Findings and recommendations from this report, as well as the Government Accountability Office's (GAO) May 2012 report ("Nonpoint Source Water Pollution: Greater Oversight and Additional Data Needed for Key EPA Water Program"), were considered as EPA led a Section 319 program reform effort to revise the national Section 319 grant guidelines. As noted above, in April 2013, EPA published new Section 319 grant guidelines, which apply to all Section 319-funded grant activities beginning in FY 2014. The guidelines address in some way all the key program improvements identified by this study.
3	Brownfields Program Office of Brownfields & Land Revitalization Parts I and II: http://www.epa.gov/brownfields/pdfs/Brownfields-Evaluation-Parts-I-II.pdf Part III: http://sites.nicholasinstitute.duke.edu/environmentaleconomi	The purpose of the evaluation was to: • Analyze property milestones achieved through Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants. • Estimate the economic benefits caused by Brownfields cleanup grants through use of rigorous, quasi-experimental methods. • Identify opportunities for improving program efficiencies and management.	As a result of this evaluation, EPA improved the data it collects on brownfields properties receiving funding and made changes to its grant process in order to improve outcomes. The finding that Brownfields cleanup led to a 5.1% to 12.8% increase in housing property values is being used to inform decision-makers on the benefits of the program.

	cs/files/2013/01/WP-EE-12-08.pdf		
3	Federal Facilities Site Evaluation Project (FFSEP) Office of Solid Waste & Emergency Response/ Federal Facilities Restoration and Reuse Office (FFRRO) http://www.epa.gov/fedfac/ffsep/index.htm	The FFSEP was designed to evaluate the cleanup status of 514 sites that were identified in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) as potentially stalled. The goal of this information- gathering process was better utilizing the Agency's cleanup authorities to share information, accelerating cleanups where possible, addressing a greater number of contaminated sites, and restoring these sites back to productive use while protecting human health and the environment.	In addition to document verification and data quality improvements to CERCLIS, the FFSEP enabled FFRRO to advance the concepts of transparency, public participation, and collaboration with our federal partners in order to promote efficient and effective federal facility cleanups. FFRRO has reinforced expectations with the regions for periodic review of the status of non-NPL sites. The FFSEP has also improved information sharing and the working relationships between EPA, the states, and the other federal agencies.
3	RCRA Corrective Action Program Office of Solid Waste & Emergency Response/ Office of Resource Conservation and Recovery The report is not yet available online	EPA accepted prior recommendations from GAO to review the program's evolving workload and increasing challenges, such as reduced resources, loss of experienced staff, and increasingly complex sites.	The program is considering additional options to streamline the process, new measures to move the program along, and potential tools such as training and guidance. The analysis is informing the program's strategic and long term planning, budget proposals, and work plans.
3	Hazardous Waste Determination Program Office of Resource Conservation and Recovery	The purpose of the evaluation was threefold: 1) determine the extent to which the federal hazardous waste determination program is working; 2) identify obstacles and challenges that hazardous waste generators face	In response to the evaluation's findings, regulatory changes, as well as changes in outreach and training, are under consideration.

	http://www.epa.gov/evaluate/reports	complying with the regulations; and, 3) help EPA improve its approach, methods, and activities designed to aid generators' compliance with hazardous waste determination regulations. The scope of the evaluation focuses on EPA's program and how it is implemented by states and perceived by hazardous waste generators.	
3	EPA Tribal Solid Waste Management Assistance Office of Solid Waste & Emergency Response http://www.epa.gov/oig/reports/2011/20110321-11-P-0171.pdf	The purpose of the evaluation was to determine whether EPA's tribal solid waste management activities are helping tribes develop the management and enforcement capacity they need to eliminate open dumps.	In response to the evaluation, EPA is currently developing an agency-wide plan to provide solid waste management capacity assistance to tribes. In addition, EPA has evaluated its performance measures related to tribal solid waste management issues, and will continue to evaluate these measures for effectiveness.
3	Office of Superfund Remediation and Technology Innovation Technology Innovation and Field Services Division http://epa.gov/evaluate/pdf/waste/gr-strategy-eval-final-report.pdf	Scope: As part of the implementation of the Superfund Green Remediation (GR) Strategy, the Superfund program evaluated the implementation of the Strategy itself. The purpose of the evaluation was to: 1) Assess EPA experiences to date in implementing the GR Strategy and document the Strategy's effectiveness in achieving its stated goals; 2) determine a baseline against which to measure EPA progress in implementing the GR Strategy; and 3) determine the best metrics for	The report's findings are being used to prepare the next phase of the Strategy. The findings helped EPA understand whether it was pulling the right "levers" to change program behavior in pursuit of green remediation policy goals.

