



Report to the Committee on
Transportation and Infrastructure, House
of Representatives

May 2023

LAKE PONTCHARTRAIN BASIN

Additional Transparency and Performance Management Could Improve EPA's Restoration Program

GAO Highlights

Highlights of [GAO-23-105547](#), a report to the Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The lakes, rivers, and other water bodies in the Lake Pontchartrain Basin support industry, provide habitat for plants and animals, and create recreational opportunities. However, stormwater, sewage, and agricultural runoff have polluted Basin waters for decades. To address these challenges, the Lake Pontchartrain Basin Restoration Act of 2000 called for EPA to establish the Lake Pontchartrain Basin Restoration Program to restore the ecological health of the Basin.

GAO was asked to review restoration efforts in the Basin. This report examines (1) restoration efforts since 1995, (2) EPA's implementation of relevant grants management requirements for its Lake Pontchartrain Basin Restoration Program, and (3) EPA's management of the program's performance.

GAO reviewed documents concerning Basin restoration efforts and the program; interviewed representatives from EPA, other federal agencies, state and local governments, a nonprofit, and recipients of program funding; and compared EPA's grants and performance management of the program against leading practices.

What GAO Recommends

GAO is making four recommendations to EPA, including that EPA (1) make key grant program information publicly available in a central location, such as a website; and (2) update the program's comprehensive conservation and management plan to include performance measures. EPA agreed with the recommendations and highlighted steps it has begun taking and plans to take to address them.

View [GAO-23-105547](#). For more information, contact J. Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

May 2023

LAKE PONTCHARTRAIN BASIN

Additional Transparency and Performance Management Could Improve EPA's Restoration Program

What GAO Found

Federal and nonfederal entities have made numerous efforts to restore the water quality and ecosystems in the Lake Pontchartrain Basin, which is an important water resource for communities in the region, including New Orleans and Baton Rouge, Louisiana. For example, through the Lake Pontchartrain Basin Restoration Program authorized in 2000, the U.S. Environmental Protection Agency (EPA) has awarded about \$31 million to administer and implement projects through this program. Such projects have included improving local sewer systems and monitoring water quality. In addition, the state of Louisiana's Coastal Protection and Restoration Authority has completed numerous Basin restoration projects, such as reconstructing shoreline marsh (see fig.).

Bayou Bonfouca Marsh Creation Project



Sources: Providence Engineering and Environmental Group LLC and Duplantier Design Group, PC (2017) (left); Patrick Quigley (2016) (right). | GAO-23-105547

EPA has generally followed agency- and government-wide grants management regulations, policies, and procedures in managing Lake Pontchartrain Basin Restoration Program grants. For example, consistent with agency policy, EPA has reviewed grant recipients' quality assurance project plans and conducted annual programmatic reviews. However, EPA has not always ensured transparency by providing potential applicants with key grant information—such as expected funding levels and timelines—needed to make decisions about their grant applications. GAO has previously reported that complete information about grants should be publicly available. Unless EPA improves the availability of key grant information to make it publicly accessible in a central location, the agency will not be able to adequately communicate information that potential applicants need to apply effectively for grants.

EPA has taken initial actions to manage the performance of the Lake Pontchartrain Basin Restoration Program. For example, the agency defined the mission and desired outcomes of the program by approving a comprehensive conservation and management plan as a guiding document. This plan describes broad goals and the types of projects that may help reach these goals, but it does not include performance measures for measuring progress. For example, the plan includes a goal to reduce sewage pollution in the Basin and identifies projects that may assist in meeting this goal, but it does not include performance measures to determine progress made in reducing sewage pollution. Without developing and using performance measures, EPA will not be positioned to know if the program is achieving the desired results.

Contents

Letter		1
	Background	5
	Federal and Nonfederal Entities Have Made Numerous Efforts to Restore the Basin	9
	EPA Has Generally Followed Grant Policies for the PRP but Should Provide Key Information to Potential Subgrantees	21
	EPA Has Taken Initial Actions to Manage the Performance of the PRP but Could Do More	24
	Conclusions	32
	Recommendations for Executive Action	33
	Agency Comments	33
Appendix I	Objectives, Scope, and Methodology	35
Appendix II	Examples of Lake Pontchartrain Basin Restoration Program Projects	41
Appendix III	Comments from the U.S. Environmental Protection Agency	44
Appendix IV	GAO Contact and Staff Acknowledgments	47
Table		
	Table 1: Lake Pontchartrain Basin Restoration Program (PRP) Projects Funded by Grants in Fiscal Year 2020	41
Figures		
	Figure 1: Performance Management: Key Steps and Leading Practices	8
	Figure 2: Funds Awarded by the U.S. Environmental Protection Agency for the Lake Pontchartrain Basin Restoration Program, Fiscal Years 2002-2021	10
	Figure 3: Bayou Bonfouca Marsh Creation Project	18
	Figure 4: Pontchartrain Conservancy's Recreational Water Quality Monitoring Program	20

Figure 5: Differing Maps of the Lake Pontchartrain Basin	26
Figure 6: Land Loss Due to Gulf Waters in Coastal Louisiana	28

Abbreviations

Corps	U.S. Army Corps of Engineers
CPRA	Coastal Protection and Restoration Authority
EPA	U.S. Environmental Protection Agency
GPRA	Government Performance and Results Act of 1993
LDEQ	Louisiana Department of Environmental Quality
OMB	Office of Management and Budget
PRP	Lake Pontchartrain Basin Restoration Program
TMDL	Total Maximum Daily Load
UNORTF	University of New Orleans Research and Technology Foundation
USGS	U.S. Geological Survey

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



May 12, 2023

The Honorable Sam Graves
Chairman
The Honorable Rick Larsen
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

The Lake Pontchartrain Basin is an important resource for the Basin's population of more than 2 million people,¹ including the residents of New Orleans and Baton Rouge, Louisiana. The rivers, lakes, wetlands, bays, islands, and other natural features of the Basin support commercial fishing, agriculture, and forestry operations. The U.S. Environmental Protection Agency (EPA) reported that the estimated value for the production of agriculture, forestry, fisheries, and wildlife commodities in the Basin was almost \$900 million in 2018.² The Basin also provides important habitat for plants and animals and recreational opportunities for residents and visitors. In addition, the wetlands and barrier islands in the Basin, which opens to the Gulf of Mexico, provide critical natural flood protection to inhabited areas during hurricanes and tropical storms. Wetlands also improve water quality by filtering sediments.

However, the Basin has faced long-standing ecological challenges. Stormwater, sewage, and agricultural runoff have been major sources of pollution in the Basin for decades.³ Such pollution can increase the presence of contaminants that are harmful to human health and impact the industries and ecosystems that need clean water. Other issues have worsened the health of the Basin. For example, saltwater intrusion and

¹U.S. Environmental Protection Agency, *Fiscal Year 2022 Justification of Appropriation Estimates for the Committee on Appropriations*, EPA-190-R-21-002 (May 2021).

²U.S. Environmental Protection Agency, *Fiscal Year 2022 Justification of Appropriation Estimates*.

³Lake Pontchartrain Basin Foundation, *Comprehensive Management Plan* (1995).

sea level rise have increased salinity in Basin waters. Increased salinity has been shown to contribute to the loss of wetlands in the Basin.⁴

The Lake Pontchartrain Basin Restoration Act of 2000 called for EPA to establish the Lake Pontchartrain Basin Restoration Program (PRP).⁵ For purposes of the program, the “Basin” is defined as the Lake Pontchartrain Basin, a 10,000 square mile watershed encompassing 16 parishes in the state of Louisiana and four counties in the state of Mississippi.⁶ The act provides that the purpose of the PRP shall be to restore the ecological health of the Basin by developing and funding restoration projects and related scientific and public education projects. Under the act, EPA’s duties in carrying out the program include, among other things, coordinating the grant, research, and planning programs authorized for the PRP. EPA began awarding grants under the PRP in fiscal year 2002, according to EPA documents, and the program has awarded funds through 2021. Additionally, in November 2021, the Infrastructure Investment and Jobs Act appropriated, in equal amounts for each of fiscal years 2022 through 2026, \$53 million to EPA for Lake Pontchartrain.⁷ In addition to the PRP, there are other restoration efforts underway in the Basin involving numerous entities, including federal, state, and local agencies, as well as nonprofit organizations.

Over time, some progress has been made restoring the Basin, but more work remains. For example, Lake Pontchartrain—the largest of the three lakes in the Basin—was removed from the state of Louisiana’s list of impaired water bodies in 2006 after the state and other entities made

⁴U.S. Army Corps of Engineers’ Engineering Research and Development Center, *Land and Forest Area Changes in the Vicinity of the Mississippi River Gulf Outlet, Central Wetlands Region, 1935-2010*, ERDC/EL TR-12-7 (Washington, D.C.: March 2012); and G. P. Shaffer et al., “Decline of the Maurepas Swamp, Pontchartrain Basin, Louisiana, and Approaches to Restoration,” *Water*, vol. 8 (2016).

⁵Pub. L. No. 106-457, tit. V, § 502, 114 Stat. 1957, 1973 (codified as amended at 33 U.S.C. § 1273).

⁶33 U.S.C. § 1273(e)(1). In December 2022, the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 (National Defense Authorization Act for Fiscal Year 2023) amended the definition to indicate that the Basin includes 10,000 square miles, rather than 5,000, as the statute provided prior to the amendment. Pub. L. No. 117-263, § 8501(c)(2) (2022).

⁷Pub. L. No. 117-58, 135 Stat. 429, 1396 (2021).

investments in the Basin,⁸ such as repairing sewer infrastructure. However, the lake was relisted in 2020 and remained listed in 2022, according to documentation from the state of Louisiana.⁹ In addition, as recently as 2022, the state of Louisiana reported that no more than 27 percent of water bodies in the Basin are considered healthy enough to fully support fish and other wildlife, and no more than 36 percent of water bodies in the Basin are healthy enough for human activities, such as swimming.¹⁰ Furthermore, Louisiana's Coastal Protection and Restoration Authority—which works to achieve comprehensive coastal protection for the state—notes that sea level rise projections have increased dramatically, and land loss in Louisiana will continue without bold action, such as large-scale restoration of the coast-wide landscape.¹¹

You asked us to review efforts to restore the Basin. This report examines (1) efforts to restore water quality and ecosystems in the Lake Pontchartrain Basin, (2) the extent to which EPA has followed relevant requirements for grants management of the PRP, and (3) the extent to which EPA has managed the performance of the PRP.

To address the first objective, we reviewed relevant literature and documents, identified illustrative examples of restoration projects in the Basin, and interviewed entities working to restore the Basin. Specifically, we conducted a literature search for relevant reports on federal, state, local, and nonprofit restoration efforts in the Basin to identify examples of

⁸The Clean Water Act specifies the process for states to identify water bodies requiring Total Maximum Daily Loads (TMDL) due to limited water quality. A TMDL establishes the maximum amount of a pollutant a water body can receive while still meeting water quality standards. TMDLs can be the starting point or a planning tool for restoring water quality. See 33 U.S.C. § 1313(d).

⁹Until 2006, Lake Pontchartrain was considered impaired due to high counts of fecal coliform bacteria. From 2006 through 2018, the lake was removed from the state of Louisiana's list of impaired water bodies. However, it was relisted in 2020 due to high counts of enterococcus bacteria. Fecal coliform and enterococcus bacteria typically are not considered harmful to humans. However, their presence may indicate that other disease-causing agents, such as viruses, bacteria, and protozoa, may be present.

¹⁰Louisiana Department of Environmental Quality, *2022 Louisiana Water Quality Inventory: Integrated Report (Appendix A-Assessments)*, accessed April 12, 2023, <https://ldeq.maps.arcgis.com/apps/insant/portfolio/index.html?appid=a689bc37c40848f598a1937d092f63ae%20>. The Basin spans 15 parishes (i.e., counties) in the state of Louisiana and three counties in the state of Mississippi, according to Louisiana Department of Environmental Quality documentation.

