



OFFICE OF INSPECTOR GENERAL

*Catalyst for Improving the Environment*

## Evaluation Report

# Impact of EPA and State Drinking Water Capacity Development Efforts Uncertain

Report No. 2003-P-00018

September 30, 2003



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**Abbreviations**

CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
DWSRF	Drinking Water State Revolving Fund
GAO	General Accounting Office
GPRA	Government Performance and Results Act
HSNC	Historical Significant Non-Compliance
OGWDW	Office of Ground Water and Drinking Water
OIG	Office of Inspector General
SDWA	Safe Drinking Water Act
SDWIS/FED	Safe Drinking Water Information System/Federal Version
T/M/F	Technical, Managerial, and Financial

**Cover:** Photo of water tower by EPA OIG.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
INSPECTOR GENERAL

September 30, 2003

**MEMORANDUM**

SUBJECT: Impact of EPA and State Drinking Water  
Capacity Development Efforts Uncertain  
Report No. 2003-P-00018

FROM: Dan Engelberg /Signed by Kwai Chan for/  
Director for Water Issues  
Office of Program Evaluation

TO: G. Tracy Mehan III  
Assistant Administrator  
Office of Water

This is our final report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and the findings contained in this report do not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA management in accordance with established resolution procedures. The Assistant Administrator for the Office of Water responded to our draft report on June 23, 2003, and that response is included as an appendix in this report.

This report identifies issues that EPA needs to address to ensure that, as States continue to implement capacity development, they provide sufficient managerial and financial assistance to community water systems. Providing this assistance is vital to the long-term sustainability of these systems, and will ultimately help systems meet drinking water standards. EPA also needs to have a performance measurement process to determine if, nationally, the overall capacity, or healthiness, of community water systems is improving. Without this strategic information, EPA cannot make critical management decisions to provide resources and assistance to States as the States work to implement their capacity development strategies. These issues are summarized below and presented in detail in Appendices A and B.

## Purpose

Congress, in passing the 1996 Safe Drinking Water Act (SDWA) amendments, provided funding for capacity development to meet significant challenges facing community water systems, including aging infrastructure, underfunding, and meeting drinking water regulations. Capacity development is a way of structuring drinking water protection programs to assist water systems in attaining the technical, managerial, and financial (T/M/F) capacity to achieve and maintain long-term sustainability.<sup>1</sup> Capacity development is based on the idea that systems that achieve and maintain capacity will be the best prepared to meet current and future drinking water challenges, such as new Federal drinking water regulations and substantial infrastructure needs. Therefore, it is critical that capacity development is designed and implemented in a manner that will effectively ensure that systems needing capacity assistance will get this help before ultimately falling into noncompliance.

Since the EPA drinking water capacity development process is relatively new, our national examination focused on the design and early implementation of this program. Our initial objective was to evaluate EPA and State formulation and initial implementation of capacity development programs to determine the extent to which such programs have been formulated and initially implemented consistent with the specific requirements and overall objectives of the SDWA. Specific emphasis was to be given to evaluating how States are integrating capacity development, together with other SDWA initiatives and drinking water program activities, to assist community water systems to consistently achieve the health objectives of the SDWA. During the course of our work, we identified an additional issue related to performance measurement. As a result, this report addresses the following two questions:

- Did EPA and State design of the capacity development strategies ensure that community water systems have received T/M/F capacity assistance?
- How has EPA planned to assess the performance of capacity development initiatives at a national level, and how strong is the design for evaluation?

## Background

Almost 264 million people in the United States obtain their drinking water from 54,000 community water systems. These systems vary from very small rural systems to very large systems. While they all share

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<sup>1</sup>EPA has defined the three key capacity components needed for proper operation of a drinking water system as follows:

- *Technical*: The physical and operational ability of a drinking water system to meet SDWA requirements.
- *Managerial*: The ability of the system operators to conduct their affairs in a manner enabling the system to achieve and maintain compliance.
- *Financial*: The ability to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance.

problems with aging infrastructure, underfunding, and meeting regulations, small systems have had great difficulty in keeping up with SDWA regulations. EPA recently estimated that over the next 20 years, the nation is facing a deficit of nearly \$265 billion in resources available to meet projected drinking water infrastructure needs. At a January 2003 EPA conference on the infrastructure gap, the Assistant Administrator for Water promoted capacity development investment as a means to help address this issue.

Congress amended the SDWA in 1996, providing for a variety of initiatives to assist States and public water systems in providing safe drinking water to the public. Capacity development, the Drinking Water State Revolving Fund (DWSRF), operator certification programs, and such resources as the Environmental Finance Centers and Small System Technical Assistance Centers, were instituted to provide assistance to States and community water systems. Congress established capacity development with the intent of focusing on those systems most in need of assistance. These were primarily small systems (serving populations of 3,300 or less). Although small systems make up the majority of community water systems (46,000 of the 54,000 total systems), they only serve about 10 percent (25 million people) of the population. However, in 2000, small systems accounted for 90 percent of all systems that had a “History of Significant Noncompliance” (a system violating one or more National Primary Drinking Water Regulations in any three quarters within a 3-year period).

All three components of capacity development (technical, managerial, and financial) are critical to the successful operation of community water systems. EPA uses the diagram in Figure 1 to illustrate the interrelated nature of T/M/F capacity. EPA, States, and drinking water systems house T/M/F expertise in different program areas at different levels. The success of water systems’ achieving capacity to run their operations in an efficient, business-like manner rests on water system owners and operators being able to effectively understand, communicate, and coordinate the various T/M/F needs. States, through the design and implementation of their capacity development strategies, have approached capacity development in different ways, to meet the unique issues facing their systems.

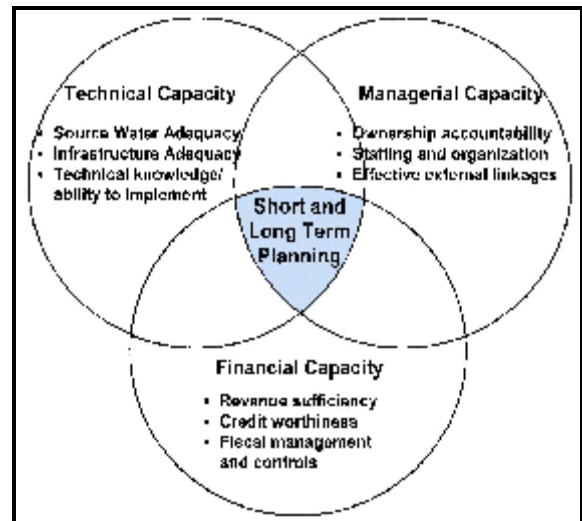


Figure 1: EPA Diagram on T/M/F Capacity

As detailed in Appendix A, Table A-1, the 1996 SDWA Amendments present four key attributes that are needed to promote a capacity development process that assists public water systems in attaining T/M/F capacity. Specifically, a successful capacity development process should be:

- **Flexible** so that EPA and States can maximize the use of resources and capabilities to implement processes that meet the unique needs of each State.
- **Proactive** in identifying and prioritizing those water systems most in need of improving T/M/F capacities.
- **Integrated** so that the resources of all Federal and State drinking water programs are utilized.
- **Accountable** in being able to demonstrate that capacity development helps water systems provide safe water to customers.

All four attributes do not need to be present to the same degree for capacity development programs to be successful. However, we believe that the combined presence of these attributes promotes a capacity development process that assists public water systems in attaining T/M/F capacity.

EPA's Office of Ground Water and Drinking Water (OGWDW) is responsible for governing capacity development as a national program by providing guidance to States, as well as requiring accountability from States with respect to congressional expectations.

## Scope and Methodology

We performed our evaluation in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States. We conducted our field work from August 2001 to November 2002. We focused our review on six States: Arizona, Illinois, Massachusetts, Nebraska, South Carolina, and Washington; related EPA regional offices; and EPA Headquarters. To draw conclusions about the design and initial implementation of EPA and State capacity development activities, we collected information from a broad range of sources (see Appendix C, which provides greater detail on our Scope and Methodology).

## Results of Review

We identified two issues relating to our review questions:

- With assistance from EPA, States designed capacity development strategies that generally met the requirements of the 1996 SDWA Amendments. However, EPA and States need to improve the continuing implementation of these strategies to ensure that managerial and financial capacity needs are being addressed, and EPA needs to improve its oversight of States' capacity development programs.
- EPA has not developed or implemented a plan to assess the performance of the capacity development initiative, and is currently unable to report on the results that the capacity development program is having on a national basis.



These issues are discussed below.

### ***Capacity Development Design and Early Implementation Results Mixed***

EPA, working closely with States and stakeholders, provided guidance and publications to ensure that States' capacity development strategies generally were *designed* to provide capacity assistance to community water systems, while providing the States with flexibility to design strategies that met their individual needs. EPA's and States' *implementation* efforts, however, need to be more proactive, integrated, and accountable, to ensure that community water systems become and stay "healthy." When we assessed EPA and State programs using the four attributes of flexibility, proactivity, integration, and accountability, we determined that EPA and States have focused on providing *technical* assistance, and that more needs to be done to provide the *managerial* and *financial* capacity assistance.

All three components of capacity development are critical for community water systems to operate effectively. States had success with providing technical capacity development that was proactive, integrated, and flexible. This is to be expected, to a certain extent, since drinking water programs have historically been technically focused. However, the States had less success providing managerial and financial assistance to water systems. EPA staff told us the Agency also did not provide sufficient oversight to States to hold them accountable for ensuring that systems most in need of T/M/F capacity assistance were being helped. We attribute the lack of accountability to the fact that during the design of the capacity development program, stakeholders disputed EPA's authority to hold States accountable for capacity development through DWSRF withholding.

During our review, EPA staff indicated that there continues to be an overemphasis on technical capacity, at the expense of managerial and financial capacities. State-level managers identified the lack of managerial and financial capacities as significant obstacles to systems sustaining technical capacity. Massachusetts officials stated that all technical capacity deficiencies are caused by managerial and/or financial problems. Nebraska officials said 70 to 80 percent of their major deficiencies are because of managerial or financial problems.