		measuring the program's success in implementing GR practices.	
3	Leaking Underground Storage Tank (LUST) program Office of Underground Storage Tanks (OUST) http://www.epa.gov/swerust1/cat/backlog.html	To understand the makeup of the remaining underground storage tank (UST) releases and why the pace of cleanup is slowing, EPA undertook a two-phase, data-driven analysis of UST cleanups as of 2006 (Phase 1) and 2009 (Phase 2). The study compiled and analyzed available data from 14 state LUST programs. It identified key findings and potential opportunities to help reduce the number of remaining UST cleanups.	As a result of this study, EPA is working with states, tribes, and other stakeholders to discuss and develop targeted cleanup strategies. OUST developed an implementation plan to support the backlog reduction initiative. Areas of focus include: • Technical issues and challenges relating to difficult sites and evaluation of cleanup technologies at difficult sites. • Availability of funding for cleanups through state cleanup funds and petroleum brownfields initiatives. • Abandoned tanks and the development of tools and training to address responsible party searches. • Collection and distribution of innovative approaches used by states to address their backlogs and encourage the exchange of successful reduction efforts. • Supporting regional efforts to assist states with backlog reduction efforts.
4	OCSPP and ORD Risk Assessment activities Office of Pollution Prevention and Toxics/Chemical Control Division http://www.gao.gov/Products/GAO-09-353	The purpose of the evaluation was to review the extent to which EPA incorporates information from human bio-monitoring studies into its assessments of commercial chemical risks, to investigate the steps taken by EPA to improve the usefulness of bio-monitoring data for chemical risk assessment, and to assess the extent of EPA's authority under the Toxic Substances Control Act (TSCA) to require chemical companies to develop and submit bio-monitoring data.	EPA has been working to establish a comprehensive research strategy for bio-monitoring within the Agency and has participated in discussions concerning the formation of an interagency research effort. This study has underscored the importance of bio-monitoring data and suggested possible applications during the Agency risk assessment process.

4	US Endocrine Disruptor Screening Program (EDSP) Office of Science Coordination & Policy (OSCP)/ Exposure Assessment Coordination & Policy Division (EACPD) http://www.epa.gov/oig/reports/2011/20110503-11-P-0215.pdf	The purpose of the evaluation was to determine whether EPA has planned and conducted the requisite research and testing to evaluate and regulate endocrine disrupting chemicals.	The evaluation found that EPA had not developed a management plan laying out the program's goals and priorities, nor established outcome performance measures to track program results. In response to those findings, EPA has now developed an EDSP management organizational structure to: (1) ensure coordination across OCSP, Office of Water, and Office of Research and Development and (2) provide timely feedback and decision making needed to move the program forward. As a result of this new efficiency, the Agency is able to make more timely decisions and better utilize new advanced informational technologies and computational methods. The OIG evaluation initiated the development of the "US EDSP Comprehensive Management Plan" that was issued in June 2012. In addition to the management plan, the Agency also issued, on November 30, 2012, a white paper defining the "EDSP Universe of Chemicals and General Validation Principles" for the consideration of computational methods.
4	TSCA New Chemicals and Existing Chemicals Office of Pollution Prevention and Toxics/Chemical Control Division http://www.epa.gov/oig/reports/2012/20121229-12-P-0162.pdf	The purpose of the evaluation was to determine how effectively EPA is managing the human health and environmental risks of nanomaterials.	The evaluation has led to a more concerted effort to promote research on nanomaterials and to apply the agency's regulatory authorities under relevant statutes to address these substances. EPA has proposed mandatory reporting rules for nanomaterials under the Federal Insecticide, Fungicide, and Rodenticide Act and is developing proposed rules under the Toxic Substances Control Act. The Agency has also convened a workgroup of all relevant programs to coordinate regulation of nanomaterials.