

August 2000

DRINKING WATER

Spending Constraints Could Affect States' Ability to Implement Increasing Program Requirements



G A O

Accountability * Integrity * Reliability

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Abbreviations

ASDWA	Association of State Drinking Water Administrators
EPA	Environmental Protection Agency



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August 31, 2000

The Honorable Thomas J. Bliley, Jr.
Chairman, Committee on Commerce
House of Representatives

The Honorable Michael Bilirakis
Chairman, Subcommittee on Health and Environment
Committee on Commerce
House of Representatives

The Honorable Brian P. Bilbray
House of Representatives

The Honorable Rick Lazio
House of Representatives

Ensuring an adequate supply of safe drinking water requires investing not only in physical infrastructure, such as water treatment and distribution systems, but also in essential activities, such as training water system operators and monitoring compliance with standards. In the Safe Drinking Water Act Amendments of 1996, the Congress enacted new programs to better protect drinking water supplies and public health. Under the act, the states are responsible for implementing a number of programs, including those to help ensure that the nation's thousands of drinking water systems have the financial, technical, and managerial ability to comply with regulations and protect sources of drinking water from contamination. In addition, the states must oversee water systems' compliance with complex new regulations on specific contaminants. (App. I provides an overview of some of the key requirements of the 1996 amendments.)

To help states meet these responsibilities, the Congress, through the 1996 amendments, substantially increased the amount of funding authorized to support drinking water programs. First, the amendments authorized an increase in the funding for Public Water System Supervision grants from \$70 million to \$100 million annually through fiscal year 2003. These supervision grants to the states are directed at program implementation activities, such as providing technical assistance to local water systems, conducting inspections, and overseeing water systems' compliance with requirements for testing and treating water quality. Second, the

amendments authorized \$9.6 billion, to be appropriated through 2003, to establish the Drinking Water State Revolving Fund. In its annual budgets, the Environmental Protection Agency (EPA) requests appropriations to capitalize the states' funds and makes specific allotments to each state for that purpose. (The states, in turn, lend money from the funds to their local water systems for improvements that are needed to comply with federal drinking water regulations and protect public health. As loans are repaid, the states' funds are replenished, enabling them to make loans for other eligible drinking water projects.) While the state revolving funds are primarily directed at financing local infrastructure, the states, at their option, may reserve or "set aside" up to 31 percent of their annual allotment to help implement their drinking water programs and to perform related activities, such as training water system operators. The states must match a portion of both the supervision grants and the revolving fund set-asides. Despite the significant increases in the amount of funding the Congress has authorized to help the states implement their programs, state representatives have expressed concerns about whether the states have sufficient resources to fulfill their responsibilities under the act.

In recognition of the key role that the states play in ensuring compliance with the requirements of the Safe Drinking Water Act, you asked us to assess the amounts of funding available and expended for implementing the states' drinking water programs. As agreed with your offices, this report provides information on (1) how EPA's budget requests for the states' implementation of their drinking water programs compare with the amounts authorized and estimated to be needed; (2) how much the states have spent since the passage of the 1996 amendments to implement these programs and how the expenditures compare with the estimated needs; (3) what effects federal funding levels have had, and may have in the future, on the states' ability to implement their programs; and (4) what existing practices have the potential to help the states implement their drinking water programs more effectively and efficiently.

As a measure of the amount of funding states need to implement their drinking water programs, we used estimates developed for fiscal years 1999 through 2005 by the Association of State Drinking Water Administrators (ASDWA) with the support and participation of EPA.¹ To obtain a nationwide perspective on the states' spending, we mailed a questionnaire to survey 49 state drinking water agencies on their expenditures for implementing their drinking water programs since the 1996 amendments (that is, for fiscal years 1997 through 1999).² To obtain information on the effects of federal funding levels on the states' ability to implement their programs and the practices or programs that might help them implement their programs, we conducted detailed discussions with officials in eight states—Arkansas, Florida, Indiana, Maine, Massachusetts, Ohio, Oregon, and Utah. Criteria for selecting these states included the size of the state's drinking water program, the program's current staffing level, and the state's use of management strategies to implement its program more efficiently or effectively. A detailed discussion of our scope and methodology appears at the end of the report.

Results in Brief

In its budget requests for fiscal years 1998 through 2000, EPA requested about 94 percent of the \$100 million authorized annually by the Safe Drinking Water Act Amendments of 1996 for supervision grants to the states and tribes. For the same fiscal years, EPA requested, on average, 80 percent of the amounts authorized to capitalize the states' revolving loan fund for drinking water. If the states had made maximum use of set-asides from the revolving fund, EPA's requested appropriations would have provided a total of \$308 million in fiscal year 1999 and \$318 million in fiscal year 2000 to help the states meet their responsibilities under the drinking water program, which include overseeing water systems' compliance with treatment and testing requirements, conducting inspections, and taking enforcement action, when necessary. These amounts, when combined with

¹EPA does not routinely estimate the total amounts needed by the states. ASDWA is the professional association serving state drinking water programs; its members are generally the administrators of drinking water programs in the 50 states.

²We did not include Wyoming and the District of Columbia in the survey because they do not implement their own drinking water programs; instead, EPA directly oversees their programs. We also did not include Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. All 49 state agencies responded to our survey. For the purposes of this report, "all states" refers to these 49 states.

required matching funds from the states, would have exceeded the annual needs estimated by ASDWA.

However, information provided by EPA shows that the states generally have not set aside nearly as much money from the revolving loan fund for program implementation as they could have, in part because doing so would have diverted funds from needed infrastructure improvements. According to our nationwide survey of state drinking water agencies, for fiscal years 1997 through 1999, the states' actual expenditures for implementing their drinking water programs—including expenditures of both federal and state funds—were \$214 million, \$237 million, and \$276 million, respectively. About 53 percent of these expenditures was funded from state sources, and, collectively, the states' contributions exceeded the statutory matching requirements. In fiscal year 1999, the only year for which our data permit such a comparison, the states' total expenditures fell short of ASDWA's estimate of the amount needed for program implementation nationwide by about 20 percent.

According to our survey, the amounts of federal funding available for fiscal years 1997 through 1999 had less of an impact on the states' ability to implement their drinking water programs than did the effects of state-imposed spending constraints. Over 75 percent of the states reported that their staffing levels in fiscal year 1999 were inadequate to meet the act's requirements in effect through that year. The following reasons were most frequently cited: (1) the states' authorized staffing and authorized funding levels were too low, (2) hiring freezes prevented the states from filling authorized positions, and (3) inadequate state salaries made it difficult to attract and retain qualified staff. In addition, about 40 percent of these respondents indicated a reluctance to use revolving fund set-asides to address inadequate staffing levels, citing concerns about diverting funds from infrastructure projects and the continued availability of the set-asides in the long term. Our discussions with drinking water program officials from eight states disclosed that they have been able to meet most requirements in effect through fiscal year 1999, generally by scaling back their programs or doing the minimum amount necessary to meet the requirements. According to state program managers, if this situation continues, it could eventually lead to more compliance problems and a larger enforcement workload, especially among small water systems, which make up the overwhelming majority of water systems. Over 90 percent of the surveyed states predicted that their staffing levels would be less than adequate in the future as a number of new program requirements and complex contaminant regulations take effect.

Program officials in the eight states we contacted cited some management practices that could increase the efficiency of program implementation. For example, some states are taking advantage of the expertise in other state and federal agencies or associations. The states also reported the increased use of the Internet to obtain and disseminate information. EPA officials pointed to new requirements that may increase efficiency, including those designed to assess water sources for contamination and improve the ability of water systems to comply with drinking water regulations, but it could take years to realize the benefits.

We provided EPA with a draft of this report for its review and comment. EPA officials, including the Acting Chief of the Protection Branch of EPA's Office of Ground Water and Drinking Water, generally agreed with the information presented. However, EPA officials had concerns in two areas. First, the officials said that the draft report did not sufficiently emphasize the impact of increasing program requirements on the states' future resource needs. We modified the report to highlight existing material concerning the impact of increasing program requirements. Second, the officials noted that our comparison of the funds potentially available to the states, with the needs estimated by ASDWA, could be misleading. We clarified our presentation of this comparison. EPA officials also provided technical clarifications, which we incorporated as appropriate.

Background

The Congress enacted the Safe Drinking Water Act in 1974 to protect the public from the risks of contaminated drinking water. The act required, among other things, that EPA establish (1) drinking water standards or treatment techniques for contaminants that adversely affect human health and (2) requirements for monitoring the quality of drinking water supplies and ensuring the proper operation and maintenance of public water systems. The act also authorized EPA to give the primary enforcement authority for the drinking water program—commonly referred to as “primacy”—to the states that meet certain requirements. Among the key requirements are that the states (1) adopt drinking water regulations that are no less stringent than EPA's national primary drinking water regulations and (2) adopt and implement adequate procedures to carry out the program's requirements and enforce the regulations. All states except Wyoming have assumed primacy for managing their drinking water programs.

To assist the states in developing and implementing their own drinking water programs, the 1974 act authorized EPA to award them program

supervision grants and provided that the federal funds would constitute not more than 75 percent of the cost of implementing state programs. Historically, the federal share of the states' program costs has averaged about 45 percent, with the states providing the remaining funds.