¹¹Coastal Protection and Restoration Authority, *Louisiana's Comprehensive Master Plan for a Sustainable Coast* (June 2, 2017).

restoration efforts among these entities. We analyzed the contents of 55 published reports. We also reviewed documents and a subset of data describing federal and nonfederal restoration programs and projects. For example, we reviewed documents and data from EPA describing PRP projects and grant amounts awarded for those projects. Dollar figures presented in this report have not been adjusted for inflation. We also identified and reviewed relevant information about two illustrative examples of Basin restoration projects to explain how these projects were funded, planned, and conducted. We interviewed federal and nonfederal entities that conduct restoration work in the Basin to understand their efforts.

To address the second objective, we identified and reviewed relevant agency- and government-wide requirements for EPA's grants management for the PRP. We reviewed documents related to grants management for evidence of the extent to which EPA's grants management practices align with requirements. We assessed the process by which EPA awards grants to the University of New Orleans Research and Technology Foundation (UNORTF) and the process by which UNORTF awards grants to subgrantees. We assessed EPA's oversight of federal funds awarded to the grantee by comparing it with the requirements. Finally, we interviewed EPA, UNORTF, and a selection of subgrantees to understand their experiences with the PRP.

To address the third objective, we reviewed performance and other PRP documents, such as semiannual progress reports, for evidence of performance goals and data. We also interviewed EPA officials about the strategic goals established for the program's restoration efforts and the steps taken to collect performance data and assess progress in meeting these goals. Additionally, we interviewed other entities involved in EPA's performance management efforts, such as the PRP's sole grantee—UNORTF—and subgrantees. We identified relevant key steps and leading practices for performance management and compared these with EPA's actions. For additional details on our scope and methodology, see appendix I.

We conducted this performance audit from November 2021 to May 2023 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.

Background

National Estuary Program

EPA works to restore and maintain water quality in water bodies and estuaries—such as Lake Pontchartrain—across the nation, including through its implementation of the Clean Water Act. For example, EPA oversees the National Estuary Program. This program was established under 1987 amendments to the Clean Water Act to, among other things, identify nationally significant estuaries that are threatened by pollution, development, or overuse, and promote comprehensive planning for, and conservation and management of, these estuaries.¹²

Under the National Estuary Program, EPA is to convene a management conference for each estuary of national significance.¹³ One of the purposes of the management conference is to develop a comprehensive conservation and management plan. This plan is to recommend priority corrective actions to address sources of pollution to restore and maintain the chemical, physical, and biological integrity of the estuary, including restoration and maintenance of water quality, among other things.¹⁴ Other purposes of the management conference include developing plans for the coordinated implementation of the plan by the entities participating in the conference and monitoring the effectiveness of actions taken pursuant to the plan.¹⁵

By statute, a state governor may nominate an estuary lying in whole or in part within the state as an estuary of national significance and request a management conference to develop a comprehensive conservation and

¹²Water Quality Act of 1987, Pub. L. No. 100-4, § 317, 101 Stat. 7, 61 (codified as amended at 33 U.S.C. § 1330).

¹³33 U.S.C. § 1330(a)(2)(A). In addition to EPA, by statute, each management conference is to include, at a minimum, representatives of (1) each state and foreign nation located in whole or in part in the relevant estuarine zone; (2) international, interstate, or regional agencies or entities with jurisdiction over all or a significant part of the estuary; (3) each interested federal agency, as determined appropriate by the EPA Administrator; (4) local governments with jurisdiction over any land or water within the estuarine zone, as determined appropriate by the EPA Administrator; and (5) affected industries, public and private educational organizations, nonprofit institutions, and the general public, as determined appropriate by the EPA Administrator. 33 U.S.C. § 1330(c).

¹⁴33 U.S.C. § 1330(b)(4)(A).

¹⁵33 U.S.C. § 1330(b)(5), (6).

management plan for the estuary.¹⁶ When selecting estuaries and convening management conferences, EPA is to give priority consideration to certain named estuaries, including the Lake Pontchartrain Basin.¹⁷ However, no governor has nominated the Basin as an estuary of national significance, according to EPA officials, and EPA has not selected the Basin under the National Estuary Program.¹⁸ Consequently, the Basin does not receive grant funding through the National Estuary Program. However, by statute, EPA is to provide administrative and technical assistance to a management conference convened for the Basin under section 320 of the Clean Water Act, the section governing the National Estuary Program.¹⁹

Lake Pontchartrain Basin Restoration Program

The Lake Pontchartrain Basin Restoration Act of 2000 called for EPA to establish the Lake Pontchartrain Basin Restoration Program.²⁰ EPA's duties in carrying out the program include to:

- Provide administrative and technical assistance to a management conference convened for the Basin;²¹
- Assist and support the activities of the management conference, including the implementation of recommendations of the management conference;
- Support environmental monitoring of the Basin and research to provide necessary technical and scientific information;
- Develop a comprehensive research plan to address the technical needs of the program;

¹⁶33 U.S.C. § 1330(a)(1).

¹⁷33 U.S.C. § 1330(a)(2)(B).

¹⁸EPA officials explained that EPA has never selected an estuary without a governor's nomination because EPA considers the nomination as a sign of the governor's interest in participating in the National Estuary Program.

¹⁹See 33 U.S.C. § 1273(c)(1).

²⁰Pub. L. No. 106-457, tit. V, § 502, 114 Stat. 1957, 1973 (codified as amended at 33 U.S.C. § 1273).

²¹Specifically, as noted previously, the statute provides that the management conference for the Basin is to be convened under section 320 of the Clean Water Act, which is the provision governing the National Estuary Program. 33 U.S.C. § 1273(c)(1) (citing 33 U.S.C. § 1330).

-
- Coordinate the grant, research, and planning programs authorized for the program;
 - Collect and make available to the public publications and other forms of information the management conference determines to be appropriate, relating to the environmental quality of the Basin; and
 - Ensure that the comprehensive conservation and management plan approved for the Basin under section 320 is reviewed and revised in accordance with section 320 not less often than once every 5 years, beginning on December 23, 2022.²²

The statute also authorizes EPA to make grants to pay not more than 75 percent of the costs for restoration projects and studies identified in the comprehensive conservation and management plan approved for the Basin under section 320, and for public education projects recommended by the management conference.²³

Key Steps and Leading Practices for Performance Management

GAO published an executive guide that identifies key steps for managing the performance of federal programs.²⁴ This guide describes the steps and practices that agencies need to take to implement the Government Performance and Results Act of 1993 (GPRA).²⁵ That act created requirements for agencies to generate information that congressional and executive branch decision makers need to improve government performance and reduce costs. GAO developed its guide to help Congress and federal managers put the act into effect.

According to the executive guide, the first step in managing the performance of federal programs is to define the program's mission and

²²The requirement to review and revise the plan every 5 years was added by the National Defense Authorization Act for Fiscal Year 2023, enacted in December 2022 and, therefore, was not considered during our review. Pub. L. No. 117-263, § 8501(c)(1)(A)(iii) (2022).

²³33 U.S.C. § 1273(d). The National Defense Authorization Act for Fiscal Year 2023 amended the statute to specify that restoration projects and studies eligible for grants under the PRP are those identified in the comprehensive conservation and management plan; prior to the December 2022 amendments, the statutory language provided that grants could be made for restoration projects and studies recommended by the management conference. Pub. L. No. 117-263, § 8501(c)(1)(B) (2022).

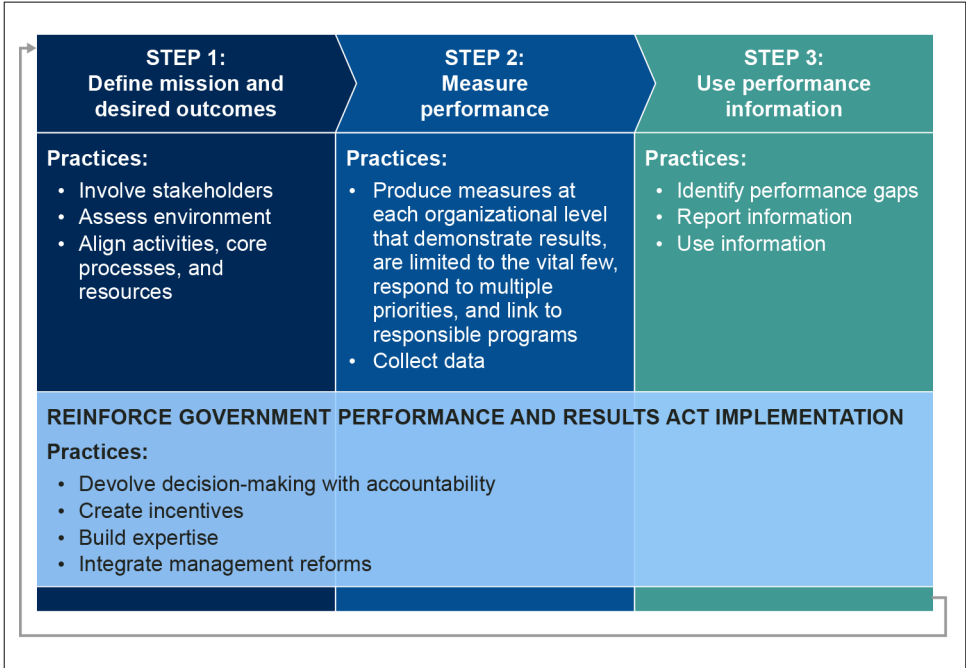
²⁴GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, [GAO/GGD-96-118](#) (Washington, D.C.: June 1996).

²⁵Pub. L. No. 103-62, 107 Stat. 285. The GPRA Modernization Act of 2010 significantly enhanced the performance management framework established by GPRA. Pub. L. No. 111-352, 124 Stat. 3866 (2011).

desired outcomes. Leading practices for this step include involving stakeholders and assessing the environment. Involving stakeholders is important for helping agencies ensure that their efforts and resources are targeted at the highest priorities, according to the guide. Assessing the environment is important for helping agencies maintain focus on long-term goals and adjust to emerging trends and requirements.

The second step in managing the performance of federal programs is measuring performance. Leading practices for this step include developing performance measures. A performance measure is a numeric description of an agency's work and the results of that work. Figure 1 depicts key steps and leading practices for managing the performance of federal programs.

Figure 1: Performance Management: Key Steps and Leading Practices



Source: GAO. | GAO-23-105547

Federal and Nonfederal Entities Have Made Numerous Efforts to Restore the Basin

Various entities—including federal, state, and local agencies; academic institutions; and nonprofit organizations—have undertaken numerous efforts to restore water quality and ecosystems in the Lake Pontchartrain Basin since at least 1995.²⁶

Federal Agencies' Restoration Efforts in the Basin

Federal agencies that have conducted restoration efforts in the Basin include EPA; the U.S. Army Corps of Engineers (Corps); the U.S. Department of the Interior; and member agencies of the Coastal Wetlands Planning, Protection and Restoration Act Task Force.

EPA

EPA Region 6 is responsible for aspects of several key Clean Water Act programs that contribute to protection and restoration of water bodies in the Basin. These programs include the PRP, Section 319 Nonpoint Source Management Program, Impaired Waters and Total Maximum Daily Load, Urban Waters, and Clean Water State Revolving Fund programs.

