



July 2016

# GRANTS MANAGEMENT

## EPA Could Improve Certain Monitoring Practices

# GAO Highlights

Highlights of [GAO-16-530](#), a report to congressional requesters

## Why GAO Did This Study

Grants comprised about half of EPA's budget in 2015, or about \$4 billion. Through several grant programs, EPA headquarters and 10 regional offices award these grants to a variety of recipients, including state and local governments. EPA provides guidance through directives that seek to ensure the appropriate use of funds and achievement of environmental results or public health protection, among other purposes.

GAO was asked to review how EPA monitors environmental and other grant results. This report examines (1) how EPA awards grants, (2) the federal and EPA requirements for monitoring grant and program results, and (3) how EPA monitors its grants to ensure that environmental and other program results are achieved. GAO analyzed relevant federal laws, regulations, and EPA guidance; reviewed processes for ensuring that environmental results are achieved for the three EPA program offices that award the majority of EPA grant dollars; and interviewed EPA officials and officials from eight state environmental agencies—selected based on the amount of environmental funding they receive from EPA.

## What GAO Recommends

GAO is making six recommendations, including that EPA (1) reduce duplicative reporting by identifying grant programs where existing data reporting can meet EPA's performance reporting requirements and (2) incorporate data quality controls for performance reports into its planned web-based portal. In response, EPA agreed with GAO's findings, conclusions, and recommendations.

View [GAO-16-530](#). For more information, contact J. Alfredo Gómez at (202) 512-3841 or [gomezj@gao.gov](mailto:gomezj@gao.gov).

July 2016

## GRANTS MANAGEMENT

### EPA Could Improve Certain Monitoring Practices

## What GAO Found

The Environmental Protection Agency (EPA) generally awards three different categories of grants: formula, categorical, and discretionary. According to EPA data, in fiscal year 2015, EPA awarded the majority of its grant funds—\$2.25 billion of \$3.95 billion (57 percent)—as formula grants, primarily to states to support water infrastructure based on funding formulas prescribed by law. EPA awarded \$1.09 billion (about 28 percent) of its grant funds as categorical grants. These grants were generally awarded noncompetitively, mostly to states and Indian tribes to operate environmental programs. EPA determines the amount of funding each grantee receives based on agency formula or program factors. EPA awarded \$0.513 billion (about 13 percent) in discretionary grants for specific activities, such as research. EPA also awarded \$0.09 billion (2 percent) in grant funds to special appropriations act projects for specific drinking water and wastewater infrastructure projects in specific communities.

Multiple federal and agency requirements and guidelines apply to monitoring grant and grant program results. For example, under EPA regulations, grantees must submit performance reports to EPA at least annually. EPA policies and guidance, such as its environmental results directive, call for EPA program officials to review performance reports to determine if the grantee achieved the planned results and for program offices to report on significant grant results through other processes, such as submissions to EPA databases. EPA incorporates requirements related to grantee reporting frequency, content, and reporting processes into grant terms and conditions.

EPA monitors performance reports and program-specific data from grantees to ensure that grants achieve environmental and other program results. However, GAO found that certain practices may hinder EPA's ability to efficiently monitor some results and increase administrative burden. For example, EPA collects some information from grantees twice—once in a performance report and once in a database—because EPA uses the information for different purposes. GAO's prior work and EPA analyses have shown that duplication of efforts can increase administrative costs and reduce the funds available for other priorities. By identifying grant programs where existing data reporting can meet EPA's performance reporting requirements, the agency can help reduce duplicative reporting for grantees. Also, GAO's review of grantee performance reports found issues that may hinder EPA's ability to efficiently identify factors affecting grantee results. For example, because grantees submit performance reports in a written format, there are no built-in quality controls to ensure these reports' consistency with EPA's environmental results directive. Rather, EPA officials must perform a manual review. A 2014 analysis of EPA's grants management processes found that EPA relied heavily on manual processes and could incorporate improvements into its new grants management database system. EPA officials said they plan to develop a web-based portal for grantees to submit documents, such as performance reports. By incorporating built-in data quality controls, such as required fields, for performance reports into its planned web-based portal, EPA could improve these reports' consistency with the environmental results directive and reduce the administrative burden of performing manual reviews.

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## Abbreviations

CWSRF	Clean Water State Revolving Fund
DWSRF	Drinking Water State Revolving Fund
EPA	Environmental Protection Agency
Exchange Network	Environmental Information Exchange Network
IT	information technology
OGD	Office of Grants and Debarment

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July 14, 2016

The Honorable Fred Upton  
Chairman  
Committee on Energy and Commerce  
House of Representatives

The Honorable Tim Murphy  
Chairman  
Subcommittee on Oversight and Investigations  
Committee on Energy and Commerce  
House of Representatives

The Environmental Protection Agency (EPA) awarded roughly \$3.95 billion in 2015—about 49 percent of its budget—in grants to states, local governments, tribes, and other recipients, in part to implement environmental statutes and regulations.<sup>1</sup> The agency awards nearly 60 percent of its total grant dollars to states for two grant programs: the Clean Water State Revolving Fund and Drinking Water State Revolving Fund, the largest sources of federal funds for repairing and replacing the nation's aging water infrastructure, among other things.<sup>2</sup> Other grants are used for various purposes, such as hazardous waste cleanup, ensuring air quality, and pollution prevention.

EPA awards and manages its grants at multiple levels across the agency, including its headquarters and 10 regional offices. EPA's Office of Grants and Debarment (OGD) in its headquarters office develops national grant policies and guidance, awards some grants, and oversees EPA's grants

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<sup>1</sup>EPA provides financial assistance to recipients through various agreements, such as grants and cooperative agreements. With grants, EPA is not expected to have substantial involvement with the recipient in carrying out its activities. In contrast, with cooperative agreements, EPA is expected to have substantial involvement with the recipient in carrying out its activities. For the purposes of this report, we refer to all EPA financial assistance agreements as grants and refer to all recipients as grantees.

<sup>2</sup>These programs were created under the Water Quality Act of 1987 and the Safe Drinking Water Act Amendments of 1996, respectively. States use these funds to provide low-interest loans, subsidies, and other support to communities or utilities to pay for wastewater and drinking water infrastructure projects, such as replacing pipelines or upgrading treatment facilities.

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management agency-wide. Headquarters program offices implement national policies for their grant programs, and both headquarters program offices and regional offices award grants and monitor environmental results. Program offices also oversee the technical and program-specific aspects of headquarters grants. Three program offices—the Office of Water, the Office of Air and Radiation, and the Office of Land and Emergency Management awarded the majority of EPA grant funding in 2015. EPA’s 10 regional offices provide administrative, technical, and program-specific oversight of the grants the regions award.

OGD provides guidance to grant management officials through several management directives that reflect federal statutes, regulations, Office of Management and Budget guidance, and EPA policies and procedures. These directives seek to ensure the timely awarding of grants, appropriate use of funds, and achievement of the desired results of protecting human health and the environment. Each management directive contains multiple requirements, such as the frequency and type of management reviews EPA officials perform, the steps necessary to perform them, and the documentation of grantees meeting applicable requirements.

Prior EPA Office of Inspector General and GAO reports have identified problems with EPA’s grants management. For example, in 2014, EPA’s Office of Inspector General found that EPA did not enforce reporting requirements for grantees to provide data that would demonstrate the effects the Drinking Water State Revolving Fund has on public health.<sup>3</sup> Additionally, in an August 2015 report, we found that EPA had made progress monitoring agency-wide compliance with certain grants management directives, such as EPA policies, by electronically tracking unspent grant funds and grantee submission of required reports in a timely manner.<sup>4</sup> However, we found that two key challenges hampered EPA’s efforts to monitor agency-wide compliance with such directives. First, several EPA regional offices use paper files to document compliance, so monitoring these offices’ compliance with directives

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<sup>3</sup>Environmental Protection Agency, Office of Inspector General, *EPA Needs to Demonstrate Public Health Benefits of Drinking Water State Revolving Fund Projects*, 15-P-0032 (Washington, D.C.: Dec. 5, 2014).

<sup>4</sup>GAO, *Grants Management: EPA Has Opportunities to Improve Planning and Compliance Monitoring*, [GAO 15-618](#) (Washington, D.C.: Aug. 17, 2015).

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requires resource-intensive manual file reviews. Second, the limited reporting and analysis capabilities of its information technology (IT) systems leaves EPA without agency-wide information for most of the directive requirements we reviewed. EPA officials planned to fully implement an updated IT system by 2017. We recommended that EPA could better monitor agency-wide compliance with grants management directives by developing ways to more effectively use existing web-based tools until it implements its new IT system. EPA agreed with our findings and recommendations.

You asked us to examine how EPA monitors environmental and other results from its grants. This report examines (1) how EPA awards grants, (2) the federal and EPA requirements and guidelines for monitoring grant and program results, and (3) how EPA monitors its grants to ensure that environmental and other program results are achieved.

To examine how EPA awards grants and what federal and EPA requirements and guidelines apply for monitoring grant and program results, we reviewed relevant federal laws, regulations, and EPA's policies and guidance for awarding and monitoring grants. To examine how EPA monitors its grants to ensure that environmental and other program results are achieved, we reviewed EPA's monitoring processes for grants in the three program offices that award the majority of EPA grant dollars—Office of Air and Radiation, Office of Water, and Office of Land and Emergency Management. We identified 45 programs that award grants within the three program offices we reviewed, from the Catalog of Federal Domestic Assistance. For each of the 45 grant programs, we searched EPA's grants management databases for relevant performance reports. Based on our search results, we selected a nonprobability sample of 49 performance reports across 23 grant programs based on criteria including whether the report was electronically available and whether different EPA regions were represented, as shown in table 1.<sup>5</sup>

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<sup>5</sup>Although the results of our review cannot be projected agency-wide because our sample was nongeneralizable, the performance reports represent a broad array of grant programs and include grantees in each EPA region.

**Table 1: Grant Programs and Performance Reports GAO Reviewed, by Environmental Protection Agency (EPA) Program Office**

EPA program office	Program	Reports reviewed	EPA region(s)
Office of Air and Radiation	Air Pollution Control Support <sup>a</sup>	3	3,9,10
	Internships, Training and Workshops	1	5
	National Clean Diesel Emissions Reduction	3	2,4(2)
	State Clean Diesel	1	10
	State Indoor Air Radon	2	3,9
	Temporally Integrated Monitoring of Ecosystems and Long-Term Monitoring	1	1
Office of Land and Emergency Management	Brownfields Assessment and Cleanup <sup>b</sup>	2	5,10
	Hazardous Waste Management State Program Support <sup>a</sup>	5	2,4(2),9,10
	Leaking Underground Storage Tank Trust Fund Corrective Action	2	5(2)
	State and Tribal Response	3	9(2),10
	Superfund State, Indian Tribe Core <sup>b</sup>	1	7
	Superfund State, Political Subdivision, and Indian Tribe Site-Specific <sup>b</sup>	1	7
	Underground Storage Tank Prevention, Detection, and Compliance	2	5,10
Office of Water	Beach Monitoring and Notification	2	1,5
	Clean Water State Revolving Fund	2	5,9
	Drinking Water State Revolving Fund	2	6,8
	Great Lakes	2	2,5
	Long Island Sound	1	2
	Nonpoint Source Implementation <sup>a</sup>	3	3,10(2)
	Safe Drinking Water Act - Public Water System Supervision	2	3,4
	State Underground Water Source Protection <sup>a</sup>	2	9,10
	Water Pollution Control Program Support <sup>a</sup>	5	4(2),9,10(2)
	Water Quality Management Planning	1	2
<b>Summary of review scope</b>		<b>49</b>	<b>1-10</b>

Source: GAO analysis of grantee performance reports submitted to EPA. | GAO-16-530

<sup>a</sup>For this program, one of the reports we reviewed was a state report on grants within a performance partnership.