In 1986, the Congress amended the act to significantly increase the number of contaminants to be regulated, strengthen EPA's enforcement authority, and establish various other requirements. In the years after these amendments were enacted, the states experienced great difficulty in meeting increasingly complex and demanding requirements while fulfilling their basic responsibilities. Among other things, the states' drinking water program staffs were typically responsible for performing physical inspections of drinking water facilities (called sanitary surveys), providing technical assistance, ensuring the water systems' compliance with contaminant limits and other program requirements, and taking enforcement action against violators. Funding shortages at the state level were a major reason why the states were having difficulties fulfilling their responsibilities.

The 1996 amendments addressed the states' financial resource problems by increasing the authorized funding for the supervision grants, which totaled \$70 million in fiscal year 1995, to \$100 million annually through fiscal year 2003, and authorizing a total of \$9.6 billion through 2003 to establish the Drinking Water State Revolving Fund for infrastructure improvements at local water systems. The states use their entire supervision grants for implementation activities, such as monitoring a water system's compliance with requirements and providing technical assistance, and are required to provide matching funds equal to one third of the grant's amount. To give the states more flexibility in operating their drinking water programs, the Congress gave them the option of setting aside up to 31 percent of their annual revolving fund allotments for certain designated activities, most of which are related to program implementation. The states may set aside up to

- 2 percent to provide technical assistance to small water systems for such purposes as selecting an appropriate treatment technology;
- 4 percent to administer their revolving fund programs;
- 10 percent of their annual revolving fund allotments for a combination of the following: supervision of public water systems; technical assistance through programs designed to protect sources of drinking water; strategies to help ensure the financial, technical, and managerial

-
- capacity of water systems to provide safe drinking water; and programs to certify water system operators; and
- 15 percent for several other categories of activities, such as establishing and implementing wellhead protection programs to protect groundwater sources of drinking water.

The states must match the 10-percent set-aside on a dollar-for-dollar basis,³ but they are not required to provide matching funds for the other set-asides.

In addition to providing more funding to the states, the 1996 amendments added a number of new responsibilities. For example, the amendments established new programs for protecting drinking water sources and helping to ensure the financial, technical, and managerial viability of water systems. As these new programs are being implemented, the states will also be overseeing water systems' compliance with complex new regulations on specific contaminants. For example, conventional water treatment practices require the addition of disinfectant chemicals to the water that, while effective in controlling many harmful microorganisms, can combine with organic and inorganic compounds in the water and form potentially harmful disinfection by-products. The Disinfectants/Disinfection By-Products Rule attempts to minimize risks from these by-products and still control microbial contaminants.

Although EPA does not routinely estimate the states' resource needs for implementing the requirements of the Safe Drinking Water Act, ASDWA has periodically developed such estimates with the support and participation of EPA. As the professional association serving state drinking water programs, ASDWA is a key stakeholder in EPA's development of regulations and guidance and periodically prepares reports on various aspects of the drinking water program as a service to its members and EPA. Since 1988, ASDWA has prepared three estimates of the resources the states need to fulfill their responsibilities under the Safe Drinking Water Act. The most recent estimate incorporated the requirements of the 1996 amendments and covers fiscal years 1999 through 2005.

³Up to 50 percent of the required matching funds for the 10-percent set-aside may consist of the state's match to the supervision grant in 1993. Therefore, some states are only required to provide half of the match in "new" money.

EPA's Budget Requests Have Been Less Than Amounts Authorized but Sufficient to Cover the States' Estimated Needs

For fiscal years 1998 through 2000, EPA annually requested less than the amounts that the Congress had authorized for the implementation of the states' drinking water programs. However, if all of the states had chosen to set aside the maximum allowable portion of their allotments from the revolving fund, then EPA's budget requests would have provided them with funding levels that—combined with their required matching contributions—exceeded the aggregate amount ASDWA estimated the states would need. The amount would have exceeded ASDWA's total estimate by \$27 million in fiscal year 1999 and \$44 million in fiscal year 2000. (ASDWA did not estimate needs for fiscal year 1998.)

EPA's Budget Requests Have Been Less Than the Authorized Funds

According to EPA officials, the agency's annual budget request, as reflected in the President's Budget, indicates (1) the level of resources that agency officials believe is needed to fulfill EPA's mission and program responsibilities, including funding for the states' drinking water programs, and (2) the planning ceilings and policy directives provided by the Office of Management and Budget. Consequently, as is the case with other EPA programs, the amounts requested by EPA may fall below the amounts authorized by the Congress.

The two primary sources of federal funding for the states' implementation of their drinking water programs are the supervision grants and the set-asides from the revolving fund. Table 1 shows the differences between the amounts authorized and requested for fiscal years 1998 through 2000 for the states' implementation of their drinking water programs. For the purpose of this analysis, we (1) adjusted the amounts for the supervision grants and the revolving fund to include all states except Wyoming and (2) computed the amount of the revolving fund allotment available for set-asides at 31 percent—the maximum amount allowed.⁴

⁴We did not include Wyoming in the analysis because it does not have primacy for the drinking water program. In addition, we did not include the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Indian Tribes. The former Trust Territories were also excluded from the supervision grants.

Table 1: Authorized Funds and EPA Budget Requests for the States' Implementation of Their Drinking Water Programs, Fiscal Years 1998 Through 2000

Dollars in millions

Fiscal year	Authorized funds ^a	Budget request	Difference between authorized funds and budget request	Budget request as a percentage of authorized funds
1998				
Public Water System Supervision grants	\$90.5	\$84.9	\$5.6	93.8
Drinking Water State Revolving Fund allotments available for set-asides	280.6	212.4 ^b	68.2	75.7
Total	\$371.1	\$297.3	\$73.8	80.1
1999				
Public Water System Supervision grants	\$90.6	\$85.0	\$5.6	93.8
Drinking Water State Revolving Fund allotments available for set-asides	280.0	222.7 ^b	57.3	79.5
Total	\$370.6	\$307.7	\$62.9	83.0
2000				
Public Water System Supervision grants	\$90.6	\$85.0	\$5.6	93.8
Drinking Water State Revolving Fund allotments available for set-asides	279.4	232.9 ^b	46.5	83.4
Total	\$370.0	\$317.9	\$52.1	85.9

^aAmounts refer to authorized appropriations under the Safe Drinking Water Act Amendments of 1996.

^bEPA did not expressly request these amounts in its annual budgets. The amounts shown here represent 31 percent of EPA's budget request for the revolving fund, adjusted to show what would be available to the 49 states included in our analysis.

Source: GAO's analysis of data from EPA.

For fiscal years 1998 through 2000, on average, EPA requested about 94 percent of the funding authorized for supervision grants and 80 percent of the funding authorized for the revolving fund, from which the set-asides are available. As shown in table 1, EPA's requests for the supervision grants remained constant at about \$85 million during this period, while its requests for the revolving fund allotments have increased, making more funds available for set-aside use each year, from \$212 million in fiscal year 1998 to \$233 million in fiscal year 2000. (During this period, EPA received the amounts it requested for the supervision grants and the revolving fund, except for fiscal year 2000, when the appropriation for the revolving fund was \$5 million less than requested.)

In addition to the supervision grants and the revolving fund, the 1996 amendments authorize other appropriations for specific activities, which could provide additional funding to the states. These include \$30 million in authorizations for grants to establish wellhead protection areas, \$5 million to establish a source water petition program,⁵ and \$30 million to provide the states with funding for training and certifying water system operators.⁶ Of these activities, EPA has only reserved funds in fiscal years 1999 and 2000 to provide the states with funds for the costs of training water system operators. According to EPA's Chief, Budget and Accountability, Office of Ground Water and Drinking Water, the agency did not request funds for wellhead protection because almost all of the states already had wellhead protection programs or for a source water petition program because of higher priorities in the drinking water program. She explained that EPA did not reserve funds for training water system operators in fiscal year 1998 because the final guidelines on operator certification training were not issued until February 1999.

EPA's Budget Requests, Combined With Required Matching Contributions From the States, Were Adequate for Estimated Needs

According to ASDWA, the total estimated needs for the states' programs in fiscal years 1999 and 2000 were \$345 million and \$339 million, respectively.⁷ The amounts EPA requested during those years would have been more than enough to meet the states' annual needs as estimated by ASDWA if

- the states took full advantage of the available set-asides—that is, if each state set aside the maximum 31 percent for state implementation activities and provided the required matching funds—and
- the supervision grants and the minimum required matching contributions were included in the total.

⁵Sections 1452 and 1453 of the Safe Drinking Water Act authorize funding for state programs that establish local voluntary incentive-based partnerships for source water protection and remediation.

⁶The 1996 amendments allow EPA to reserve funds from the overall appropriation for the revolving fund for several purposes, including \$30 million for reimbursement for operator training and certification costs, \$10 million for health effects studies, \$2 million for the costs of monitoring for unregulated contaminants, and \$15 million for technical assistance to small water systems. To the extent EPA opts to take these set-asides, the amount of funds available for allotments to the states is reduced.

⁷ASDWA's estimates exclude Wyoming, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Indian Tribes. ASDWA did not estimate the needs for fiscal year 1998.

As indicated in table 2, the funds potentially available to the states from EPA's budget requests, when combined with the states' required matching contributions, would have exceeded the states' collective estimated needs for fiscal years 1999 and 2000 by about \$27 million and \$44 million, respectively. The matching contributions potentially add a significant amount of funds to the total amount available for state implementation—about \$65 million or more per year.

