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NONPOINT SOURCE WATER POLLUTION

Greater Oversight and Additional Data Needed for Key EPA Water Program

GAO Accountability * Integrity * Reliability

Highlights

Highlights of GAO-12-335, a report to congressional requesters

Why GAO Did This Study

Pollution from nonpoint sources—such as runoff from farms or construction sites—remains the leading cause of impairment to the nation's waters. Under section 319 of the Clean Water Act, each year EPA provides grants to states to implement programs and fund projects that address nonpoint source pollution; the program received $165 million in fiscal year 2012. Section 319 includes minimum conditions that states must meet to receive grants. By regulation, EPA's 10 regional offices oversee state programs and are to ensure that states' projects can be feasibly implemented. USDA also has programs to protect water resources.

GAO examined (1) states' experiences in funding projects that address nonpoint source pollution, (2) the extent to which EPA oversees the section 319 program and measures its effectiveness, and (3) the extent to which key agricultural programs complement EPA efforts to control such pollution. GAO surveyed project managers, reviewed information from EPA's 10 regional offices on oversight of state programs, and analyzed USDA data.

What GAO Recommends

GAO recommends, among other things, that EPA provide section 319 oversight guidance to its regional offices and that USDA analyze data to determine if measures were taken to mitigate water quality impacts in section 319 project areas. EPA agreed with the recommendations, while USDA was silent on them. Both agencies commented on specific findings, which are addressed within the report.

View GAO-12-335. For more information, contact David C. Trimble at (202) 512-3841 or trimbled@gao.gov. To view the e-supplement online, click on GAO-12-377SP.

What GAO Found

Under section 319 of the Clean Water Act, state-selected projects to reduce nonpoint source pollution have helped restore more than 350 impaired water bodies since 2000, but other projects have encountered significant challenges. According to GAO survey results, 28 percent of projects did not achieve all objectives originally identified in the project proposal (e.g., implementing the desired number of pollution reduction practices), while many that did so still faced considerable challenges. About half such challenges were beyond staff control (e.g., bad weather or staff turnover), but the other half were challenges that generally could have been identified and mitigated before projects were proposed and selected for funding, such as gaining access to desired properties. In one state, for example, $285,000 in section 319 funds was to subsidize the cost to homeowners of repairing damaged septic systems. Once the grant was awarded, however, one homeowner signed up to participate.

The Environmental Protection Agency's (EPA) oversight and measures of effectiveness of states' programs have not consistently ensured the selection of projects likely to yield measurable water quality outcomes. EPA's 10 regional offices varied widely in their review of states' work plans, which describe projects states plan to undertake in the upcoming year, and project selection criteria, which identify eligibility parameters for receiving section 319 funds. For example, three regional offices reported reviewing annual work plans in depth and actively influencing the types of projects selected, while three others reported limited to no involvement in such reviews, instead deferring to states' judgment on project feasibility and selection. EPA, however, has not provided its 10 regions with guidance on how to oversee the state programs. Also, EPA's primary measures of program effectiveness may not fully demonstrate program achievements. Section 319 requires states to report to EPA on two measures, including reductions in key pollutants. It does not limit EPA to these two measures, but the agency has chosen to use them as barometers of success for the section 319 program. States can demonstrate their achievements in additional ways—ways that may provide a more accurate picture of the overall health of targeted water bodies, such as the number and kind of living organisms in the water.

USDA's Environmental Quality Incentives Program is the key agricultural conservation program that can complement EPA efforts to reduce nonpoint source pollution, and its conservation practices have significantly reduced pollutants coming from agricultural land across the country. Notwithstanding its achievements, certain conservation practices can adversely affect water quality if not properly implemented—for example, by transporting polluted runoff from nutrient-laden fields into nearby water bodies. The agency's Natural Resources Conservation Service (NRCS) has procedures in place intended to ensure that its practices do not inadvertently harm water quality. During its field work, GAO identified a few instances where these procedures may not have been followed (including in watersheds where EPA's section 319 funds had been used), and therefore sought NRCS data to determine if they were isolated instances or indicative of a more prevalent issue. NRCS' national level data, however, are not sufficiently detailed to identify whether appropriate measures are always in place to mitigate potential water quality impacts. According to NRCS, such data are instead located in its field offices and are not analyzed by the agency.