

FRESHWATER SUPPLY

States' Views of How Federal Agencies Could Help Them Meet the Challenges of Expected Shortages

Why GAO Did This Study

The widespread drought conditions of 2002 focused attention on a critical national challenge: ensuring a sufficient freshwater supply to sustain quality of life and economic growth. States have primary responsibility for managing the allocation and use of water resources, but multiple federal agencies also play a role. For example, Interior's Bureau of Reclamation operates numerous water storage facilities, and the U.S. Geological Survey collects important surface and ground-water information.

GAO was asked to determine the current conditions and future trends for U.S. water availability and use, the likelihood of shortages and their potential consequences, and states' views on how federal activities could better support state water management efforts to meet future demands.

For this review, GAO conducted a web-based survey of water managers in the 50 states and received responses from 47 states; California, Michigan, and New Mexico did not participate.

What GAO Found

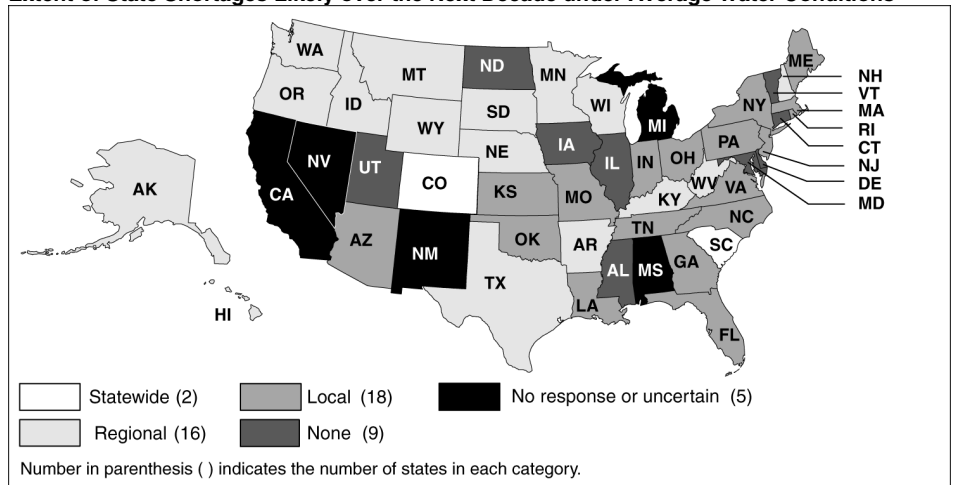
National water availability and use has not been comprehensively assessed in 25 years, but current trends indicate that demands on the nation's supplies are growing. In particular, the nation's capacity for storing surface-water is limited and ground-water is being depleted. At the same time, growing population and pressures to keep water instream for fisheries and the environment place new demands on the freshwater supply. The potential effects of climate change also create uncertainty about future water availability and use.

State water managers expect freshwater shortages in the near future, and the consequences may be severe. Even under normal conditions, water managers in 36 states anticipate shortages in localities, regions, or statewide in the next 10 years. Drought conditions will exacerbate shortage impacts. When water shortages occur, economic impacts to sectors such as agriculture can be in the billions of dollars. Water shortages also harm the environment. For example, diminished flows reduced the Florida Everglades to half its original size. Finally, water shortages cause social discord when users compete for limited supplies.

State water managers ranked federal actions that could best help states meet their water resource needs. They preferred: (1) financial assistance to increase storage and distribution capacity; (2) water data from more locations; (3) more flexibility in complying with or administering federal environmental laws; (4) better coordinated federal participation in water-management agreements; and (5) more consultation with states on federal or tribal use of water rights. Federal officials identified agency activities that support state preferences.

While not making recommendations, GAO encourages federal officials to review the results of our state survey and consider opportunities to better support state water management efforts. We provided copies of this report to the seven departments and agencies discussed within. They concurred with our findings and provided technical clarifications, which we incorporated as appropriate.

Extent of State Shortages Likely over the Next Decade under Average Water Conditions



Source: GAO analysis of state water managers' responses to GAO survey.

www.gao.gov/cgi-bin/getrpt?GAO-03-514.

To view the full report, including the scope and methodology, click on the link above. For more information, contact Barry Hill at (202) 512-9775 or hillb@gao.gov.