Table 2: Amounts Potentially Available to the States from EPA's Budget Requests, Including the Minimum State Match, Compared to Estimated Needs, Fiscal Years 1999 and 2000

Dollars in millions

Source of funds	Fiscal year 1999	Fiscal year 2000
Public Water System Supervision Grants ^a	\$85.0	\$85.0
Minimum state match to Public Water System Supervision Grants ^b	28.3	28.3
Drinking Water State Revolving Fund allotments available for set-asides ^{a, c}	222.7	232.9
State match to state program management set-asides ^d	35.9	37.6
Total funds potentially available	\$371.9	\$383.8
Estimated needs	\$345.1	\$339.4
Amount above needs	\$26.8	\$44.4

^aWe did not include the amounts allocated for Wyoming, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Indian Tribes. In addition, the supervision grant funds do not include amounts allocated for the former Trust Territories.

^bAmounts are equal to one-third of the supervision grants, the minimum state match.

^cStates are actually setting aside much less than the maximum 31 percent allowed.

^dWe estimated the match as 5 percent of the total revolving fund allotments to the 49 states. The state program management set-aside of 10 percent requires a dollar-for-dollar match but allows 50 percent of the match to come from a state's 1993 match to the supervision grant. Consequently, we assumed that a state would only have to provide 50 percent of the required match.

Source: GAO's analysis of data from EPA and ASDWA.

ASDWA developed an aggregate national needs estimate; it did not estimate each individual state's needs. The Association developed a model that outlined the activities required to implement each regulation or program

and estimated the cost of these activities for fiscal years 1999 through 2005. The activities were identified by state, ASDWA, and EPA officials, and the state representatives developed the average costs for the program activities identified in the model. Nine states tested the model, which was then revised and used to project a national total. The estimated costs varied, depending on the size of a state's program, with each state categorized as small, medium, or large on the basis of its full-time equivalent staff levels and other considerations. See appendix II for more information on ASDWA's estimates.

We asked the drinking water program officials in our eight case study states to review ASDWA's model and comment on the reasonableness of the values used for estimating costs. These officials said that, overall, the cost and staff estimates used in the model were "somewhat reasonable" (seven states) or "very reasonable" (one state), although some questioned specific elements of the estimates. For example, some officials commented that the cost estimates for technical or clerical staff were either too high or too low, especially for technical staff. The director of the drinking water program in Massachusetts remarked that, because of the higher cost of living in that state, the average cost for a technical staff year is \$80,000—much higher than the \$50,000 technical staff year estimated by the model.⁸ Some officials also noted that, due to unique features within their programs or their states, the model did not exactly fit their situation. For example, the director of the drinking water program in Arkansas commented that his state has an extensive program for collecting and analyzing drinking water samples for compliance with standards, whereas most other states rely upon the water systems to do this. Officials in Arkansas, Florida, Ohio, and Utah noted that there were some discrepancies between elements of the model and their particular situations, but these discrepancies seemed to balance each other out, so that the overall estimates were acceptable. In two states, the model's projected staff needs were considered high. In Maine, for example, the program director believed that the state could have operated with 8 to 13 fewer staff years to implement the program in 1999 than the model projected. Indiana's program director believed that the model's staff year estimates were overstated by about 10 percent.

ASDWA officials acknowledge that the model might not be reflective of the needs of individual states or specific aspects of their programs. The officials explained that the model was designed to develop a national

⁸Staff-year costs include salary and benefits.

projection of resource needs, based on a composite model of small, medium, and large states' needs. Because the model was developed and tested by almost 25 percent of the states, ASDWA officials believe that the projected national need is reasonable. Our review of the methods used to develop the model indicates that the Association took reasonable measures to derive and validate its cost estimates and confirms its contention that the model could be used to develop national estimates. Thus, we believe that using ASDWA's estimates as an approximation of future costs is reasonable.

States' Contributions Have Exceeded Statutory Matching Requirements, But Overall Spending Has Fallen Short of Estimated Needs

A significant share of the states' collective expenditures to implement their drinking water programs has been funded from state sources. In the aggregate, this state funding has exceeded the statutory matching requirements for (1) supervision grants and (2) the revolving loan fund set-asides. However, some states have not set aside all of the revolving loan funds that they could have, at least in part because doing so would have diminished the amount of funds available to lend to water systems for infrastructure improvements. The states' collective spending has fallen short of the needs estimated by ASDWA.

States' Share of Total Expenditures Has Generally Exceeded Statutory Matching Requirements

States are required to match funds equal to one-third of their supervision grants and to match dollar-for-dollar any funds obtained under the 10-percent set-aside for managing various program activities. According to the results of our nationwide survey, the states are contributing a significant share of the funding for their programs and are contributing more funding than required to meet these statutory matching provisions. During fiscal years 1997, 1998, and 1999, state funds were the source of 53 percent, on average, of the states' total expenditures for implementing their drinking water programs. Of the expenditures that came from the states' funding, 30 percent was provided to match federal funds, and 70 percent consisted of other state funds for implementing state drinking water programs. Table 3 provides a breakdown of the funding sources for the states' spending and shows that the states contributed about half of the total expenditures, on average, over this 3-year period.

Table 3: Sources and Amounts of States' Expenditures for Drinking Water Program Implementation, Fiscal Years 1997 Through 1999

Dollars in millions

Amount and percentage of total expenditures by year	Funding source						Grand total
	Federal funds			State funds			
	Public Water System Supervision grants	Drinking Water State Revolving Fund set-asides	Total federal funds	Required matching contributions	Funding from other state sources ^a	Total state funds	
1997							
Expenditures	\$82	\$8	\$90	\$35	\$89	\$123	\$214
Percentage of total expenditures	38.4	3.9	42.3	16.2	41.4	57.7	100.0
1998							
Expenditures	\$82	\$26	\$108	\$37	\$92	\$129	\$237
Percentage of total expenditures	34.6	11.2	45.8	15.4	38.8	54.2	100.0
1999							
Expenditures	\$84	\$57	\$141	\$43	\$91	\$134	\$276
Percentage of total expenditures	30.5	20.8	51.2	15.8	33.0	48.8	100.0
3-year average							
Expenditures	\$83	\$31	\$113	\$38	\$91	\$129	\$242
Percentage of total expenditures	34.2	12.7	46.8	15.8	37.4	53.2	100.0

^aThe majority of states (57 percent) reported that less than 10 percent of their funding from other state sources, if any, was used to implement activities that are in addition to those required under federal drinking water regulations.

Note: Some totals do not add due to rounding.

Source: GAO's survey of 49 state drinking water programs.

Some States Did Not Take Full Advantage of Revolving Fund Set-Asides

Set-aside activity varied significantly from fiscal years 1997 through 1998, the only years for which complete information on set-asides is available.⁹ Table 4 shows how much of the available set-asides the states reserved and expended during those years and provides partial data for fiscal year 1999.

Table 4: Availability and Use of Drinking Water State Revolving Fund Set-Asides, Fiscal Years 1997 Through 1999

Dollars in millions

Set-asides	Fiscal year 1997	Fiscal year 1998	Fiscal year 1999
Authorized by the 1996 amendments	\$274.1	\$280.6	\$280.0
Requested in EPA's budget (amount potentially available)	376.3 ^a	212.4	222.7
Reserved by states from amount potentially available	238.4 ^b	95.7	83.8 ^c
Expended by states	\$8.0	\$26.0	\$57.0

^aAmount includes fiscal year 1997 budget request of \$151.6 million plus 31 percent of the funds appropriated for the revolving fund in fiscal years 1995 and 1996 of \$225 and \$500 million, respectively.

^bAmount includes set-asides available from the fiscal year 1995 and 1996 appropriations of \$225 million and \$500 million, respectively, because these funds were not available to the states until the revolving fund was established in fiscal year 1997.

^cStates have 2 years, or until September 30, 2000, to reserve the fiscal year 1999 set-asides. Amount shown represents the total set-asides reserved as of August 2000.

Source: GAO's analysis of data from EPA and GAO's survey of state drinking water programs.

⁹Grants to the states are available for obligation in the fiscal year for which the funds are authorized and the following fiscal year. This means that states have until September 30, 2000 to obligate their fiscal year 1999 grants.

During fiscal year 1997, the states had a one-time opportunity to set aside up to 10 percent of their revolving fund allotments for source water delineation and assessment activities,¹⁰ and every state took advantage of this opportunity to some extent. Although this set-aside was available only in fiscal year 1997, the states have up to 4 years to obligate these funds. In fiscal year 1998, however, the states set aside, on average, less than half of the revolving fund allotments they could have for program implementation, in part, because doing so would have diverted funds from needed infrastructure improvements. According to EPA's most recent survey of drinking water infrastructure needs, for the 20-year period from 1995 through 2014, a total of \$138.4 billion (in 1995 dollars) will be needed to build new, and upgrade the existing, infrastructure of the nation's water systems.¹¹ The states spent considerably less than the amounts they reserved from the available set-asides because it took some time for them to get new activities, such as the revolving loan fund, underway. In addition, the states can spend the funds they have reserved over a number of years, in accordance with work plans approved by EPA.

While set-aside usage varied by state, most states did not take full advantage of the allowable set-asides. During fiscal years 1997 and 1998, 11 and 8 states, respectively, used the full 31 percent set-aside allowed by law. The most frequently used set-asides were the 4-percent administrative set-aside and the 2-percent set-aside for technical assistance to small public water systems. Table 5 shows the extent to which the states used each type of set-aside.