<sup>b</sup>These programs provide financial assistance through cooperative agreements.

Two analysts reviewed the content of the performance reports and the performance reports' consistency with EPA's environmental results directive, and compared the content to information collected from grantees in EPA's program-specific databases. To ensure consistency in our review, each analyst reviewed the other's work and resolved any differences. Additionally, we interviewed representatives from the



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Environmental Council of States—an association of state environmental agency leaders—and a nongeneralizable sample of officials from environmental agencies in eight states—California, Hawaii, Maryland, Michigan, New York, North Carolina, Pennsylvania, and West Virginia—to obtain their perspectives on EPA’s monitoring processes for grants.<sup>6</sup> We selected these eight states because they received the greatest amount of funding from the federal government, according to the Environmental Council of States’ data.<sup>7</sup> The results of our interviews with officials from these agencies cannot be generalized to those of states not included in our review. For all three objectives, we interviewed officials from EPA’s OGD and the three program offices we reviewed. For more information on our scope and methodology, see appendix I.

We conducted this performance audit from August 2015 to July 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

EPA provides financial assistance to a variety of recipients, including states, tribes, and nongovernmental organizations, through assistance agreements such as grants. EPA awards these grants to recipients to meet local environmental priorities and national objectives established in federal law, regulations, or EPA policy. As we have previously reported, most federal grant-making agencies, including EPA, generally follow a life cycle comprising various stages—preaward (announcement and application), award, implementation, and closeout—for awarding grants, as seen in figure 1.<sup>8</sup>

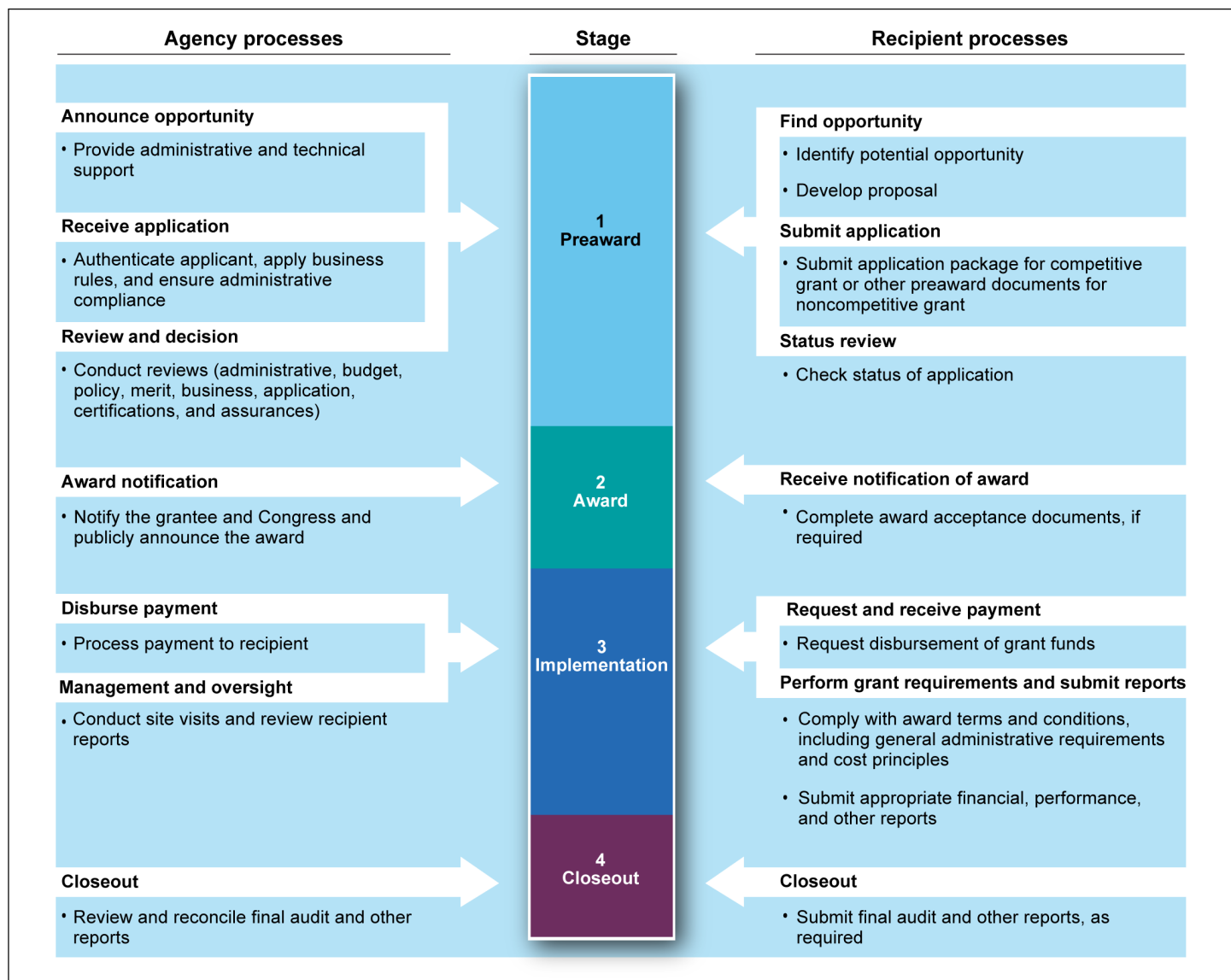
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<sup>6</sup>Because this was a nongeneralizable sample, our findings are not generalizable to other states but provide illustrative examples.

<sup>7</sup>Environmental Council of States, *Status of State Environmental Budgets, 2011-2013* (Washington, D.C.: September 2012).

<sup>8</sup>GAO, *Grants Management: Improved Planning, Coordination, and Communication Needed to Strengthen Reform Efforts*, [GAO-13-383](#) (Washington, D.C.: May 23, 2013).

**Figure 1: The Grant Life Cycle for Federal Grant-Making Agencies and Grant Recipients**



Source: GAO. | GAO-16-530

The federal laws establishing EPA's grant programs generally specify the types of activities that can be funded, objectives to be accomplished

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through the funding, and who is eligible to receive the funding. In addition to these statutory requirements, EPA has issued regulations governing its grants, which may impose additional requirements on recipients.<sup>9</sup> EPA either notifies the public of the grant opportunity or notifies eligible state agencies about available grants, and applicants must submit applications to the agency for its review. In the preaward stage, EPA reviews applications to determine or verify which meet eligibility requirements and awards funding. EPA assigns project officers—who manage the technical and program-related aspects of the grants—and grant specialists—who manage the administrative aspects of grants—in program and regional offices to oversee the implementation stage of the grants.

The implementation stage includes development of a grant work plan that outlines EPA and grantee agreed-upon goals, objectives, activities, and time frames for completion under the grant, such as developing certain water quality standards by the end of the year. It also includes payment processing, agency monitoring, and grantee reporting on the results of its individual grant as well as its contribution to program results. For example, results for an individual water quality grant might include the grantee using funds to develop water quality standards, whereas program results might include the grantee's contribution to the number of water quality permits issued under the program as a whole. Grantees submit information on grant results to EPA through performance reports and progress reports, depending on the grant program.<sup>10</sup> The closeout phase includes preparation of final reports, financial reconciliation, and any required accounting for property.

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## EPA Awards Different Categories of Grants

EPA generally awards three types of grants:

- **Formula grants.** EPA awards these grants noncompetitively to states in amounts based on formulas prescribed by law to support water infrastructure projects, among other things. For example, grants from the Clean Water and Drinking Water State Revolving Funds can be used to support infrastructure, such as water treatment facility

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<sup>9</sup>For example, EPA regulations require each grantee to have a written quality assurance system approved by EPA for all grants that involve environmental data operations, including environmental data collection, production, or use. 2 C.F.R. § 1500.11.

<sup>10</sup>EPA policies refer to both performance and progress reports. For the purposes of this report, the term performance report includes both performance and progress reports.

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construction, and improvements to drinking water systems, such as pipelines or drinking water filtration plants. According to EPA data, in fiscal year 2015, EPA awarded about \$2.25 billion of \$3.95 billion (about 57 percent) of grant funds as formula grants, as shown in figure 2.

- **Categorical grants.** EPA generally awards these grants—which EPA also refers to as continuing environmental program grants—noncompetitively, mostly to states and Indian tribes to operate environmental programs that they are authorized by statute to implement. For example, under the Clean Water Act, states and tribes can establish and operate programs for the prevention and control of surface water and groundwater pollution. EPA determines the amount of funding each grantee receives based on agency-developed formulas or program-specific factors. In fiscal year 2015, EPA awarded about \$1.09 billion of \$3.95 billion (about 28 percent) of grant funds as categorical grants, according to EPA data.<sup>11</sup>
- **Discretionary grants.** EPA awards these grants—competitively or noncompetitively—to eligible applicants for specific projects, with EPA program and regional offices selecting grantees and funding amounts for each grant.<sup>12</sup> EPA primarily awards these grants to states, local governments, Indian tribes, nonprofit organizations, and universities for a variety of activities, such as environmental research, training, and environmental education programs. According to EPA data, in fiscal year 2015, EPA awarded about \$0.513 billion of \$3.95 billion (about 13 percent) of grant funds as discretionary grants.<sup>13</sup>

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<sup>11</sup>EPA officials told us that they awarded \$0.0091 billion out of \$1.09 billion (0.83 percent) categorical grants competitively in fiscal year 2015.

<sup>12</sup>Although discretionary grant funds may be competitively awarded, EPA does not award all of them through a competitive process. Certain grant programs are exempt from EPA's Policy for Competition of Assistance Agreements, and there are exceptions for certain grants to be awarded noncompetitively. For example, grants to states, interstate agencies, local agencies, and other eligible recipients under programs that are covered by 40 C.F.R. Part 35 that are not subject to statutory or regulatory competition requirements are exempt from the competition policy, and grants that are for \$25,000 or less are exceptions that may be awarded noncompetitively.

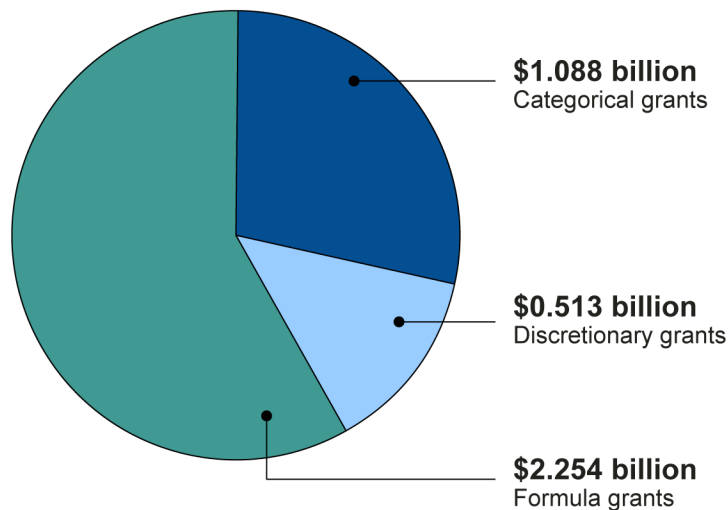
<sup>13</sup>Of this \$0.513 billion for discretionary grants, EPA awarded \$0.175 billion (about 34 percent) competitively in fiscal year 2015, according to EPA data.