Lake Pontchartrain Basin Restoration Program

EPA has various roles under the PRP, the purpose of which, as noted previously, is to restore the ecological health of the Basin by developing and funding restoration projects and related scientific and public education projects. As previously discussed, EPA's duties in carrying out the PRP include, among others, providing administrative and technical assistance to a management conference convened for the Basin under section 320 of the Clean Water Act. In addition, EPA awards and oversees the distribution of PRP funds through a cooperative agreement with UNORTF,²⁷ the grantee and pass-through entity for PRP funding.²⁸

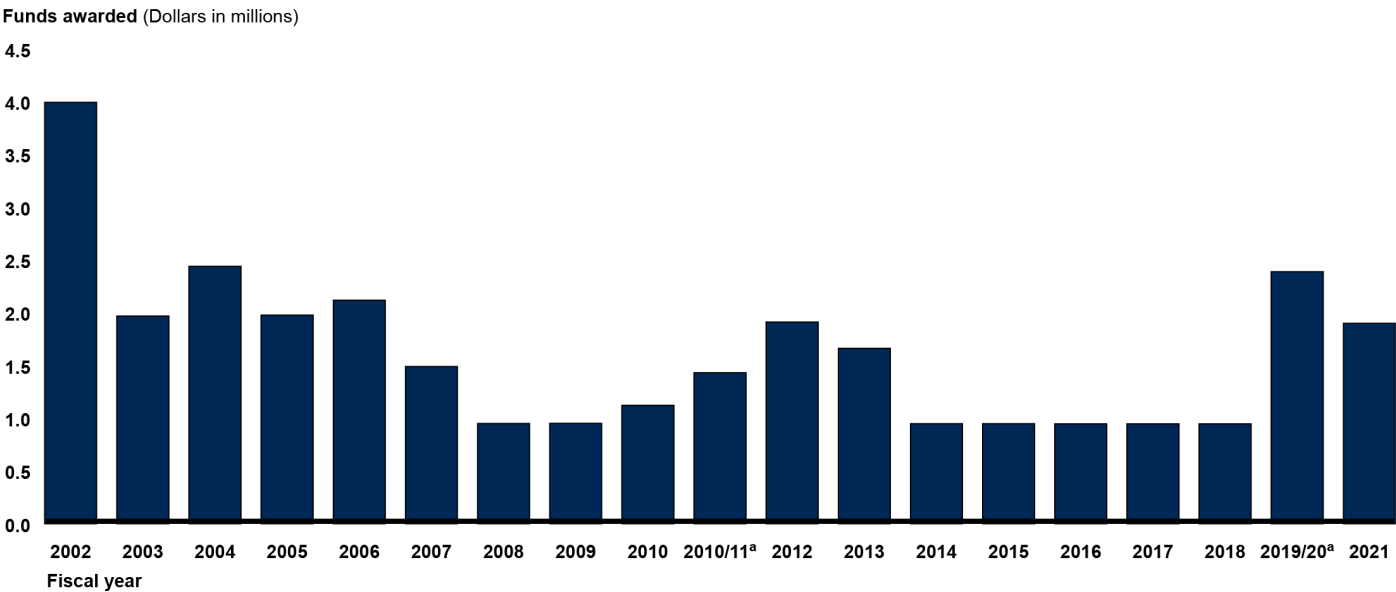
²⁶This report focuses on restoration efforts made since 1995 because EPA first funded the development of a comprehensive conservation and management plan for restoring the Basin in 1995.

²⁷Grants and cooperative agreements are two types of federal financial assistance. For the purposes of this report, we use the term grants to refer to both grants and cooperative agreements.

²⁸A "pass-through entity" is a nonfederal entity that provides a subaward to a subrecipient to carry out part of a federal program. 2 C.F.R. § 200.1. As the pass-through entity for the PRP, UNORTF represents EPA on many administrative tasks. For requirements for pass-through entities under federal grant regulations, see 2 C.F.R. § 200.332.

EPA has primarily implemented the PRP as a grant program to fund PRP projects. These projects have included monitoring water quality, surveying wastewater pipes for leaks and cracks, and designing sewer system improvements. See appendix II for additional examples of recent projects implemented by parishes and cities using PRP funds. From fiscal year 2002 through fiscal year 2021, EPA awarded approximately \$31 million to implement PRP projects.²⁹ See figure 2 below.

Figure 2: Funds Awarded by the U.S. Environmental Protection Agency for the Lake Pontchartrain Basin Restoration Program, Fiscal Years 2002-2021



Source: U.S. Environmental Protection Agency (EPA) documents. | GAO-23-105547

Note: Dollar figures in this figure have not been adjusted for inflation.

^aSome or all funds for these fiscal years were combined into one grant and cannot be disaggregated, according to EPA officials.

Although the Lake Pontchartrain Basin is not managed through EPA’s National Estuary Program, EPA aims to implement, to the extent possible, certain National Estuary Program requirements, according to EPA officials. These requirements—developing a comprehensive conservation

²⁹This total includes the amount awarded to UNORTF to administer the program in addition to the amount awarded to UNORTF as the pass-through entity to make subawards to subrecipients.

and management plan and convening a management conference—are described in the following sections.

Comprehensive conservation and management plan. Developing a comprehensive conservation and management plan is a key component of EPA’s National Estuary Program. EPA funded the development of a 1995 comprehensive conservation and management plan for the Basin to serve as a roadmap for future restoration efforts. The plan identified three key environmental challenges for the Basin: (1) sewage and agricultural runoff, (2) stormwater runoff, and (3) saltwater intrusion and wetland loss. This plan has served as the guiding document for the PRP since the PRP was authorized by statute in 2000, according to EPA officials. The same officials told us that PRP projects are supposed to align with the plan in order to receive grant funding.³⁰ The plan has not been updated since 1995.

In 2006, EPA also funded a comprehensive habitat management plan to address the restoration and conservation of habitats in the Basin. To date, most PRP projects have focused on wastewater and stormwater improvements. EPA officials told us that implementing additional habitat projects in the Basin is one of its priorities for the PRP.

Management conference. Convening a management conference is another key component of EPA’s National Estuary Program. Program documents for the PRP indicate intentions for a large and diverse management conference comprised of stakeholders from federal, state, and local agencies; universities; and environmental, business, and agricultural organizations. In addition, an executive committee—a subcommittee of the PRP’s management conference—was to recommend which projects would receive PRP funding and how often to update the comprehensive conservation and management plan.³¹ The broader management conference was to adopt plans annually for

³⁰As previously mentioned, the National Defense Authorization Act for Fiscal Year 2023 amended the statute to specify that restoration projects and studies eligible for grants under the PRP are those identified in the comprehensive conservation and management plan; prior to the December 2022 amendments, the statutory language provided that grants could be made for restoration projects and studies recommended by the management conference. Pub. L. No. 117-263, § 8501(c)(1)(B) (2022).

³¹As noted previously, December 2022 amendments to the PRP statute added a requirement that the comprehensive conservation and management plan be reviewed and revised not less often than every 5 years. Pub. L. No. 117-263, § 8501(c)(1)(A)(iii) (2022).

spending PRP funds and periodically update the Basin's comprehensive conservation and management plan.

However, membership in the broader management conference dwindled over time, according to EPA officials we interviewed. The current executive committee is what remains of the original management conference, according to EPA officials. As of February 2023, the PRP's executive committee was comprised of six individuals representing mostly local organizations, such as the New Orleans Regional Planning Commission.³²

The executive committee determines which projects will receive PRP funding after scoring grant applications based on numeric criteria. Applications with the highest scores receive PRP funding, according to a long-standing committee member. UNORTF prepares requests for proposals and sends the PRP project proposals it receives in response to the requests for proposals to the executive committee for review, among other tasks. UNORTF uses some of the PRP funds it receives from EPA to administer PRP subgrants. However, most PRP funding goes to subgrantees, according to EPA documentation.

Section 319 Nonpoint Source Management Program

Through the Section 319 Nonpoint Source Management Program, states, territories, and Tribes receive grants from EPA to support a variety of activities, such as education, training, technology transfer, and demonstration projects.³³ According to EPA, the Louisiana Departments of Environmental Quality and Agriculture and Forestry received grants for the Basin under this program. The grants supported efforts made between 2008 and 2018 to reduce bacteria levels and remove segments of the following water bodies from Louisiana's list of impaired water bodies: Tangipahoa River, Tchefuncte River, Little Silver Creek, Yellow Water River, Big Creek, Selsers Creek, and the Natalbany River.

³²Early program documents indicate intentions for EPA to serve on the executive committee. However, as of February 2023, EPA was not a current member of the executive committee.

³³The "Section 319 Nonpoint Source Management Program" refers to section 319 of the Clean Water Act. For the grant program under section 319, see 33 U.S.C. § 1329(h).

Impaired Waters and TMDL Program

EPA has established Total Maximum Daily Loads for numerous waterways in the Basin. As previously mentioned, the Clean Water Act specifies the process for states, territories, and authorized Tribes to identify water bodies requiring TMDLs due to limited water quality.³⁴ A TMDL establishes the maximum amount of a pollutant that a water body can receive while still meeting water quality standards and can be a starting point or planning tool for restoring water quality.

Urban Waters Program

EPA also has funded restoration projects in the Basin through its Urban Waters program. This program aims to revitalize the nation's urban waters, such as those in the greater New Orleans area. In one example of an Urban Waters effort in the Basin, EPA awarded a grant to a nonprofit organization to train community members and wetland restoration advocates to monitor and track progress at urban wetland restoration projects near Lake Pontchartrain.

Clean Water State Revolving Fund Program

EPA provides grant funding to the Louisiana Department of Environmental Quality through EPA's Clean Water State Revolving Fund Program. This federal-state partnership provides communities with low-cost financing for a wide range of water quality infrastructure projects. Since 2015, the program has invested more than \$188 million in clean water infrastructure improvements across the parishes of the Lake Pontchartrain Basin.

U.S. Army Corps of Engineers

To help restore ecosystems in Louisiana and the Basin, the Corps has administered the Louisiana Coastal Area Program, which was authorized by the Water Resources Development Act of 2007.³⁵ This program was intended to provide a systematic approach to coastal restoration. It uses near-term as well as large-scale, long-term studies and programs to restore natural features and ecosystem processes, according to the Corps. With almost \$17 million from the program, the Corps assessed the feasibility of four possible restoration projects in the Basin. One of these

³⁴See 33 U.S.C. § 1313(d).

³⁵Pub. L. No. 110-114, tit. VII, 121 Stat. 1041, 1270.

studies assessed options for restoring ecosystems near the now-closed Mississippi River Gulf Outlet.³⁶ However, the Corps did not construct any of the restoration projects it assessed in the Basin. Corps officials we interviewed explained that the Corps needs local sponsors in order to move forward with construction, and various factors, such as the availability and accessibility of real estate for projects, can prevent local sponsors from participating.

U.S. Department of the Interior

The U.S. Department of the Interior's U.S. Fish and Wildlife Service, U.S. Geological Survey (USGS), and Office of Natural Resources Revenue have supported restoration of the Basin.

U.S. Fish and Wildlife Service

Between 2008 and 2016, the U.S. Fish and Wildlife Service funded 66 projects in 10 Louisiana parishes located within the Basin through the agency's Coastal Impact Assistance Program.³⁷ The Energy Policy Act of 2005 established the program, which distributed funding to Outer Continental Shelf oil- and gas-producing states to use for one of several authorized purposes specified by statute.³⁸ These uses included, among other things, projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands, as well as mitigation of damage to fish, wildlife, or natural resources. One project funded through this program installed approximately 2,000 linear feet of rock dike on the south shore of Lake Pontchartrain. The intent of this project was to stop chronic shoreline erosion that was exposing fragile, highly organic marsh to increased wave and tidal energy.

USGS

In recent years, USGS has monitored the Basin's water flows and water quality using funds provided by cooperating agencies, according to USGS officials we interviewed. For example, according to these officials, the

³⁶In 1968, the Corps completed construction of the Mississippi River Gulf Outlet, an artificial channel designed to shorten the navigation route between the Gulf of Mexico and the Port of New Orleans. The channel was closed in 2009 amidst public controversy surrounding the channel.

³⁷According to Interior officials, program funding ceased in 2017.

³⁸Pub. L. No. 109-58, § 384, 119 Stat. 594, 739 (codified as amended at 43 U.S.C. § 1356a).

Corps funded USGS through multiple interagency agreements to investigate water quality, phytoplankton communities, and toxins in Lake Pontchartrain and the western Mississippi Sound from 2008 through 2021.