¹⁰Section 1453 of the Safe Drinking Water Act, as amended, requires that the states delineate the boundaries of areas from which public water systems receive supplies of drinking water and within each delineated area determine the susceptibility of the public water system(s) to contamination.

¹¹*Drinking Water Infrastructure Needs Survey: First Report to Congress*, EPA 812-R-97-001, Office of Water (Jan. 1997).

Table 5: States' Use of Set-Asides From the Drinking Water State Revolving Fund, Fiscal Years 1997 and 1998

Set-aside category	States taking maximum set-aside	States taking less than the maximum set-aside	States taking no set-aside
1997			
4-percent administrative	47	2	0
2-percent technical assistance	37	9	3
10-percent state program management	14	22	13
15-percent local assistance	17	32	0
Full 31 percent	11	38	0
1998			
4-percent administrative	46	2	1
2-percent technical assistance	41	2	6
10-percent state program management	16	21	12
15-percent local assistance	10	21	18
Full 31 percent	8	41	0

Source: GAO's analysis of data from EPA.

States' Collective Spending Is Less Than ASDWA's Estimated Needs

Although they have contributed more funds than required by the federal matching provisions, according to the state expenditure data obtained in our survey, the states collectively may be spending less than the nationwide amounts that ASDWA estimates are needed. For example, in fiscal year 1999—the only year for which our data permit a direct comparison—collective state expenditures, including funds from both state and federal sources, were about 80 percent of the amount estimated to be needed for program implementation.¹² If recent trends continue over the next several years—that is, if EPA's appropriations for supervision grants and the state revolving fund remain at about their existing levels relative to the amounts authorized and the states collectively continue to make use of only about half of the available set-asides—then the gap between the amounts

¹²We collected data on how much the states spent to implement their drinking water programs for fiscal years 1997 through 1999 only; ASDWA estimated the amount of funding the states would need to implement their programs for fiscal years 1999 through 2005 only.

expended and estimated to be needed could grow larger. According to ASDWA, by fiscal year 2005, the states will need an estimated \$449 million to implement their drinking water programs, an increase of about 30 percent from fiscal year 1999. Table 6 shows the projected resource needs for implementing the states' oversight programs, by year, from fiscal years 1999 through 2005.

Table 6: Resource Needs for Implementing the States' Drinking Water Programs, Fiscal Years 1999 Through 2005

Dollars in millions

Year	Full-time equivalent staff	Funding
1999	4,911	\$345
2000	5,020	339
2001	5,190	362
2002	5,208	374
2003	5,588	414
2004	5,755	439
2005	5,252	\$449

Note: The estimates do not include Wyoming or the District of Columbia. In addition, we adjusted ASDWA's estimates to exclude Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

Source: GAO's presentation of data from ASDWA.

Factors Other Than Federal Funding Levels Affected Most States' Ability to Implement Their Drinking Water Programs

According to our nationwide survey and more detailed discussions with drinking water officials in eight states, for fiscal years 1997 through 1999, factors other than federal funding levels affected their ability to implement their drinking water programs. These factors include less than adequate authorized staffing and funding at the state level (while exceeding statutory matching requirements, the states spent less than the amount ASDWA had estimated was needed), state-imposed hiring freezes, and inadequate state salaries, which made it difficult to attract and retain qualified staff. Other factors, such as concerns about using revolving fund money for program implementation instead of infrastructure projects, made it difficult for some states to use all of the available federal funding. Despite these factors, program officials from all eight states told us they were able to meet most program requirements in effect through fiscal year 1999, largely by scaling back their programs and doing the minimum amount of work to

meet requirements. As program responsibilities increase over the next 5 years, the state program officials indicated that these factors will likely play a greater role in their ability to implement their programs.

Most State Programs Reported Inadequate Staffing Levels Because of State-Imposed Spending Constraints

In responding to our nationwide survey, 76 percent of the states reported that their current staffing levels were less than adequate, or much less than adequate, to implement their programs. Among these states, the most frequently cited “major” or “moderate” reasons for not having an adequate staffing level were inadequate authorized state staffing levels (76 percent), inadequate authorized state funding levels (60 percent), state-imposed hiring freezes that prevented program offices from filling authorized positions (41 percent), and inadequate state salary structures, which made it difficult to attract and retain qualified staff (49 percent).

To obtain more detailed information on factors that affected the states’ ability to implement their programs, we conducted in-depth interviews with drinking water program officials from eight states. In general, we were told that state legislatures authorize the number of staff that state drinking water programs can hire and/or the amount of state funding the programs can receive. This can create situations in which some states have adequate authorized staffing levels to carry out program responsibilities but not enough funding to hire all of the authorized staff. Other states may have adequate funding but cannot hire anyone because they have inadequate authorized staffing levels or because there is a hiring freeze in effect. Program officials from five of the eight states that we contacted raised concerns about the impact of inadequate state staffing and funding or hiring freezes. For example:

- Officials from Maine said that they do not currently have adequate authorized staffing or funding levels and they have an informal hiring freeze in effect. They commented that, even if they did receive additional federal funds, unless the authorized state staffing level is increased, they would not be able to hire new permanent staff and would have to use contractors to perform program responsibilities.
- An official from Indiana said that the state’s drinking water program has a serious funding shortage and estimated that it needs to increase its total resource level by at least 50 percent. This official explained that the authorized state funding level for the program is only enough to meet the match required to obtain federal funds.

In addition to the factors mentioned above, program officials from two of the eight states that we contacted partly attributed inadequate staffing levels to an inability to pay staff competitive salaries. These officials explained that inadequate salaries have made it difficult to attract and retain qualified staff. For example, Arkansas officials told us that the state's program had several vacancies because the low salaries it must offer prospective employees made it noncompetitive in the labor market. They explained that, even for entry-level positions, the applicants expected salaries much higher than the state could offer; moreover, many of the staff that they hired have used the state as a training ground and often take positions in private consulting firms. The officials said that they simply cannot retain qualified staff for the long term.

Recently, an ASDWA representative raised concerns during a congressional hearing about the effects of hiring freezes and inadequate staffing on the states' ability to implement their programs. During a March 1999 hearing before the Senate Committee on Environment and Public Works, Subcommittee on Fisheries, Wildlife, and Drinking Water, an ASDWA representative said a number of states were facing the challenge of trying to implement their programs with limited personnel because of hiring freezes and staff ceilings at the state level. The representative said that the states were being asked to do more and more with no new staff or limited staff. This official acknowledged that additional federal funding would not necessarily help those states that have been experiencing these challenges.

After the Safe Drinking Water Act was amended in 1986, the states' overall fiscal conditions were not favorable and funding shortages affected their ability to implement their programs.¹³ However, the states' fiscal conditions have improved considerably since then. According to the National Conference of State Legislatures, in fiscal year 2000, the states were generally in their best financial condition in decades. Furthermore, in fiscal year 2000, favorable fiscal conditions prompted 31 percent of the states to cut taxes specifically to reduce excess revenues.¹⁴

¹³See *Drinking Water: Widening Gap Between Needs and Available Resources Threatens Vital EPA Program* (GAO/RCED-92-184, July 6, 1992).

¹⁴*State Budget and Tax Actions 2000, Preliminary Report: Executive Summary, National Conference of State Legislatures*. This information is based on 49 states. Massachusetts had not passed its budget by the time this report was issued.

The Director of EPA's Drinking Water Protection Division does not believe that the Congress intended that the federal government would provide all the funding for state drinking water programs. He pointed out that, over time, the amount of federal funding has increased, particularly in recent years, with the authority for the states to use set-asides from the revolving fund to implement their programs. The Director acknowledged that many state drinking water programs are facing challenges, including state-imposed staffing limitations and opposition from state governors and legislatures to diverting too much funding from needed infrastructure projects. Nevertheless, he believes that when the states assume primacy for their drinking water programs, it is their responsibility to ensure that they spend the amounts necessary to adequately implement them.

Certain Factors Have Limited Some States' Use of Revolving Fund Set-Asides

Several of the states that did not have adequate staffing levels attributed this problem to factors that can limit their use of the revolving fund set-asides to help implement their drinking water programs. About 41 percent of these states said that their programs' inadequate staffing levels were due to concerns about using the revolving fund to implement drinking water programs instead of using the money to fund infrastructure projects. Officials from three of the eight case study states voiced similar concerns, for example:

- An Indiana official said that taking set-aside money from the revolving fund for program activities is very difficult because the attitude of the state budget agency is that as much of the revolving fund money as possible should be used to finance infrastructure projects. As a result, the set-asides are not as helpful as they could be.
- An Oregon official acknowledged that the committee that advises the state's drinking water program is concerned about using set-aside money from the revolving fund for program implementation. According to this official, while supporting the use of some set-aside money for program implementation, the committee has made it clear that financing infrastructure is the main priority in Oregon. The committee is supportive of using set-aside money to maintain the current level of program services; the committee is reluctant to use the revolving fund money to expand the program.¹⁵

¹⁵Officials from two other states raised concerns about their legislature's policies against expanding state programs as affecting the amount of resources available for their programs.