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EPA also awarded \$0.09 billion of \$3.95 billion (about 2 percent) of grant funds to special appropriations act projects for specific drinking water and wastewater infrastructure projects in specific communities.<sup>14</sup>

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**Figure 2: Fiscal Year 2015 Environmental Protection Agency (EPA) Awarding of Funding, by Grant Category**



EPA also awarded around \$0.09 billion in fiscal year 2015 for Special Appropriations Act Project grants. These grant funds were appropriated for specific drinking water and wastewater infrastructure in specific communities before fiscal year 2010.

For more information, see <https://www.epa.gov/sites/production/files/2015-09/documents/20150930-15-p-0299.pdf>.

Source: EPA, Office of Grants and Debarment. | GAO-16-530

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## Multiple Federal and EPA Requirements and Guidelines Apply to Monitoring Grant and Grant Program Results

Multiple federal and EPA requirements—established in laws and regulations—and EPA guidelines apply to monitoring the results of individual EPA grants and, more broadly, the results of EPA grant programs.

The following requirements and guidelines form the basis of how EPA aligns individual grants to achieve the agency's public health and environmental objectives:

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<sup>14</sup>These grant funds were appropriated for specific drinking water and wastewater infrastructure in specific communities before fiscal year 2010.

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- **Federal laws:** Authorizing statutes for certain EPA grant programs, most notably the Clean Water Act, require states—which receive grants from EPA to capitalize state clean water revolving funds—to report annually to EPA on how they have met the goals and objectives identified in their intended use plans for their revolving funds.<sup>15</sup>
  - **EPA regulations:** EPA regulations require grantees to submit performance reports to EPA as specified in their grant agreements at least annually and typically no more frequently than quarterly.<sup>16</sup> Under EPA's regulations, the grantee's performance should be measured in a way that will help improve grant program outcomes, share lessons learned, and spread the adoption of promising practices. Additionally, under EPA's regulations, the agency should provide grantees with clear performance goals, indicators, and milestones, and should establish reporting frequency and content that allow EPA to build evidence for program and performance decisions, among other things.<sup>17</sup>
  - **Agency-wide policies and guidance:** EPA policies, such as its environmental results directive, call for grant work plans and performance reports to link to the agency's strategic plan and include outputs and outcomes.<sup>18</sup> The environmental results directive, the *Policy on Compliance, Review, and Monitoring*, and related guidance also call for EPA program officials to review interim and final performance reports—or for certain programs, use a joint evaluation process—to determine if the grantee achieved the planned outputs and outcomes, and document the results of these reviews in EPA's

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<sup>15</sup>33 U.S.C. § 1386(d). The Safe Drinking Water Act, as amended, also requires states that receive grants to capitalize their state drinking water revolving funds to report regularly to EPA on their funds' activities. 42 U.S.C. § 300j-12(g)(4).

<sup>16</sup>2 C.F.R. §§ 1500.1, 200.328(b)(1). In December 2014, EPA issued a grant regulation adopting the Office of Management and Budget's Uniform Guidance, which is codified in 2 C.F.R. Part 200, for new federal awards. 2 C.F.R. § 1500.1.

<sup>17</sup>2 C.F.R. §§ 1500.1, 200.301.

<sup>18</sup>EPA Order 5700.7A1, *Environmental Results under EPA Assistance Agreements* (October 2013), and EPA Grants Policy Issuance 11-03, *State Grant Workplans and Progress Reports*.

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grants management databases.<sup>19</sup> Additionally, the environmental results directive calls for EPA program offices to report on significant grant results through reporting processes established by national program managers, such as data submissions to EPA databases.<sup>20</sup>

- **Program-specific guidance:** EPA program offices provide biennial guidance on each program's priorities and key actions to accomplish health and environmental goals in EPA's strategic plan.<sup>21</sup> According to EPA officials, this guidance includes annual commitment measures, which guide implementation with EPA regions, states, tribes, and other partners. Many annual commitment measures include regional performance targets, which contribute to meeting EPA annual budget measures, and in turn, long-term strategic measures, according to EPA officials. EPA regional offices use these performance measures and targets to guide their negotiations with grantees on individual grant work plan outputs and outcomes.<sup>22</sup>
- **Grant-specific requirements:** EPA incorporates requirements related to grantee reporting frequency, content, and reporting processes (i.e., written performance report, data submissions to an EPA database, or both) into individual grant terms and conditions as part of the final grant agreement. EPA and grantees also negotiate grant-specific outputs and outcomes, which grantees incorporate into their grant work plans.

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<sup>19</sup>For certain grant programs for states, local governments, interstate agencies, Indian tribes, and intertribal consortia, such as Water Pollution Control grants, EPA and grantees are to develop a process for jointly evaluating and reporting progress and accomplishments under the grant work plan, according to EPA regulations in 40 C.F.R. §§ 35.115(a), 35.515(a). For more information on EPA policy provisions, see EPA Order 5700.7A, *Environmental Results under EPA Assistance Agreements* (October 2013), section 9(a) and 9(b), and EPA Grants Policy Issuance 11-03, *State Grant Workplans and Progress Reports*, sections 6 and 9. For information on documenting results of review, see EPA Order 5700.6A2 CHG2, *Policy on Compliance, Review, and Monitoring*.

<sup>20</sup>EPA officials report significant national program results in achieving annual budget performance measure targets, established in EPA's annual performance plan and budget, as part of EPA's annual performance report.

<sup>21</sup>The Government Performance and Results Act of 1993, as amended, requires agencies, including EPA, to develop a strategic plan. 5 U.S.C. § 306.

<sup>22</sup>For example, see Environmental Protection Agency, Office of Water, *FY 2016-2017 National Water Program Guidance*, EPA-420-R-15-008 (Washington, D.C.: April 2015).

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## EPA Monitors Performance Reports and Data to Ensure Grants Achieve Results, but Certain Practices Hinder EPA's Ability to Efficiently Monitor Results

EPA monitors performance reports and program-specific data from grantees to ensure that grants achieve environmental and other program results, but certain practices hinder EPA's ability to efficiently monitor some results. In addition, we identified a variety of monitoring issues that may hinder EPA's ability to efficiently identify factors affecting grantee results.

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## EPA Monitors Written Performance Reports and Program-Specific Numeric Data to Ensure Grants Achieve Results

According to EPA policies and officials, after EPA approves grantee work plans that identify agreed-upon environmental and other results for each grant, grantees generally report information on their progress and grant results to EPA in two ways: (1) submitting performance reports—generally written—that describe the grantees' progress toward the planned grant results in their work plans, such as using grant funds to provide technical assistance to local officials, and (2) electronically submitting program-specific data—generally numeric—on certain program measures, such as the number of hazardous waste violations issued, which EPA tracks in various program databases.<sup>23</sup> According to an EPA official, the information streams from grantees differ in that the performance reports go to EPA project officers for the purpose of managing individual grants, whereas EPA program managers use the electronic data to monitor regional and program progress on EPA's performance measures.

**Performance reports.** At least annually, grantees are to submit performance reports to EPA as specified in their grant agreements. EPA policies include general guidelines about what performance reports should include, such as a comparison between planned and actual grant results, but allow the frequency, content, and format of performance

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<sup>23</sup>EPA also collects data directly from grantee-operated monitoring stations, which take measurements of pollutant levels and other characteristics of air. For some programs, EPA collects written information on grant-funded projects through a program-specific database, and in some cases, EPA collects quantitative data in performance reports.



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reports to vary by program and grant.<sup>24</sup> For more information on the performance reports we reviewed, see appendix II.

According to EPA officials, EPA project officers monitor these reports to review grantee progress toward agreed-upon program results, such as providing outreach to communities about hazardous waste.<sup>25</sup> Project officers conduct two types of routine grants monitoring: (1) baseline monitoring, which is the periodic review of grantee progress and compliance with a specific grant's scope of work, terms and conditions, and regulatory requirements, and (2) advanced monitoring, which is an in-depth assessment of a grantee or a project's progress, management, and expectations. EPA assigns a certain number of advanced monitoring reviews to each regional and program office annually.<sup>26</sup> In 2015, OGD assigned program and regional offices to perform advanced monitoring for at least 10 percent of their active grantees, which program and regional offices select based on criteria such as the size of the grant and the experience level of the grantee, among others.<sup>27</sup>

EPA project officers document the results of their monitoring—for example, whether grantees have made sufficient progress and complied with grant terms and conditions—in EPA's grants management databases at least annually. Based on their baseline monitoring review, EPA project officers may impose more frequent or intensive grant monitoring, such as advanced monitoring, to address any identified concerns. According to EPA data, project officers recommended additional grant monitoring for 78 out of 2,987 reviews (about 3 percent) in 2015. Additionally, program and regional offices summarize any significant grants management-related observations or trends from their advanced monitoring reviews as part of their annual postaward monitoring plans.

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<sup>24</sup>EPA's Grants Policy Issuance 11-03 calls for performance reports for certain categorical grant programs to contain "three essential elements": linkage to an EPA strategic plan goal, linkage to an EPA strategic plan objective, and work plan commitments with time frames. EPA Order 5700.7A1 establishes EPA's policy that to the maximum extent practicable, proposed assistance agreements are linked to EPA's strategic plan, and that outputs and outcomes are appropriately addressed in work plans and performance reports, among other things.

<sup>25</sup>EPA Order 5700.6A2 CHG 2 and EPA Order 5700.7A1.

<sup>26</sup>EPA Order 5700.6A2 CHG 2.

<sup>27</sup>Program and regional offices may decide to perform advanced monitoring on more grantees than they are directed to by OGD.

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**Program-specific information.** According to program officials, grantees also electronically submit program-specific information—generally numeric data—on certain results, such as the acres of brownfield properties made ready for reuse. According to EPA policy and program officials, program officials monitor these data to track and report program accomplishments, at the regional and agency levels, and, as applicable, to assess the agency’s progress meeting its performance measure targets in support of agency strategic goals.<sup>28</sup> According to EPA officials, generally grantees or EPA program officials—depending on the database—are to enter grant results, such as the number of enforcement actions, into EPA’s program-specific data systems at agreed-upon intervals, such as quarterly. These requirements may be part of a grant’s terms and conditions.

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<sup>28</sup>For an example of how EPA program offices use the information they collect from grantees to track and report program accomplishments, see Environmental Protection Agency, *National Water Program: Best Practices and End of the Year Performance Report Fiscal Year 2014* (Washington, D.C.: June 2015), available at <https://www.epa.gov/sites/production/files/2015-07/documents/nationalwaterprogrameodreportfy2014webfile.pdf>.

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### **EPA Performance Measures and Data Systems**

The number of performance measures and data systems that the Environmental Protection Agency (EPA) uses to collect and analyze data on environmental and other program results in 2016—including incorporating performance data from grantees as relevant—varies across the three program offices we reviewed. For example, the Office of Water collects or analyzes grantee data on results for 13 of its 15 grant programs using 20 data systems, and integrates the results as appropriate into its reporting on 111 annual commitment measures. The Office of Land and Emergency Management collects or analyzes grantee data on results for 10 of its 13 grant programs using 4 systems, and integrates the results as appropriate into its reporting on 34 annual commitment measures. The Office of Air and Radiation collects or analyzes grantee data on results for 7 of its 9 grant programs using 3 systems, and integrates the results as appropriate into its reporting on 54 annual commitment measures.