**State Programs Had High Degree of Flexibility.** EPA and States approached capacity development in a highly flexible manner. Through the 1996 SDWA Amendments, Congress required EPA to afford States the flexibility to tailor capacity development strategies to meet the varying needs of their community water systems. EPA promoted flexibility through its capacity development handbook, guidance, and stakeholder process when designing the capacity development process. The guidance that EPA produced was the result of a thorough stakeholder consultation process that included State officials.

States embraced this opportunity to craft strategies to meet the needs facing their water systems. States used the guidance and materials that EPA developed in conjunction with its stakeholders to create and implement capacity development strategies for existing systems by October 1, 2000. The flexibility EPA afforded States is seen in the varied approaches among their capacity development strategies, as shown in Appendix A.

During our review, EPA officials discussed the difficulties they sometimes faced regarding flexibility. The EPA Capacity Development Coordinator said simply creating the capacity development guidance had been a challenge, noting that many of the individuals involved were adamant that EPA was neither authorized nor directed by Congress to develop guidance. Rather, these individuals insisted that EPA was only to act as an information source and was, therefore, only empowered to publish information for use at the States' discretion. The highly flexible, partnering environment that encompasses capacity development has caused confusion and disagreement as to how much authority EPA has. Although EPA has been extremely responsive to the flexibility needs of capacity development, this responsiveness has resulted in EPA providing guidance that did not hold States sufficiently accountable for ensuring that public water systems are achieving and maintaining capacity, as discussed below.

**EPA and State Efforts Can Be More Proactive.** We determined that while EPA provided tools to States for developing proactive capacity development strategies, States could improve their efforts to proactively assist public water systems. Proactivity is an important attribute because it describes how EPA and the States plan and manage their work to prevent water systems from having difficulties in providing safe drinking water to the public.

EPA provided the States with guidance and publications that identified how they could design proactive capacity development strategies to reach all water systems. For example, the publication *Information for States on Implementing the Capacity Development Provisions of The Safe Drinking Water Act Amendments of 1996* provides examples of tools, such as sanitary surveys, that States could use when assessing water system capacity.

All six States were working to prevent technical deficiencies in water systems by providing assistance through activities such as conducting sanitary surveys. Three States (Arizona, Illinois, and South Carolina) were still in the process of developing assessment tools to help water systems address managerial and financial deficiencies. The three other States (Massachusetts, Nebraska, and Washington) were proactive in their efforts to assess and deliver assistance to water systems in developing their managerial and financial capacities. However, for all six States, we determined that they can improve their efforts to deliver managerial and financial assistance to systems before technical problems occur.

The SDWA Amendments give four sequential, closely linked activities that describe how States can provide proactive capacity assistance to community water systems:

- **Assessing** water system T/M/F capacities.
- **Prioritizing** systems based on their capacity needs.
- **Delivering** T/M/F capacity development services to systems most in need.
- **Collecting information** to determine whether water systems are achieving results.

The extent to which States designed and were proactively implementing capacity development strategies regarding the first three activities is addressed in Appendix A, Table A-2; details on collecting information are in Appendix B.

**Capacity Development Integration into Established Programs Varied.** There was a great deal of variability in the degree to which States integrated the three capacity elements (T/M/F) into the following established drinking water programs: (1) sanitary survey, (2) operator certification, (3) enforcement, and (4) DWSRF. Emphasis was being placed on improving the technical capacities of systems, with less attention being devoted to developing methods to assess and deliver managerial and financial capacity assistance. As a result, in these four programs, EPA and the States were not maximizing the investment of capacity development – a process that cuts across all drinking water programs – to assist water systems in acquiring and maintaining their managerial and financial capacities. Effectively incorporating capacity development into these four programs, which comprise a major share of States’ interactions with water systems, will help to ensure that T/M/F assistance will be provided to water systems. Details on integration efforts for the four programs noted are in Appendix A, Table A-3.

**Accountability Process Needs Further Effort.** EPA did not perform a meaningful evaluation of State capacity development activities as required in the 1996 SDWA Amendments. Although EPA received the reports required under SDWA, there was no systematic process to review them for purposes of making DWSRF withholding determinations, in accordance with the Amendments. Specifically, EPA Headquarters did not:

- Issue guidance to regions on conducting reviews.
- Identify what constituted passing criteria for evaluating State capacity development efforts.
- Identify what sanctioning actions were available to EPA.

Details on these issues are addressed in Appendix A, Tables A-4 through A-6.

Without an effective assessment process, EPA Regions will be unable to execute their oversight responsibilities to determine whether States are making progress in implementing their capacity development strategies as Congress intended, especially in the areas of providing managerial and financial capacity assistance. Providing managerial and financial assistance is vital to the long-term sustainability of public water systems. Ultimately, without sufficient assistance in all three areas of capacity development, there is no assurance that those water systems most in need will receive adequate help and all public water systems will have the tools they require to maintain compliance and long-term sustainability.

Congress directed that States be held accountable, through DWSRF withholding, for “... developing and implementing a strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity.” EPA is responsible for annually assessing the implementation of State strategies to determine whether States should incur DWSRF withholding. The DWSRF withholding provision that Congress linked to capacity development illustrates how critical EPA oversight of State strategies is to ensuring States are accountable for designing and implementing effective strategies.

The guidance that EPA uses to hold States accountable for successful implementation of capacity development is not effective. EPA issued *Guidance on Implementing the Capacity Development Provisions of the Safe Drinking Water Act Amendments of 1996* (EPA 816-R-98-006) in July 1998 to establish national policy regarding implementation of the capacity development provisions of the 1996 SDWA Amendments. In this guidance, EPA listed the “minimum requirements” States must meet to avoid DWSRF withholding. These minimum requirements include the submission of five reports, relating to the States’ design and on-going implementation of their capacity development programs. Although EPA stated that all States submitted the five reports required under the guidance, we concluded the guidance was too general or lacking in detail for EPA to use the reports to perform effective reviews on State progress.

We also determined that EPA’s regulations do not provide sufficient passing criteria assessing States’ progress in implementing their capacity development strategies. In August 2000, EPA promulgated DWSRF withholding regulations, as part of 40 Code of Federal Regulations (CFR) 35, *Drinking Water State Revolving Funds: Interim Final Rule*, indicating EPA will withhold funds from a State if it does not adequately develop an implementing strategy to assist public water systems in acquiring T/M/F capacity. We determined that EPA’s withholding regulations do not sufficiently define the various criteria necessary to conduct a meaningful and effective assessment of a State strategy. These criteria need to define “developing,” “implementing,” “acquiring,” and “maintaining.”

Because of a lack of adequate guidance and defined criteria for assessment, EPA does not have a credible sanctioning mechanism for use under the DWSRF withholding provisions. Maintaining State accountability of capacity development activities necessitates that EPA incorporate three steps: (1) common knowledge of the availability of sanctions, (2) a defined process for applying sanctions, and (3) a willingness on the part of EPA to use sanctions. Although EPA made States aware of the possibility of the withholding sanction, it has not developed a process for initiating corrective actions, and EPA staff indicated a reluctance to use the sanctions.

Region 7 has developed a comprehensive evaluation, which could be used by all Regions, to periodically assess, in some depth, whether States are meeting the SDWA requirements, including implementation of capacity development strategies. In April 2002, it initiated a comprehensive review of Nebraska, including identification of strengths of Nebraska’s programs (including capacity development, operator certification, etc.), as well as areas that needed improvement. Region 7 also included steps that it will take to continue to assist Nebraska in its capacity development implementation. This type of comprehensive evaluation may provide a good model for EPA to consider using for assessments, and, along with better defined criteria, could use to provide a meaningful assessment of States’ progress, as part of their oversight responsibilities.

## ***Capacity Development Accomplishments Uncertain Due to Lack of Performance Measures***

In addition to the capacity development implementation issues presented, EPA has not developed or implemented a plan to assess the performance of the capacity development initiative, and is currently unable to report on the results that the capacity development program is achieving on a national basis. In earlier reports, we discussed EPA's progress in developing performance measures and meeting the requirements of the Government Performance and Results Act (GPRA).<sup>2</sup> These efforts resulted in the Inspector General in September 2002 naming EPA's difficulty in linking mission to management a key management challenge.

Measuring performance is important because it provides accountability, communicates the value of the program to others, and gives managers information to make decisions for program improvement. Equipped with such information, EPA and Congress can better allocate resources to improve human health and the environment. For example, under the President's Management Agenda, all Federal agencies will be expected to use OMB's Program Assessment Rating Tool (PART) results and performance measures to support and explain budget requests. OMB plans to assess EPA's drinking water program, using PART, in FY 2006. However, EPA specifically has not:

- Identified capacity development goals;
- Developed performance measures to assess progress toward the goals;
- Collected data on capacity development performance measures; and
- Analyzed data and reported on capacity development performance results.

Details on these issues are in Appendix B, Table B-1.

Instead of developing national measures, EPA relied on States to identify those measures, based on their individual capacity development strategies. But the measures identified by States, being based on individual strategies, were not similar enough to be used for comparison, or their results consolidated, to account for results at a national level. For example, there was high degree of variability in baseline measures for the six States that we reviewed, as shown in Appendix B, Table B-2.

Having an established national measure for capacity is critical for EPA and Congress to determine the extent to which systems are becoming and staying healthy. Without this information, EPA cannot report to Congress on its success in implementing the capacity development provisions of the 1996 SDWA Amendments. Further, EPA ultimately does not know whether it is, in fact, maximizing its efforts to improve the ability of water systems to deliver safe water to the public. Given the severe budgetary circumstances that many States face, EPA and the States must be able to demonstrate that the financial investment in capacity development is yielding results and deserves continued support.

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<sup>2</sup>*EPA's Progress in Using the Government Performance and Results Act to Manage for Results* [EPA-Office of Inspector General (OIG) 2001-B-000001]; and *Audit of EPA's Fiscal 2000 Financial Statements* [EPA-OIG 2001-1-00107].