Office of Natural Resources Revenue

The Office of Natural Resources Revenue allocates funds for several purposes, including conservation, coastal restoration, and hurricane protection, under the Gulf of Mexico Energy Security Act of 2006.³⁹ The act, among other things, provides for Louisiana and three other energy-producing states to share a portion of royalty revenues from the production of oil and natural gas in the Gulf of Mexico through 2055.⁴⁰ The Office of Natural Resources Revenue distributes these revenues to states based on allocations established by law and regulation. The states then disburse funds. Numerous Louisiana parishes in the Basin have received such funds, according to Interior data.⁴¹ These data show that from fiscal year 2009 through fiscal year 2020, the office allocated about \$345 million in these funds to Louisiana.⁴² Allocating funds to states is the extent of the office's role, according to Office of Natural Resources Revenue officials we interviewed. The office does not track the specific use of funds or the effectiveness of funded projects.⁴³

Coastal Wetlands Planning, Protection and Restoration Act Task Force

The Louisiana Coastal Wetlands Conservation and Restoration Task Force was convened under the Coastal Wetlands Planning, Protection and Restoration Act in 1990 to identify and prepare a list of coastal

³⁹Pub. L. No. 109-432, div. C, tit. I, 120 Stat. 2922, 3000 (codified as amended at 43 U.S.C. § 1331 note).

⁴⁰The three other Gulf producing states subject to revenue sharing are Alabama, Mississippi, and Texas.

⁴¹As of March 2023, these data were available at <https://revenuedata.doi.gov/query-data/?dataType=Disbursements&period=Fiscal%20Year&fiscalYear=2009%2C2010%2C2011%2C2012%2C2013%2C2014%2C2015%2C2016%2C2017%2C2018%2C2019%2C2020&groupBy=localRecipient&usStateName=Louisiana&source=GOMESA%20offshore>.

⁴²This allocation included funds provided to the state of Louisiana as well as to numerous parishes (i.e., counties) in Louisiana.

⁴³Consequently, we were not able to assess how much Gulf of Mexico Energy Security Act funding supported restoration—as opposed to conservation or hurricane protection—projects in the Basin.

wetlands restoration projects in Louisiana.⁴⁴ The task force comprises a state agency from Louisiana and the following five federal agencies: the U.S. Fish and Wildlife Service, EPA, the Corps, U.S. Department of Commerce's National Marine Fisheries Service, and U.S. Department of Agriculture's Natural Resources Conservation Service. Using funding allocated to task force members by the Corps, which is the chair of the task force, 28 projects have been implemented in the Basin. As of November 2022, these projects had an estimated cost of about \$312 million and involved creating marshes, protecting shorelines, and restoring barrier islands, among other things.

State Agencies' Restoration Efforts in the Basin

Coastal Protection and Restoration Authority

The Louisiana State legislature formed the Coastal Protection and Restoration Authority (CPRA) in 2005 to develop, implement, and enforce a comprehensive coastal protection and restoration master plan for the state. CPRA developed a decision-making framework for determining which projects would best address land loss, reduce storm surge flood risks, and provide the greatest returns on investment.⁴⁵ On the basis of this framework, CPRA officials developed a \$50 billion budget for restoration and risk reduction projects to be completed throughout the state during the 50-year period starting in 2017. Of that amount, \$25 billion is planned for restoration projects, according to Louisiana's 2017 master plan.⁴⁶ CPRA coordinates funding from a variety of sources, such as from federal agencies through the Coastal Wetlands Planning, Protection and Restoration Act.

Of the state agencies that have helped restore the Basin, CPRA has been identified as a key contributor by others working to restore the Basin. About \$1.3 billion of the funds designated in CPRA's budget is planned

⁴⁴Pub. L. No. 101-646, tit. III, 104 Stat. 4778 (1990) (codified as amended at 16 U.S.C. §§ 3951-3957).

⁴⁵Coastal Protection and Restoration Authority, *Appendix B: Plan Formulation Process*, 2012 Coastal Master Plan (2012).

⁴⁶Coastal Protection and Restoration Authority, *Louisiana's Comprehensive Master Plan for a Sustainable Coast* (2017).

specifically for the Basin, according to CPRA officials. See figure 3, below, for an example of a CPRA-sponsored project in the Basin.

Figure 3: Bayou Bonfouca Marsh Creation Project

Overview: The Bayou Bonfouca Marsh Creation Project is located along the northeastern corner of Lake Pontchartrain in St. Tammany Parish. In 2005, storm surges from Hurricane Katrina removed many acres of marsh and caused extensive damage along the north shore of Lake Pontchartrain, especially in the marshes near Bayou Bonfouca. Although shoreline erosion rates were relatively low before the project was implemented, only a narrow strip of shoreline existed between Lake Pontchartrain and the project area's interior ponds. In addition, the shoreline was breached in several locations. If these breaches had not been addressed and tidal channels had been allowed to expand, high tidal energy would have intruded into the project area's interior ponds. This would have accelerated the loss of interior marshes.



Purpose: The purpose of the Bayou Bonfouca Marsh Creation Project was to recreate and nourish approximately 620 acres of low salinity brackish marsh in open waters adjacent to Bayou Bonfouca, for a 20-year project life.

Implementation: U.S. Fish and Wildlife Service served as lead federal sponsor, with funding approved through the federal Coastal Wetlands Planning, Protection and Restoration Act. Louisiana's Coastal Protection and Restoration Authority (CPRA) served as local sponsor and was responsible for engineering and design services.

Design began in April 2011 and was 95 percent complete as of October 2012. Construction began in September 2016 and ended in December 2017.

Total estimated project costs, including future operations and maintenance costs, were \$28.2 million.



Results: This project created approximately 608 acres of marsh using 3.6 million cubic yards of sediment from two borrow areas in Lake Pontchartrain. It also, among other things, repaired a breached shoreline to prevent erosion.

Sources: GAO analysis of CPRA information. Photos: Patrick Quigley (2016) (left); Providence Engineering and Environmental Group LLC and Duplantier Design Group, PC (2017) (right). | GAO-23-105547

Other State Agencies

Other state agencies also have contributed to restoration efforts in the Basin. For example, the Louisiana Department of Environmental Quality has monitored water bodies and developed TMDLs for various pollutants throughout the state, including in the Basin. In addition, the Louisiana Department of Health and Hospitals tests beach water in Lake Pontchartrain on a weekly basis from April through October to determine whether its water quality meets EPA criteria for swimming. The Mississippi Department of Environmental Quality also has collected monitoring data on some Basin streams through its Ambient Biological Network. The department has used this network to determine stream health. However, as of October 2022, it had not implemented a watershed restoration project in any of the watersheds draining into Lake Pontchartrain, according to department officials we interviewed. These officials explained that the department prioritizes watersheds for restoration based on input from department programs and partners.

Local Agencies’ Restoration Efforts

Parishes, cities, and towns in the Basin have repaired and upgraded their stormwater and wastewater systems using PRP and other funding sources. In one example of a project funded through means other than the PRP, the Sewerage and Water Board of New Orleans announced in December 2021 that it had received a \$275 million loan from EPA to modernize sewer pipelines throughout the city.⁴⁷

Academic Institutions’ Restoration Efforts

Numerous academic institutions—including Tulane University, Louisiana State University, Southeast Louisiana University, the University of New Orleans, and the University of Mississippi—have studied and documented a wide range of environmental conditions and issues in the Basin. For example, researchers have studied the distribution and abundance of plants and shellfish, the presence of toxic metals (e.g., mercury) in the Basin, and the relationship between stormwater runoff and the presence of fecal coliform bacteria. For the first 3 to 5 years of the PRP, the U.S. Department of Commerce’s National Oceanic and Atmospheric Administration and USGS funded academic research in the Basin, according to a long-standing member of the PRP’s executive committee and research symposium reports. Since then, the Corps, nonprofits, and for-profit organizations have supported such research.

Nonprofit Organizations’ Restoration Efforts

Of the nonprofits that have helped restore the Basin, the Pontchartrain Conservancy has been identified as a key contributor by others working to restore the Basin. The conservancy coordinated the development of the comprehensive conservation and management plan for the Basin that EPA funded in 1995.⁴⁸ Since then, the conservancy has continued to conduct and support research in the Basin, to include maintaining a large database of information on the environmental health of the Basin using funds from the PRP and other sources. The conservancy also has uploaded recent water quality data to an online tool developed for EPA’s data partners, according to the conservancy. EPA makes these data available to water resource managers and other members of the public.⁴⁹

⁴⁷Specifically, the loan was made through a program established by the Water Infrastructure Finance and Innovation Act of 2014. Pub. L. No. 113-121, tit. V, subtit. C, 128 Stat. 1332. This program is a federal credit program administered by EPA for eligible water and wastewater infrastructure projects.

⁴⁸At that time, the conservancy was called the Lake Pontchartrain Basin Foundation.

⁴⁹As of March 2023, these data were available at <https://www.epa.gov/waterdata/water-quality-data>.

For additional information about some of the conservancy's work, see figure 4 below.

Figure 4: Pontchartrain Conservancy's Recreational Water Quality Monitoring Program

Overview: Since 2001, the nonprofit Pontchartrain Conservancy has continuously monitored the water quality of Louisiana's Lake Pontchartrain through its Recreational Water Quality Monitoring Program. The conservancy created this program after the state of Louisiana deemed the lake unsafe for swimming due to the presence of fecal coliform bacteria. Fecal coliform bacteria can cause gastrointestinal problems, such as vomiting and diarrhea. They also serve as indicators for other bacteria, such as those found on shellfish that can cause severe illness in humans if ingested. The program was designed to keep residents informed about whether the lake can be used for recreation.



Purpose: The program has three main goals, to (1) disseminate water quality information to the public on a weekly basis; (2) identify sources that contribute to the pollution of the lake; and (3) share data with researchers, citizens, students, and local, state, and federal agencies.

Implementation: Implementing the program costs about \$200,000 annually. This covers staff time, laboratory expenses, and travel.

From 2001 until 2019, the main source of funding for the program was the U.S. Environmental Protection Agency's (EPA) Lake Pontchartrain Basin Restoration Program. Since then, sources of funding have varied. According to the conservancy, it has used funds from EPA's Gulf of Mexico Program, the Louisiana Department of Environmental Quality (LDEQ), and state of Louisiana general funds appropriated by the legislature and managed by the Department of Administration.



Implementation (cont.): The conservancy deploys two sampling teams and conducts two sampling runs weekly to allow laboratory staff sufficient time to analyze the samples on weekdays, before residents use the lake recreationally during the weekend. Sampling teams use hand-held instruments to collect samples. They record water quality measures (e.g., temperature and dissolved oxygen) that need to be taken within 15 minutes of sampling. Dissolved oxygen—oxygen that can be found in water—is critical for aquatic organisms and for decomposing biological pollution such as wastewater runoff. The remaining measures (e.g. fecal coliform bacteria counts) are analyzed in a commercial laboratory. Results are published on the conservancy's website and can be downloaded through the conservancy's "Lake and Coast" application for mobile devices. Newspapers and members of the public can access these data to decide whether to swim in the lake.

Results: In 2006, LDEQ used data collected from this program to demonstrate that Lake Pontchartrain was no longer impaired, according to the conservancy. The removal of the lake from Louisiana's list of impaired water bodies was a key outcome of the program. In addition, the program's data set helps the public make health decisions. The data set can be used to (1) understand the overall quality of water in the lake and (2) assess changes in the lake—such as how long water stays fresh before salinity levels increase—after storms and other significant events. This information can help residents and others plan for how long it will take for the lake to return to normal after such events. It also can inform decisions about where to implement habitat projects and conduct recreational and commercial activities, such as fishing.