The Safe Drinking Water Act Amendments of 1996 authorized funding for the revolving fund at a level of \$9.6 billion through 2003. Of the states reporting inadequate staffing levels, approximately 43 percent cited concern about the continued availability of the set-aside money after the fund's authorization expires as a "major" or "moderate" reason for their inadequate staffing levels. Program officials from four of the eight states that we contacted were concerned about impacts to their state's programs if this fund is not reauthorized, for example:

- According to a Utah official, the key reason the state has been able to meet statutory requirements has been because it has taken almost all of the available set-aside money from the revolving fund. Thus, if set-aside money from the fund does not continue to be available, a major source of funding for Utah's program would be eliminated.
- An Oregon official was concerned about the long-term availability of the set-aside money from the revolving fund. This official said he uses set-aside money to replace another funding source and to help offset the effects of inflation. He added that if the revolving fund were not reauthorized, then the state might have to reduce the program's staffing level.

Program managers from both Ohio and Utah believe that the additional funding the states need to meet program requirements should come from an increase in the general supervision grants, rather than the revolving fund set-asides, so the states would not be forced to make a choice between program implementation and infrastructure construction. Four of the eight states we contacted said that an increase in federal supervision grant funding might prompt their legislatures to approve additional state funding since a small increase in state funding could be used to match a larger amount of federal dollars. About 30 percent of the states we surveyed said that an insufficient level of funding for the supervision grant contributed to their inadequate staffing levels.

States Are Using Different Strategies to Deal With Inadequate Resources

Program officials in all eight states we contacted maintain that they have been able to meet most of the program requirements in effect through fiscal year 1999, despite seven of the eight states having less than adequate resources. The states used a variety of strategies to compensate, including scaling back their programs, doing the minimum necessary to meet requirements, and setting formal or informal priorities among their responsibilities.

Six of the eight states said they have had to scale back their programs by providing less technical assistance to water systems, particularly small water systems, which make up the overwhelming majority of all public water systems. According to EPA, small systems often lack sufficient resources and expertise to comply with complex regulations and many are not financially healthy. As a result, these systems often need help to comply with the regulations. Drinking water officials in both Oregon and Ohio told us that they have less time and resources to devote individual attention to small water systems and still meet their responsibilities under the 1996 amendments. Ohio officials commented that ultimately, this will have an impact on compliance. They said that investing resources in technical assistance initially is much more effective than having to pay for increased enforcement activity later. In addition to cutting back on technical assistance, states have scaled back their programs in other ways. For example, Florida officials said they have reduced their permitting activities, and the state no longer regularly analyzes follow-up checks on water samples to determine the quality of water analyses performed at the 200 laboratories in the state.

Officials from most of the eight states we contacted acknowledged doing the minimum amount necessary to meet program requirements. For example, officials from four states told us that they have reduced the frequency with which they conduct comprehensive inspections of water systems, called sanitary surveys.¹⁶ Among other things, the surveys are intended to help ensure compliance and correct problems before they become serious. Maine officials said they have cut back on sanitary surveys to the minimum levels required by EPA and have reduced bacteriological sampling at transient noncommunity systems. Although normally required on a quarterly basis, the sampling may be done annually if a noncommunity water system is free of sanitary defects, which, for Maine's transient noncommunity systems, means having three consecutive good samples. However, program officials said that they have been performing annual coliform sampling at the state's 900 transient systems even though the three 'good' samples were taken 10 to 20 years ago.¹⁷ The officials acknowledged

¹⁶Only one of the four was not meeting EPA's minimum requirements for conducting sanitary surveys, in particular, the requirement to perform sanitary surveys at transient noncommunity systems every 5 years. Transient noncommunity water systems cater to transitory customers in nonresidential areas such as campgrounds, motels, and gas stations.

¹⁷Coliform is a group of related bacteria whose presence in drinking water may indicate contamination by disease-causing microorganisms.

that they should take the samples for these systems quarterly but said that the workload associated with this would be overwhelming.

Officials from six of the eight case study states said they currently engage in some form of priority-setting. For example, an Oregon official said that the state's program activities have been divided into two groups—those that are considered critical tasks and those that are considered important, but less critical. The other five states currently set priorities in a less formal fashion on the basis of such criteria as the size of the water system, the size of the population at risk, the potential health effects of a violation, and the potential loss of federal funding if the state does not perform an activity. For example, Indiana officials said they do not have the resources to take enforcement actions against all violations and consider such factors in deciding which violations to pursue. Several state officials told us transient noncommunity water systems—such as systems at rest areas or campgrounds that cater to tourists or other short-term visitors—are most likely to get the least attention. Officials from EPA's Office of Ground Water and Drinking Water acknowledged that some states are struggling to meet the requirements of the 1996 amendments, but the agency's position is that the requirements are congressional mandates and it is not appropriate for EPA to set priorities among them.

States Expect the Staffing Situation to Worsen as Program Responsibilities Expand Through 2005

The results of our nationwide survey indicate that 94 percent of the states expect that their staffing levels will be less than adequate or much less than adequate as new program requirements and complex contaminant regulations take effect over the next 5 years. Program officials from seven of the eight states indicated that the state-imposed constraints that currently affect their ability to implement their programs—such as inadequate state staffing and funding levels, hiring freezes, and inadequate state salary levels—will continue to compromise their programs if not addressed. In light of ASDWA's estimate that the states' resource needs will increase by about 30 percent between fiscal years 1999 and 2005, the effects that the states have experienced thus far could be exacerbated in the future.

Program officials from six of the eight states that we contacted said that increasing federal funding to the authorized levels (i.e., an increase of about 7 percent for the supervision grants and 20 percent for the state revolving funds) would make very little difference in their ability to implement program requirements. Some of these officials also said that even if federal funds were increased, it would be difficult to obtain

additional state funding to match the federal funds. Moreover, some of them pointed out that the increase in the supervision grants would be cancelled out by inflation in just a couple of years. For example, Ohio officials said that funding increases would just help maintain the status quo, which does not include the cost of implementing new rules.

In six of the eight states, program officials indicated that the same factors that have made it difficult to use set-aside money from the revolving fund could hinder their use of these funds in the future. In addition, officials from five of the eight states said they would find it very difficult to get their legislatures to provide more matching funds to obtain additional set-aside money. In Ohio, for example, a program official said the state's program has gone as far as it can in using the set-asides because local infrastructure needs far exceed the current resources. According to a program official from Indiana, even if the political sensitivities associated with using revolving fund money for program implementation—and concerns about the continued availability of this money—did not exist, inadequate state funding would make it difficult for Indiana to provide the additional matching funds.

Officials from five of the eight states also reported that determining the extent to which future funding levels would affect their programs is difficult because the details of certain rules, and hence the resulting workload on their programs, are unclear. For example, the Ohio official pointed out that the cost of implementing the arsenic rule depends on where EPA sets the standard for this contaminant. This official said that 225 public water systems in Ohio would be affected by this rule if the arsenic standard were set at 10 milligrams per liter, while 500 systems would be affected if the standard were set at 5 milligrams per liter. Similarly, a Florida official said if the limit for the acceptable amount of radon in drinking water were set at 300 picocuries, about 40 to 50 percent of the systems in Florida would fail.¹⁸ If the standard were lowered to 1,000 picocuries, about 1 percent would fail.

¹⁸A picocurie is the standard measurement of radioactivity.

Management Practices and New Requirements Could Increase the Efficiency and the Effectiveness of States' Drinking Water Programs

Beyond adding more funding, one potential solution to the states' increasing responsibilities under the Safe Drinking Water Act is the adoption of management practices that improve efficiency or otherwise enhance the states' ability to implement their programs. Officials in the eight case study states cited efforts to improve program efficiency by adopting new management practices. Also, the EPA officials we interviewed emphasized that new requirements to develop statewide programs for assessing source waters and to improve the water systems' ability to comply with drinking water regulations, which were mandated in the Safe Drinking Water Act Amendments of 1996, would likely increase the efficiency of state programs over the long term.

States Cited Some Management Practices That Could Increase Their Programs' Efficiency and Effectiveness

Although no one reported any substantively new initiatives, officials from all eight case study states cited some management practices they are using that could increase the efficiency and effectiveness of their drinking water programs. These officials told us that their states are taking advantage of the expertise in other state and federal agencies or associations through contracts, interagency agreements, and partnerships. For example, according to Massachusetts officials, the state program contracts with a consortium of four organizations that provide technical assistance for small water systems to improve their level of compliance with federal requirements.¹⁹ Arkansas has a formal cooperative agreement with the U.S. Geological Survey to conduct source water assessment activities. Program officials in both Utah and Oregon reported that partnerships with other agencies and organizations have assisted them in implementing their programs. When initiating their capacity development activities, officials in both states found partnerships with the Environmental Finance Center at Boise State University to be very helpful.

¹⁹These include the New England Water Works Association, the New England Rural Water Association, the Rural Community Assistance Program, and the Massachusetts Water Works Association.

Nationwide, more than 70 percent of the states we surveyed reported using third-party assistance.²⁰ Of the states that used third-party assistance and reported inadequate staffing levels, 20 percent also reported that using contractors allowed them to meet half or more of their programs' needs. The eight states that we contacted all used contractors to some extent, and four said contractors allowed them to meet half or more of their program needs. However, in Oregon, where contractors meet about half of the program's needs, an official explained that he does not hire contractors to supplement state staff. Instead, Oregon chooses to contract out services that can be performed more efficiently by another organization. Arkansas officials also explained that even if the state's drinking water program were operating at its fully authorized staff level, the state would, for the sake of efficiency, continue to contract with third parties that have specialized expertise.²¹

Most of the officials we contacted also reported an increased use of technology. They mentioned using the Internet and developing or improving electronic records management systems as efficient practices. For example, in Indiana, some laboratories submit data electronically, which, according to state officials, allows program staff to react quickly when contaminants are present in water samples. Officials in half of our case study states specifically reported using the Internet as a means of readily obtaining and disseminating information.