We also identified four challenges that EPA faces and needs to address to be able to measure capacity development: (1) having limited control over implementation; (2) lack of comparability due to high variability in approaches; (3) difficulty in showing periodic progress because demonstrating outcomes can take years; and (4) States' concerns over data collection burden and its accuracy. These challenges are discussed further in Appendix B, Table B-3.

## **Conclusions**

Capacity development is a cornerstone of EPA's and States' drinking water programs. All other drinking water programs support water systems' efforts to achieve and maintain capacity. Thus, how well EPA and States' are able to deliver capacity assistance to public water systems will, ultimately, affect drinking water quality. This is why it is so important for EPA and States to provide not only technical assistance but the needed financial and managerial assistance that systems require. EPA also needs to know how well States are doing in providing T/M/F assistance, to strategically and proactively invest resources necessary to help States with their capacity development efforts.

Through more efficient investments in developing the capacity of drinking water systems, EPA and the States can better help public water systems meet current and future financial and regulatory challenges. To do this, EPA and State capacity development processes need to provide the appropriate amount of T/M/F assistance to help systems achieve and maintain long-term sustainability. They need to ensure that programs are balanced – flexible, proactive, integrated, and accountable. Further, EPA needs to address the challenges to implementing an adequate performance measure system for capacity development, to identify performance gaps and set target goals to improve overall drinking water quality.

## **Recommendations**

For EPA to achieve the great potential that capacity development can provide to our Nation's community water systems, EPA needs to improve its oversight of States' capacity development effort, including having the right information and related indicators or measures to assess capacity development progress. Therefore, we recommend that the Assistant Administrator for Water:

1. Develop a national capacity development strategy that promotes T/M/F capacity in a proactive, integrated, flexible, and accountable manner throughout its key drinking water programs, and provide additional guidance and/or information, accordingly.
2. Revise 40 CFR 35.3515 (DWSRF withholding regulations) to provide more specific criteria that will allow EPA to conduct meaningful annual assessments of State capacity development strategies. These revisions should include defining the terms “developing,” “implementing,” “acquiring,” and “maintaining,” as criteria for EPA to conduct annual assessments of State capacity development strategies.

3. Develop the comprehensive evaluation to be used to assess implementation of States' capacity development strategies, consistent with differing States' needs and circumstances, and require the use of this tool by Regions as part of their oversight responsibilities.
4. Work with its partners and stakeholders to:
  - (a) Identify a set of common measures that can be used to develop and implement national performance goals.
  - (b) Determine what common capacity development data and/or information resources are available that could be used to support a national capacity development measure, while minimizing data collection burdens to States and water systems.
5. Using the results in Recommendation 4, develop national capacity development measures by:
  - (a) Identifying capacity development goals to be accomplished, as part of the drinking water annual performance goals.
  - (b) Developing specific capacity development measures that support the capacity development annual performance goals.
  - (c) Either modifying already existing data collection efforts or developing new data collection processes for capacity development performance measures.
  - (d) Analyzing results of capacity development performance on a national basis, and reporting progress to Congress and the public, as required by GPRA.

## **Agency Response and OIG Evaluation**

In our draft report, we made recommendations to promote the use of all three elements of T/M/F in capacity development, as well as to develop a performance measurement system to assess capacity development achievements. The Assistant Administrator for the Office of Water provided a response to our draft report on June 23, 2003 (see Appendix D). The Assistant Administrator substantially disagreed with the message in our report. Substantively, Office of Water felt we misinterpreted Congress' intent when it passed the SDWA Amendments, and also cited potential errors in the information presented. From a process standpoint, Office of Water felt that we had changed the focus of our study from capacity development to performance measurement, and that meaningful results could not be obtained, since capacity development is still in the early stages of implementation. Office of Water also felt that States were misled, since the report mentions States by name, contrary to the agreement OIG made with the States. We generally do not agree with these issues, and have responded to these concerns in Appendix E, Notes 7 to 12.

EPA disagreed with the recommendations we presented in the draft report. In response to our recommendations to change capacity development guidance or regulations, to enhance delivery of

managerial and financial capacities through better oversight, EPA pointed out that these steps would impede the flexibility afforded to States. We disagree with EPA's opinion. States are afforded a high degree of flexibility within the boundaries of delivering T/M/F assistance to public water systems, and EPA has the responsibility to ensure that this happens. Therefore, we maintain our recommendations that EPA needs to work with its stakeholders and partners to better promote and integrate managerial and financial capacity efforts in States' drinking water strategies.

EPA also did not support measuring capacity development progress, stating that the current GPRA drinking water goal sufficiently captures capacity development results. We do not agree with EPA's position. We maintain that without defined annual goals for capacity development, EPA will not have the ability to manage this program effectively and to target resources where they will do the most good. Additionally, EPA's overall drinking water goal measures drinking water system compliance only, and accumulates this information in the Safe Drinking Water Information System/Federal Version (SDWIS-FED), an "exceptions" reporting database, with only systems in noncompliance being tracked. SDWIS-FED was designed to track enforcement activities, and was not designed to measure managerial or financial data. Therefore, SDWIS-FED may provide some measure of technical capacity, but not managerial or financial capacity results. Therefore, relying on this measure to ascertain adequate capacity is incomplete, at best.

Detailed analyses of the Agency's comments are in Appendix E.

## **Action Required**

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days of the date of this report. You should include a corrective actions plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public. For your convenience, this report will be available at <http://www.epa.gov/oigearth/eroom.htm>.

We appreciated the active participation by the EPA Office of Water and selected Regional and State officials. If you or your office have any questions, please contact me at (202) 566-0830 or Leah Nikaidoh at (513) 487-2365.



## **Details on Capacity Development Design and Early Implementation Results**

**Table A-1: Capacity Development Attributes Presented in 1996 SDWA Amendments**

<p><b>Proactivity</b> was required in the capacity development section of the Amendments, Public Law 104-182, §1420(c)(2)(A), which stated:</p> <p style="text-align: center;"><i>In preparing the capacity development strategy, the State shall consider, solicit public comment on, and include as appropriate – (A) the methods or criteria that the State will use to identify and prioritize the public water systems most in need of improving technical, managerial, and financial capacity.</i></p>
<p><b>Integration</b> was identified in the findings section of the Amendments, Public Law 104-182, §3(8)(B), which stated:</p> <p style="text-align: center;"><i>[M]ore effective protection of public health requires...maximizing the value of the different and complementary strengths and responsibilities of the Federal and State governments in those States that have primary enforcement responsibility for the Safe Drinking Water Act.</i></p>
<p><b>Flexibility</b> was identified in the findings section of the Amendments, Public Law 104-182 §3(4), which stated:</p> <p style="text-align: center;"><i>States play a central role in the implementation of safe drinking water programs, and States need increased financial resources and appropriate flexibility to ensure the prompt and effective development and implementation of drinking water programs.</i></p>
<p><b>Accountability</b> was required in the capacity development section of the Amendments, Public Law 104-182, §1420(c)(1), which stated:</p> <p style="text-align: center;"><i>...State[s] shall receive only [a portion] of the allotment that the State is otherwise entitled to receive under [DWSRF], unless the State is developing and implementing capacity development strategies that assist water systems in acquiring and maintaining technical, managerial, and financial capacity.</i></p>

**Table A-2: Proactivity Efforts by States**

Steps	Results of States' Efforts
Assessing	<p>Arizona, Illinois, and South Carolina did not conduct managerial or financial capacity assessments of community water systems. The reasons involved insufficient design of capacity assessment tools, or components of capacity development strategies not yet being developed. Massachusetts and Nebraska assessed the managerial and financial capacity of water systems through the sanitary survey. Washington conducted managerial and financial assessments through a review of water system planning documents. These reviews occurred on a 6-year cycle for systems with 1,000 or more connections. Other reviews occurred only when a system was new or expanding, applying for a DWSRF loan, or experiencing problems. (Washington applies Federal drinking water regulations to approximately 16,000 water systems. Due to the large number of systems, State officials limit planning document reviews.)</p>
Prioritizing	<p>Arizona ranked all water systems by assigning point values to each system, based on a variety of data. However, water systems with managerial or financial deficiencies were not prioritized because these capacities were not assessed by the State. Subsequent to our site visit, Arizona designed a capacity assessment tool that included managerial and financial components, such as water system security and fiscal controls. The other five States grouped water systems into priority tiers. Massachusetts and Nebraska prioritized capacity assistance based on results from their water system T/M/F assessments. In Washington, water systems were prioritized based on the operating permit "color," which is determined through T/M/F assessments. Illinois did not prioritize capacity assistance based on water system managerial or financial deficiencies, but was in the process of developing a capacity assessment tool that will allow it to prioritize systems into three priority tiers. South Carolina was also experiencing difficulties prioritizing assistance based on water systems' financial deficiencies because the sanitary survey did not incorporate financial assessments into the initial review process. South Carolina officials indicated they would like assistance in solving this problem.</p>
Delivering	<p>States that identified and prioritized water systems with managerial and financial deficiencies were delivering needed assistance. In addition, States that had not identified and prioritized water systems based on managerial and financial deficiencies were also delivering various levels of managerial and financial assistance. However, by not first identifying and prioritizing water systems with managerial and financial deficiencies, States may miss the opportunity to prevent technical failures from occurring. For example:</p> <ul style="list-style-type: none"> <li>• Massachusetts delivered capacity assistance to water systems by requiring systems with T/M/F deficiencies to follow plans to address identified deficiencies. Third parties were hired to assist systems in the development of these plans.</li> <li>• South Carolina, which had difficulties with its assessment and prioritization methods, also delivered this type of assistance to water systems through T/M/F capacity development plans. However, managerial and financial assistance was only delivered to systems once a technical deficiency was identified.</li> <li>• Illinois explained that field engineers and third parties worked to educate water boards and water system managers about the managerial and financial operations of water systems. The State indicated it will also encourage water systems to undertake voluntary T/M/F capacity development plans once its capacity assessment tool is developed.</li> </ul>