Sources: GAO analysis of information from Pontchartrain Conservancy. Photos: Pontchartrain Conservancy (2022). | GAO-23-105547

EPA Has Generally Followed Grant Policies for the PRP but Should Provide Key Information to Potential Subgrantees

EPA Has Generally Followed Federal Government Policies in Managing PRP Grants

For PRP grants, EPA has generally followed agency- and government-wide grants management regulations, policies, and procedures.⁵⁰ For example, consistent with agency policy, EPA has reviewed and approved PRP work plans, collected and reviewed semiannual and final progress reports for all PRP funded projects, and conducted annual programmatic reviews. These activities are the primary means by which EPA tracks PRP projects. In addition, according to EPA, the agency has used annual programmatic reviews to (1) identify areas of concern cited in the grantee's semiannual and final progress reports to EPA, (2) determine whether the timing of expended funds is consistent with progress made, and (3) determine whether the PRP's grantee is meeting all of the terms and conditions established in its grant award.

Through its programmatic reviews, EPA identified and corrected several issues with the PRP. For example, in 2017, EPA found that UNORTF—the grantee and administrator of PRP funds—was not dispersing funds in a timely manner. In response, EPA requested that UNORTF implement new procedures and tools to help them manage unliquidated

⁵⁰See U.S. Environmental Protection Agency, *Policy on Compliance, Review and Monitoring*, EPA Order 5700.6 A2 CHG 2, (Washington, D.C., Sept. 24, 2007). Federal grant-making agencies, including EPA, also have adopted the government-wide framework for grants management under the Office of Management and Budget's (OMB) *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. See 79 Fed. Reg. 75,867 (Dec. 19, 2014) (joint interim final rule implementing OMB's final Uniform Guidance); 78 Fed. Reg. 78,590 (Dec. 26, 2013) (OMB's final Uniform Guidance) (codified as amended at 2 C.F.R. pt. 200). In addition to implementing the Uniform Guidance, through the 2014 joint interim final rule, EPA promulgated regulations that supplement the Uniform Guidance. See 2 C.F.R. pt. 1500.

obligations.⁵¹ UNORTF's unliquidated obligations rate dropped in the year following the review and has remained stable since, according to EPA officials. Additionally, in 2017, EPA found that UNORTF was incorrectly using a management fee—in lieu of an approved indirect cost rate—to recover its administrative costs.⁵² After EPA identified the problem, UNORTF submitted an application for an approved indirect cost rate in 2017, and EPA applied the approved rate to UNORTF's subsequent grant applications.

EPA Could Improve the Availability of Key Grant Information

While EPA has reviewed PRP grant documents and conducted programmatic reviews, it has not always made—either through its own actions or through UNORTF—key grant information available for potential subgrantees to make decisions about PRP grant applications. This key information includes the comprehensive conservation and management plan, amount of available funding, and selection criteria for the PRP. Specifically, six of the 10 subgrantees we interviewed were unaware of the comprehensive conservation and management plan as the guiding document for the PRP and developed their project proposals independent of the plan. According to EPA officials we interviewed, subgrantees' funded projects should align with the comprehensive conservation and management plan.⁵³ In addition, four of the 10 subgrantees told us that

⁵¹An obligation is a commitment that creates a legal liability of the government for the payment of goods and services ordered or received, or a legal duty on the part of the United States that could mature into a legal liability. An unliquidated obligation is an outstanding obligation, or a payment that needs to be made. See GAO, *A Glossary of Terms Used in the Federal Budget Process*, [GAO-05-734SP](#) (Washington, D.C.; Sept. 2005).

⁵²An indirect cost rate is used to distribute indirect costs to recipients of federal awards, according to the Uniform Guidance. See 2 C.F.R. § 200.414; 2 C.F.R. pt. 200, app. IV. Indirect costs are those that have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective. 2 C.F.R. pt. 200, app. IV, § A.1. The Uniform Guidance further divides indirect costs into two broad categories: facilities and administration. The facilities category is defined as depreciation on buildings, equipment and capital improvement, interest on debt associated with certain buildings, equipment and capital improvements, and operations and maintenance expenses. The administration category is defined as general administration and general expenses, such as the director's office, accounting, personnel and all other types of expenditures not listed under facilities. 2 C.F.R. § 200.414(a).

⁵³As noted previously, the National Defense Authorization Act for Fiscal Year 2023 amended the statute to specify that restoration projects and studies eligible for grants under the PRP are those identified in the comprehensive conservation and management plan; prior to the December 2022 amendments, the statutory language provided that grants could be made for restoration projects and studies recommended by the management conference. Pub. L. No. 117-263, § 8501(c)(1)(B) (2022).

the amount of funding they could expect to receive for a project was unclear, which affected their applications. In some cases, subgrantees had to rework and resubmit their proposals after submitting initial proposals. In addition, at least one subgrantee was unaware of the selection criteria for the PRP and said that clearer criteria would help potential subgrantees develop proposals that would align with the goals of the program.

Potential subgrantees may not have this information because it is not publicly available in a central location. EPA does not maintain a website for the PRP, and UNORTF's website does not include key grant information needed by potential subgrantees to effectively apply for PRP grants.⁵⁴ As of March 2023, UNORTF's website did not include eligibility information, deadlines, match requirements, or other specifics for PRP-funded restoration projects.⁵⁵ This lack of key grant information from EPA and UNORTF can negatively impact potential subgrantees' ability to apply for PRP funding. This, in turn, has resulted in at least one subgrantee deciding to stop relying on PRP grant funding, according to the subgrantee.

We have previously reported that complete information about grants should be publicly available.⁵⁶ Additionally, *Standards for Internal Control in the Federal Government* states that strong internal controls include communicating information necessary to operate the program.⁵⁷ Unless EPA improves the availability of key grant information to make it publicly accessible in a central location, such as on UNORTF's website, the

⁵⁴EPA officials told us that it is the grantee's responsibility to provide potential subgrantees with key grant information needed to make decisions about PRP grant applications. However, while the grantee has the direct relationship with the subgrantee, EPA is responsible for coordinating the grant, research, and planning programs authorized for the PRP. 33 U.S.C. § 1273(c)(5).

⁵⁵UNORTF's website includes some background information on the program, types of project activities, past program participants, and contact information. In addition, in December 2022, UNORTF posted a request for proposals to update the PRP's comprehensive conservation and management plan, as the plan had not been updated since its development in 1995. This request for proposals included eligibility information, deadlines, selection criteria, and access to key documents for this specific request for proposals to update the comprehensive conservation and management plan.

⁵⁶GAO, *Grants Management: EPA Has Taken Steps to Improve Competition for Discretionary Grants but Could Make Information More Readily Available*, [GAO-17-161](#) (Washington, D.C.: Jan. 23, 2017).

⁵⁷GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington D.C.: Sept. 10, 2014).

agency will not be able to adequately communicate information that potential subgrantees need to effectively apply for PRP grants.

EPA Has Taken Initial Actions to Manage the Performance of the PRP but Could Do More

EPA Has Taken Actions to Define the Mission and Desired Outcomes of the PRP

At the start of the program, EPA took some actions to define the mission and desired outcomes of the PRP, which is the first key step in effective performance management. EPA did this by approving the 1995 comprehensive conservation and management plan as a guiding document for the PRP. This plan helped guide early restoration efforts in the Basin to address identified environmental challenges. It also identifies recommended projects and management practices to correct or reduce the problems identified with each of these challenges. For example, the plan states that in order to reduce urban runoff that can negatively affect the Basin, relevant stakeholders must find and eliminate sources of sewage.

In addition to defining the mission and desired outcomes of the program, EPA has taken some actions to measure the performance and use performance information to monitor outcomes—the second and third key steps in effective performance management, respectively—for individual PRP projects. As previously mentioned, EPA has collected data on PRP projects through, for example, obtaining semiannual reports from subgrantees on their projects. EPA reviews these reports to assess progress toward achieving performance goals and to determine whether and how to remedy concerns included in a subgrantee's semiannual progress report, according to agency officials.

EPA Should Do More to Manage the PRP

While EPA has taken initial actions to manage the performance of the program, it could do more. Specifically, EPA has not assessed the environment affecting the program, involved key stakeholders to ensure that their efforts target the highest priorities, or developed performance measures for the PRP as a whole, as called for by leading practices of effective performance management. Additionally, EPA has conducted limited oversight of the PRP.

EPA Has Not Assessed the Environment Affecting the PRP

Since the PRP first began awarding grants in fiscal year 2002, EPA has not assessed the environment affecting the program in three key ways. First, EPA has not defined the geographic boundaries to clarify which parishes and counties are included within the Basin. We also identified conflicting information about what constitutes the boundaries. The authorizing legislation for the PRP defines the Basin as encompassing 16 parishes (counties) in the state of Louisiana and four counties in the state of Mississippi without specifying which parishes and counties are included.⁵⁸ However, we identified maps with a variety of boundaries for the Basin (see fig. 5), including

- an atlas of the Basin—co-sponsored by EPA, USGS, and the Pontchartrain Conservancy in 2002—that did not include any areas in Mississippi;
- a map developed by USGS in 2000 that shows the boundaries of the Basin extending north of Jackson, Mississippi; and
- a map from 2023 by the state of Mississippi showing the Basin extending to five counties in the southern part of Mississippi that borders Louisiana.

In August 2022, EPA officials told us that they assigned a staff member to map the Basin, but they did not provide details on what this mapping project would involve. In March 2023, EPA officials told us that EPA had begun developing this map and plans to incorporate input from state and other federal entities. EPA officials expect the map to be completed in the next year.

GAO has previously reported that agencies should systematically assess the environment affecting the program in its performance management.⁵⁹ By defining the Basin's geographic boundaries in a way that clarifies which parishes and counties are included within the Basin's boundaries, EPA will have more assurance that it is convening the appropriate stakeholders to implement the PRP.

⁵⁸While the PRP statute does not specify which parishes and counties are included, it does, as amended in December 2022, specify the size of the Basin, specifically, that it is a 10,000 square mile watershed. 33 U.S.C. § 1273(e)(1).

⁵⁹[GAO/GGD-96-118](#).

Figure 5: Differing Maps of the Lake Pontchartrain Basin



In 2002, the U.S. Environmental Protection Agency, the U.S. Geological Survey (USGS), and the Pontchartrain Conservancy co-sponsored an atlas for the Basin that did not include areas in Mississippi.



In 2000, USGS developed a map of the Basin that shows the boundaries extending north of Jackson, Mississippi.



