

GAO Highlights

Highlights of [GAO-16-237](#), a report to congressional requesters

Why GAO Did This Study

Recent catastrophic breaks in water mains and sewer discharges during storms are indicators of the nation's old and deteriorating water and wastewater infrastructure. EPA estimates that small water utilities—those serving fewer than 10,000 people—may need about \$143 billion for drinking water and wastewater infrastructure repairs and replacement over 20 years. EPA and USDA provide the three largest sources of federal funding for water infrastructure. In a March 2004 report, GAO found that water utilities may benefit from implementing asset management—a tool used across a variety of sectors to manage physical assets, such as roads and buildings.

GAO was asked to review water utilities' use of asset management. This report examines (1) what is known about the use of asset management among the nation's water utilities—particularly small water utilities—including benefits and challenges and (2) steps EPA and USDA are taking to help small water utilities implement asset management. GAO selected a nongeneralizable sample of 25 water utilities in 10 states based on largest infrastructure needs and interviewed EPA, USDA, state, and water utility officials.

What GAO Recommends

GAO recommends that EPA consider collecting information about utilities' use of asset management through its needs assessment surveys, and that EPA and USDA compile the benefits of asset management into one document. EPA and USDA generally agreed with GAO's findings and recommendations.

View [GAO-16-237](#). For more information, contact J. Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

January 2016

WATER INFRASTRUCTURE

EPA and USDA Are Helping Small Water Utilities with Asset Management; Opportunities Exist to Better Track Results

What GAO Found

The small water utilities GAO reviewed in 10 selected states are implementing some asset management practices, although state officials said that large water utilities are more likely to implement asset management than small utilities. The asset management practices these small utilities used include identifying key assets, such as pipelines, treatment plants, and other facilities, and assessing their life-cycle costs. For example, officials from 23 of the 25 small water utilities GAO reviewed said they had maps that identify the location of at least some of their assets. However, of the 25 small water utilities, officials from 9 said they knew the cost of rehabilitation versus replacement for all of their assets. Officials from the Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), and the 10 selected states identified benefits and challenges for small water utilities using asset management. The benefits that EPA, USDA, and state officials identified include cost savings and more efficient long-term planning. The key challenges these officials identified include the availability of funding to cover start-up and maintenance costs, the availability of human resources, information on how to implement asset management practices, and political support from elected officials to begin an asset management program or increase user rates.

EPA and USDA are taking steps to help water utilities implement asset management by providing funding, free or low-cost tools such as software, one-on-one technical assistance, and classroom training for small water utilities that plan to implement asset management practices. EPA and USDA collect feedback from training participants, but do not collect information that will help track the results of the agencies' training efforts (e.g., whether utilities participating in such training implemented asset management practices). GAO identified in a March 2004 guide that evaluating training programs is key to ensuring training is effective in contributing to the accomplishment of agency goals and objectives. EPA officials told GAO that they had considered collecting nationwide data on water utilities' use of asset management but did not have the resources to pursue it. Leveraging existing data collection methods may be a cost-effective way for the agencies to collect this information. EPA conducts periodic needs assessment surveys of water utilities and has included questions about asset management use in the wastewater survey, but not in the drinking water survey. EPA officials said they did not receive enough responses to questions in the wastewater survey, and they have not considered including them in the drinking water survey. By continuing to include questions on wastewater utilities and considering questions about drinking water utilities' use of asset management in the surveys, EPA could have better assurance that it has information on the effectiveness of its training efforts with USDA. In addition, EPA and USDA officials told GAO that the agencies share anecdotal data on the benefits of asset management through technical assistance, but had not considered compiling such information into one document to encourage water utilities to adopt it. EPA and USDA are not required to compile such information, but doing so could provide information on benefits, including cost savings, and costs to water utilities that have not received training and could help encourage them to adopt asset management practices.