**Table A-3: Integration Efforts**

Program	EPA and States' Efforts
Sanitary Survey	<p>All States are required to use sanitary surveys to perform compliance assessments of public water systems. Sanitary surveys may also be used to perform assessments of the managerial and financial capacity of water system management and operators.</p> <p>EPA officials, through statements, training information, and capacity development material, identified the importance of sanitary surveys in ensuring technical capacity, and to a lesser degree, integrated financial and managerial capacities in their materials. When we asked EPA officials if sanitary surveys required information about managerial and financial capacity, they said:</p> <ul style="list-style-type: none"> <li>• Although most of the required elements of a sanitary survey are geared toward determining technical capacity, a number of significant deficiencies may disclose underlying problems with managerial and/or financial capacity.</li> <li>• States were allowed to create their own definition of what constituted a significant deficiency identified as part of the sanitary survey, but definitions for managerial and financial significant deficiencies did not exist because EPA and States did not consider such deficiencies significant to public health.</li> <li>• The sanitary survey is for compliance-oriented activities and is not related to capacity development.</li> </ul> <p>While EPA identified the sanitary survey as a tool States could use for evaluating capacity, the Agency has not conveyed that managerial and financial assessments are just as important as technical. This is evident by the fact that only Massachusetts used the sanitary survey to identify managerial and financial violations. Nebraska, and Washington also used the sanitary survey to varying degrees to assess all three components of capacity. However, Arizona, Illinois, and South Carolina are in the process of incorporating managerial and/or financial capacity assessments into sanitary surveys. As a result, we concluded the sanitary survey needs to better integrate all three components of capacity to ensure that a water system assessment is complete.</p>
Operator Certification	<p>Operators are responsible for the day-to-day management of a water system's technical operations and, therefore, are critical to ensuring the drinking water delivered to the public is safe, but can also be responsible for the management and financial budgets of systems, and can be a critical link to water boards and directors. Massachusetts, Nebraska, and Washington integrated all three aspects of T/M/F in the training portion of their operator certification programs. For example:</p> <ul style="list-style-type: none"> <li>• Massachusetts offers courses in the financial, managerial, and operational aspects of running a successful water system, and operators are required to be more informed on managerial and financial capacity matters as part of their duties and responsibilities.</li> <li>• Washington requires operators to have training about the T/M/F operations of a water system to maintain their certifications.</li> </ul>

Program	EPA and States' Efforts
Enforcement	<p>Massachusetts has incorporated managerial and financial capacity requirements into its regulations, and South Carolina requires systems in noncompliance to develop business plans that contain all three elements of capacity. Illinois includes voluntary managerial and financial self-assessment as part of its enforcement agreements. The enforcement programs in Nebraska and Washington have not integrated managerial and financial capacity among its operations; however, Washington is attempting to do so. Although enforcement is often seen as the last resort to address noncompliant water systems, State enforcement programs can be used to promote long-term managerial and financial capacity with systems.</p>
DWSRF	<p><b>DWSRF Loans:</b> EPA requires that loans go to systems that either have adequate capacity or will achieve capacity through the loan project. The Drinking Water National Information Management System that EPA uses to track the DWSRF program cannot determine what T/M/F problems the loans were used to solve. Furthermore, the EPA capacity information about the DWSRF program is focused mostly on the financial ability of systems to repay the loans, rather than assessing the overall T/M/F health of systems. Ensuring DWSRF loan recipients have viable sources of funds from which to repay loans is a legitimate concern but, Congress also intended States to utilize all three elements of capacity. Therefore, in addition to focusing on the ability of systems to repay loans, the States should also address managerial and technical issues to ensure the financial investment is protected.</p> <p><b>DWSRF Set-Asides:</b> An EPA Headquarters manager of the capacity development program told us EPA wants its regions to encourage States to use DWSRF set-asides for T/M/F activities. Future EPA plans include promoting the use of DWSRF set-asides for capacity activities in those States that do not currently utilize set-aside funds, and working with regions and States to encourage States to revise their strategies as necessary. Four of the States in our review (Massachusetts, Washington, Arizona, and Nebraska) used between 15 to 31 percent of the DWSRF for set-asides to assist in capacity development efforts. However, Illinois and South Carolina only used 4 percent for set-asides, in order to fund the administration of their DWSRF.</p>

**Table A-4: Accountability Issues**

Issue	Detailed Information
<p>EPA Guidance Inadequate</p>	<p>EPA’s guidance was too general or lacking for EPA to perform effective reviews of these reports to assess States’ progress. Stakeholders disputed the Agency’s authority to promulgate such guidance and perform these reviews. For example, in October 1998, the National Rural Water Association testified before the House Subcommittee on Health and Environment that EPA was not authorized, through the SDWA Amendments, to establish guidance regulating capacity development strategies. This view was prevalent among stakeholders, who noted that, among other things, the guidance impacted State flexibility. Examples of stakeholders’ comments on the EPA draft capacity development guidance are presented in Table A-5. The stakeholders disputed authority of EPA to hold States accountable for capacity development through DWSRF withholding, which contributed to EPA providing minimal oversight guidance to Regions and States.</p> <p>EPA guidance for the States in preparing strategies included six general “suggestions” or ideas for them to consider in their strategies. The guidance included a worksheet States could use to ensure that SDWA capacity development requirements were met. For example, the worksheet suggested that States describe how they solicited public comments and considered these comments. However, EPA did not provide any expectations on what it expected to see in the write-ups of these questions. In some instances, the EPA capacity development guidance provided to the regions was too vague for the regions to oversee States in designing and implementing strategies. Also, EPA provided no review guidance to the regions for three of five required reports, as presented in Table A-6.</p> <p>Without specific guidance, regions had no standard by which to hold States accountable for capacity development through DWSRF withholding provisions.</p>
<p>Withholding Regulations Inadequate</p>	<p>EPA’s withholding regulations are inadequate because they do not sufficiently define the various criteria necessary to conduct a meaningful and effective assessment of a State strategy. These criteria need to include definitions of “developing,” “implementing,” “acquiring,” and “maintaining.” Without these definitions, the withholding regulations are not specific enough to perform effective annual assessments. Therefore, there is no way to determine whether the strategy that a State is “designing and implementing” is effectively providing the necessary services to the neediest systems.</p> <p>As noted in Table 5, EPA stated that its authority to make regulations and even guidance were questioned by various stakeholders. We asked the OIG’s Office of Counsel to review the 1996 SDWA Amendments and applicable regulations to determine whether EPA’s authority truly was limited. The Office of Counsel attorney recognized that the provisions in the SDWA amendments provided a great deal of leeway for the States to design capacity development strategies. However, the attorney stated that through 40 CFR 35.3515, EPA, for the purpose of executing its responsibility under the Amendments to perform assessments, can provide more specific guidance or regulations to adequately perform these reviews.</p>

Issue	Detailed Information
Sanctioning Process Ineffective	<p><b>Common Knowledge of the Availability of Sanctions.</b> EPA, through its capacity development guidance, has made States aware of the possibility that DWSRF withholding can be used as a sanctioning mechanism. In fact, the majority of the guidance is focused on DWSRF withholding. All six States visited were aware of DWSRF withholding as a sanctioning mechanism.</p> <p><b>Process for Applying Sanctions.</b> EPA defined a process for a sanctioning mechanism, but did not establish this process as part of its official capacity development guidance (EPA 816-R-98-006). EPA delineated a DWSRF withholding sanctioning process through an e-mail sent to regional capacity development and DWSRF coordinators on October 26, 2000. Although this e-mail generally establishes a process for regions to initiate a review to decide whether to implement a DWSRF withholding sanction, it does not specifically establish a process for applying withholding as a capacity development sanction. According to EPA, until a sanctioning process is part of the EPA capacity development guidance, Regions may be reluctant to employ DWSRF withholding against States. Also, as part of this process, EPA guidance needs to include criteria that can be applied when assessing capacity development progress.</p> <p><b>Willingness to Use Sanctions.</b> The Capacity Development Coordinator for EPA told us that he was suspicious that no withholding recommendations were made. However, he indicated that several Regional capacity development coordinators were instructed by their management to accept what the States provided. There was also uncertainty among Regions about whether they would be able to actually implement sanctions through DWSRF withholding.</p>

**Table A-5: Examples of Stakeholders' Comments to EPA Capacity Development Draft Guidance**

Stakeholder Comment	EPA Response
<p>Many commentors were concerned with whether an appropriate balance could be struck between providing State flexibility while ensuring national program accountability in implementation. They stressed the need for EPA to acknowledge State program diversity in capacity development, and that only limited or no oversight by EPA would be necessary.</p>	<p>While the law clearly contemplates such flexibility, it also clearly establishes what States must do regarding capacity development if they wish to avoid a capacity development-related withholding from their DWSRF. The guidance provides a simple objective framework for EPA to use in assessing whether or not a State has done what the law requires in order to avoid capacity development-related DWSRF withholding.</p>
<p>Many commentors expressed concern regarding the proposed scope of EPA review of State strategies.</p>	<p>The Agency [EPA] believes that it has proposed the narrowest and most limited review possible which is still consistent with the requirements of the statute. The Agency's proposed review of State capacity development strategies is narrowly focused on ensuring that these statutory requirements are met.</p>
<p>Many commentors stated their belief that EPA does not have statutory authority to issue guidance related to capacity development strategies.</p>	<p>The basis for this guidance is the EPA Administrator's authority to issue guidance and regulations under the DWSRF section. This guidance establishes national policy regarding implementation of the DWSRF withholding related to capacity development strategies under sections 1420(c) [capacity development strategies] and 1452(a)(1)(G)(i) [DWSRF withholding relating to capacity development strategies] of the SDWA as amended.</p>
<p>A number of commentors expressed concern regarding the proposed requirements for documentation of the strategy and documentation of ongoing strategy implementation.</p>	<p>The Agency has simplified and streamlined the strategy documentation and reporting requirements.</p>

**Table A-6: Analysis of EPA Guidance to Regions on Review of State Reports**

Report	EPA Guidance to Regions
List of Systems in HSNC (Historical Significant Non-Compliance)	No guidance was established.
State Capacity Development Strategies	The EPA guidance for Regions to use when assessing proposed State strategies was identical to that provided to the States. Regions were instructed to use the same general suggested worksheet questions as States when assessing the proposed design of State strategies.
Annual State Strategy Implementation for DWSRF Withholding Determination	No guidance was established. EPA stated to us: <i>The determination of whether the state is implementing its strategy is the responsibility of the capacity development coordinator. There is no national guidance that outlines what a state implementation report should contain. When making a decision to withhold DWSRF funds, each regional coordinator should use a state's initial strategy as a baseline to determine the appropriate content of the report as well as progress made towards improving technical, managerial and financial capacity of public water systems.</i>
August 6, 2001 Report to the Administrator on the Success of Initial Capacity Development Efforts	A January 25, 2001 EPA headquarters memo to regional capacity development coordinators stated the only statutory requirement was that a report needed to be submitted and the structure and details of the report were up to each State. The memo only offered "suggestions" to the States on how they may want to consider structuring the report.
State Report to Governor on Capacity Development Strategy Progress	No guidance was established.