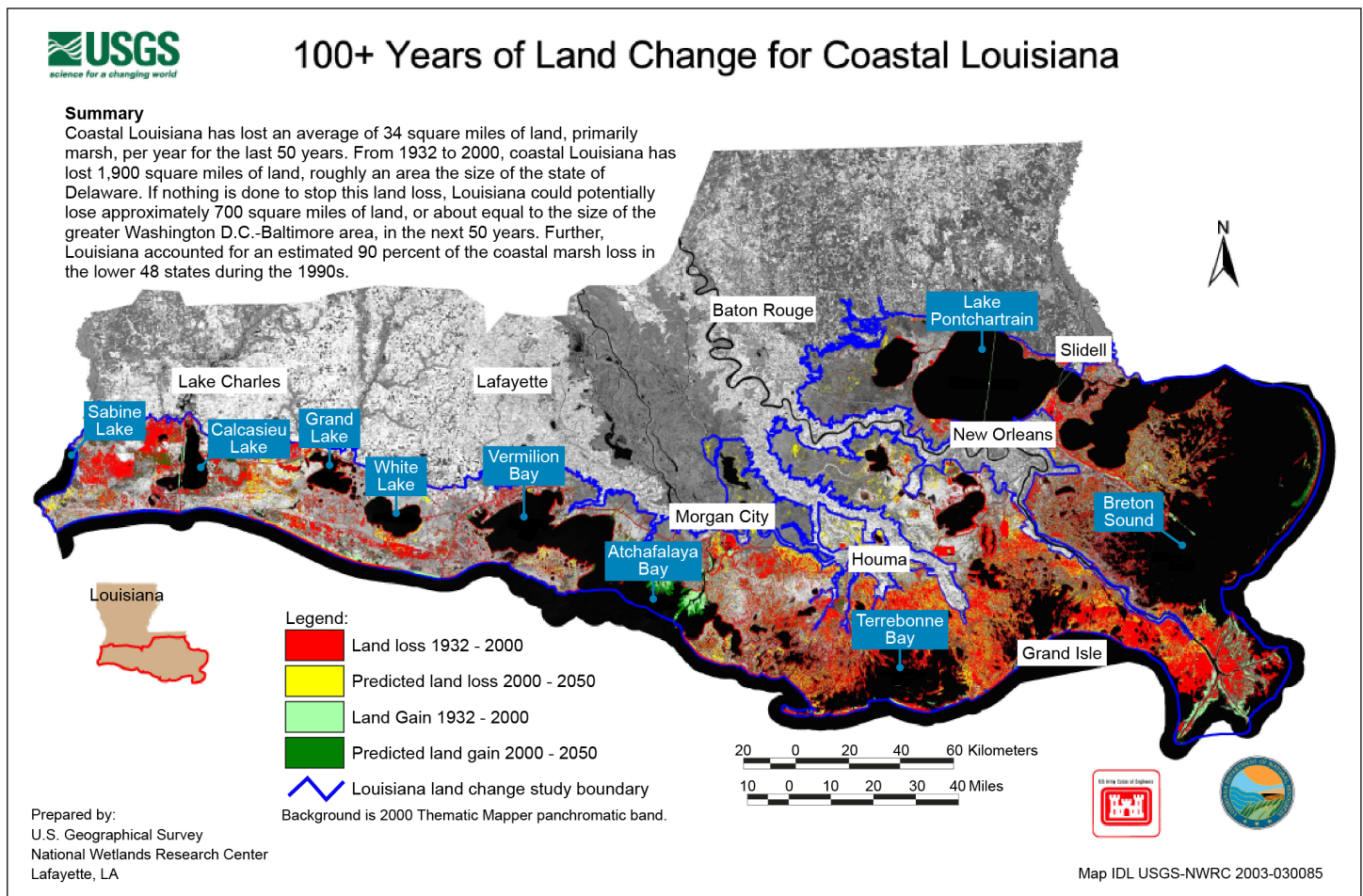
In 2023, the Mississippi Department of Environmental Quality developed a map of the Basin that includes five counties in the southern part of Mississippi along the border of Louisiana.

Sources: *Environmental Atlas of Lake Pontchartrain Basin* (top) (2002), USGS (middle) (2000), and Mississippi Department of Environmental Quality (bottom) (2023). | GAO-23-105547

The second key way that EPA has not assessed the environment affecting the program is that it has not incorporated land mass changes into its plans for the PRP. Land mass in Louisiana has changed significantly since 2002, when the program first began awarding grants, and the comprehensive conservation and management plan—which EPA uses as a guiding document for the PRP—was developed in 1995. According to USGS, land mass in southern Louisiana decreased by nearly 2,000 square miles from 1932 to 2000. From 2004 through 2008, more than 300 square miles of marshland were lost to Hurricanes Katrina, Rita, Gustav, and Ike. In addition, the coastal area in Louisiana around the Basin has faced land loss since at least 1932, and USGS projects that Louisiana will face additional land loss through 2050. See figure 6 below. A stakeholder working to restore the Basin described the land changes that have taken place since 1995 as significant and noted that, consequently, an updated plan is necessary.⁶⁰

⁶⁰As noted previously, in December 2022, the National Defense Authorization Act for Fiscal Year 2023 amended the PRP legislation to specify that one of EPA’s duties in carrying out the PRP is to ensure that the comprehensive conservation and management plan approved for the Basin is reviewed and revised not less often than once every 5 years, beginning on December 23, 2022. Pub. L. No. 117-263, § 8501(c)(1)(B) (2022).

Figure 6: Land Loss Due to Gulf Waters in Coastal Louisiana



Source: U.S. Geological Survey (2003). | GAO-23-105547

The third key way that EPA has not assessed the environment affecting the program is that it has not incorporated progress made on addressing the Basin's environmental concerns into plans for the PRP. A member of the PRP's executive committee noted that some of the problems identified in the comprehensive conservation and management plan have been addressed, and the plan no longer aligns with current environmental conditions for this reason as well. For example, the dredging of shells in Lake Pontchartrain, which worsened the lake's water quality, has

stopped.⁶¹ In addition, between the 1960s and 1990s, Louisiana had a significant dairy industry that polluted the Basin. Since then, resources have been dedicated to creating waste retention lagoons to help reduce agricultural runoff. Having an updated comprehensive conservation and management plan that reflects these changes would be helpful to the PRP's executive committee when it decides which projects to recommend for PRP funding, according to a committee member.

EPA Has Not Involved Key Stakeholders in Managing the PRP

While EPA consults with UNORTF to administer PRP funding, EPA has not involved other key stakeholders in its management of the PRP. These include other federal agencies working in the Basin, the state of Louisiana, and the state of Mississippi. For example, EPA has not worked with stakeholders to update the comprehensive conservation and management plan since its original development in 1995.⁶² In addition, a Louisiana Coastal Protection and Restoration Authority (CPRA) official told us that CPRA would like to see collaboration between EPA and CPRA on the PRP so that the program would be more consistent with the state's restoration goals and benefit from CPRA's past research in the Basin. GAO has previously reported that stakeholder involvement in performance management is important to help agencies ensure that their efforts and resources are targeted at the highest priorities.⁶³

EPA Has Not Developed Performance Measures

EPA has not developed performance measures for tracking the progress and performance of the PRP. While the comprehensive conservation and management plan describes broad goals and the types of projects that may help reach these goals, it does not include performance measures for measuring progress. For example, the plan includes a goal to reduce sewage pollution in the Basin and identifies projects that may assist in meeting this goal, such as monitoring home sewage systems in certain parishes. However, the plan does not include performance measures to determine progress made in reducing this pollution. An example of a performance measure for efforts to reduce sewage pollution could be to reduce annually the total number of sewer system failures within the

⁶¹From 1933 to 1990, clam shells were harvested from Lake Pontchartrain for the construction of roads, parking lots, and levees. Despite the economic value of the shell mining industry, dredging in Lake Pontchartrain was banned in 1990 in an effort to improve water quality.

⁶²As noted previously, in 1995, EPA funded the development of a comprehensive conservation and management plan for the Basin to serve as a roadmap for future restoration efforts.

⁶³[GAO/GGD-96-118](#).

EPA Has Provided Limited Oversight of the PRP

Basin. EPA officials told us that they need specific and trackable metrics to allow the agency to report on the progress made in the Basin.

GAO has previously reported that measuring performance is a key step in developing a performance management system.⁶⁴ Measuring performance allows agencies to track the progress made toward reaching goals and gives managers crucial information on which to base organizational and management decisions. It involves producing measures that demonstrate results.

As previously discussed, EPA has not assessed the environment because it has not updated the comprehensive conservation and management plan to incorporate land changes or progress made. EPA also has not collaborated with stakeholders or developed performance measures for the PRP. Assessing the environment, involving stakeholders, and producing performance measures are leading practices of performance management. Without collaborating with stakeholders to update the comprehensive conservation and management plan with performance measures and to reflect the current state of the Basin, EPA will not be positioned to know if the program is achieving the desired results.

In December 2022, UNORTF announced a request for proposals to update the comprehensive conservation and management plan for the Basin. UNORTF plans to begin the update in June 2023.

In addition to not fully managing the performance of the program, EPA has conducted limited oversight of the PRP. Specifically, EPA has mostly limited its interactions with the PRP executive committee—the external party that recommends projects for funding—to informing the committee that funds were available, according to EPA officials. EPA also has not attended executive committee meetings in recent years, according to EPA officials we interviewed. In August 2022, EPA officials said that the agency planned to join the executive committee as a voting member and planned to play a more active role in its meetings.

EPA officials also told us that the agency does not collect or retain records of most key decisions from the executive committee. The only documents the executive committee sends to UNORTF are transmittals of scoring results for project applications that inform funding decisions.

⁶⁴[GAO/GGD-96-118](#).

Neither the executive committee nor UNORTF collects meeting minutes, so no records of key decisions are maintained by EPA other than these scoring results. Additionally, neither EPA nor UNORTF has developed or documented a process for replacing members of the executive committee.

One of EPA's statutory duties in carrying out the program is to coordinate the grant, research, and planning programs authorized for the PRP.⁶⁵ In addition, GAO has previously reported that agencies should develop strong oversight and internal controls to facilitate effective use of grant funds while maintaining adequate, ongoing communication with grantees.⁶⁶ According to *Standards for Internal Control in the Federal Government*, effective documentation provides a means to retain organizational knowledge and mitigate risk. These standards also state that effective internal controls should include succession planning and communication with external parties, as succession plans address the entity's need to replace competent personnel over the long term.⁶⁷

According to EPA officials, the agency has not developed or documented a process specific to overseeing the PRP. Instead, EPA has used agency-wide grant guidance that is not specific to the PRP in its oversight processes.⁶⁸ Because this guidance is not specific to the PRP, it does not address all relevant requirements for grants under the PRP, such as the statutory limit of EPA funding not more than 75 percent of the costs of projects and studies through PRP grants.

Had EPA developed or documented a process specific to overseeing the PRP as a whole, EPA might have been better positioned to monitor the program. For example, one of the most significant problems EPA identified with the PRP—that UNORTF was not charging the nonfederal funding match correctly after a 2012 amendment to the Clean Water Act changed the amount required—was not identified or corrected until it had

⁶⁵33 U.S.C. § 1273(c)(5).

⁶⁶[GAO/GGD-96-118](#).

⁶⁷ [GAO-14-704G](#).

⁶⁸U.S. Environmental Protection Agency, *Policy on Compliance, Review and Monitoring*.

already occurred for several years.⁶⁹ EPA officials told us that they were not aware of the change to the statute for 4 years and, therefore, had not communicated the change to UNORTF. This required EPA to temporarily halt payments in 2017 and amend the affected grants to increase the nonfederal match. Correcting the problem posed challenges for subgrantees because they had to increase their monetary and other resource contributions or solicit funding from other sources.

Conclusions

The Lake Pontchartrain Basin—an important resource for the area’s population of more than 2 million people—has faced long-standing ecological challenges such as sewage pollution and agricultural runoff. Such pollution can increase the presence of contaminants that are harmful to human health and impact the industries and ecosystems that need clean water. To help restore the ecological health of the Basin, Congress called for EPA to establish the PRP and authorized appropriations for the program. Further, Congress provided a large influx of funds for Lake Pontchartrain in November 2021 through the Infrastructure Investment and Jobs Act.

EPA has taken some actions to manage the grants and performance of the PRP—by developing a comprehensive conservation and management plan for the Basin, among other actions—but could do more, particularly in light of the increased funding. First, EPA could improve the availability of key grant information for PRP-funded restoration projects for potential subgrantees. Currently, grant applicants do not consistently have access to information they need to effectively apply for PRP funding because information about eligibility, deadlines, and match requirements is not publicly available in a central location, such as on a program website. Second, EPA has not clarified which parishes and counties are located within the Basin’s boundaries. Defining the Basin’s geographic boundaries in a way that clarifies which parishes and counties fall within the Basin’s boundaries would provide EPA with greater assurance that it is convening the appropriate stakeholders to implement the PRP. Third, EPA has not worked with stakeholders to ensure that the program’s comprehensive conservation and management plan reflects the current state of the Basin—such as land mass changes and progress made—and includes performance measures. Without such measures, EPA cannot know if the program is achieving the desired

⁶⁹Specifically, in 2012, through legislation reauthorizing the PRP, the PRP statute was amended to provide that for the grants it makes through the program, EPA could pay not more than 75 percent of the costs for restoration projects and studies. Pub. L. No. 112-237, § 1(1), 126 Stat. 1628, 1628 (2012) (codified as amended at 33 U.S.C. § 1273(d)).

results. Finally, EPA has not developed or documented a process for overseeing the PRP. Had EPA done so, it might have been better positioned to monitor problems with the program, including a problem with the funding match that took several years to identify and required EPA to temporarily halt payments in 2017.

