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July 14, 2016

The Honorable Bob Gibbs
Chairman
Subcommittee on Water Resources
and Environment
Committee on Transportation and Infrastructure
House of Representatives

Environmental Protection Agency: Status of Efforts to Address Nonpoint Source Water Pollution through the Section 319 Program

Dear Mr. Chairman:

Nonpoint source water pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources, including runoff from farms, managed forests, and urban areas. This runoff can carry harmful pollutants, such as fertilizers and sediment from fields, toxins from abandoned mines, and oils from roads, into lakes, rivers, and other bodies of water. The Clean Water Act was passed by Congress in 1972 to restore and maintain the chemical, physical, and biological integrity of the nation's waters. In 1987, Congress amended the act, adding section 319 to create a non-regulatory program through which the Environmental Protection Agency (EPA) administers annual grants to help states develop and implement their own programs for managing nonpoint source water pollution.¹ Under EPA's section 319 program, states retain the primary role for addressing nonpoint source water pollution, which they do largely through voluntary means and financial incentives. The extent of available incentives has declined in recent years, as grants to states under the section 319 program have declined by more than 30 percent from about \$240 million in fiscal year 2004 to about \$160 million in fiscal year 2014, according to EPA budget documents.

In May 2012, we found that through the section 319 program, states had funded numerous projects that addressed varied categories of pollution (e.g., agricultural, urban, and stormwater runoff) and have helped to restore hundreds of impaired water bodies.² For example, states funded projects to develop watershed-based plans that identify causes and remedies of nonpoint source water pollution in specific geographic zones as well as projects to implement agricultural conservation practices to lessen agricultural runoff. We also found that states funded some projects that encountered preventable challenges, which can be avoided when states use more rigorous project selection processes. For instance, projects that relied on voluntary participation sometimes did not achieve their goals when landowners' buy-in was not

¹In this report, we refer to this program as the section 319 program.

²GAO, *Nonpoint Source Water Pollution: Greater Oversight and Additional Data Needed for Key EPA Water Program*, [GAO-12-335](#) (Washington, D.C.: May 31, 2012).

secured in advance. Moreover, we found that EPA's regional offices varied in their oversight of states' nonpoint source management programs and the extent to which they influenced the projects that states funded. Finally, we found that EPA's primary measures of effectiveness may not fully demonstrate program achievements.³ In our report, we made two recommendations to EPA. Specifically, we recommended that (1) EPA provide regional offices with guidance on how to fulfill their oversight responsibilities, such as reviewing states' plans for project feasibility and criteria to ensure that funded projects have characteristics that reflect the greatest likelihood of effective implementation and tangible water quality results, and (2) that EPA revise section 319 guidelines to states to emphasize measures that more accurately reflect the overall health of targeted water bodies (e.g., the number, kind, and condition of living organisms) and demonstrate states' focus on protecting high-quality water bodies, where appropriate. EPA agreed with our recommendations calling for improved and more consistent regional oversight and for improved and more comprehensive program measures.

You requested that we assess the status of EPA's section 319 program. This report examines (1) how many projects states have awarded under EPA's section 319 program in recent years and the types of pollution these projects were intended to address, and (2) what actions, if any, EPA has taken since 2012 to improve oversight of its section 319 program. We briefed you on our overall findings on the status of EPA's section 319 program on April 18, 2016, and this report includes the content of that briefing and several additional details.

To address both objectives, we identified and reviewed general changes EPA has made to the section 319 program since 2012 on the awarding of grants for projects and actions taken to improve oversight of the program. We did not conduct a full assessment of the impacts of changes EPA made to the program due, in part, to the limited time since program changes were put into effect. As discussed below, the most recent changes to the program did not begin to take effect until 2014—and some were not completed until September 2015. Moreover, state officials enter data on section 319 grants up to 1 year after grants are awarded; we therefore had only 1 fiscal year's worth of grant data to assess.⁴ To examine how many projects states have awarded under EPA's section 319 program in recent years, and the types of pollution these projects were intended to address, we collected and analyzed data from EPA's Grants Reporting and Tracking System from fiscal year 2011 through fiscal year 2014.⁵ We analyzed data from this period because these were the most recent years for which EPA had complete data on awarded projects that were not covered in our May 2012 report, which included data on projects awarded through fiscal year 2010. We determined that the data were sufficiently reliable for the purposes of our reporting objectives by electronically testing the data and by interviewing EPA officials about the data. To examine what actions EPA has taken since 2012 to improve oversight of its section 319 program, we reviewed EPA's most recent grant guidance

³The two measures of effectiveness that EPA requires states to report for the section 319 program are: (1) reductions in loadings of specific nonpoint source pollutants, and (2) improvement in water quality by achieving state water quality standards for water bodies identified on states' lists of impaired waters as requiring nonpoint source controls.