## ***Details on Capacity Development Performance Measurement***

**Table B-1: EPA's Difficulties in Addressing Performance Measurement Steps**

Step	Issue Identified	Discussion of Issue
<b>Identify Goals</b>	EPA's Current Goal Structure Does Not Address Capacity Development Objectives	<p>EPA did not include an annual performance goal for capacity development, a critical Amendment requirement, in its annual plans.</p> <p>EPA also has several other annual performance goals relating to the Clean and Safe Water goal that affect safe drinking water, stemming from requirements in the 1996 SDWA Amendments. For example, in EPA's fiscal 2002 annual performance goals, it included: <i>[States] Ensure that 100% of community water systems are complying with the Consumer Confidence Rule (CCR) by issuing annual consumer confidence reports.</i></p> <p>EPA proposed an annual performance goal for capacity development for fiscal 1999. However, this annual performance goal was not adopted. An EPA Office of Water official said that this goal was dropped, in part, because the Agency was directed to decrease the number of output measures and goals for that year.</p>
<b>Develop Measures</b>	Performance Measures Selected Cannot Be Used at National Level	<p>EPA has not selected capacity development performance measures necessary to enable the Agency to assess its national progress in achieving capacity development goals or intended outcomes. This situation is the result of EPA not identifying how capacity development would fit into its annual performance goals, as well as EPA's limited control over States' drinking water programs and the variability in States' capacity development processes.</p> <p>EPA also did not identify nation-wide performance measures, relying instead on States to identify those measures, based on their individual capacity development strategies. But the measures identified by States, being based on individual strategies, were not similar enough to be used for comparison, or their results consolidated, to account for results at a national level.</p> <p>The six States identified output rather than outcome measures in their capacity development strategies and, therefore, did not provide a means to assess long-term, outcome-oriented results.</p>

Step	Issue Identified	Discussion of Issue
<b>Collect Data</b>	Data Collection Not Providing Useful Measurement Information	<p>EPA and the States had five reporting requirements under the SDWA Amendments. Because EPA did not develop national capacity development goals and related performance measures, resulting data collection efforts have not been consistent. Additionally, the data that EPA has collected through various reporting efforts were not consistent enough, and were not always complete or accurate.</p> <p>A comparative analysis of the six States' baseline measures against their August 6, 2001, reports to EPA (item 4 in Table 2) on the success of enforcement mechanisms and initial capacity development efforts in relation to fiscal 2000 strategies showed that none of the States provided data or other specific information that related to how much progress they had made in regards to their initial capacity development efforts, based on their strategy baselines. Of the six States, only South Carolina provided any specific data, by including information on its progress to reduce HSNCs.</p>
<b>Analyze and Report on Results</b>	Analysis and Reporting Will Be Difficult For EPA	<p>EPA has not identified goals, developed measures or collected sufficient, complete data needed to perform analysis and report on results at a national level.</p> <p>EPA has treated various capacity development reporting efforts as a data sharing effort for the States, instead of strategically assessing the information to make decisions at a national level.</p> <p>When we asked EPA staff whether they had analyzed the State responses to the HSNC lists and August 6, 2001, reports, they responded that they had not, even though "we know it's important and will likely use it in the future."</p> <p>EPA staff indicated plans to use the HSNC reports to publish a summary document, and then encourage States to use these summary reports as implementation tools. However, since the HSNC reports do not contain the information needed to assess and report on T/M/F capacities and why HSNCs continue to experience deficiencies, it is doubtful that this information, in its current form, would be useful in assessing system capacity or in improving State strategy implementation.</p>

**Table B-2: Six States' Baseline Measures from Capacity Development Strategies**

State	Capacity Development Strategy Baseline Measures
Arizona	Identify baseline from 1998 or 1999 data that are tracked in State system, including basic system data such as owner, system type, population served, and number of enforcement/compliance actions. Will consider additional approaches to measuring capacity, including outreach activities (third party providers, sanitary surveys), operator certification, compliance data, and assessment surveys.
Illinois	Uses a combination of compliance with regulations, plus a factor of improved operations, based upon information obtained from sanitary surveys. Will also assess quality of consumer confidence reports.
Massachusetts	Will use sanitary surveys ("Comprehensive Compliance Evaluations") to assess baseline capacity status of systems. Based on results of evaluation, systems will be assigned capacity status: adequate, conditional, inadequate. Results will then be input into electronic tracking system. State will track and evaluate status of systems as they move from one status to another, as indicator of capacity improvement. Measuring performance based upon number of systems moving from one category to another. Massachusetts has used its State-wide data to identify trends, and develop assistance to target different problems that are surfacing.
Nebraska	Number of sanitary surveys performed on an annual basis, site visits by outreach team, followup with systems via surveys to solicit feedback on assistance systems have received, followup on deficiencies being found.
South Carolina	If sanitary survey yields poor results, system prepares a business plan, which includes information on facilities, management, and financial planning. State will determine if a system has a business plan. Development of benchmarks from systems' annual financial statements will provide empirical database for measurement of viability (ability to meet compliance standards).
Washington	Use three-component formula to measure capacity: (1) operating permit status; (2) system has completed water system planning document that includes three capacity components; and (3) enforcement actions. Data will be gathered, based upon this formula, to prioritize systems for capacity assistance.

**Table B-3: Performance Measurement Challenges**

<i><b>EPA Faces Four Challenges in Establishing Effective System</b></i>
<p><b>Having Limited Control Over Implementation.</b> EPA’s limited control over drinking water program activities makes it difficult for the Agency to exert direct control over achieving national goals. Responsibilities for day-to-day implementation of Federal drinking water regulations have basically been delegated to the States. While EPA has oversight responsibility, it has limited control over what States do. This is a problem faced by Federal programs, according to GAO. Because EPA relies on States and other partners, such as rural water associations and third party contractors, to implement capacity development, EPA has to either get buy-in from stakeholders on measures, or adopt new regulations, requiring reporting on specific, mandated measures.</p>
<p><b>Lack of Comparability Due to High Variability in Approaches.</b> Congress afforded the States great flexibility in designing and implementing capacity development. As a result, variability at the State level for capacity development activities can be so extensive that there is little commonality in outputs. Thus, there is currently little that EPA can measure that is common to provide a “national” picture.</p>
<p><b>Difficulty Showing Periodic Progress Because Demonstrating Outcomes Can Take Years.</b> The length of time that capacity development activities take to produce outcomes makes it difficult for EPA to report progress on an annual basis. Long-term outcomes may take years to manifest themselves, and capacity development is a generally a long-term sustainability process. Additionally, external factors can make it difficult to show a direct relationship between a specific program goal and the activities or outputs that caused the eventual outcome.</p>
<p><b>States’ Concerns Over Data Collection Burden and Its Accuracy.</b> The time and cost of collecting comprehensive data is also an obstacle for developing performance measures. GAO has indicated that the following challenges with data collection were raised by Federal managers: (1) using data collected by others, (2) ascertaining the accuracy and quality of performance data, and (3) acquiring data in a timely way. During our review, five of six States (except South Carolina) expressed concerns over capacity development data collection burdens, such as additional paperwork requirements.</p>

## ***Details on Scope and Methodology***

To determine initial EPA and State success at designing and implementing capacity development strategies, we reviewed documents and conducted interviews and site visits at EPA Headquarters, regions, and a total of nine States.

We conducted initial research to learn about State and EPA efforts to help systems develop their T/M/F capacities. This consisted of reviewing the 1996 SDWA Amendments and visiting three States – Kansas, Minnesota, and Vermont – judgmentally selected through discussions with Office of Water staff. We reviewed the capacity development strategies and implementation. We also interviewed water system operators regarding capacity development outreach.

During our research and field work phases, we also reviewed capacity development policy and guidance issued by the Office of Water. We interviewed Office of Water officials to determine how guidance and policy was developed, and how it communicates with regional offices and States. We met with regional capacity development coordinators to determine how they have assisted States regarding capacity development strategies within their drinking water programs. We also obtained legal advice from the OIG Office of Counsel regarding the 1996 SDWA Amendments and related regulations.

After conducting our initial research and identifying T/M/F capacity as the three components that Congress stated were needed for systems to have the ability to deliver safe water, we also identified four attributes (proactivity, integration, flexibility, and accountability) that Congress described to EPA and States as necessary to enhancing a system's capacity.

### **Sample Selection**

We selected six States for a more detailed analysis of capacity development: Arizona, Illinois, Massachusetts, Nebraska, South Carolina, and Washington. Our selection was based on information reported in EPA's annual report of drinking water violations, *Factoids: Drinking Water and Ground Water Statistics for 2000*, for 1998 through 2000.<sup>3</sup> The information reported in Factoids used for our sample selection was drawn from the Safe Drinking Water Information System/Federal Version (SDWIS/FED), which EPA uses to measure the quality of drinking water in States and the nation and the effectiveness of drinking water programs. We ranked all States based upon percentage of population and exposure risk from health-based violations identified in SDWIS/FED. The states we selected were among those that (according to SDWIS/FED) had the greatest number and the highest percentage of their population receiving water from public water

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<sup>3</sup>EPA 816-K-01-004 (June 2001) <http://www.epa.gov/safewater>. At the time of field work, this was the most recent annual report of States' performance based on violations reported in the Safe Drinking Water Information System/Federal Version published by OGWDW.

systems that had failed one or more health based violations. We used this approach in order to be able to determine progress designing and implementing capacity development in those states where it is most needed (based on how EPA currently measures performance). This also allows us to assess the prospect of EPA achieving its stated GPRA goals for its drinking water program.