Recommendations for Executive Action

We are making the following four recommendations to EPA:

The EPA Administrator should improve the availability of key grant information by making it publicly accessible in a central location, such as a website. (Recommendation 1)

The EPA Administrator should define the geographic boundaries of the Lake Pontchartrain Basin to clarify which parishes and counties are included within the Basin's boundaries to ensure that EPA convenes appropriate stakeholders to implement the PRP. (Recommendation 2)

The EPA Administrator, in updating the comprehensive conservation and management plan, should collaborate with relevant stakeholders to ensure that the plan reflects the current state of the Lake Pontchartrain Basin and includes performance measures. (Recommendation 3)

The EPA Administrator should develop and document a process for overseeing the PRP. (Recommendation 4)

Agency Comments

We provided a draft of this report to EPA, Interior, and the Department of Defense for review and comment. Interior and the Department of Defense did not have comments on the draft report. EPA provided written comments, reproduced in appendix III, and stated that it generally agrees with our findings, conclusions, and recommendations. Our recommendations ask the EPA Administrator to: (1) improve the availability of key grant information by making it publicly accessible in a central location, such as a website; (2) define the geographic boundaries of the Lake Pontchartrain Basin to clarify which parishes and counties are included within the Basin's boundaries to ensure that EPA convenes the appropriate stakeholders to implement the PRP; (3) in updating the PRP's comprehensive conservation management plan, collaborate with relevant stakeholders to ensure that the plan reflects the current state of the Basin and includes performance measures; and (4) develop and document a process for overseeing the PRP.

EPA noted that it has already taken steps, and plans to take additional steps, to implement these recommendations. First, EPA said that it has

launched a public website for the PRP and plans to add program information to this website in the coming weeks. Second, EPA said that it is developing a map that will clarify which parishes and counties are included within the Basin's boundaries. Third, EPA said that it plans to involve stakeholders and include performance measures and trackable milestones when updating the PRP's comprehensive conservation and management plan. Last, EPA said that it is developing program-specific guidance that will both provide direction to PRP grantees and inform the PRP's management conference and public about key aspects of the program. As described, these actions would likely address our recommendations.

We are sending copies of this report to the appropriate congressional committees; EPA; the Secretaries of the Departments of Defense and Interior; and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-3841 or 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, flowing style.

J. Alfredo Gómez
Director, Natural Resources and Environment

Appendix I: Objectives, Scope, and Methodology

This report examines (1) efforts to restore water quality and ecosystems in the Lake Pontchartrain Basin, (2) the extent to which the U.S. Environmental Protection Agency (EPA) has followed relevant requirements for grants management of the Lake Pontchartrain Basin Restoration Program (PRP), and (3) the extent to which EPA has managed the performance of the PRP. To address these objectives, we reviewed relevant literature, reviewed agency documents and data, interviewed EPA officials and others working to restore the Basin, and compared EPA's efforts with relevant requirements and leading practices for grants and performance management.

Describing Restoration Efforts

To address the first objective, we reviewed relevant literature, reviewed documents and a subset of data describing restoration efforts, identified illustrative examples of restoration projects in the Basin, and interviewed entities working to restore the Basin in order to understand their efforts.

Review relevant literature. We conducted a literature search to find examples of federal, state, local, and nonprofit restoration efforts in the Basin since 1995.¹ We selected this scoping period because 1995 was the year that EPA first funded the development of a comprehensive conservation and management plan for restoring the Basin. We searched several databases (e.g., ProQuest, Dialog, and Scopus) using relevant key words (e.g., Pontchartrain, watershed, and restoration) for peer-reviewed scholarly materials, conference papers, government reports, trade and industry articles, and association and nonprofit reports. Our literature search identified 225 relevant sources. We reviewed the abstracts for all 225 sources and analyzed the complete contents of 55 sources. We did not review in full (1) reports focused primarily on issues other than restoring the Basin's water quality and ecosystems (e.g., levee construction) or (2) highly technical reports addressing issues such as microbial communities in raw sewage and the prevalence of specific submerged aquatic vegetation.

Review documents and data. We reviewed documents and a subset of data describing federal and nonfederal restoration programs and projects since 1995. Examples of the documents we reviewed include the comprehensive conservation and management plan that EPA funded for the Basin and the Coastal Protection and Restoration Authority's

¹We did not search for examples of tribal restoration efforts because we did not identify any federally recognized Tribes in the Basin.

*Comprehensive Master Plan for a Sustainable Coast.*² Data we reviewed included PRP expenditure data from EPA's Compass Data Warehouse; Natural Resources Revenue Data from the U.S. Department of the Interior; data published online by the Coastal Wetlands Planning, Protection and Restoration Act Task Force; and funding estimates provided by the U.S. Army Corps of Engineers (Corps), Louisiana's Coastal Protection and Restoration Authority, and Pontchartrain Conservancy.

To assess the reliability of EPA's PRP data, we reviewed source documents for these data, requested written information and interviewed EPA officials about EPA's data reliability procedures, and verified that the data provided matched their source documents. We determined that these data were sufficiently reliable for describing funds awarded through the PRP. The other data we cite in our report do not materially affect our findings, conclusions, or recommendations. Consequently, for these data, we focused on ensuring that the data were reasonable. We took a variety of steps to do so. For example, we corroborated the funding estimate provided by the Pontchartrain Conservancy by comparing this estimate with budget documentation provided by EPA. We determined that these data were reasonable for the purpose of contextualizing agencies' efforts.

Identify illustrative examples. We identified and reviewed relevant information (e.g., documents, photographs, and maps) about two illustrative examples of Basin restoration projects to explain how these projects were funded, planned, and conducted. We identified these illustrative examples by reviewing literature search results, obtaining recommendations from entities involved in restoring the Basin, and reviewing descriptions of projects funded by the PRP; the Coastal Wetlands Planning, Protection and Restoration Act; and Louisiana's Coastal Protection and Restoration Authority. We searched for projects that aimed to restore the water quality or ecosystems in Lake Pontchartrain Basin; were underway or recently completed; had varying restoration goals (e.g., improve water quality or restore marshes); and had different project implementers (e.g., federal, state, or local governments). From among the projects we identified, we selected two illustrative examples because they had different restoration goals—one aims to improve water quality, while the other aimed to restore marsh—and different project implementers. See figures 3 and 4 in our report for

²Lake Pontchartrain Basin Foundation, *Comprehensive Management Plan* (Oct. 17, 1995); and Coastal Protection and Restoration Authority, *Louisiana's Comprehensive Master Plan for a Sustainable Coast* (June 2, 2017).

additional information about the illustrative examples we selected. Findings from our reviews of these projects are not generalizable to those we did not select as illustrative examples.

Conduct interviews. We interviewed federal and nonfederal entities that conduct restoration work in the Basin to understand their efforts. We determined which federal, state, and nonprofit entities to interview after (1) reviewing literature search results to determine which entities were responsible for restoring the water quality and ecosystems in the Basin and (2) asking entities working to restore the Basin for recommendations on other entities involved in restoring the Basin. After assessing the information we collected through these means, we selected the following entities to interview:

- **Federal agencies.** We interviewed officials from EPA Region 6, the Corps, and the U.S. Department of the Interior's U.S. Fish and Wildlife Service, U.S. Geological Survey, and Office of Natural Resources Revenue.
- **State agencies.** We interviewed officials from Louisiana's Coastal Protection and Restoration Authority, the Louisiana Department of Environmental Quality, and the Mississippi Department of Environmental Quality.
- **Nonprofit organizations.** Our literature search results indicated that several nonprofits have contributed to restoration efforts in the Basin. From among these, we selected one to interview—the Pontchartrain Conservancy—because of its level of involvement in the PRP and restoration efforts in the Basin.

In addition to the entities listed above, we interviewed officials from nine local agencies in Louisiana that received PRP funding for their perspectives on the PRP and to learn about any other restoration efforts conducted by these agencies. We selected these nine agencies because they received the most PRP funding from fiscal year 2016 through fiscal year 2020. If we did not receive a response from a local agency after multiple attempts, we selected the local agency that received the next highest amount of PRP funding. The local officials we interviewed were from Jefferson and St. John parishes; the cities of Hammond, Kenner, Mandeville, Slidell, and Ponchatoula; and the towns of Abita Springs and Madisonville.

Evaluating Grants Management

To address the second objective, we identified relevant requirements for grants management, reviewed documentation related to PRP grants to assess EPA's grants management, and interviewed entities involved with PRP grants.

Identify requirements. We identified relevant requirements for EPA's grants management for the PRP by reviewing the PRP's authorizing statute; EPA guidance, including its *Policy on Compliance, Review and Monitoring* that was approved in 2007; and government-wide guidance and requirements, including, the Office of Management and Budget's Uniform Administrative Requirements, *Cost Principles, and Audit Requirements for Federal Awards*.³ We also reviewed prior GAO reports that outlined leading practices for grants management.⁴ Finally, we reviewed the *Standards for Internal Control in the Federal Government* for guidance on internal controls.⁵

Review documents and data. We reviewed documents related to EPA's grant selection process and overall grants management—such as EPA baseline reports from annual programmatic reviews from 2021 and 2022—for evidence of the extent to which EPA's grants management practices for the PRP align with the requirements that we identified. We assessed the process by which EPA awarded grant funds to the University of New Orleans Research and Technology Foundation (UNORTF) as the grantee and the process by which the grantee awards grant funds to subgrantees by reviewing EPA documentation, including competition exceptions and requests for proposals. We assessed EPA's oversight of federal funds granted to the grantee by comparing the documentary evidence with the identified requirements.

Conduct interviews. We interviewed EPA and UNORTF to understand their roles as lead agency and grantee, respectively, in managing the grants for the PRP. We also interviewed a selection of subgrantees—a

³For the PRP authorizing statute, see 33 U.S.C. § 1273. U.S. Environmental Protection Agency, *Policy on Compliance, Review and Monitoring*, EPA Order 5700.6 A2 CHG 2 (Washington, D.C.: Sept. 24, 2010); and Office of Management and Budget, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, 2 C.F.R. pt. 200 (Washington, D.C.: December 2014).

⁴GAO, *Grants Management: EPA Has Taken Steps to Improve Competition for Discretionary Grants but Could Make Information More Readily Available*, [GAO-17-161](#) (Washington, D.C.: Jan. 23, 2017).

⁵GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington D.C.: Sept. 10, 2014).

nonprofit, municipalities, and parishes—that previously had received grant awards through the PRP, as detailed above. We held semistructured interviews with each selected subgrantee to understand their restoration efforts in the Basin and their overall experience with the PRP grants process, including a discussion of summaries of efforts to restore water quality and ecosystems in the Basin, interactions with EPA and UNORTF, and any challenges faced concerning the PRP.

Evaluating Performance Management

To address the third objective, we selected relevant leading practices for performance management, reviewed documents and data, and interviewed entities involved in the performance management for the PRP.

Select leading practices. We selected relevant leading practices for performance management, on the basis of relevance to the PRP, from prior GAO work on performance management. Specifically, we selected the leading practices outlined in GAO’s 1996 report, *Executive Guide*.⁶ Multiple reviewers at GAO were involved in determining which selected leading practices were most relevant to grant, research, and planning programs, such as the PRP.

Review documents and data. We reviewed EPA performance and other PRP documents, such as semiannual progress reports from 2016 through 2022, for evidence of performance goals and data. Since the comprehensive conservation and management plan is the guiding document for the PRP, we reviewed the plan for evidence of performance goals and compared the plan with the selected leading practices. Multiple reviewers at GAO were involved in determining which selected leading practices were met by the PRP.

Conduct interviews. We interviewed EPA officials about performance goals established for restoration efforts and steps taken to collect performance data and assess progress in meeting these goals. Additionally, we interviewed other entities involved in EPA’s performance management efforts, such as the PRP’s sole grantee—UNORTF—and 10 selected subgrantees, as detailed above. We held semistructured interviews with each selected subgrantee to understand their overall experience with the PRP performance management process and their

⁶GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, [GAO/GGD-96-118](#), (Washington, D.C.: June 1996).

interactions with EPA and UNORTF. We then identified common themes across each of the interviews.