New Requirements Are Intended to Increase Efficiency and Effectiveness, But It May Take Years to Realize Benefits

The Safe Drinking Water Act Amendments of 1996 included requirements for state programs to assess drinking water sources for vulnerability to contamination and improve water systems' capacity to comply with federal drinking water regulations. Although these new requirements necessitate the states' investing substantial resources in the short term, according to EPA officials, they will eventually improve both the efficiency and effectiveness of the states' programs.

²⁰Thirty-seven percent of the states using third-party assistance reported contracting for at least 5 full-time staff years.

²¹For example, Arkansas uses money set-aside from the state's drinking water revolving fund to contract with the Arkansas Rural Water Association and the Community Resource Group, Inc. (the Southern Rural Community Assistance Program affiliate) to provide technical assistance for water systems.

An assistant branch chief in EPA's Office of Ground Water and Drinking Water noted that the requirement to assess drinking water sources challenges the states to enhance their programs' long-term effectiveness by investing in increased public involvement, concentrating financial resources in identified drinking water protection areas, and emphasizing environmental threats requiring protective measures. By incorporating a public review of the assessment program's design and results, as the statute requires, the states are more likely to raise the public's interest so that the information will be used to improve the quality of drinking water, the official noted. In addition, that official noted that the amendments' requirement for designating drinking water protection areas encourages the states to maximize resources by focusing their efforts intensively within those areas most influential to the quality of water at wells and intake locations. Finally, the assessment requirement emphasizes the identification of contamination threats to all sources of public drinking water. Ultimately, this requirement might reduce the need to monitor and treat supplies, and it is widely recognized as the most cost-effective approach to protecting drinking water.

The Small Systems Coordinator in EPA's Office of Ground Water and Drinking Water anticipates that the requirement to improve local water systems' capacity will also help the states incur long-term benefits while improving public health by reducing the amount of resources they spend on oversight, assistance, and enforcement. Among the amendments' requirements addressing issues associated with small systems' capacity were provisions to help ensure that drinking water systems meet federal regulations. Specifically, the amendments require the states to help existing water systems become more efficient and effective and to ensure that new systems demonstrate the financial, technical, and managerial capability to comply with drinking water regulations. As a result, systems will eventually require less attention from the states, which will free their resources to address other needs. An official we interviewed in Utah provided an example of how a state might address the regulatory compliance needs of existing systems. Utah has developed an Improvement Priority System to evaluate and score each water system in several areas relating to condition and performance. This allows water systems to address and resolve existing or potential problems in order of their significance and helps the state concentrate its resources on those systems that need the most assistance.

Observations

Our survey of officials from state drinking water programs shows that in implementing these programs, the states have funded a significant portion of their expenditures from their own sources. Nevertheless, the states' collective expenditures have fallen short of the needs estimated by ASDWA. Furthermore, our survey suggests that a number of state-level spending constraints, including inadequate state staffing and funding levels, state-imposed hiring freezes, and inadequate state salaries, could impair the states' ability to meet future program requirements. An important factor affecting the level of funding used to implement the states' program is their decision regarding the use of their revolving fund allotments. A decision to use a portion of this money to help pay for program implementation can be difficult because the states' needs for infrastructure are very high.

The eight states we contacted maintain that they have been able to implement almost all statutory program requirements in effect through fiscal year 1999, although only by scaling back their drinking water programs and doing the minimum amount of work necessary. Among other things, the states are cutting back on the technical assistance they provide to local water systems and reducing the frequency of sanitary surveys. However, state officials point out that decreasing the technical assistance and the frequency of sanitary surveys could lead to increased compliance problems in the future, especially among small water systems. As the needs of these programs increase along with the growth in their responsibilities, it will become imperative to address the factors that have thus far affected the states' ability to implement their programs.

Agency Comments

We provided EPA with a draft of this report for its review and comment. We met with EPA officials, including the Acting Chief of the Protection Branch from EPA's Office of Ground Water and Drinking Water. The officials generally agreed with the information presented in our draft report; however, they expressed concerns in two areas. First, the officials said that the draft report did not sufficiently emphasize the impact of the increasing program requirements on the states' future resource needs. We made several changes to highlight material already in the report concerning the impact of potential state resource shortfalls on their future program implementation. Second, the EPA officials noted that our comparison of the funds potentially available to the states with the needs estimated by ASDWA could be misleading because, as our draft report indicated, most states (1) do not take the maximum amount allowed for the revolving fund

set-asides and (2) actually have contributed much more than the minimum amounts required for matching the EPA-provided funds. We clarified our presentation of this comparison. The EPA officials also provided technical clarifications, which we incorporated into the report as appropriate.

Scope and Methodology

To conduct our work, we interviewed officials in EPA's Office of Ground Water and Drinking Water and obtained and reviewed related legislation and program regulations, guidance, and reports. We also interviewed drinking water officials in each of the 10 EPA regional offices and managers of drinking water programs in eight states—Arkansas, Florida, Indiana, Maine, Massachusetts, Ohio, Oregon, and Utah. Criteria for selecting these states included the size of their drinking water programs, current staffing levels, and their use of management strategies to implement their programs more efficiently and effectively. We also obtained information on our objectives from officials of key environmental, trade, and state associations involved in drinking water issues. These groups included ASDWA, the American Water Works Association, the Association of Metropolitan Sewerage Agencies, the Association of Metropolitan Water Agencies, the Council on Infrastructure Financing Authorities, the Council of State Governments, the Environmental Council of the States, the National Conference of State Legislatures, the National Drinking Water Advisory Council, the National Rural Water Association, the Rural Community Assistance Program, and the Natural Resources Defense Council.

To provide information on how EPA's budget requests for program implementation compare with the amounts authorized and estimated to be needed, we obtained information on EPA's budget requests by statutory authorization from officials in the Budget and Accountability section of EPA's Office of Ground Water and Drinking Water. We compared these amounts with the amounts authorized for the states' implementation of drinking water programs, including the amounts authorized for the Public Water System Supervision grants and the Drinking Water State Revolving Fund. We were unable to obtain from EPA an overall estimate of the resources the states need to implement their drinking water programs. EPA does not have, and does not routinely prepare, such estimates. However, in fiscal year 1999, ASDWA, with the support and participation of EPA, estimated the resources needed by the states to implement the requirements of the Safe Drinking Water Act Amendments of 1996 from fiscal years 1999 through 2005. We discussed the methodology used in this analysis for estimating state needs with officials from EPA, ASDWA, and the contractor who helped prepare the needs analysis for ASDWA. We

interviewed EPA officials from the Office of Ground Water and Drinking Water and program officials from the eight states that we contacted on the reasonableness of these estimates.

To provide information on how much the states have spent since the 1996 amendments to implement their drinking water programs, we surveyed program administrators in 49 states. We did not include Wyoming and the District of Columbia in the survey because they do not have primacy for their drinking water programs; instead, EPA directly implements their programs. We also did not include Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands in the survey. We pretested our questionnaire with officials in California, Ohio, and Oregon and obtained comments from ASDWA. We received survey responses from all 49 states (a 100-percent response rate). The survey, with summary responses, appears in appendix III.

To address the effects federal funding levels have had, and will have, on the states' ability to implement their drinking water programs and to obtain information on practices that might help states implement their programs, we relied on in-depth interviews with program officials in the eight states.

Our work was conducted from November 1999 through August 2000 in accordance with generally accepted government auditing standards.

As arranged with your offices, unless you announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will make copies available to interested congressional committees; the Honorable Carol M. Browner, Administrator, Environmental Protection Agency; and the Honorable Jacob J. Lew, Director, Office of Management and Budget. We will also make copies available to others on request.

If you have any questions regarding this report, please contact me at (202) 512-6878. Key contributors to this report were Ellen Crocker, Terri Dee, Carolyn Hall, Luann Moy, and Lisa Pittelkau.

David G. Wood

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Protection Issues

Highlights of the Safe Drinking Water Act Amendments of 1996

Under the Safe Drinking Water Act, EPA is authorized to grant primary enforcement responsibility, commonly referred to as “primacy,” for the drinking water program, to the states that meet certain requirements. Among the key requirements, the states must

- adopt drinking water regulations that are no less stringent than EPA’s national primary drinking water regulations and
- adopt and implement adequate procedures to carry out the program’s requirements and enforce the regulations.

The 1996 amendments include a number of key provisions.

Drinking Water State Revolving Fund

All states (and Puerto Rico) can establish Drinking Water State Revolving Funds, using federal capitalization grant money, to make loans to public water systems to finance projects needed to comply with drinking water regulations. Loan repayments to states are deposited in this fund for future loans. The program also allows states to reserve a portion of their grant to fund activities needed to protect source waters and enhance water system management.