After the States had been selected, it came to our attention that there may be data errors in the SDWIS/FED database that could impact the validity of the information in Factoids. Officials from five of the six States we visited also raised concerns about the quality of data in SDWIS/FED and EPA officials from OGWDW agreed that the data contained in SDWIS/FED may not be complete for all States. After reviewing these concerns we decided not to alter the initial list of states. First, given these states' prominent position relative to others in SDWIS/FED, removing any of them would have been difficult to defend given the information we had in hand. And expending resources to collect verifiable information to warrant adding others to those we had already selected would have also been difficult to justify given that sample selection was not the principal purpose of this review, which was to assess EPA and states' progress designing and implementing capacity development.

During our visits to the States (and discussions with corresponding Regional offices), we met with officials from a variety of drinking water programs to discuss how capacity development was being implemented using the four attributes. We met with program staff involved with capacity development, public water system supervision, DWSRF, operator certification, compliance and enforcement, and third parties such as State Rural Water Associations. We prepared a compilation of the information gathered at each State during our site visits, so that the States could review the information collected, and provide any clarifications or corrections. We sent these compilations to each State in March 2002. All of the States reviewed the compilations and provided comments back to us. For one State, there were a substantial number of comments provided. As a result, we returned to this State, to gather additional information to support the results of our evaluation.

We reviewed performance measurement requirements under the Government Performance and Results Act, and analyzed EPA and the six selected States' performance information on capacity development.

We assessed EPA's progress in developing a performance measurement system for capacity development by applying a framework of a four- step process presented by GAO through its analysis of GPRA requirements, and published in a series of recent reports.<sup>4</sup> The four-step process, based upon GPRA requirements, is shown in Table C-1:

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<sup>4</sup>*Effectively Implementing the Government Performance and Results Act* [GAO/GGD-96-118]; *Managing for Results-Analytic Challenges in Measuring Performance* [GAO/HEHS/GGD-97-138]; and, *Managing for Results-Measuring Program Results That Are Under Limited Federal Control* [GAO/GGD-99-16].

**Table C-1: Four Key Steps in the Performance Measurement Process**

Step	Definition	Components
Identifying Goals	Specifying long-term strategic goals and annual performance goals that include the outcomes of program activities.	<ul style="list-style-type: none"> <li>• Assessing key elements of strategic plan.</li> <li>• Involving stakeholders.</li> <li>• Identifying external factors that affect goals.</li> <li>• Linking goals to the mission, as well as to day-to-day operational activities.</li> </ul>
Developing Measures	Selecting measures to assess a program's progress in achieving its goals or intended outcomes.	<ul style="list-style-type: none"> <li>• Determining how annual performance goals will be measured.</li> <li>• Ensuring performance measures will reinforce connection between long-term strategic goals and day-to-day activities of managers.</li> <li>• Obtaining baseline data for comparison.</li> </ul>
Collecting Data	Planning and implementing collection and validation of data on performance measures.	<ul style="list-style-type: none"> <li>• Ensuring data collection efforts are sufficiently complete, accurate, and consistent to be useful in decision making.</li> </ul>
Analyzing and Reporting Results	Comparing program performance data with annual performance goals and reporting results to agency and congressional decision makers.	<ul style="list-style-type: none"> <li>• Comparing performance data in prior years to current year.</li> <li>• Identifying performance gaps and setting improvement goals by targeting resources to improve overall mission accomplishment.</li> <li>• Summarizing findings of program evaluations completed during year.</li> </ul>

Because of the progressive nature of this process, if EPA faces difficulties in addressing some of the earlier steps (such as identifying goals), this will negatively impact the remaining steps.

We conducted our field work from October 2001 to November 2002. This evaluation was performed in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States.

### Prior Coverage

- EPA OIG Report No. 2001-B-000001, *EPA's Progress in Using the Government Performance and Results Act to Manage for Results* ( June 13, 2001): This report noted that EPA needs to strengthen its partnerships with States and other Federal agencies, and invest in developing performance information that is more outcome oriented.
- General Accounting Office Report No. GAO/T-RCED-00-298, *Drinking Water Spending Constraints Could Affect States' Ability to Meet Increasing Program Requirements* (September 19, 2000): This testimony stated that the amount of Federal funding available to the States for the 1996 SDWA Amendment requirements had less impact on States' ability to implement their drinking water programs than State-imposed spending constraints.

- General Accounting Office Report No. GAO/RCED-99-31, *Safe Drinking Water Act: Progress and Future Challenges in Implementing the 1996 Amendments* (January 1999): This report indicated that the States lacked the resources needed to fully develop and implement drinking water programs, and that State legislatures were not putting needed authorities into place. The report also noted problems encountered by small water systems that do not have the T/M/F capacity to comply with current and future requirements



## Agency Response to Draft Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

JUN 23 2003

OFFICE OF  
WATER

### MEMORANDUM

**SUBJECT:** Response to the Findings and Recommendations of the Draft Report, *Impact of EPA and State Drinking Water Capacity Development Efforts is Unknown*

**FROM:** G. Tracy Mehan, III /signed by Benjamin Grumbles,  
Assistant Administrator /Deputy Assistant Administrator/

**TO:** Nikki L. Tinsley  
Inspector General

Thank you for the opportunity to review and comment on your draft report, *Impact of EPA and State Drinking Water Capacity Development Efforts is Unknown*. The Environmental Protection Agency (EPA) and States have coordinated with the Office of Inspector General (OIG) throughout this lengthy evaluation. The Agency provided significant program materials at your request and professional staff have been available for numerous meetings.

In general, we are deeply disappointed in the report, both in substantive content, study design and evaluation methods, factual accuracy, and overall tone. This negative assessment is strongly shared by the six States that participated extensively in your investigation of the national Capacity Development program. Their input and specific comments are reflected in this response. Even though your office took an additional year beyond your target date, the report is seriously flawed and demonstrates a lack of understanding of the program. After more than one and a half years of investigation and report preparation, the OIG found nothing positive in a program that is spawning new ideas, new ways of doing business, and developing and implementing proactive programs that your report underscores as a key feature of a sound capacity development program.

Contrary to the mutually agreed upon objective, the final evaluation shifted gears without consultation and is narrowly focused on OIG's view that the Safe Drinking Water Act's (SDWA) Capacity Development program lacks nationally quantifiable performance goals and measures. We believe this view is fundamentally flawed and that the States and EPA have developed accountability measures that meet Congressional intent and capture the public health protection benefits of State Capacity Development programs. OIG's opinion of the respective roles of EPA

Note 1

Note 2

Note 3

Note 4

and the States in the Federal-State partnership is not supported by the SDWA’s capacity development provisions nor the legislative history. Therefore, most of the report’s recommendations would be better characterized as OIG’s critique of the legislation and its perceived shortcomings, instead of how EPA and the States should measure program success.

Note 5

On a positive note, we do appreciate that the report acknowledges the challenges EPA would face in developing a national performance-based measurement system. We agree with four of the five challenges identified in the report on pp. 16-17:

1. EPA’s limited control over implementation since States are delegated primary responsibility for implementing the drinking water program;
2. the Congressionally allowed variability in State approaches makes it difficult to identify common measures that can be aggregated at the national level;
3. demonstrating outcomes can take years; and,
4. States are increasingly concerned over data collection and reporting burdens.

It is precisely because the OIG recognizes these challenges and statutory limitations, but then chooses to ignore them in the report’s findings, that we are disappointed with the content and tone of the draft report.

Note 6

You provided us with a very brief period to review and comment on the draft report given your lengthy study period and extended report drafting; the complexity of the program; and your request that we consult with the States and EPA Regions. We have received significant comments from our regions and the six States that participated in the evaluation. The following, by consensus, are the major areas of concern with this report:

Note 7

1. The study objectives of the report changed after the data collection phase and the data was collected too early to provide meaningful results;
2. States and EPA disagree with the OIG’s interpretation of Congress’ directive and intent;
3. OIG missed an important opportunity to provide substantive input on all components of the capacity development program (only the existing systems program was evaluated);
4. States were misled as the report mentions States by name, contrary to the agreement the OIG made with the States; and
5. there are a number of factual errors that impact the accuracy and credibility of the findings.

Note 8

Note 9

Note 10

Note 11

Note 12

Evaluation Objectives and Study Focus Changed After the Data Collection Phase

The Capacity Development program is a cornerstone in the protection of our nation’s drinking water. Capacity development is the process of water systems acquiring and maintaining adequate technical, managerial, and financial capabilities to enable them to consistently provide

safe drinking water on a sustainable basis. The SDWA's capacity development provisions provide a framework for States and water systems to work together to ensure that systems acquire the capacity needed to realize SDWA's public health protection objectives. EPA, in conjunction with our State partners, has spent a considerable amount of time and resources in developing and implementing an effective yet flexible Capacity Development program. However, because the evaluation's objectives and study questions changed significantly after your investigators collected data from EPA and the States, we respectfully, but strongly, disagree with the approach and findings.

Note 13

States have expressed surprise and serious concern to the Office of Water (OW) that the focus of the report has changed. For example, when first approached by the OIG, the state of Arizona was told the report would be a study that focused on three key areas:

1. State successes in capacity development implementation;
2. the challenges States face in implementing their strategies; and
3. overall program implementation issues and concerns.

In addition, the investigators indicated that the report would contain examples of successful program elements from States that would foster productive information transfer among the States.