Source: EPA officials and GAO analysis of EPA documents. | GAO-16-530

According to EPA officials, there is not always a direct link between individual grantee results and EPA's annual budget and annual commitment performance measures.<sup>29</sup> However, officials told us that each regional or program office considers information from its program-specific data systems that is relevant to program- or agency-level performance measures, interprets it, and enters the results as appropriate into EPA's national performance tracking systems. For example, Office of Water officials use data collected from grantees in its Drinking Water National Information Management System database to report annually in EPA's national performance tracking system the number of Drinking Water State Revolving Fund projects that have started operations.<sup>30</sup>

EPA officials said that reporting grant and program results to EPA has improved over time, as EPA has transitioned from collecting data in hard copy and expanded electronic reporting by grantees. Additionally, officials we spoke with from several states said that electronic reporting had certain benefits. EPA officials told us that collecting certain information electronically from grantees allows EPA to access and analyze grant and program results more efficiently than it can for results collected in a written format, because EPA officials do not have to manually enter information into a data system for analysis. Additionally, in response to information-sharing problems—such as incompatible computer systems, manual data entry, and differing data structures across program offices—EPA and the Environmental Council of States formed the Environmental Information Exchange Network (Exchange Network) in 1998, an information-sharing partnership that uses a common, standardized format so that EPA, states, and other partners can share environmental data across different data systems. As a result, EPA and its partners may access and use environmental data more efficiently, according to

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<sup>29</sup>In 2007, EPA worked with states to develop a standardized performance measure template for certain state grant programs to better link state grant results to EPA's strategic plan. For program-specific measures, such as "the number of homes built with radon-resistant new construction," the template collects information on a variety of related work areas, such the number of builders using radon-resistant techniques. However, in a 2009 lessons-learned analysis, a state grant template measures work group determined that the process did not adequately evaluate state grant results for the applicable state grants and the process was burdensome, among other conclusions.

<sup>30</sup>For additional examples of how EPA uses data from certain performance measures, see the "Program Performance and Assessment" section in Environmental Protection Agency, *Fiscal Year 2017 Justification of Appropriation Estimates for the Committee on Appropriations*, EPA-190-K-16-001 (February 2016).

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Exchange Network documents. For example, officials we interviewed from each of the eight state environmental agencies we reviewed said that they use the information they collect for EPA to either manage their programs or inform the public. Additionally, even with some technical issues with individual databases, officials from six of these eight agencies said that electronic reporting has several benefits, such as improving data timeliness, greater efficiency, and reduced administrative burden.

Furthermore, based on our review of agency policy, analysis, and planning documents, we found that current and past EPA initiatives have taken steps to reduce the reporting burden on grantees and others. For example:

- Since 1996 EPA has been authorized to issue performance partnership grants,<sup>31</sup> which allow states, Indian tribes, interstate agencies, and intertribal consortia grantees to combine funds from certain EPA grant programs into a single grant.<sup>32</sup> EPA designed this system to provide grantees with greater flexibility to address their highest environmental priorities and reduce administrative burden and costs, among other objectives. In 2015, EPA issued a policy to increase awareness and encourage the use of these grants.<sup>33</sup>
- In 2008, EPA issued a policy to reduce reporting burdens for states awarded grants under 28 grant programs by establishing general frequencies for grant work plan progress reports and specifying that

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<sup>31</sup>Performance partnership grants for states and federally recognized Indian tribes were authorized by the Omnibus Consolidated Rescissions and Appropriations Act of 1996, Pub. L. No. 104-134, 110 Stat. 1321, 1321-299 (1996). Performance partnership grants for interstate agencies and intertribal consortia were authorized by the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1998, Pub. L. No. 105-65, 111 Stat. 1344, 1373 (1997).

<sup>32</sup>Performance partnership grant funds may be used for any activity that is eligible under at least 1 of the eligible environmental programs from which funds are combined into the grant. For more information on these grants, see Environmental Protection Agency, *Best Practices Guide for Performance Partnership Grants with States*, EPA-140B-14-001 (Washington, D.C.: June 2014), available at [https://www.epa.gov/sites/production/files/2015-12/documents/best\\_practices\\_guide\\_for\\_ppgs\\_with\\_states.pdf](https://www.epa.gov/sites/production/files/2015-12/documents/best_practices_guide_for_ppgs_with_states.pdf).

<sup>33</sup>For more information on grant program consolidation efforts, see GAO, *Grant Program Consolidations: Lessons Learned and Implications for Congressional Oversight*, GAO-15-125 (Washington, D.C.: Dec. 12, 2014).

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EPA regional offices could only require more frequent progress reports in certain circumstances.<sup>34</sup>

- In 2012, EPA's OGD contracted with external experts to review its grants management processes and identify improvements as part of EPA's Grants Business Process Reengineering Initiative. This initiative seeks to streamline and standardize the grants management process at EPA and develop an improved business process to be implemented through EPA's new grants management data systems. The study identified several potential high-level improvements, such as reducing manual activities and expanding standardization in documents to ensure greater consistency and reduce administrative burden.
- In 2013, EPA and states established a leadership council for E-Enterprise for the Environment—a joint initiative to streamline and modernize business processes shared between EPA and regulatory partners, such as states, and reduce reporting burden on regulated entities, among other goals. For example, in 2015, EPA and states initiated the Combined Air Emissions Reporting project, which seeks to streamline multiple emissions reporting processes at the federal, state, and local levels, according to EPA's website. The project will establish a single, authoritative data repository that will reduce the industry and government transaction costs for reporting and managing emissions data through features such as autopopulated forms and data sharing across regulatory agencies.
- In 2015, EPA finalized an electronic reporting rule that requires, among other things, states that receive grants to issue National Pollution Discharge Elimination System permits to substitute electronic reporting for paper-based reports, saving time and resources for states, EPA, and permitted facilities.<sup>35</sup> According to an EPA economic analysis, when fully implemented, the new rule will eliminate 900,000 hours of reporting across regulated entities and

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<sup>34</sup>EPA Grants Policy Issuance 08-05, *Burden Reduction for State Grants*.

<sup>35</sup>The Clean Water Act generally prohibits discharge of pollutants into waters of the United States. Point sources, such as manufacturing facilities and wastewater treatment facilities that discharge pollutants into waters of the United States are required to obtain a National Pollution Discharge Elimination System permit, which generally imposes specific limits and conditions on the discharge.

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state agencies.<sup>36</sup> According to EPA's fiscal year 2017 budget, the agency plans to further reduce the reporting burden by 1 million hours by the end of fiscal year 2017.<sup>37</sup>

- In 2016, EPA's OGD issued its 2016-2020 Grants Management Plan, which includes several streamlining efforts specific to grants. For example, under Goal 2: Streamline Grants Management Procedures, EPA plans to evaluate its grants management processes and assess opportunities to streamline its procedures. Under this goal, EPA also plans to provide a mechanism for staff to submit feedback about existing burdens and new requirements or procedures. Furthermore, under Goal 4: Ensure Transparency and Accountability and Demonstrate Results, EPA plans to improve its process for monitoring grants and will collect input from external stakeholders, such as states and grantees, about how to address burdens.<sup>38</sup>

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### Certain EPA Monitoring Practices Hinder EPA's Ability to Efficiently Monitor Some Results and May Increase EPA's and Grantees' Administrative Burden

Based on our review of the three program offices that award the majority of EPA grant funding, we found that certain EPA monitoring practices in these offices hinder EPA's ability to efficiently monitor some results and may increase EPA's and grantees' administrative burden. First, EPA collects a variety of information about grant results, but some of the information is not readily accessible. Second, EPA collects certain information from grantees twice, once in a written report and once in an electronic database. Third, one program office transfers data relevant to its annual performance measures from its program-specific databases to EPA's national database manually rather than electronically. EPA officials and officials from several state environmental agencies who we interviewed said that these practices increase their administrative burden.

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<sup>36</sup>Environmental Protection Agency, *Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Final Rule*, Docket No. EPA-HQ-OECA-2009-0274 (Washington, D.C.: Sept. 14, 2015).

<sup>37</sup>Environmental Protection Agency, *Fiscal Year 2017 Justification of Appropriation Estimates for the Committee on Appropriations*.

<sup>38</sup>Environmental Protection Agency, Office of Grants and Debarment, *Grants Management Plan 2016-2020* (Washington, D.C.: February 2016).

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EPA Collects a Variety of Information about Grant Results, but Some of the Information Is Not Readily Accessible

EPA collects a variety of information about grant results through grantee performance reports and program-specific databases. However, some of the information was not readily accessible to project officers or grantees. Based on our review of performance reports across 23 grant programs, we found that the types of results that grantees reported, such as data collection and management, covered a variety of topics and were generally similar across programs, as shown in table 2. Additionally, we found that grantees electronically report a variety of information about grant results to program-specific databases, such as enforcement actions and environmental benefits of water infrastructure projects. However, only some of the information reported by grantees was readily accessible, either to the public through user-defined searches on EPA's website or to grantees through accessing an EPA database directly. This is because the information in grantees' performance reports is stored as file attachments to database records and EPA's legacy grants management databases do not have the capability to search data stored in this format.<sup>39</sup> For instance, a program manager that wanted to obtain information on the number and types of training activities funded by a particular grant program—and that are not reported to a program-specific database—would need project officers to open each performance report individually and manually review it for relevant information. OGD officials told us that—depending on the availability of funds—they plan to develop a web-based portal for grantees to submit documents, including their performance reports, centrally as part of their new grants management database.

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<sup>39</sup>The search functions of EPA's legacy grants management databases vary. For example, EPA's State Grant Information Technology Application allows users to search for performance reports by grant type, recipient, or relevant EPA strategic objective through intuitive drop-down menus. In contrast, searching EPA's Integrated Grants Management System is not intuitive or user-friendly, according to EPA documents.

**Table 2: Types of Information Included in Performance Reports GAO Reviewed for 23 Grant Programs**

	Number of reports			Total (percentage of 49 reports)
	Office of Air and Radiation: 11 reports reviewed for 6 programs <sup>a</sup>	Office of Land and Emergency: Management 16 reports reviewed for 7 programs <sup>a</sup>	Office of Water: 22 reports reviewed for 10 programs <sup>a</sup>	
Capacity-building or technical assistance	7	9	16	32 (65)
Data collection or management	5	10	17	32 (65)
Reporting to the Environmental Protection Agency (EPA) or coordination with EPA	5	13	21	39 (80)
External coordination or outreach	8	11	16	35 (71)
Program implementation	7	15	20	42 (86)
Compliance or enforcement	3	9	11	23 (47)
Budget information or financial status	7	11	12	30 (61)
Funded project description	5	4	7	16 (33)
Other <sup>b</sup>	6	5	6	17 (35)

Source: GAO analysis of grantee performance reports. | GAO-16-530

<sup>a</sup>The number of performance reports we reviewed for each program office varied based on the number of grant programs per program office and the availability of performance reports in EPA's grants management databases, among other factors. For more information on how we selected grant programs and performance reports to review, see our scope and methodology in app. I.

<sup>b</sup>Other types of information or activity include information not included in other categories, such as success stories or specific challenges faced.

Under EPA's regulations, grantee performance should be measured in a way that will help improve grant program outcomes, share lessons learned, and spread the adoption of promising practices. EPA has procedures in place to collect this information through its program-specific databases and performance reports.<sup>40</sup> However, we have previously found that for performance information to be useful, it should meet users' needs for consistency, relevance, accessibility, and ease of use, among

<sup>40</sup>EPA and its state partners may also share lessons learned through program-wide conference calls and meetings or participation in working groups through the Environmental Council of States, such as the Water Committee, which facilitates discussions among states on water-related issues.



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other attributes.<sup>41</sup> EPA's 2014 internal analysis of its grants management business processes identified improvements that if implemented into EPA's planned web-based portal, could improve the accessibility and usefulness of information in grantee performance reports for EPA, grantees, and other users. For example, the analysis found that incorporating expanded search capabilities into EPA's new grants management database, such as keyword searches, could improve users' access to relevant information. However, it is unclear to what extent, if at all, these features will be applied to the web-based portal because the high-level analysis does not specify how performance reports will be stored and accessed through the web-based portal.