We conducted this performance audit from November 2021 to May 2023 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.

Appendix II: Examples of Lake Pontchartrain Basin Restoration Program Projects

We obtained from the U.S. Environmental Protection Agency (EPA) examples of projects funded by EPA's Lake Pontchartrain Basin Restoration Program. The examples in table 1, below, were funded in fiscal year 2020. As shown below, many of these projects aimed to improve local sewer systems. Others addressed stormwater management, public education, and water quality monitoring.

Table 1: Lake Pontchartrain Basin Restoration Program (PRP) Projects Funded by Grants in Fiscal Year 2020

Amount in dollars

Funding recipient	Project name	PRP award	Project description
University of New Orleans Research and Technology Foundation	Grant Management	121,730	Assist and support the activities of the PRP's management conference. Monitor subgrantees of PRP grants to ensure that they meet all programmatic requirements.
City of Hammond	Sewer System Evaluation Survey of West Hammond	105,000	Conduct initial Sewer System Evaluation Survey of West Hammond to ensure the integrity of Hammond's sewer system.
City of Hammond	Sewer System Evaluation Survey of West Hammond Phase 2	55,000	Conduct second phase of a Sewer System Evaluation Survey of West Hammond.
City of Kenner	Sewer Lift Station Improvements: 42nd & Lake Trail and 31st & Loyola	33,040	Prepare design plans and specifications for public bid for the improvements to the 42nd & Lake Trail and 31st & Loyola Sewer Lift Stations. ^a
City of Mandeville	Upgrades to Sewer Lift Stations 42 & 43	37,230	Prepare design plans and specifications for public bid for the upgrades to Sewer Lift Stations 42 and 43.
City of Mandeville	Upgrades to Sewer Lift Stations 3 & 39	41,500	Prepare design plans and specifications for public bid for the upgrades to Sewer Lift Stations 3 and 39.
City of New Orleans	Lincoln Beach Permeable Parking Lot	41,230	Design a Permeable Parking Lot for Lincoln Beach. Prepare construction documents that the city can use to construct the lot using other allocated funds.
City of Slidell	2021 Gravity Sewer Smoke Testing	39,550	Prepare a plan to test the gravity-operated sewer main and identify inflow connections to the sanitary sewer system for subdivisions experiencing higher-than-expected magnitudes of wastewater inflow.
Jefferson Parish	Lake Villa Site Improvements and Marsh Monitoring	77,000	Enhance public awareness and understanding of preparedness and risks through education and notification programs. Invest in structural and green infrastructure projects to manage future risk. Find and develop opportunities to work with other agencies to leverage mitigation funds and share information about the risks of natural hazards. Promote public understanding, support hazard mitigation, and monitor mitigation measures to ensure that they are functioning efficiently.

**Appendix II: Examples of Lake Pontchartrain
Basin Restoration Program Projects**

Funding recipient	Project name	PRP award	Project description
Jefferson Parish	Promoting Urban Gardening for Strategic Stormwater Management Program	18,000	Complete an audit of the parish's existing codes and ordinances pertaining to clearing and erosion control, and obtain recommendations for improving and consolidating the ordinances.
Jefferson Parish	Market & Sauve (D4-7) Lift Station Rehabilitation	41,146	Rehabilitate Lift Station D4-7 to eliminate sanitary sewer overflows. This will be achieved by evaluating deficiencies at the existing lift station and completing plans and specifications for the rehabilitation.
Jefferson Parish	Neyrey & Veterans (F7-13) Lift Station Rehabilitation	44,000	Rehabilitate Lift Station F7-13 to eliminate sanitary sewer overflows. This will be achieved by evaluating deficiencies at the existing lift station and completing plans and specifications for the rehabilitation.
Lake Pontchartrain Basin Foundation	Lake Pontchartrain Basin Foundation Ecosystem Restoration and Preservation Program	334,008	Complete weekly water quality monitoring at 12 sites across the Lake Pontchartrain Basin. Continue to assess Lincoln Beach for reopening scenarios. Continue to support the New Canal Lighthouse and Education Center to improve accessibility to facilities and engage with the public. Carry out project management administration.
St. Bernard Parish	St. Bernard Parish Wastewater System Data Collection and Assessment	35,000	Establish a baseline dry weather wastewater flow within the Fazendville, Munster, and Violet/Riverbend wastewater collection systems, and quantify the magnitude of rainfall-derived inflow and infiltration.
St. Bernard Parish	Walkers Lane Sewer Lift Station Improvements & Force Main	40,000	Design upgrades to the existing Walkers Lane Sewer Lift Station and Force Main. ^b Increase pumping capacity and sanitary sewer storage capacity of the existing lift station.
St. Charles Parish	East Bank Sewer Lift Stations Upgrades, Plans, and Specifications	70,000	Complete the design plans and specifications to improve and upgrade three lift stations located on the East Bank of St. Charles Parish.
St. John the Baptist Parish	Central Avenue Lift Station Upgrade	29,525	Prepare design plans and specifications to upgrade the Central Avenue Lift Station capacity to pump wet weather flow from its collection system to the Reserve Wastewater Treatment Pond.
St. John the Baptist Parish	Wastewater System Data Collection and Assessment	34,000	Create a plan of action that will reduce stormwater inflow into the wastewater collection system during wet weather events. A report of results and recommended improvements with cost estimates will be prepared. Then a contractor will be obtained to make the necessary repairs.
St. Tammany Parish	Pollution Source Tracking for Water Quality Restoration in the Bayou Bonfouca Watershed	82,360	Inspect homeowner sewer treatment systems to assure compliance with permits, educate homeowners on proper operation and maintenance of the systems, and reduce sewerage from Bayou Bonfouca and Lake Pontchartrain. This project will also quantify the pass/fail rate of home wastewater systems in the watershed and compare it with the previous program data.

Appendix II: Examples of Lake Pontchartrain
Basin Restoration Program Projects

Funding recipient	Project name	PRP award	Project description
Town of Madisonville	Sanitary Sewer Study and Project Design for the Town of Madisonville	136,500	Rehabilitate or reconstruct sections of lines of the existing sewer infrastructure in the critical areas of the town. A sewer study will be conducted to identify potential service line repairs, line replacement and lining, point repairs, and manhole sealing alternatives.

Source: U.S. Environmental Protection Agency (EPA). | GAO-23-105547

^aA sewer lift station moves wastewater from lower to higher elevation through pipes, according to EPA. See EPA, *Collection Systems Technology Fact Sheet Sewers, Lift Station*, EPA 832-F-00-073 (Washington, D.C.: Sept. 2000).

^bA force main is a pipeline that conveys wastewater under pressure from lower to higher elevation. See EPA, *Wastewater Technology Fact Sheet Sewers, Force Main*, EPA 832-F-00-071 (Washington, D.C.: Sept. 2000).

Appendix III: Comments from the U.S. Environmental Protection Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

Office of the Regional Administrator

April 24, 2023

Mr. Alfredo Gomez
Director
Natural Resources and Environment
U.S. Government Accountability Office
Washington, D.C. 20548

Dear Mr. Gomez:

Thank you for the opportunity to review and comment on the U.S. Government Accountability Office's draft report, "Additional Transparency and Performance Management Could Improve EPA's Restoration Program GAO-23-105547." The purpose of this letter is to provide the U.S. Environmental Protection Agency's response to the draft report. The EPA generally agrees with GAO's findings, conclusions, and recommendations.

GAO was asked by Congressman Sam Graves, Missouri, and Congressman Rick Larsen, Washington, to review restoration efforts in the Lake Pontchartrain Basin. While the lakes, rivers, and other waterbodies of the Basin support industry, provide habitat for plants and animals, and create recreational opportunities, the Basin waters and natural habitats have been impacted and polluted by saltwater intrusion, wetland loss, stormwater, sewage, and agricultural runoff for decades. To address these challenges, the Lake Pontchartrain Basin Restoration Act of 2000 called for the EPA to establish the Lake Pontchartrain Basin Restoration Program, or PRP, to restore the ecological health of the Basin.

GAO's draft report examines restoration efforts since 1995, the EPA's implementation of relevant grants management requirements for the PRP, and the EPA's management of the PRP's performance. To this end, GAO reviewed documents concerning Basin restoration efforts and the PRP, interviewed representatives from the EPA and other stakeholders, and compared the EPA's grants and performance management of the PRP against leading practices. GAO found that the EPA has generally followed agency and government wide grants management requirements in managing PRP grants, and that Region 6 has taken steps to better manage the PRP. The EPA generally agrees with GAO's four recommendations and has already taken steps to implement corrective action. The responses below describe current and planned activities to improve the PRP as recommended by the GAO.

GAO Recommendation:

The EPA Administrator should improve the availability of key grant information by making it publicly accessible in a central location, such as a website.

The EPA Response:

The EPA agrees with this recommendation and launched a PRP public website at the following link: <https://www.epa.gov/la/lake-pontchartrain-basin-restoration-program>. The PRP website currently

describes the program and includes links to the current requests for proposals. In the next few weeks, the EPA will continue to expand the website to include additional program information.

GAO Recommendation:

The EPA Administrator should define the geographic boundaries of the Lake Pontchartrain Basin to clarify which parishes and counties are included within the Basin's boundaries to ensure it convenes appropriate stakeholders to implement the PRP.

The EPA Response:

The EPA agrees with this recommendation that an updated boundary map would ensure that all relevant stakeholders are involved. To date, the PRP has used the 2002 map developed by the U.S. Geological Survey; however, the EPA recognizes that this map does not include the Mississippi counties that are part of the Basin. Region 6 is developing a map that would clarify which parishes and counties are included within the Basin's boundaries.

GAO Recommendation:

The EPA Administrator, in updating the comprehensive conservation management plan, should collaborate with relevant stakeholders to ensure that the plan reflects the current state of the Lake Pontchartrain Basin and includes performance measures.

The EPA Response:

The EPA agrees with this recommendation. This process will involve active stakeholder participation and opportunities for public comment, per the Clean Water Act § 121(c)(7), 33 U.S.C. § 1273(c)(7) and the Clean Water Act § 320(f), 33 U.S.C. § 1330(f). The request for proposals for an entity to update the Comprehensive Conservation Management Plan, or CCMP, recently closed. The EPA expects proposal selection and award to be completed by Fall 2023. The revised CCMP will include environmental performance measures and milestones that can be tracked. The CCMP will also prioritize and track efforts to advance President Biden's environmental and climate justice Executive Orders 13895, 14008 and 14091.

GAO Recommendation:

The EPA Administrator should develop and document a process for overseeing the PRP.

The EPA Response:

The EPA agrees with this recommendation. Region 6 is developing specific program guidance that will provide direction to PRP grantees and will also inform the Management Conference and the public about key aspects of the program.

**Appendix III: Comments from the U.S.
Environmental Protection Agency**

The EPA agrees with GAO's recommendations and thanks the agency for the opportunity to review the draft report. The EPA is committed to addressing your recommendations and furthermore, we are building a robust program that advances President Biden's environmental and climate justice priorities, ensuring that every community has the opportunity to participate in and benefit from the program. Please contact Claudia Hosch, Assistance Programs Branch Chief, at (214) 665-6464 or hosch.claudia@epa.gov should you have any questions or need further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Earthea Nance".

Earthea Nance, PhD, PE
Regional Administrator

cc: EPA GAO Liaison Team

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contacts

J. Alfredo Gómez, (202) 512-3841 or gomezj@gao.gov

Staff Acknowledgments

In addition to the contact named above, Barb Patterson (Assistant Director), Mary Koenen (Analyst in Charge), and Chad Clady made key contributions to this report. Other staff who made important contributions were Adrian Apodaca, Mark Braza, David Bruno, Katherine Chambers, Philip Farah, Chad Gorman, Scott Hiromoto, Susan Iott, Tom James, Gwen Kirby, Ben Licht, Tom McCabe, Tricia Moye, Evonne Tang, and Josh Wiener.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [Email Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548



Please Print on Recycled Paper.