Note 14

Consistent with that commitment by OIG, the Engagement Letter formally signed by OW and OIG in October 2001 sets forth the following as the purpose and focus of the evaluation:

**“OBJECTIVE:** The OIG's objective is to evaluate EPA and State formulation and initial implementation of Capacity Development programs to determine the extent to which such programs have been formulated and initially implemented consistent with the specific requirements and overall objectives of the SDWA. Specific emphasis will be given to evaluation of how States are integrating capacity development together with other SDWA initiatives and drinking water program activities to assist community water systems to consistently achieve the health objectives of the SDWA.”

We agreed with OIG that this broad assessment of program start-up and challenges could potentially assist States and EPA in shaping future phases of the program. This focus of the evaluation remained in place through completion of the data collection phase that involved the six States and EPA regions. It was only after site visits and data collection were completed that OIG apparently changed from a study of State successes, challenges, and overall program issues to a national performance measures focus.

Note 15

Because of this eleventh hour change, the information collected is not related to the changed focus of your evaluation. EPA and the States were never provided the opportunity to submit information directly related to the final study questions as presented in the draft report. Changing the focus of the evaluation report post data collection renders the data collected

inadequate to answer the revised objectives of the evaluation. Therefore, we cannot concur with the report's recommendations.

Note 16

Both the States and EPA believe this surprise switch from the stated purpose undermines the fairness, quality and credibility of the draft report. We strongly recommend that OIG take the time necessary to refocus the draft on the original purpose which is supported by the data collected in the course of your investigation.

Note 17

#### Data Collected Too Early to Provide Meaningful Results

When the OIG began the evaluation, EPA and the States were in the very early stages of program implementation. As we stated to OIG during the planning phase of this evaluation, the evaluation was conducted too early to provide meaningful results in terms of assessing program performance for capacity development strategies pursuant to SDWA section 1420(c). Capacity development is universally recognized as a long-term effort. Yet, depending upon when a State's capacity development strategy was approved, most States had only approximately one year of initial implementation efforts for the OIG to evaluate. When the investigation commenced, the OIG staff recognized this issue and therefore agreed to the three study questions mentioned above. The draft report does not reference these questions, but rather focuses on national performance assessment measures and quantifiable results against those measures. This focus is premature given States had just begun to implement their strategies. Measurable results from long term strategies cannot realistically be expected at such an early stage of program implementation. The report offers little to describe this fact and leaves the reader to believe that States chose to ignore aspects of strategies rather than acknowledge that measurable progress of successful implementation may take several years.

Note 18

#### EPA Disagrees with OIG's Interpretation of Congressional Intent

We disagree with the OIG's understanding of congressional intent of the capacity development strategies. Congress clearly intended that EPA provide States as much flexibility as possible, and that EPA's role in capacity development is to ensure that States are implementing capacity development strategies that are tailored to meet each State's specific and unique needs.

The conference report for the 1996 SDWA Amendments ( Report 104-741, 104<sup>th</sup> Congress, (1996)) could not have made this point more clearly:

“States are also to adopt and implement a capacity development strategy. This is intended to encourage States to continue to focus resources on capacity development initiatives. States are required to consider, solicit public comment on, and include as deemed appropriate by the State, a number of elements and criteria. The Conferees do not expect that every State will adopt the same capacity development strategy and do not expect States to include elements in section 1420(c) that the States determine are not appropriate. It is not expected that every State will give the same consideration to each of

the elements listed in section 1420(c). Rather, the Conferees expect that, as suggested by existing State capacity development programs, State capacity development strategies developed under this section will vary according to the unique needs of the State. The Conferees encourage this diversity and indicate that EPA should give deference to a State's determination as to content and manner of implementation of a State's plan, as long as the State has solicited and considered public comment on the listed elements and has adopted a strategy that incorporates appropriate provisions."

In addition, contrary to OIG's contention, Congress precluded EPA from assessing system capacity for the purposes of withholding funds. Specifically, SDWA section 1420(c)(4) prohibits EPA from making any such assessment:

"The decisions of the State under this section regarding any particular public water system are not subject to review by the Administrator and may not serve as the basis for withholding funds under section 1452."

This provision effectively prohibits EPA from forcing States to meet any other requirements than those for content, deadlines for implementation, and reporting requirements to avoid sanctions by withholding DWSRF assistance. Strategies were intended by Congress to assist (not force or require) public water systems in acquiring and maintaining capacity.

Note 19

We welcome additional legal consultation with your office and the Office of General Counsel on this statutory interpretation issue.

#### Missed Opportunity for Meaningful Program Input

As previously discussed, the OIG missed an important opportunity to provide substantial input on program improvements. Part of this failure is attributed to OIG's decision to narrowly cover only capacity development strategies. In order to truly evaluate the efforts and successes of the capacity development program, your evaluation should have been designed to cover all aspects of SDWA section 1420. The new systems program, which is the proactive segment of the capacity development program, was not mentioned in your report. During your preliminary research phase, EPA staff encouraged the OIG to take a closer look at this program. At the time OIG staff began site visits to the States, the new systems program already had more than two years of implementation to its credit.

Note 20

In many areas of the report, the OIG criticizes EPA and States for placing too much emphasis on technical capacity and not enough on managerial and financial capacity. However, the report fails to even mention several significant efforts that are focused on managerial and financial capacity. The report does not discuss the Environmental Finance Centers (EFCs) (SDWA section 1420(g)) and the Small System Technology Assistance Centers (TACs) (SDWA section 1420(f)). Both of these university-based programs are congressionally funded each year specifically to work with EPA and States to develop tools and training that directly promote all

three elements of capacity. The EFCs have established expertise in financial capacity, and brought that perspective to their work assisting States develop their capacity development strategies. They continue to develop tools and training that help systems build financial capacity. The TACs have also focused their training and tool development efforts over the last few years to include more projects to help systems build managerial capacity.

Note 21

In addition, the States face barriers in working to assist systems. First, the SDWA requires that the strategy address existing systems. This in itself is a daunting task since many States have thousands of public water systems to regulate. Second, States recognize that the resources simply don't exist to assist all of these systems, and must prioritize systems most in need of assistance. This means that the States are focusing on the "worst of the worst" systems, many of which have been in and out of compliance for years and may resist State attempts to provide assistance.

#### States Mislead on their Participation in the Evaluation

As you know, all six states believe OIG violated commitments it made concerning their participation in the study. At the outset of the project, OIG agreed not to identify the basis for the selection of the states in the study. This was based upon an understanding that the data used for the selection was flawed for this purpose. It also reflects a recognition that this information was irrelevant to the core purpose of the study. Nonetheless, well into the study, OIG informed the states of a change in their position on this issue.

OW's understanding of the OIG's commitments on this issue is identical to that of the participating states. We are troubled that OIG's reversal damages EPA's relationship with our state partners. It will certainly impair OIG attempts to obtain state cooperation in future projects.

Note 22

#### Numerous Factual Errors Impact the Report's Accuracy

Finally, there are numerous factual errors throughout the report. In general, especially given the time frame from start to finish, we are disappointed in the quality of the report represented by these errors. One representative error is discussed below and we have included an extensive list as an attachment. We hope that you will address these issues to ensure the accuracy of the report.

Note 23

An example of a fundamental error occurs on page 28, where the report incorrectly describes the funding source for State capacity development programs. The report erroneously indicates that States may use 31% of their Drinking Water State Revolving Fund (DWSRF) for capacity development. The DWSRF funds a host of programs and capacity development is only one of the eligible programs. The theoretical maximum in set-aside dollars that could be used to support capacity development activities is 22% (10% for state program management; 10% for local assistance; and 2% for technical assistance to systems). However, this would be to the exclusion of other pressing local and state needs that are eligible for those same funds. Yet, the

Note 24

report does not describe the competition that exists within States for those scarce infrastructure funds. Neither does it mention the matching requirement in order for those funds to be used for capacity development program implementation, a difficult undertaking in current economic times. It is well documented in several reports, both by EPA and other drinking water industry organizations, that States are faced with enormous infrastructure needs that far outpace DWSRF funding. Every State faces the very real fact that every dollar set-aside from the DWSRF to implement programs results in fewer dollars overall to fund needed infrastructure. These two issues, required matching funds and competition for money within the DWSRF, work to limit the actual monies each State could set-aside for capacity development and they should be discussed to provide a complete and balanced picture.

On future technical reports such as this evaluation, you may wish to consider the benefits of conducting an independent technical peer review. It is standard practice for comparable studies in most other Federal government organizations and often improves quality.

#### Conclusion

We are including additional comment and information by attachment. As requested, Attachment 1 lists each of your recommendations and our rationale for nonconcurrence. Attachment 2 provides a more detailed list of factual errors we identified in the draft report. Attachment 3 provides comments EPA received from the States that participated in the evaluation.

I hope that these concerns can be addressed in your final report. I believe they will make it stronger, clearer, more accurate and more informative. Please include this response, in its entirety, in your final report. We also welcome the opportunity to meet with you in person to discuss our concerns in more detail.

If there are additional questions or if you wish further clarification of our comments, please contact William R. Diamond, Director, Drinking Water Protection Division, Office of Ground Water and Drinking Water, at (202) 564-3751. We look forward to working with you on this project and future reports concerning the quality of our nation's drinking water.

#### Attachments

cc: Kwai-Cheung Chan  
Cynthia C. Dougherty  
William R. Diamond  
Regional Water Division Directors  
Regional Drinking Water Branch Chiefs  
David Terry, Massachusetts Department of Environmental Protection  
Alton Boozer, South Carolina Department of Health and Environmental Control  
Marcia Willhite, Illinois Environmental Protection Agency

Jack L. Daniel, Nebraska Department of Regulation and Licensure  
Karen Smith, Arizona Department of Environmental Quality  
Gregg Grunenfelder, Washington Department of Health  
Dan Engelberg  
Leah Nikaidoh  
Judy Hecht



**Attachment 1: Response to Specific Recommendations**

**Recommendation 2-1 (a):** In order for EPA to effectively manage its capacity development program, it needs to have the right information and related indicators or measures to assess capacity development progress. Therefore, we recommend that the Assistant Administrator for Water to work with its partners and stakeholders to develop and adopt a national definition of “adequate” T/M/F capacity.