Because EPA, grantees, and other users cannot readily access information in performance reports about grant results and how different grantees achieve them, these reports are less useful for sharing lessons learned and building evidence for demonstrating grant results. Making the information that EPA collects in these reports more accessible by incorporating expanded search capability features, such as keyword searches, into its proposed web-based portal for collecting and accessing performance reports, could improve its usefulness to EPA and grantees in identifying successful approaches to common grantee challenges. Additionally, improved accessibility could facilitate EPA's ability to assess and report environmental and program results achieved through its grants by reducing the need to manually open and review each performance report to identify relevant information.

#### EPA Collects Certain Information from Grantees Twice

EPA collects certain information from grantees twice—once in a written report and once in an electronic database—and in some cases, we found varying degrees of overlap between the content of the performance reports and program-specific databases that we reviewed. Specifically, of the performance reports we reviewed across 23 grant programs, we found that one or more grantee performance reports included information that grantees also report to EPA through a program-specific database for 12 programs, as shown in table 3. For 10 of these programs, the content in 15 of the performance reports we reviewed had some overlap with data submitted through relevant program-specific databases, and for 5 of the programs, 12 reports we reviewed had substantial overlap. For more

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<sup>41</sup>GAO, *Managing for Results: Enhancing Agency Use of Performance Information for Management Decision Making*, [GAO-05-927](#) (Washington, D.C.: Sept. 9, 2005).

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information on the program-specific databases we reviewed, see appendix II.

**Table 3: Twelve Environmental Protection Agency (EPA) Programs Where Performance Reports GAO Reviewed Contained Information Also Reported to an EPA Database**

EPA program office	Program	Database name	Number of reports		
			Reviewed	Some overlap (3 to 5 areas of overlap)	Substantial overlap (6 or more areas of overlap)
Office of Land and Emergency Management	Brownfields Assessment and Cleanup <sup>a</sup>	ACRES	2	2	n/a <sup>b</sup>
	Hazardous Waste Management State Program Support <sup>c</sup>	RCRAInfo	5	2	3
	Leaking Underground Storage Tank Trust Fund Corrective Action	LUST4	2	n/a	1
	State and Tribal Response	ACRES	3	1	1
	Underground Storage Tank Prevention, Detection, and Compliance	LUST4	2	2	n/a
Office of Water	Beach Monitoring and Notification	Beach Monitoring	2	1	n/a
	Clean Water State Revolving Fund	CBR	2	n/a	2
		CWNIMS	2	n/a	2
	Drinking Water State Revolving Fund	DWNIMS	2	1	1
		PBR	2	n/a	2
	Long Island Sound	eSound	1	1	n/a
	Nonpoint Source Implementation Grants <sup>c</sup>	GRTS	3	1	n/a
	State Underground Water Source Protection <sup>c</sup>	National UIC Database	2	1	n/a
Water Pollution Control Program Support <sup>c</sup>			5	3	n/a
<b>Total</b>			<b>35</b>	<b>15</b>	<b>12</b>

Source: GAO analysis of grantee performance reports submitted to EPA. | GAO-16-530

Note: We collected 49 performance reports across 23 programs for our review. Of the 23 programs we reviewed, 14 programs also collected data from grantees in a program-specific database. For these 14 programs, we compared the content in the corresponding performance reports against the data elements in the program-specific database to determine any overlap. We did not compare performance reports to database data elements for the remaining 9 programs because these programs either did not collect grantee results in a database or EPA officials performed data entry.

<sup>a</sup>These programs provide financial assistance through cooperative agreements.

<sup>b</sup>n/a indicates not applicable.

<sup>c</sup>For this program, one of the reports we reviewed was a state report on grants within a performance partnership.

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Additionally, officials we interviewed from five of the eight state environmental agencies we reviewed confirmed that under current reporting requirements, they reported the same information to EPA twice—once electronically and once in a written performance report, which increased their administrative burden. Specifically, these state officials provided the following examples:

- Much of grantee reporting for the Clean Water State Revolving Fund—information reported electronically to EPA—is also reported separately in the written state revolving fund annual performance report.
- Grantees report the same activities in the Public Water System Supervision program that they report separately to EPA’s state revolving fund databases for the state program set-asides, funded by the Drinking Water State Revolving Fund.
- Under the State Hazardous Waste Management Program, EPA calls for grantees to include permitting, compliance, enforcement, and corrective action activities and accomplishments—already reported to EPA electronically—in their performance reports.
- Because of different programmatic and reporting needs for water program grants, officials often find themselves reporting the same data multiple times in different formats.
- Grantees submit data on actions to address nonpoint source pollution to EPA electronically throughout the year—which grantees also report separately to EPA in the annual performance reports for Nonpoint Source Pollution Grants, as required by the Clean Water Act.<sup>42</sup>

Officials we interviewed from five of the eight state environmental agencies said that EPA could work with states to evaluate how grantees report and further streamline reporting and data collection.<sup>43</sup> Officials we interviewed from one state agency said that with limited resources, they have no capacity for additional reporting requests, without some

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<sup>42</sup>33 U.S.C. § 1329(h)(11).

<sup>43</sup>Officials from one state environmental agency identified reporting issues but did not specifically identify how to address the issues. Officials from two other state environmental agencies did not identify any issues with reporting environmental results.

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modification to reporting schedules or simplification of the reporting process.

According to EPA officials, EPA's reporting process has evolved over time in response to statutory changes, such as amendments to the Government Performance and Results Act of 1993—which generally requires that agencies develop performance goals that are expressed in objective, quantifiable, and measurable form and annually report on their performance in meeting those goals.<sup>44</sup> Additionally, to facilitate grantees' timely reporting and access to environmental data, EPA and its partners have expanded electronic reporting to program-specific databases through the Exchange Network data-sharing partnership with states and others, according to EPA and Exchange Network documents. Furthermore, EPA officials told us that collecting information in both written performance reports and program-specific databases is beneficial because the information serves different purposes. Specifically, EPA officials said that performance reports are designed to provide project officers with information in the format they need for monitoring grantee progress, for example, narrative information on grantee activities to achieve results. Similarly, program-specific databases are designed to provide program managers with information in the format they need for monitoring program progress, for example, information that will allow them to report national-level results. However, officials from two of the three program offices we reviewed said that project officers either currently used, or could use, data within some program-specific databases to help monitor grantee progress.<sup>45</sup>

Because EPA collects certain information in both performance reports and program-specific databases for 12 of the programs we reviewed, some grantees have an increased administrative burden, which may result in fewer resources dedicated to activities that directly protect human health and the environment. Our prior work and EPA analyses of its business processes have shown that duplication of efforts can increase administrative costs and reduce the funds available for other

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<sup>44</sup>31 U.S.C §§ 1115(b)(1),(2),1116(b)(1).

<sup>45</sup>The third program office said that the data in its program-specific database would not be helpful to project officers for monitoring grantee progress because the data consist of raw monitoring data that require additional technical analysis to demonstrate environmental results.

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One Program Office Transfers  
Relevant Program Results  
Data from Its Databases to  
EPA's National Database  
Manually

priorities.<sup>46</sup> By identifying grant programs where existing program-specific data reporting requirements can meet EPA's performance reporting requirements for grants management purposes, the agency can help reduce duplicative reporting for grantees in a manner consistent with EPA's ongoing streamlining efforts.

Because one program office we reviewed, the Office of Water, transfers certain data relevant to program results from its program-specific databases to EPA's national database manually, this office does not benefit from greater data quality control, accessibility, and administrative efficiencies reported by another program office that electronically transfers data relevant to program results.<sup>47</sup> Specifically, the Office of Land and Emergency Management transfers data relevant to most of its annual commitment measures from its program-specific databases to EPA's national database electronically, using EPA's Performance Assessment Tool business intelligence software.<sup>48</sup> According to Office of Land and Emergency Management officials, the software provides several advantages to manual data transfer, including improved accuracy, efficiency, the ability to trace data between the different data systems, and improved data accessibility for EPA program managers.

In contrast, the Office of Water manually transfers data relevant to its annual commitment measures from its program-specific data systems to EPA's national performance database—the Budget Automation System—using a spreadsheet. According to Office of Water officials, they are not currently planning to develop the capability to transfer data electronically because EPA is in the process of replacing its Budget Automation System

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<sup>46</sup>GAO, *2016 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Other Financial Benefits*, [GAO-16-375SP](#) (Washington, D.C.: Apr. 13, 2016).

<sup>47</sup>According to EPA officials, EPA's environmental results directive does not call for grantees to report specifically on EPA's national performance measures, and grantee results data are not transferred directly to EPA's national performance systems. However, according to EPA documents, the Office of Water and the Office of Land and Emergency Management use information from program-specific databases that collect grantee data to measure progress for several annual commitment measures.

<sup>48</sup>The third program office we reviewed, the Office of Air and Radiation, does not transfer data directly from its primary database—the Air Quality System—because the database collects raw data from air quality monitoring stations, which require additional analysis before they are included in EPA's agency-wide performance tracking system, according to EPA officials.

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with a new system.<sup>49</sup> Instead, these officials said that the office is using other technology tools—such as collaboration software—to make the data transfer within EPA more efficient and reduce errors. However, an Office of Water official acknowledged that the quality assurance process for data transferred manually is lengthy.

*Standards for Internal Control in the Federal Government* states that control activities can be implemented in either an automated or a manual manner but that automated control activities tend to be more reliable because they are less susceptible to human error and are typically more efficient.<sup>50</sup> Furthermore, EPA planning documents and analyses demonstrate the potential benefits of improving efficiency in government operations by using automated control activities, such as reduced administrative burden and cost savings.<sup>51</sup> However, by transferring data from its program-specific databases to EPA's agency-wide system manually, the Office of Water does not benefit from the greater data quality control, accessibility, and administrative efficiencies available from electronic transfer of data. By adopting software tools, as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA's new national performance system, the Office of Water could reduce its administrative burden.

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<sup>49</sup>Because of limitations in the current system, officials from one of the program offices—the Office of Land and Emergency Management—told us that they have to manually transfer data from one module of the Budget Automation System to another module, for those measures that they use to track regional progress against annual commitment targets and that correspond with annual budget performance measures. The new performance system should address this issue by tracking a single set of measures, according to officials from EPA's Office of the Chief Financial Officer.

<sup>50</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014). See para. 10.06 for more information.

<sup>51</sup>Environmental Protection Agency, *Fiscal Year 2017 Justification of Appropriation Estimates for the Committee on Appropriations*.

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## Our Review of Performance Reports Identified a Variety of Monitoring Issues That May Hinder EPA's Ability to Efficiently Identify Factors Affecting Grantee Results

Our review of 49 written performance reports across 23 grant programs identified a variety of monitoring issues related to EPA's environmental results directive. First, we found that project officers may interpret EPA's environmental results directive differently because the directive is unclear. Second, in some cases, grantees did not include references to the agreed-upon outputs and outcomes from their work plan to demonstrate progress achieving planned results. Third, because grantees submit performance reports in a written format, there are no built-in quality controls to ensure these reports' consistency with EPA's directive. Each of these issues may have contributed to the inconsistencies we found in the reports we reviewed. Inconsistencies in grantee reports may make it more difficult for EPA project officers to efficiently identify or report patterns in factors affecting grantee's achievement of their agreed-upon results.

