



Highlights of [GAO-04-382](#), a report to the Chairman, Subcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure, House of Representatives

WATERSHED MANAGEMENT

Better Coordination of Data Collection Efforts Needed to Support Key Decisions

Why GAO Did This Study

Reliable and complete data are needed to assess watersheds—areas that drain into a common body of water—and allocate limited cleanup resources. Historically, water officials have expressed concern about a lack of water data. At the same time, numerous organizations collect a variety of water data. To address a number of issues concerning the water data that various organization collect, the Chairman of the Subcommittee on Water Resources and Environment asked GAO to determine (1) the key entities that collect water data, the types of data they collect, how they store the data, and how entities can access the data; and (2) the extent that water quality and water quantity data collection efforts are coordinated.

What GAO Recommends

To enhance and clearly define authority for coordinating the collection of water data nationwide, the Congress should consider formally designating a lead organization for this purpose. Among its responsibilities, the organization would (1) support the development and continued operation of regional and state monitoring councils, (2) coordinate the development of an Internet-based clearinghouse to convey what entities are collecting what types of data, and (3) coordinate development of clear guidance on metadata standards so that data users can integrate data from various sources.

www.gao.gov/cgi-bin/getrpt?GAO-04-382.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov.

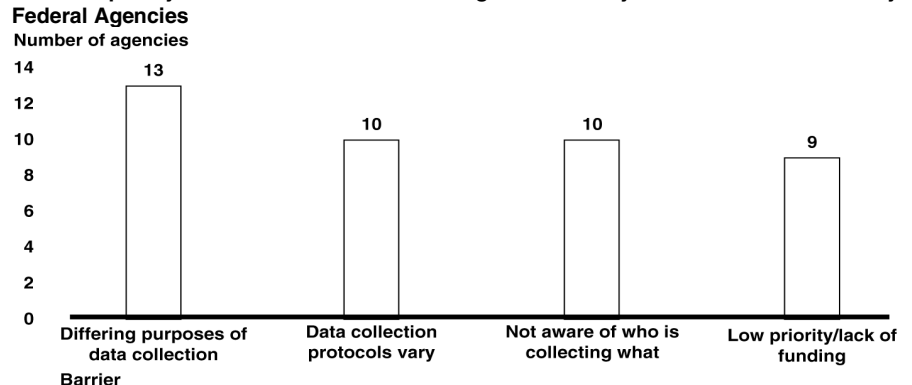
What GAO Found

At least 15 federal agencies collect a wide variety of water *quality* data. Most notably, the U.S. Geological Survey operates several large water quality monitoring programs across the nation. States also play a key role in water quality data collection to fulfill their responsibilities under the Clean Water Act. In addition, numerous local watershed groups, volunteer monitoring groups, industries, and academic groups collect water quality data. In contrast, collection of water *quantity* data is more centralized, with three federal agencies collecting the majority of data available nationwide.

While GAO found notable exceptions, officials in almost all of the federal and state agencies contacted said that coordination of water quality data was falling short of its potential. As illustrated below, key barriers frequently identified as impeding better coordination of water quality data collection include (1) the significantly different purposes for which groups collect data, (2) inconsistencies in groups' data collection protocols, (3) an unawareness by data collectors as to which entities collect what types of data, and (4) low priority for data coordination, as shown in a lack of support for councils that promote improved coordination. GAO concluded that designating a lead organization with sufficient authority and resources to coordinate data collection could help alleviate these problems and ensure that watershed managers have better information upon which to base critical decisions.

Data collectors strongly agree that coordinating water *quantity* data collection is considerably less problematic. Reasons include the fact that controversial water allocation decisions require accurate and complete water quantity data; that some of the technologies for measuring water quantity allow for immediate distribution of data; that water quantity data parameters are generally more consistent; and that coordination is simplified in that relatively fewer entities collect these data. Collectors of water quantity data generally agreed that an overall shortage of data was a more serious problem than a lack of coordination of the data that are collected.

Most Frequently Cited Barriers to Coordinating Water Quality Data Collection Efforts by 15 Federal Agencies



Source: GAO.