⁴According to EPA officials, states may award section 319 projects under a particular grant up to one year after receiving the grant. Once a project has been awarded, additional time is allowed to enter information on the project into EPA's Grants Reporting and Tracking System. As a result, the officials said that complete data on projects awarded in a particular fiscal year may not be available until the end of the following calendar year. For instance, the officials said that complete data on projects awarded in fiscal year 2015 would not be available until the end of 2016.

⁵Our use of the term "states" also includes the District of Columbia and Puerto Rico.

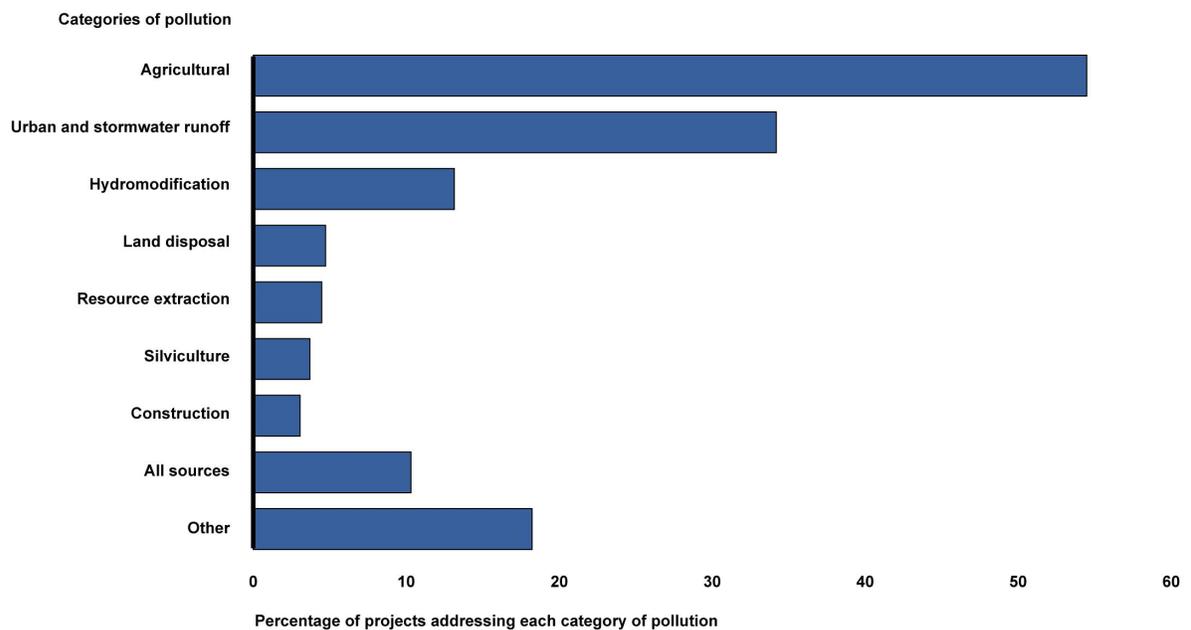
for states as well as other documents used to implement EPA’s program reforms. In addition, we reviewed EPA’s efforts to address the recommendations made in our May 2012 report and interviewed EPA officials in the Office of Water.

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

In summary, we found the following:

- Projects states have awarded and the types of pollution they address:** From fiscal year 2011 through fiscal year 2014, the most recent years for which complete data on awarded projects were available, states awarded at least 3,080 projects under the section 319 program.⁶ Similar to what we found in 2012, the two most common categories of nonpoint source water pollution targeted by these projects were agricultural runoff and urban and stormwater runoff (see fig. 1).

Figure 1: Percentage of Section 319 Projects Addressing Different Categories of Nonpoint Source Water Pollution, Fiscal Years 2011-2014



Source: GAO analysis of Environmental Protection Agency (EPA) data. | GAO-16-697R

Notes: Because many projects were listed in EPA’s Grants Reporting and Tracking System as addressing multiple categories of pollution, the percentages in the figure total more than 100 percent. Projects that did not identify the categories of pollution

⁶This total does not include projects awarded by New Jersey because information on those projects was missing from the data we collected from EPA.

they were meant to address were not included in the analysis for this figure. This analysis did not include projects awarded by New Jersey because information on those projects was missing from the data we collected from EPA. The “hydromodification” category includes pollution resulting from activities such as modifying stream channels. The “land disposal” category includes pollution resulting from things such as landfills and septic tanks. The “silviculture” category includes pollution resulting from forestry activities such as timber harvesting.