### Project Officers May Interpret EPA's Environmental Results Directive Differently Because the Directive Is Unclear

We found that individual project officers may be interpreting EPA's environmental results directive differently because the directive is unclear. Specifically, we found that reports' consistency with the directive varied by grantee and across some of the grant programs we reviewed. One reason for these variations may be that project officers have different interpretations of EPA's directive, as the directive does not provide specific criteria for evaluating performance reports' consistency.

EPA's environmental results directive establishes EPA's policy to ensure that grant outputs and outcomes are appropriately addressed in grantee performance reports, to the maximum extent practicable. Specifically, it calls for program offices to review performance reports and determine whether the grantees achieved the environmental or other outputs and outcomes in their grantee work plans, which includes assessing whether grantee explanations for unmet outputs or outcomes are satisfactory. According to the directive, the results of this review should be included in EPA's official project file for each grantee.<sup>52</sup>

However, the directive does not specify what factors the project officers who manage grants should consider when determining whether the grantees' addressing of outputs and outcomes in their performance reports is appropriate. Based on our review of performance reports, we

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<sup>52</sup>For example, project officers review grantees' progress and document any issues in EPA's grants management database as part of their annual routine monitoring of grants.



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found that the level of detail in grantees' descriptions of how they addressed grant outputs and outcomes varied across the reports we reviewed. For example, some grantees reported completing or providing training activities without including additional information on the topic, date, or number of attendees. In contrast, other grantees provided specific information on training, such as which employees attended training, the various courses, and dates of classes.

Similarly, the directive does not specify what factors project officers should consider when determining whether a grantee's explanation for an unmet output or outcome in a performance report is satisfactory. For example, we found that 17 of 49 (about 35 percent) grantee performance reports were consistent with EPA's directive because they included explanations for each outcome they did not achieve, and 20 of 49 (about 41 percent) grantee performance reports were partially consistent with the directive because they did not include explanations for all missed outcomes.<sup>53</sup> For the remaining 12 grantee performance reports (24 percent), we could not determine whether the reports were consistent with EPA's environmental results directive because they did not include any references to the agreed-upon outputs and outcomes from the grantee work plan. (See table 4.)

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<sup>53</sup>The explanations for missed outcomes may be documented elsewhere in EPA's official project file for a particular grantee, such as in correspondence, or within the project officer's annual monitoring report. Reviewing EPA's official project files for grantees was outside the scope of this review. For more information on our scope and methodology, see app. I.

**Table 4: GAO Analysis of 49 Grantee Performance Reports, by Environmental Protection Agency (EPA) Program Office, 2010-2016**

EPA program office	Program	Number of reports			
		Reviewed	Consistent	Partially consistent	Could not determine
Office of Air and Radiation	Air Pollution Control Support <sup>a</sup>	3	n/a <sup>b</sup>	2	1
	Internships, Training and Workshops	1	n/a	n/a	1
	National Clean Diesel Emissions Reduction	3	3	n/a	n/a
	State Clean Diesel	1	1	n/a	n/a
	State Indoor Air Radon	2	n/a	n/a	2
	Temporally Integrated Monitoring of Ecosystems and Long-Term Monitoring	1	n/a	n/a	1
Office of Land and Emergency Management	Brownfields Assessment and Cleanup <sup>c</sup>	2	n/a	n/a	2
	Hazardous Waste Management State Program Support <sup>a</sup>	5	n/a	5	n/a
	Leaking Underground Storage Tank Trust Fund Corrective Action	2	n/a	1	1
	State and Tribal Response	3	1	1	1
	Superfund State, Indian Tribe Core <sup>c</sup>	1	n/a	n/a	1
	Superfund State, Political Subdivision, and Indian Tribe Site-Specific <sup>c</sup>	1	n/a	1	n/a
	Underground Storage Tank Prevention, Detection, and Compliance	2	1	1	n/a
Office of Water	Beach Monitoring and Notification	2	n/a	1	1
	Clean Water State Revolving Fund	2	1	1	n/a
	Drinking Water State Revolving Fund	2	1	1	n/a
	Great Lakes	2	1	n/a	1
	Long Island Sound	1	1	n/a	n/a
	Nonpoint Source Implementation <sup>a</sup>	3	2	1	n/a
	Safe Drinking Water Act - Public Water System Supervision	2	1	1	n/a
	State Underground Water Source Protection <sup>a</sup>	2	2	n/a	n/a
	Water Pollution Control Program Support <sup>a</sup>	5	2	3	n/a
	Water Quality Management Planning	1	n/a	1	n/a
<b>Total</b>		<b>49</b>	<b>17</b>	<b>20</b>	<b>12</b>

Source: GAO analysis of EPA responses to a standard set of questions. | GAO-16-530

<sup>a</sup>For this program, one of the reports we reviewed was a state report on grants within a performance partnership.

<sup>b</sup>n/a indicates not applicable.

<sup>c</sup>These programs provide financial assistance through cooperative agreements.

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According to federal standards for internal control, management should implement control activities through policies.<sup>54</sup> Additionally, these standards state that each unit within an agency also is to document policies in the appropriate level of detail to allow management to effectively monitor the control activity. With its environmental results directive, EPA has implemented certain control activities through its policy to help ensure that grantee performance reports appropriately address planned results from grantee work plans. However, the inconsistencies we found in our review of performance reports may indicate that the guidelines within EPA's environmental results directive may not be at a sufficient level of detail for EPA to effectively monitor its implementation. By clarifying its directive or guidance to discuss the factors project officers should consider when determining whether reports appropriately address planned results and include satisfactory explanations for unmet results, EPA would have better assurance that project officers are implementing its environmental results directive consistently. In turn, implementing its directive consistently may help EPA demonstrate the achievement of environmental results from its grants, and also help project officers better identify or report patterns in factors that are affecting grantees' achievement of planned results.

Some Grantees Did Not Include References to the Planned Results in Their Work Plans to Demonstrate Progress

For 12 of the 49 (24 percent) performance reports we reviewed, grantees did not include references to the agreed-upon outputs and outcomes from their work plan to demonstrate progress in achieving planned grant results. Because some grantees did not include information from their work plans in their performance reports, we could not determine whether these grantees achieved their planned results or provided explanations for any results they did not achieve, in accordance with EPA's environmental results directive (see table 4). To assess these grantees' progress, the project officer managing the grant would have to manually compare the information in each grantee's performance report against the grantee's work plan to determine if the actual results matched the planned results.<sup>55</sup>

During a 2010 EPA-contracted review of performance reports' consistency with EPA's environmental results directive, the contractor

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<sup>54</sup>[GAO-14-704G](#).

<sup>55</sup>Reviewing EPA's official project files for additional documentation was outside the scope of this review. For more information on our scope and methodology, see app. I.

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identified the same issue with several performance reports. Specifically, although the contractor found that 147 out of 157 (about 94 percent) performance reports were greater than 60 percent consistent with EPA's directive, for 55 of these performance reports, the contractor determined their consistency by inference because the performance reports did not contain explicit linkages to planned outcomes within the grantee work plans.<sup>56</sup> Consequently, to improve the consistency of performance reports with EPA's environmental results directive, the contractor recommended that EPA consider encouraging grantees to more clearly label the planned outputs and outcomes from their work plans in their performance reports.

In fiscal year 2013, EPA implemented a policy for certain categorical grant programs that calls for grantee performance reports to include certain elements, including an explicit reference to the planned results in the work plan and projected time frame.<sup>57</sup> However, this policy does not apply to all EPA grants, including formula grants and other categorical grants. Expanding aspects of this policy, specifically, the call for performance reports to include an explicit reference to the planned results in the work plan and projected time frames, could achieve several benefits identified in the 2010 review. By increasing the extent to which grantees clearly label the planned results from their work plans in their performance reports, EPA would facilitate project officers' review of grantee progress, reduce the subjectivity of the review, and increase transparency between EPA and grantees about planned grant results.

#### Because Grantees Generally Submit Written Performance Reports, There Are No Built-In Quality Controls

Because grantees generally submit written performance reports, there are no built-in data quality controls, such as those for certain electronic reporting formats, to ensure that these reports are consistent with EPA's environmental results directive. In contrast, we found that some of EPA's program-specific databases include built-in quality controls, such as required fields, drop-down menus, or other data entry rules designed to

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<sup>56</sup>In this study, the contractor considered reports that were greater than 60 percent consistent with the directive as "consistent." For example, 40 of the 147 reports the contractor identified as consistent with EPA's directive did not contain explanations for unmet outputs or unmet outcomes. In our review, we classified such reports as "partially consistent" because the directive calls for program offices to ensure that performance reports provide a satisfactory explanation if outcomes or outputs were not achieved and does not include an acceptable minimum threshold for implementation of this part of the policy.

<sup>57</sup>EPA Grants Policy Issuance 11-03.

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ensure that the information entered is complete, accurate, and consistent. Because there are no built-in quality controls for written performance reports, EPA project officers must manually review each performance report to determine consistency with EPA's directive.

An OGD official told us that OGD plans to develop a web-based portal for grantees to submit documents, including their performance reports, electronically as part of its new grants management database. However, the business process analysis underlying the web-based portal feature of the new database does not specify whether these reports would continue to be uploaded by grantees as attachments or input directly into an application with built-in data quality controls, such as required fields, to ensure consistency with EPA's directives. The OGD official said that the office will not explore options for the web-based portal, including a timeline, until it has migrated from the old database to the new system, which it expects to complete in fiscal year 2018.

According to federal standards for internal control, control activities may be manual or automated.<sup>58</sup> EPA has manual control activities for implementing its environmental results directive, which is consistent with these standards. However, a 2014 analysis of EPA's grants management business processes found that EPA relied heavily on manual processes and could incorporate several improvements into its new grants management database system, including using electronic templates to increase information consistency and reduce the administrative burden of manual activities. By incorporating built-in data quality controls for performance reports into its planned web-based portal, EPA could improve these reports' consistency with the environmental results directive and potentially reduce project officers' administrative burden in performing manual reviews. Furthermore, improved consistency in performance reports could help EPA project officers to more efficiently identify or report patterns in factors that are affecting grantees' achievement of their agreed-upon results.

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## Conclusions

EPA has adopted a number of good practices for monitoring environmental and other program results from the nearly \$4 billion dollars it distributes each year in grants, in part to implement environmental

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<sup>58</sup> [GAO-14-704G](#).

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statutes and regulations. Furthermore, EPA continues to pursue opportunities to streamline its processes and reduce the reporting burden for regulated entities and grantees. Yet certain monitoring practices—collecting some grant results in a format that is not accessible, collecting some information from grantees twice, and manually transferring data between databases—increase EPA and grantees’ administrative burden in monitoring and reporting environmental and program results. By incorporating expanded search capability features, such as keyword searches, into its proposed web-based portal, EPA can improve the accessibility of information in grantees’ performance reports and make them more useful for sharing lessons learned and building evidence for demonstrating grant results. In addition, by identifying grant programs where existing program-specific data reporting can meet EPA’s performance reporting requirements for grants management purposes, the agency can eliminate duplicative reporting by grantees in a manner consistent with EPA’s ongoing streamlining efforts. Furthermore, by adopting software tools, as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA’s new national performance system, the Office of Water could reduce its administrative burden.

EPA has also implemented certain internal controls, such as its environmental results directive, to ensure that grantees achieve the environmental and other planned results in their work plans. However, we identified a variety of monitoring issues related to EPA’s environmental results directive—such as unclear guidance, the omission of references to planned results in performance reports to document progress, and written grantee performance reports that do not have built-in quality controls—that may undermine these efforts. By clarifying its directive or guidance to discuss the factors project officers should consider when determining whether performance reports are consistent with EPA’s environmental results directive, EPA would have better assurance that project officers are implementing its directive consistently. In addition, expanding aspects of EPA’s policy for certain categorical grants, specifically, the call for performance reports to include an explicit reference to the planned results in grantees’ work plans and their projected time frames for completion to all grants, would among other things facilitate project officers’ reviews of grantee progress results. Finally, by incorporating built-in data quality controls for performance reports into its planned web-based portal, EPA could improve these reports’ consistency with the environmental results directive and potentially reduce project officers’ administrative burden in performing manual reviews.