Implementation of Drinking Water Rules

As EPA promulgates drinking water contaminant rules, states educate water system operators about the new requirements and ensure that water quality testing, treatment, and reporting requirements are met. The new rules include the following:

- *Arsenic Rule* –EPA must revise the existing arsenic standard and promulgate a national primary drinking water regulation by January 1, 2001. EPA is proposing to reduce the current arsenic standard from 50 parts per billion to 5 parts per billion.
- *Consumer Confidence Report Rule* – Community water systems must prepare annual water quality reports (consumer confidence reports) for their customers. The reports include information on the source of the drinking water, violations of any federal drinking water standards, and contaminants that were detected and their related health effects.
- *Regulations on Microbial Contaminants, Disinfectants, and Disinfection By-Products* – EPA must promulgate several regulations concerning microbial contaminants, disinfectants, and disinfection by-products. For example, EPA was required to (and did) promulgate a stage 1 disinfectants and disinfection by-products rule, which establishes

maximum residual disinfectant goals and levels for three chemical disinfectants. According to an official with the Association of State Drinking Water Administrators, these regulations will require monitoring and adjustments of the treatment process to balance the control of microbial contaminants and the disinfection by-products, and thus, states will have to work closely with water systems and provide more technical assistance.

- *Monitoring for Unregulated Contaminants* – Starting in 1999, and every 5 years thereafter, EPA must issue a list of no more than 30 unregulated contaminants that public water systems must monitor. The frequency and the schedule of these monitoring requirements will vary according to the number of persons served by the system, the source of supply, and the contaminants likely to be found, ensuring that only a representative sample of small systems are required to monitor.
- *Radon Rule* – EPA must withdraw the regulations previously proposed for radon and promulgate new regulations by August 6, 2000. Under the new proposed regulations, states have the option of developing enhanced state programs to address the health risks from radon in indoor air (called Multimedia Mitigation Programs) as an alternative to requiring individual water systems to meet a more stringent standard for radon in drinking water. States choosing this option would be required to develop programs that include public involvement in the development of the mitigation plan, quantitative goals for reducing radon in new and existing homes, strategies for achieving these goals, and a plan for tracking and reporting results.

Operator Certification

To receive the full allotment of funds for the Drinking Water State Revolving Fund to which states are entitled, states must implement programs to certify operators of drinking water systems. This requirement includes specifying standards for the certification and the recertification of operators of community and nontransient noncommunity water systems in accordance with EPA's guidelines.

Small System and Capacity Development

To receive the full allotment of funds for the Drinking Water State Revolving Fund to which states are entitled, among other things, states must (1) prepare, periodically update, and submit to the EPA Administrator a list of water systems with histories of significant noncompliance; (2) have the legal authorities and other means to ensure that new water systems have the technical, financial, and managerial capability to comply with

drinking water regulations; and (3) develop and implement a strategy for capacity development to assist existing systems in acquiring and maintaining capacity.

Source Water Assessment Programs

States must assess their sources of drinking water (rivers, lakes, reservoirs, springs, and groundwater wells) to identify significant potential sources of contamination and to determine how susceptible the sources of drinking water are to these threats. Thus, at the nation's more than 170,000 water systems, the states must inventory the contaminants and prepare "susceptibility determinations" that evaluate and rank the threats that the inventoried contaminants pose to the water sources.

Association of State Drinking Water Administrators' Estimates of State Resource Needs

To estimate the resources the states need to fulfill their responsibilities in the nation's drinking water program in 1999, the Association of State Drinking Water Administrators (ASDWA) developed a model detailing the activities required by both existing and anticipated regulations and estimated future program costs for fiscal years 1999 through 2005. The activities were identified by a group of state, association, and EPA officials and the state representatives developed the average costs for the program activities identified in the model. These costs were based on the size of a state's program, with all the states grouped into the categories of small, medium, or large according to their full-time equivalent staff levels as well the amount of their supervision grant and the number of water systems in the state. The state members of the work group included a representative from each size category.

After the ASDWA model was developed, nine pilot states (three in each size category) reviewed and validated the model and its assumptions. Each pilot state had an opportunity to either accept the default values or enter an alternate value in the model for each program activity. The model was modified in response to the comments from the pilot states and then used to project the total costs for fiscal years 1999 through 2005 for all states (excluding Wyoming), Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

ASDWA's estimates of available financial resources consist of both federal and state funds and include Public Water System Supervision grants, funds available from allotments to the Drinking Water State Revolving Fund for set-asides, and state funding through appropriations from tax revenues or fee programs. The estimates of available resources are based on the following assumptions:

- a 1-percent per year increase from fiscal years 1999 through 2005 for the Public Water System Supervision grants,
- a 3-percent per year increase from fiscal years 1999 through 2005 for the allotments for the Drinking Water State Revolving Fund,
- an 8.6-percent set-aside for fiscal years 1999 through 2005 from the Drinking Water State Revolving Fund,
- equal expenditures of the \$110.8 million set-aside funds taken in fiscal year 1997 for source water protection expended in equal amounts over a 5-year period from fiscal years 1998 through 2002, and
- a 1-percent per year increase in the states' 1999 aggregate contribution of \$99 million. ASDWA developed the \$99 million estimate by collecting

Appendix II
Association of State Drinking Water
Administrators' Estimates of State Resource
Needs

data from the states for program activities in fiscal year 1997 and adjusting it for inflation.

Summary of States' Responses to GAO's Questionnaire

GAO Survey of State Drinking Water Programs Regarding Administrative Expenditures

Introduction

The U.S. General Accounting Office (GAO) is an agency that assists the U.S. Congress in evaluating federal programs. In recognition of the key role that states play in ensuring compliance with the present and future requirements of the Safe Drinking Water Act, the Committee on Commerce, House of Representatives, has asked GAO to assess the amount of funding available for administering states' drinking water programs.

As part of this study, we are asking your help by completing this questionnaire on staffing levels for state drinking water program implementation and how much states are spending to administer their drinking water programs. In addition to this survey, we are conducting case studies in six states to gather detailed information on how the states have set priorities in their drinking water programs, what effect funding levels may have on the states' abilities to implement their programs, and what innovative practices may potentially help the states meet their obligations.

Part I of the survey contains questions related to personnel issues. Part II of the survey contains a worksheet that collects information on actual state expenditures for administering the drinking water program and questions related to state activities that are in addition to the federal requirements.

Instructions

When answering the questions in this questionnaire, please coordinate with the appropriate members of your staff and officials in other agencies or organizations within your state who have drinking water program responsibilities.

In addition, we are requesting data by federal fiscal year (October 1 to September 30). If you have difficulty providing the data as requested, please call Lisa Pittelkau, (202) 512-6559.

We need your responses to this questionnaire by **March 17, 2000**. Please return your completed questionnaire to the following fax number.

Attn: Lisa Pittelkau
U.S. General Accounting Office
FAX: (202) 512-9925

Or, if you prefer, you can send your responses via regular mail in the enclosed, pre-addressed business reply envelope. If the envelope is missing, please send your completed questionnaire to:

U.S. General Accounting Office
ATTN: Lisa Pittelkau
441 G Street, NW – Room 2T23
Washington, DC 20548-0001

In testing this questionnaire, we found that it takes about 3 hours to complete.

If you have any questions about specific items in the questionnaire, call or e-mail your questions to:

- Lisa Pittelkau at (202) 512-6559
(e-mail address pittelkaul@gao.gov);
- Terri Dee at (617) 565-8868
(e-mail address deet.bos@gao.gov); or
- Carolyn Hall at (617) 565-7550
(e-mail address hallc.bos@gao.gov).

Please provide the following information for the person we should contact if we have any questions.

Name: _____

Title: _____

Organization: _____

Phone #: () _____

E-mail: _____

**Appendix III
Summary of States' Responses to GAO's
Questionnaire**

Part I – Staff Level

1. Consider your state's entire drinking water program during federal fiscal year (FFY) 1999 (October 1, 1998-September 30, 1999.) Please include activities such as information systems development, public notification, labs, wellhead, and source water protection programs. Exclude the underground injection control program.

Compared to the FFY 1997 levels, how have the estimated number of full-time equivalent (FTE) staff changed, if at all? In addition, please provide the number of FTEs used through arrangements with county/local governments, other state agencies, or contractors. (Enter number; if none, enter '0'.)

	FFY 1999 staff levels (Enter number; if none enter zero.)	Compared to <u>federal</u> fiscal year 1997 levels, did FFY 1999 levels increase, decrease, or remain the same? (Check one for each row.)		
		FFY 1999 levels <u>increased</u>	FFY 1999 levels remained <u>the same</u>	FFY 1999 levels <u>decreased</u>
1. Number of <u>authorized</u> drinking water program FTEs	(N ¹ =49) mean: 67.7 median: 45 range: 10 to 267 → sum: 3,315	[32]	[13]	[4]
2. Number of <u>actual</u> drinking water program FTEs at end of FFY	(N=49) mean: 61.1 median: 42 → range: 10 to 260 sum: 2,995	[30]	[13]	[6]
3. Estimated number of state and county/local FTEs used by the drinking water program that are NOT included in authorized or actual FTEs above	(N=48) mean: 10.5 median: 2 → range: 0 to 98 sum: 506	[6]	[40]	[1]
4. Estimated number of FTEs used through contracted services/activities	(N=49) mean: 3.4 median: 2 → range: 0 to 20 sum: 168	[26]	[20]	[1]

¹ 'N' is number of states that responded to item.