Data Table for Figure 1: Percentage of Section 319 Projects Addressing Different Categories of Nonpoint Source Water Pollution, Fiscal Years 2011-2014

Categories of pollution	Percentage of projects addressing each category of pollution
Agricultural	54.48
Urban and stormwater runoff	34.19
Hydromodification	13.15
Land disposal	4.73
Resource extraction	4.48
Silviculture	3.7
Construction	3.06
All sources	10.31
Other	18.23

In our 2012 report, we also found that states had funded section 319 projects designed primarily to implement indirect approaches (e.g., planning and education activities) to address nonpoint source water pollution more frequently than projects that supported more direct approaches (e.g., implementing conservation practices to reduce pollutants entering a water body). However, because EPA made changes to certain data fields that alter how it tracks project activities, we were unable to update this part of our analysis for projects awarded in fiscal years 2011 through 2014 for inclusion in this report.

- Actions EPA has taken to improve oversight:** EPA has taken a number of actions since our May 2012 report, in part to respond to our recommendations, which are intended to improve the implementation of its section 319 program, such as issuing updated guidance to EPA regional offices and states, but additional time is needed to assess the impact of the actions that have been taken. The most recent changes to the program did not begin to take effect until 2014, and some changes were not completed until 2015, so they have not been in effect for more than 1 full grant cycle. Specifically, in April 2013, EPA issued revised guidance for awarding section 319 grants to states to implement nonpoint source management programs and projects. This guidance was first applicable to grants awarded in fiscal year 2014. The 2013 guidance updates previous guidance to EPA regional offices

and states in four key areas: (1) state nonpoint source management program plans,⁷ (2) funding distribution, (3) reviews of states' watershed-based plans,⁸ and (4) regional offices' annual progress determinations.

- **State nonpoint source management program plans.** A 2011 EPA review of the section 319 program found that many state plans were out of date and that these plans were not used to implement the program. EPA's 2013 guidance directs all states to update their nonpoint source management program plans every 5 years. According to EPA officials, as of September 2015 all states had updated their plans.
- **Funding distribution.** As part of the 2013 guidance, EPA changed its funding distribution for section 319 grants to increase focus on watershed project implementation. In comparison to prior grant guidelines, the 2013 guidance directs that an additional 10 percent of states' total section 319 grant funds are to be used for watershed project implementation rather than for program planning and management.
- **Reviews of states' watershed-based plans.** As part of the 2013 guidance, EPA updated its 2004 guidance on regional offices' reviews of states' watershed-based plans. The 2013 guidance directs each EPA region to annually review at least one such plan per state.
- **Regional offices' annual progress determinations.** EPA's 2013 guidance provides EPA regional offices with a checklist and information on how to conduct state annual program and progress determination reviews. These reviews assess a state's progress relative to the milestones and commitments in its nonpoint source management program plan. According to EPA officials, the checklist will result in greater consistency in how reviews are conducted across the regional offices and will allow regional offices to provide states with feedback for program improvement.

EPA's 2013 guidance has the potential to benefit the program. We note, however, that the updated guidance does not directly address the recommendations we made in 2012. For example, EPA's program and progress determination review checklist aligns with the intent of our first 2012 recommendation—to provide additional guidance to EPA regional offices on how they are to fulfill their oversight responsibilities. However, EPA's 2013 guidance does not provide specific instruction to the regional offices on how to review states' plans for project feasibility and criteria to ensure that funded projects have characteristics reflecting the greatest likelihood of tangible water quality results, as we recommended. Regarding our other 2012 recommendation, on measures of program effectiveness, EPA has not made changes to the program's measures of effectiveness, but Office of Water officials told us that EPA is planning on doing so. The officials said they are interested in adding one of the measures we recommended but do not intend to act on the other. Specifically, the officials said the agency plans to initiate work on developing a new measure for the protection of healthy water bodies this year and to establish a workgroup focused on this measure in fiscal year 2017. EPA,

⁷State nonpoint source management program plans are to identify states' goals, priority waters, approaches, practices, and milestones for addressing nonpoint source pollution.

⁸According to EPA documents, watershed-based plans are plans that address water quality needs within a watershed (i.e., a defined geographic area) and use a series of cooperative, iterative steps to characterize existing conditions, identify and prioritize problems, define management objectives, and develop and implement protection or remediation strategies as necessary. Plans are intended to help communities, watershed organizations, and state, local, tribal and federal environmental agencies develop and implement steps to meet water quality standards and protect water resources.

however, does not intend to change its national program measures to include criteria that would reflect the overall health of water bodies, such as the number, kind, and condition of living organisms, according to EPA officials. We are encouraged that EPA has taken, and continues to take, actions to reform the section 319 program, but we continue to believe that the agency should fully implement our recommendations.

Agency Comments

We provided a draft of this product to the Administrator of EPA. EPA provided technical comments that we incorporated, as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Administrator of EPA, 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 about 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 include Nathan Anderson, Assistant Director; Mark Braza; Antoinette Capaccio; Candace Carpenter; E. E. Eischen; Ellen Fried; Katherine Killebrew; Jason Trentacoste; and Josh Wiener.

Sincerely yours,

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

J. Alfredo Gómez
Director, Natural Resources
and Environment

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