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## Recommendations for Executive Action

We recommend that the EPA Administrator direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to take the following six actions:

- Incorporate expanded search capability features, such as keyword searches, into its proposed web-based portal for collecting and accessing performance reports to improve their accessibility.
- Identify grant programs where existing program-specific data reporting can meet EPA's performance reporting requirements for grants management purposes to reduce duplicative reporting by grantees.
- Once EPA's new performance system is in place, ensure that the Office of Water adopts software tools, as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA's national performance system.
- Clarify the factors project officers should consider when determining whether performance reports are consistent with EPA's environmental results directive.
- Expand aspects of EPA's policy for certain categorical grants, specifically, the call for an explicit reference to the planned results in grantees' work plans and their projected time frames for completion, to all grants.
- Incorporate built-in data quality controls for performance reports into the planned web-based portal based on EPA's environmental results directive.

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## Agency Comments and Our Evaluation

We provided a draft of this report to EPA for its review and comment. In its written comments, reproduced in appendix III, EPA stated that it agreed with our findings and six recommendations. EPA also provided technical comments, which we incorporated into the report as appropriate.

EPA agreed with our recommendation that the agency incorporate expanded search capability features into its proposed web-based portal for performance reports and stated that incorporating such features would enable easier access to performance report information. EPA also noted that the web-based portal is a long-term initiative, subject to the agency's

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budget process and replacement of its existing grants management system, which the agency expects to complete in fiscal year 2018.

EPA generally agreed with our recommendation that the agency identify grant programs where existing program-specific data reporting by grantees can also meet EPA's separate performance reporting requirements, to reduce duplicative reporting by grantees. EPA stated that it will work with recipient partners to identify where duplicative reporting can be reduced and anticipates completing this effort by the end of fiscal year 2017. However, EPA noted that program-specific data cannot be relied upon to meet all of the agency's grants management needs and that performance reports often contain other information that allows EPA project officers to monitor a recipient's progress in meeting work plan commitments, which cannot be gleaned from output data entered into the agency's program-specific tracking systems. Additionally, EPA said that not all project officers have access to program-specific databases which would require the agency to consider expanding project officer access to those databases to enhance grant performance monitoring.

EPA agreed with our recommendation that the agency ensure that the Office of Water adopts software tools to electronically transfer relevant data from program databases to EPA's national performance system, as appropriate. EPA stated that it will also apply this recommendation to all program-specific databases—not just Office of Water databases—where appropriate and cost-effective. EPA also noted that in some cases, not all data from program-specific databases may be appropriate for direct electronic transfer because some individual grant data may need to be analyzed before being summarized at the national level.

EPA agreed with our recommendation that EPA clarify the factors project officers should consider when determining whether performance reports are consistent with EPA's environmental results directive. EPA stated it will modify the implementation guidance for the directive in fiscal year 2017.

EPA agreed with our recommendation that EPA expand aspects of EPA's policy for certain categorical grants, specifically, the call for an explicit reference to the planned results in grantee work plans and their projected time frames for completion, to all grants. EPA stated it will revise the existing policy in fiscal year 2017.



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EPA generally agreed with our recommendation that the agency incorporate built-in quality controls for performance reports into the planned web-based portal based on EPA's environmental results directive. However, EPA noted that identifying and deploying the appropriate data quality controls is a long-term effort subject to budgetary considerations, completion of the agency's replacement of its existing grants management system, and extensive collaboration with internal and external stakeholders. EPA also stated that full achievement of built-in quality controls, such as electronic templates, as envisioned in the draft report would require standardized work plan and performance report formats subject to clearance from the Office of Management and Budget. Additionally, EPA noted that grant recipients and EPA program offices have considered but generally not supported standardizing work plans and performance reports in the past. As a first step in implementing this recommendation, EPA stated that it would seek feedback from the recipient and program office community and will initiate this process in fiscal year 2017.

We recognize that EPA has considered standardizing work plans and performance report formats in the past, and we reviewed the agency's 2009 "lessons learned" analysis as part of this report (see footnote 29, page 15). We are not recommending that EPA repeat its previous effort and develop a template with standardized program-specific measures to improve reports' consistency. Specifically, implementing built-in quality controls for performance reports in EPA's web-based portal would not necessarily require grantees to measure and report the same information across grants. For example, EPA could design an electronic template that follows the guidelines of its existing policies for work plans and performance reports—such as allowing grantees and EPA to negotiate appropriate outputs and outcomes for each grant. If grantees entered their grant-specific outputs and outcomes directly into EPA's web-based portal as an electronic version of their work plan, the portal could use the information to prepopulate an electronic performance report and reduce manual data entry. Additionally, the electronic performance report could include required fields, such as an explanation field, if the grantee did not meet a particular output or outcome from its work plan. We continue to believe that such controls would improve the consistency of grantee performance reports with EPA's environmental results directive, and that both EPA project officers and grantees could benefit from the reduced administrative burden associated with submitting and reviewing performance reports electronically.

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As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the appropriate congressional committees, the Administrator of the Environmental Protection Agency, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or [gomezj@gao.gov](mailto:gomezj@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

A handwritten signature in black ink that reads "Alfredo Gómez". The signature is written in a cursive style with a large, stylized "A" and "G".

J. Alfredo Gómez  
Director, Natural Resources and Environment

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# Appendix I: Objectives, Scope, and Methodology

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This report examines (1) how the Environmental Protection Agency (EPA) awards grants, (2) the federal and EPA requirements and guidelines for monitoring grant and program results, and (3) how EPA monitors its grants to ensure that environmental and other program results are achieved.

To examine how EPA awards grants and the federal and EPA requirements and guidelines for monitoring grant and program results, we reviewed relevant federal laws, regulations, and EPA's policies and guidance for awarding and monitoring grants. Additionally, we reviewed our prior work on grants management. We also spoke to officials from EPA's Office of Grants and Debarment (OGD) about how EPA awards grants and EPA's policies for monitoring grants, and the three program offices that award the majority of EPA grant dollars—the Office of Water, Office of Land and Emergency Management, and Office of Air and Radiation—about EPA program-level guidance for monitoring grant results.

To examine how EPA monitors its grants to ensure that environmental and other program results are achieved, we reviewed EPA's monitoring processes for grants in the three program offices that award the majority of EPA grant dollars. We identified 45 grant programs awarded by the three program offices, from the Catalog of Federal Domestic Assistance, a clearinghouse for information on federal grant opportunities.<sup>1</sup> We identified an initial list of program-specific databases for the grant programs using information from EPA and its partners' Environmental Information Exchange Network and EPA's Central Data Exchange websites.<sup>2</sup> For each grant program we identified, we requested information from EPA program offices, including any corrections to the list of grant programs and associated program-specific databases, whether EPA or grantees enter data into the databases, and how grantees submit data. For these 45 programs, we searched EPA's Integrated Grants Management System and State Grant Information Technology Application for relevant performance reports.

Based on our search results, we selected a nongeneralizable sample of 49 performance reports across 23 grant programs using the following

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<sup>1</sup>See [www.cfda.gov](http://www.cfda.gov).

<sup>2</sup>See <http://www.exchangenetwork.net/> and <https://cdx.epa.gov/>.

criteria: (1) whether a performance report was electronically available, (2) whether different EPA regions were represented, (3) whether the grantee was a state grantee that we had interviewed, and (4) whether other documentation—such as an EPA routine monitoring report—was available.<sup>3</sup> Although the results of our review cannot be projected agency-wide because our sample was nongeneralizable, the performance reports represent a broad array of grant programs and include grantees in each EPA region.<sup>4</sup> For each of the 23 grant programs for which we obtained a report, we also collected information on the program-specific database associated with the program, as applicable. We collected information on the content of EPA's program-specific databases from the Environmental Information Exchange Network and the Central Data Exchange websites, EPA documents collected by a prior GAO team, and EPA's internal and external websites. Two analysts reviewed the reports and coded them in the following ways: (1) type of content and format of the report, (2) degree of consistency with EPA's environmental results directive, and (3) degree of overlap between the content of the performance reports and information collected from grantees in EPA's program-specific databases. To ensure consistency in our review, each analyst reviewed the other's work and resolved any differences.

To describe the grant results reported in performance reports, we reviewed the content of the performance reports we collected and developed nine mutually exclusive categories of information that grantees typically provide to EPA in these reports. To determine performance reports' consistency with EPA's environmental results directive, we reviewed each report against the directive's call for EPA to review performance reports to (1) determine whether the grantees achieved the planned outputs and outcomes in their work plans and (2) explain any unmet outputs and outcomes. From this review, we developed four categories:

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<sup>3</sup>For three Office of Air and Radiation programs, we requested performance reports from EPA to include more grant programs from this office in our review.

<sup>4</sup>We excluded 21 programs from our review for the following reasons: in 2 cases, EPA reported that the program we identified was not a grant program; in 3 cases, the program we identified was not a grant program to states; in 2 cases, EPA reported that the program was not funded; and in 14 cases, we could not locate in EPA's databases an electronically available report to review.

1. Consistent—the report describes progress against outputs or outcomes from the grantee’s work plan and explains all missed targets, if any.
2. Partially consistent—the report includes progress against some, but not all, outputs or outcomes from the grantee’s work plan or explains some, but not all missed targets, if any.
3. Not consistent—the report does not describe progress against outputs or outcomes from the work plan.
4. Could not determine—the report describes grantee activities without an explicit reference to outputs or outcomes from the work plan to demonstrate progress or to allow a reviewer to identify missed outputs or outcomes requiring explanations.

We did not review any other documentation from EPA’s official project file or grants management databases, which is consistent with the methodology described in a 2010 EPA-contracted study examining performance reports’ consistency with EPA’s environmental results directive.<sup>5</sup>

To determine whether grantees reported the same information to EPA twice, we reviewed the content of the performance reports and compared the report content against the information we collected describing data elements in EPA’s program-specific databases for that grant, as applicable. Based on this review, we created four categories of overlap between the report content and the data fields in EPA’s databases:

1. No overlap—no matches between content.
2. Minimal overlap—one to two matches between content.
3. Some overlap—three to five matches in content.
4. Substantial overlap—six matches or more between content.

We interviewed officials from EPA’s OGD, Office of Water, Office of Air and Radiation, Office of the Chief Financial Officer, Office of Land and Emergency Management, and lead regional offices for certain programs

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<sup>5</sup>Although the contracted study’s methodology states that the contractor neither collected nor reviewed any additional documentation other than the performance reports, the contractor decided to review the associated grantee work plans that it had previously collected as part of an earlier review of work plans. The work plans helped the contractor determine that some reports were consistent with the directive “by inference.”

to discuss EPA's processes for monitoring environmental and other program results from grants. We also provided program offices with a standard set of follow-up questions about how they collect and monitor environmental and other program results from grantees. Additionally, we interviewed representatives from the Environmental Council of States—an association of state environmental agency leaders—and a nongeneralizable sample of officials from environmental agencies in eight states—California, Hawaii, Maryland, Michigan, New York, North Carolina, Pennsylvania, and West Virginia—to obtain their perspectives on EPA's monitoring processes for grants.<sup>6</sup> We selected these eight states because they received the greatest amount of funding from the federal government, according to an Environmental Council of States' analysis of state environmental budgets data in 2012, the most recent publicly available data.<sup>7</sup> The results of our interviews with officials from these agencies cannot be generalized to those of states not included in our review.