**Appendix III
Summary of States' Responses to GAO's
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2. Excluding contractor staff, how adequate is the state's current staffing level (actual drinking water program FTEs plus state and county/local FTEs used by the drinking water program that are not included in the authorized levels at the end of FFY 1999) to meet the requirements of your state's entire drinking water program and what is the future outlook for meeting additional requirements? *(Check one box for each row.)*

Adequacy of current staff levels	Much more than adequate	More than adequate	Adequate	Less than adequate	Much less than adequate
1. To meet current federal drinking water program responsibilities (N=49)	0	0	12	34	3
2. To meet additional responsibilities stemming from the 1996 amendments that are anticipated through, and including, 2005 (N=49)	0	0	3	14	32

**Appendix III
Summary of States' Responses to GAO's
Questionnaire**

3. Excluding contractor staff, if your state's current staffing level (actual drinking water program FTEs plus state and county/local FTEs used by the drinking water program that are not included in the authorized levels at the end of FFY 1999) is **not** considered adequate to meet the current requirements of the federal drinking water program, how important is each of the following reasons for creating this situation? (Check one box for each row.)

[11] The state's current staffing level is considered adequate. (Go to question 6.)

Reason(s) current staffing level is not considered adequate	Major reason	Moderate reason	Minor reason	Not a reason
1. Authorized staffing level is not adequate. (N=37)	14	14	4	5
2. Authorized state funding level is not adequate. (N=37)	12	10	8	7
3. State hiring freeze (formal or informal) precludes hiring. (N=37)	7	8	4	18
4. State salary structure is not adequate to attract/retain qualified staff. (N=37)	8	10	10	9
5. Concerns about continued availability of the Drinking Water State Revolving Loan Fund set-aside monies over the long-term (N=37)	8	8	13	8
6. Concerns about using the Drinking Water State Revolving Loan Fund for program administration versus infrastructure projects (N=37)	10	5	7	15
7. State can't provide funding for the required match for the state program management set-aside. (N=36)	1	3	6	26
8. Other 1 (Please explain in the space provided below.) (N=16) <u>Other Mentioned = 5</u> <u>More Federal Funds Needed = 11</u>	12	4	0	0
9. Other 2 (Please explain in the space provided below.) (N=9) <u>Other Mentioned = 7</u>	4	5	0	0

**Appendix III
Summary of States' Responses to GAO's
Questionnaire**

4. If you checked more than one reason in question 3, which reason is the most important? *(Check one.)*

[9] *Not applicable; did not check more than one reason (Go to question 5.)*

1. [9] Authorized staffing level is not adequate.
2. [6] Authorized state funding level is not adequate.
3. [6] State hiring freeze (formal or informal) precludes hiring.
4. [2] State salary structure is not adequate to attract/retain qualified staff.
5. [3] Concerns about continued availability of the Drinking Water State Revolving Loan Fund set-aside monies over the long-term
6. [2] Concerns about using the Drinking Water State Revolving Loan Fund for program administration versus infrastructure projects
7. [0] State can't provide funding for the required match for the state program management set-aside.
8. [9] Other 1 *(Please specify.)* _____
9. [3] Other 2 *(Please specify.)* _____

5. If your state used contractor staff in addition to state and county/local employees, to what extent has this staffing combination enabled the state to meet the obligations of the drinking water program? *(Check one.)*

1. [1] Met all of our needs
2. [3] Met most of our needs
3. [2] Met about half of our needs
4. [18] Met some of our needs
5. [6] Met hardly any or none of our needs
6. [6] Did not use contractor staff.

**Appendix III
Summary of States' Responses to GAO's
Questionnaire**

Part II - Expenditures

6. On the following worksheet (page 6), please provide information about your state's expenditures for administering your state's drinking water program for federal fiscal years 1997, 1998, and 1999 (October 1-September 30). In providing this information, please note the following:

Row 2d – Local Assistance Set-Aside

Include:

- (1) technical assistance to public water systems for capacity development;
- (2) expenditures to delineate or assess source water protection areas; and
- (3) expenditures to establish and implement wellhead protection programs.

Do NOT include any amounts used for loans or financial assistance to water systems under section 1452(k) of the Safe Drinking Water Act, as amended, such as:

- (1) loans to public water systems to acquire land or conservation easements;
- (2) loans for community water systems to implement source water protection measures or to implement recommendations in source water petitions;
- (3) loans to community water systems to implement source water petitions; or
- (4) financial assistance to public water system systems for capacity development.

Row 4 - Required Match for State Program Management Set-Aside

Do NOT include any credits from 1993

Row 5 - Other State Funding Dedicated to Drinking Water Program

Provide the amount of all state expenditures excluding the required state matches reported in rows 3 and 4.

Do NOT include:

- (1) the required 20 percent state match for the Drinking Water State Revolving Loan Fund capitalization grant,
- (2) expenditures for underground injection control program, or
- (3) any expenditures related to Clean Water Act activities.

**Appendix III
Summary of States' Responses to GAO's
Questionnaire**

Question 6 Worksheet	Actual Administrative Expenditures for Drinking Water Program		
	Federal fiscal year 1997	Federal fiscal year 1998	Federal fiscal year 1999
Federal Funds - Actual Expenditures	(N=49)	(N=49)	(N=49)
1. Public Water System Supervision Grant	mean: \$1,673,002 median: \$1,140,000 range: \$448,000 to \$5,690,000 sum: \$81,977,121	mean: \$1,673,580 median: \$1,213,100 range: \$429,898 to \$5,717,200 sum: \$82,005,399	mean: \$1,715,379 median: \$1,234,200 range: \$410,298 to \$5,674,200 sum: \$84,053,585
2. Drinking Water State Revolving Loan Fund Set-Asides:	(N=49)	(N=49)	(N=49)
a. Administrative	mean: \$82,471 median: \$0 range: \$0 to \$1,683,440 sum: \$4,041,097	mean: \$238,041 median: \$123,622 range: \$0 to \$2,366,708 sum: \$11,664,022	mean: \$362,043 median: \$279,436 range: \$0 to \$1,802,464 sum: \$17,740,087
b. Technical Assistance	mean: \$10,480 median: \$0 range: \$0 to \$254,000 sum: \$513,530	mean: \$54,996 median: \$0 range: \$0 to \$1,183,354 sum: \$2,694,815	mean: \$126,991 median: \$89,832 range: \$0 to \$901,232 sum: \$6,222,559
c. State Program Management	mean: \$32,828 median: \$0 range: \$0 to \$1,277,620 sum: \$1,608,575	mean: \$131,931 median: \$0 range: \$0 to \$1,935,176 sum: \$6,464,613	mean: \$367,580 median: \$116,299 range: \$0 to \$4,552,546 sum: \$18,011,406
d. Local Assistance -- Do NOT include loans or financial assistance to water systems under section 1452(k).	mean: \$45,817 median: \$0 range: \$0 to \$2,104,300 sum: \$2,245,050	mean: \$115,037 median: \$814 range: \$0 to \$1,540,620 sum: \$5,636,797	mean: \$310,975 median: \$150,734 range: \$0 to \$2,023,266 sum: \$15,237,760
State Funds - Actual Expenditures	(N=49)	(N=49)	(N=49)
3. Required Match for Public Water System Supervision Grant (1/3 of amount in item 1 above; also referred to as "25% match")	mean: \$557,667 median: \$380,000 range: \$149,333 to \$1,896,667 sum: \$27,325,707	mean: \$557,860 median: \$404,367 range: \$143,299 to \$1,905,733 sum: \$27,335,133	mean: \$571,793 median: \$411,400 range: \$136,766 to \$1,891,400 sum: \$28,017,862
4. Required Match for State Program Management Set-Aside Do NOT include credits from 1993.	mean: \$150,505 median: \$0 range: \$0 to \$1,756,190 sum: \$7,374,745	mean: \$187,362 median: \$0 range: \$0 to \$2,437,500 sum: \$9,180,740	mean: \$314,915 median: \$114,000 range: \$0 to \$2,252,866 sum: \$15,430,836
5. Other State Funding Dedicated to Drinking Water Program --Provide the amount of all state expenditures excluding the required state matches reported in rows 3 and 4. --Do NOT include the 20 percent state match for the Drinking Water State Revolving Loan Fund capitalization grant.	mean: \$1,806,162 median: \$857,848 range: \$0 to \$10,021,374 sum: \$88,501,950	mean: \$1,878,680 median: \$913,794 range: \$0 to \$10,351,500 sum: \$92,055,301	mean: \$1,856,464 median: \$1,067,601 range: \$0 to \$10,383,460 sum: \$90,966,725
Total Actual Expenditures for Drinking Water Program	(N=49) mean: \$4,358,934 median: \$3,121,330 range: \$934,277 to \$17,608,041 sum: \$213,587,775	(N=49) mean: \$4,837,486 median: \$3,290,584 range: \$917,462 to \$18,727,747 sum: \$237,036,820	(N=49) mean: \$5,626,139 median: \$3,663,366 range: \$1,074,683 to \$19,325,564 sum: \$275,680,819

**Appendix III
Summary of States' Responses to GAO's
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7. During FFY 1999, did your state's drinking water program include activities that are in addition to those required by the federal safe drinking water program?

- 1. [41] Yes → (Go to question 8)
- 2. [8] No → (Go to question 10)

8. Consider question 6, row 5, "Other State Funding Dedicated to Drinking Water Program." Of the total expenditures that you recorded in this category (row 5), what percent are for activities that are in addition to those required by the federal safe drinking program? (Check one.)

- 1. [20] Less than 10%
- 2. [13] 10 to 25 %
- 3. [5] 26 to 50 %
- 4. [3] 51% or more

9. Briefly describe the state's drinking water program activities that are referenced in question 8 above. (Describe below.)

_____ (N=40) _____

Comments

10. If you have any additional comments on state staff levels and expenditures, please provide them in the space below. (Describe below.)

(N=19)

Thank you for your help!

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