We conducted this performance audit from August 2015 through July 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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<sup>6</sup>Because this was a nongeneralizable sample, our findings are not generalizable to other states but provide illustrative examples.

<sup>7</sup>Environmental Council of States, *Status of State Environmental Budgets, 2011-2013* (Washington, D.C.: September 2012).

# Appendix II: Additional Information on GAO's Review of 23 EPA Grant Programs

Table 5 summarizes the scope of our review of grantee performance reports.

**Table 5: Additional Information on the Grantee Performance Reports GAO Reviewed, by Environmental Protection Agency (EPA) Program Office**

EPA program office	Program	Reports reviewed	EPA region(s)	Year(s)
Office of Air and Radiation	Air Pollution Control Support <sup>a</sup>	3	3,9,10	2013, 2014, 2015
	Internships, Training and Workshops	1	5	2016
	National Clean Diesel Emissions Reduction	3	2,4(2)	2015(3)
	State Clean Diesel	1	10	2013-2014
	State Indoor Air Radon	2	3,9	2013-2014, 2015
	Temporally Integrated Monitoring of Ecosystems and Long-Term Monitoring	1	1	2015
Office of Land and Emergency Management	Brownfields Assessment and Cleanup <sup>b</sup>	2	5,10	2015(2)
	Hazardous Waste Management State Program Support <sup>a</sup>	5	2,4(2),9,10	2012-2014, 2013(2), 2013-2014, 2014
	Leaking Underground Storage Tank Trust Fund Corrective Action	2	5(2)	2014, 2015
	State and Tribal Response	3	9(2),10	2013, 2014, 2015
	Superfund State, Indian Tribe Core <sup>b</sup>	1	7	2015
	Superfund State, Political Subdivision, and Indian Tribe Site-Specific <sup>b</sup>	1	7	2014
	Underground Storage Tank Prevention, Detection, and Compliance	2	5,10	2013, 2015
Office of Water	Beach Monitoring and Notification	2	1,5	2012-2013, 2014
	Clean Water State Revolving Fund	2	5,9	2014-2015, 2015
	Drinking Water State Revolving Fund	2	6,8	2014-2015, 2015
	Great Lakes	2	2,5	2011, 2015
	Long Island Sound	1	2	2014
	Nonpoint Source Implementation <sup>a</sup>	3	3,10(2)	2010, 2012-2013, 2013
	Safe Drinking Water Act - Public Water System Supervision	2	3,4	2013, 2014
	State Underground Water Source Protection <sup>a</sup>	2	9,10	2012-2013, 2013
	Water Pollution Control Program Support <sup>a</sup>	5	4(2),9,10(2)	2012-2013(2), 2013(2), 2014-2015
	Water Quality Management Planning	1	2	2014-2015
<b>Summary of review scope</b>		<b>49</b>	<b>1-10</b>	<b>2010-2016</b>

Source: GAO analysis of grantee performance reports submitted to EPA. | GAO-16-530

**Appendix II: Additional Information on GAO's  
Review of 23 EPA Grant Programs**

<sup>a</sup>For this program, one of the reports we reviewed was a state report on grants within a performance partnership.

<sup>b</sup>These programs provide financial assistance through cooperative agreements.

Table 6 provides information on which program-specific databases we reviewed.

**Table 6: Environmental Protection Agency (EPA) Program-Specific Databases GAO Reviewed, by Program Office**

EPA program office	Program-specific database	Program
Office of Air and Radiation <sup>a</sup>	Air Quality System	Air Pollution Control Support
Office of Land and Emergency Management <sup>b</sup>	Assessment, Cleanup, and Redevelopment Exchange System	Brownfields Assessment and Cleanup State and Tribal Response
	Leaking Underground Storage Tank 4	Leaking Underground Storage Tank Trust Fund Corrective Action
		Underground Storage Tank Prevention, Detection, and Compliance
	Resource Conservation and Recovery Act Information	Hazardous Waste Management State Program Support
Office of Water <sup>c</sup>	eBeaches	Beach Monitoring and Notification
	Clean Water Benefits Reporting	Clean Water State Revolving Fund (CWSRF)
	CWSRF National Information Management System	CWSRF
	Drinking Water National Information Management System	Drinking Water State Revolving Fund (DWSRF)
	eSound	Long Island Sound
	Grants Reporting and Tracking System	Nonpoint Source Implementation
	Integrated Compliance Information System	Water Pollution Control Program Support
	Inventory, Measures, and Reporting Systems <sup>d</sup>	State Underground Water Source Protection
	National Underground Injection Control Database	State Underground Water Source Protection
	National Estuary On-line Reporting Tool	Long Island Sound
	Project Benefits Reporting	DWSRF
	Safe Drinking Water Information System/State <sup>d</sup>	Safe Drinking Water Act - Public Water System Supervision
	Storage and Retrieval Database/Water Quality Exchange	Nonpoint Source Implementation Water Pollution Control Program Support

Source: GAO analysis of EPA responses to a standard set of questions. | GAO-16-530

<sup>a</sup>The Office of Air and Radiation also uses one internal tracking database for its Clean Diesel programs and one for its State Indoor Air Radon program.

<sup>b</sup>The Office of Land and Emergency Management uses one internal tracking database that we did not review for its Superfund programs.

<sup>c</sup>The Office of Water also uses seven other databases we did not review—including one database for its Chesapeake Bay program, two internal tracking databases for its Great Lakes program, two



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**Appendix II: Additional Information on GAO's  
Review of 23 EPA Grant Programs**

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databases for its Lake Champlain Basin program, one internal tracking database for its Water Pollution Control program, and one database for its wetland programs.

<sup>d</sup>For these databases, either EPA or the grantee may enter data.

# Appendix III: Comments from the Environmental Protection Agency



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

JUN 30 2016

OFFICE OF  
ADMINISTRATION  
AND RESOURCES  
MANAGEMENT

Mr. J. Alfredo Gomez  
Director  
Natural Resources and Environment  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, D.C. 20548

Dear Mr. Gomez:

Thank you for the opportunity to comment on the Government Accountability Office's draft report, GAO-16-530 *Grants Management: EPA Could Improve Certain Monitoring Practices*.

The draft report addresses: 1) how the U.S. Environmental Protection Agency awards grants; 2) the federal and agency requirements and guidelines for monitoring grant and program results; and 3) how the EPA monitors its grants to ensure that environmental and other program results are achieved. This letter provides the EPA's response to the draft report's findings, conclusions and recommendations.

At the outset, we commend your staff for their thoughtful and professional manner in conducting the review and engaging with affected EPA offices. We are pleased that the draft report acknowledges that the agency has adopted a number of good practices for monitoring grant results and continues to take steps to streamline processes and reduce grantee reporting burdens. We also appreciate the draft report's finding that the agency's internal controls to ensure grantees achieve planned results are consistent with federal standards for internal controls.

The EPA agrees with the findings and conclusions in the draft report that there are opportunities to make the grant monitoring process more efficient and enhance the consistency of grantee performance reports with the agency's environmental results directive. The agency's response to the six recommendations is provided below. Additionally, we have provided an enclosure with technical comments for your consideration.

**Recommendation 1—*Incorporate expanded search capability features, such as keyword searches, into its proposed web-based portal for collecting and accessing performance reports, to improve their accessibility.***

The EPA agrees with this recommendation. The agency's vision for grants management includes having grant recipients submit performance reports and other information to the agency through a web-based portal. The portal would incorporate capabilities such as key word searches to allow for easier access to

Internet Address (URL) • <http://www.epa.gov>  
Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Postconsumer, Process Chlorine Free Recycled Paper

performance report information. The portal is a long-term initiative, subject to the agency's budget process, and dependent on the EPA's completion of the replacement system to modernize the existing Integrated Grants Management System. The EPA expects to fully deploy the replacement system in FY 2018.

**Recommendation 2—Identify grant programs where existing program-specific data reporting can meet EPA's performance reporting requirements for grants management purposes to reduce duplicative reporting by grantees.**

The EPA generally agrees with this recommendation and will work with recipient partners to identify where duplicative reporting can be reduced. We anticipate completing the identification process by the end of FY 2017.

It should be noted, however, that program-specific data cannot be relied upon to meet all grants management requirements. Performance reports often contain other information that allows the EPA's project officers to monitor a recipient's progress in meeting work plan commitments. This information cannot be gleaned from output data entered into program-specific tracking systems. In addition, not all POs have access to program-specific databases. This will require the EPA to consider expanding POs access to those databases to enhance grant performance monitoring.

**Recommendation 3—Once EPA's new performance system is in place, ensure that the Office of Water adopts software tools as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA's national performance system.**

The EPA agrees with this recommendation but will also apply it to all program-specific databases, not only OW databases, where appropriate and cost-effective. Not all data from program-specific databases may be appropriate for direct electronic transfer to the national performance system as some individual grant data may need to be analyzed before being rolled up into national data.

**Recommendation 4—Clarify the factors project officers should consider when determining whether performance reports are consistent with EPA's environmental results directive.**

The EPA agrees with this recommendation and will modify the implementation guidance for the environmental results directive accordingly in FY 2017.

**Recommendation 5—Expand aspects of EPA's policy for certain categorical grants, specifically, the call for an explicit reference to the planned results in grantees' workplans and their projected time frames for completion, to all grants.**

The EPA agrees with this recommendation and will revise the existing policy accordingly in FY 2017.

**Recommendation 6—Incorporate built-in data quality controls for performance reports into the planned web-based portal based on EPA's environmental results directive.**

The EPA generally agrees with this recommendation but notes that identifying and deploying appropriate data quality controls is a long-term effort subject to budgetary considerations, completion of the IGMS replacement system, and extensive collaboration with internal and external stakeholders.

The draft report's vision for built-in data quality controls involves the use of electronic templates and reduced reliance on manual data entry. Full achievement of that vision would require a standardized work plan and performance report formats subject to clearance by the Office of Management and Budget under the Paperwork Reduction Act. In the past, the EPA's grant recipients generally have not supported standardizing work plans and performance reports, with many large recipients, such as states, having their own institutionalized formats. Additionally, under its 2009-2013 Grants Management Plan, the EPA considered the use of standardized performance report formats but decided against requiring them due to program office concerns that such formats would not meet program-specific needs. Accordingly, as the first step in implementing this recommendation, the EPA will seek feedback from the recipient and program office community. The agency will initiate that process in FY 2017.

Again, thank you for the opportunity to provide comments on the draft report and for the professionalism of your staff in conducting the review. If you should have any questions, please contact Howard Corcoran, Director, Office of Grants and Debarment, at (202) 564-1903.

Sincerely,



Donna J. Vizian  
Acting Assistant Administrator

Enclosure

cc: EPA GAO Liaison Team  
EPA Assistant Administrators  
EPA Regional Administrators  
General Counsel  
Deputy Regional Administrators  
Senior Resource Officials  
Inspector General  
Howard Corcoran  
Denise Polk  
Laurice Jones  
Alexandra Raver  
Grants Management Officers  
Junior Resource Officials

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

J. Alfredo Gómez (202) 512-3841 or [gomezj@gao.gov](mailto:gomezj@gao.gov)

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## Staff Acknowledgments

In addition to the contact named above, Michael Hix (Assistant Director), Amy Bowser, Cindy Gilbert, Taylor Hadfield, Thomas James, Benjamin Licht, Kimberly McGatlin, Alison O'Neill, Danny Royer, Jeanette Soares, Sara Sullivan, Kiki Theodoropoulos, and Lisa Van Arsdale made key contributions to this report.

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