*Nonconcur.* Through capacity development guidance that we developed with stakeholders, we believe that we have adequately defined what is meant by technical, managerial and financial capacity (as noted on pages 2 and 3 of the draft report) and the key components to achieving capacity.

It is not likely that a national definition of “adequate” TMF capacity can be developed that will address all State capacity development program elements. By the intent of Congress, State capacity development strategies focused on flexibility and moved away from set performance measures. Rather than have a mandated program, States were allowed to choose first to participate, and second, to be allowed the flexibility to develop their own State specific strategies. In several sections of the report, the OIG admits it would be very difficult to assess achievements of the programs given the criteria included in the SDWA. If EPA were to develop a national standard definition of TMF capacity beyond the existing guidance, it would in effect eliminate most of the intended flexibility from the program.

Note 25

**Recommendation 2-1 (b):** In order for EPA to effectively manage its capacity development program, it needs to have the right information and related indicators or measures to assess capacity development progress. Therefore, we recommend that the Assistant Administrator for Water to work with its partners and stakeholders to identify a set of common measures that can be used to develop and implement national performance goals.

*Nonconcur.* The measures that have capture overall public health protection and therefore reflects our capacity development activities.

Note 26

**Recommendation 2-1 (c):** In order for EPA to effectively manage its capacity development program, it needs to have the right information and related indicators or measures to assess capacity development progress. Therefore, we recommend that the Assistant Administrator for Water to work with its partners and stakeholders to determine what common capacity development data and/or information resources are available that could be used to support a national capacity development measure, while minimizing data collection burdens to States and water systems.

*Nonconcur.* States established baselines and methods to measure progress as suggested by SDWA 1420(c)(2)(D). We are trying to improve program evaluation, but we must target data collection to minimize burden to States. We don't think that nationally reportable measures are available or effective to identify the contribution of capacity development to our overall GPRA objective. For enhanced program implementation, we could analyze/evaluate State program documentation and other data (Community Water System Survey, SDWIS data, historical Significant Non-Complier list) to determine if there are commonalities.

Note 27

**Recommendation 2-2 (a):** Using the results in Recommendation 2-1, develop national capacity development measure(s) by identifying capacity development goals to be accomplished, as part of the drinking water annual performance goal(s).

*Nonconcur.* The feasibility of measures that could be assessed on a long-term basis is uncertain. Primary data sources we would consider have longer reporting horizons. For example, the Community Water System Survey is conducted every 4-5 years; the list of systems in historical Significant Non-Compliance is submitted from States to EPA every three years. The feasibility of identifying measures that can be assessed on an annual basis, beyond our existing GPRA measures, is even more unlikely.

Note 28

**Recommendation 2-2 (b):** Using the results in Recommendation 2-1, develop national capacity development measure(s) by developing specific capacity development measures that support the capacity development annual performance goal(s).

*Nonconcur.* Refer to response for 2-2(a).

Note 28

**Recommendation 2-2 (c):** Using the results in Recommendation 2-1, develop national capacity development measure(s) by either modifying already existing data collection efforts or developing new data collection processes for capacity development performance measures.

*Nonconcur.* We believe that we could pursue ways to modify existing data collection efforts to collect more meaningful data. In an effort to keep minimize State burden, we would not develop new data collection processes.

Note 29

**Recommendation 2-2 (d):** Using the results in Recommendation 2-1, develop national capacity development measure(s) by analyzing results of capacity development performance on a national basis, and reporting progress to Congress and the public, as required by GPRA.

*Nonconcur.* Current measures developed for GPRA reporting are sufficient to assess drinking water program effectiveness and is in full compliance with GPRA. GPRA measures for segment-by-segment core program activities are not feasible nor will they provide meaningful indicators of progress.

Note 30

**Recommendation 3-1:** Revise 40 CFR 35.3515 (DWSRF withholding regulations) to provide more specific criteria that will allow EPA to conduct meaningful annual assessments of State capacity development strategies. We suggest that EPA also include as criteria the results of Recommendation 2-1, in regards to defining what constitutes adequate T/M/F capacity.

*Nonconcur.* EPA does not believe that the DWSRF regulation is the appropriate mechanism place to dictate to the regions how to assess State reports for the purposes of withholding DWSRF funds. We also believe this is inconsistent with Congressional intent. We do believe that we can provide informal guidance and assistance to the regions in reviewing the annual capacity development reports for the purpose of making withholding determinations, provided we determine that such guidance adds value to the process.

Note 31

**Recommendation 3-2:** Utilizing the outcomes of Recommendations 2-1 and 2-2, develop a national capacity development strategy that promotes T/M/F capacity in a proactive, integrated, flexible, and accountable manner.

*Nonconcur.* Our guidance development, outreach, and advocacy work clearly articulates our vision and outlines our strategy.

Note 32

**Recommendation 3-3:** In light of Recommendations 3-1 and 3-2, modify capacity development guidance accordingly.

*Nonconcur.* The draft report fails to recognize that Congress chose a flexible approach for States in developing and implementing the capacity development program. Rather than a top down approach, Congress asked that EPA set broad guidelines and that States take charge of developing strategies for addressing the unique characteristics of their State drinking water systems. Changing the capacity development guidance would remove the flexibility we have allowed States to have in implementing the program.

Note 33

## Attachment #2: Factual Errors and Other Comments

### General

The cover letter incorrectly identifies Bill Diamond as the Director of the Office of Ground Water and Drinking Water. He is the Director of the Drinking Water Protection Division within the Office of Ground Water and Drinking Water. Also, the Regional Capacity Development Coordinators and Regional Water Division Directors are different people. The coordinators are staff, not supervisors.

Note 34

### Report Title

The title of the report should be changed from “Impact of EPA and State Drinking Water Capacity Development Efforts is Unknown” to “Impact of EPA and State Drinking Water Capacity Development Efforts **Uncertain** or **Needs to be More Fully Documented**.” Implying that EPA and the States have no idea about the impact of the capacity development program is not helpful and leaves the reader with the idea that the capacity development program is not at all useful.

Note 35

### Executive Summary:

Page i, 1<sup>st</sup> paragraph: The second sentence reads, “These systems vary from very small rural systems to very large systems, and they all face problems with aging infrastructure, underfunding, and future drinking water regulations.” We recommend changing the phrase, “*they all face problems*” to “*many face challenges*”.

Note 36

Page i, 1<sup>st</sup> paragraph: The last sentence does not logically follow the sentence above it. It refers to the estimated payment gap of \$265 billion, which includes both capital and Operations & Maintenance costs. Most of the gap will likely be felt by larger systems, which have greater needs. Also, the sentence before refers to “expanding requirements of the SDWA”, but most of the gap is related to those needed to simply operate water utilities and has nothing to do with SDWA requirements. For example, most of the need and gap is due to payments needed for pipes.

Note 37

Page i, 2<sup>nd</sup> paragraph: The conference held in January 2003 was on “innovative approaches to addressing the infrastructure gap”, not on the gap in and of itself. Please cite where the AA for Water called for capacity development investment as a means to address the issue.

Note 38

Page i, 3<sup>rd</sup> paragraph: Add “program” at end of the first sentence.

Note 39

Page i, last paragraph: Change the phrase “...unable to determine the extent to which those capacity development efforts have been effective” to “...unable to **fully** determine the extent to which those capacity development efforts have been effective”. This change in language more accurately portrays the current situation.

Note 40

Page ii, 1<sup>st</sup> paragraph: We do not agree with the conclusion that EPA cannot report to Congress on the successes of the capacity development program as envisioned by the 1996 SDWA Amendments. We can analyze existing data submitted by States. The data necessary to report successes to Congress wasn't available at the time the evaluation was conducted.

Note 41

Page ii, 2<sup>nd</sup> paragraph. Mentioning the budget crises that States are currently facing is somewhat irrelevant given that most of the funds that are being used for capacity development are Federal dollars from DWSRF set-asides.

Note 42

#### Chapter 1

Page 1, 1<sup>st</sup> paragraph: The second sentence reads, "These systems vary from very small rural systems to very large systems, and they all face problems with aging infrastructure, underfunding, and future drinking water regulations." We recommend changing the phrase, "*they all face problems*" to "*many face challenges*".

Note 43

Page 2, 1<sup>st</sup> paragraph: The report mentions the use of the number of water supplies with a historical significant non-compliance (HSNC) as a means of gauging the degree of problem a State may be having in implementing the drinking water program. OIG did not take into account the enforcement actions that had been taken to assure water supplies were committing to corrective actions that, given time for implementation of construction programs, would result in attainment of compliance. They had also failed to recognize the overall high compliance rates that are being achieved.

Note 44

Page 2, 1<sup>st</sup> paragraph. What was the number of systems that had a history of SNC in 2000. Without a number there is no sense of the significance of the 91% value. Is it 91% of 10 systems, 2000, 20,000?

Note 45

Page 2, 1<sup>st</sup> paragraph: What is the source for saying that "SDWA requirements had surpassed the TMF capabilities of most small systems?"

Note 46

Page 2, Treatment bullet: It is incorrect to assume that all public water systems treat their water. There are ground water systems that do not have treatment as part of the process of delivering safe drinking water.

Note 47

Page 3, 2<sup>nd</sup> paragraph. The report States that a potential amount of funds that could have been withheld between 2001-2003 was \$359 million. The report seems to reflect that it would have been a good thing to withhold funds from States - which would have had the likely effect of defunding all set-asides and negatively impacting a State's ability to fund infrastructure projects needed for public health. Note that while EPA has not permanently withheld funds, it has, when allowed, held back full award of funds until requirements have been met.

Note 48

Page 4, 1<sup>st</sup> paragraph: The third sentence should read, "...by requiring them **to** have to demonstrate..."

Note 49

Page 4, last paragraph: The last sentence should read, "Congress expects EPA to approve State strategies if the States considered, *solicited public comment on, and included as appropriate*". After that sentence, there should be two additional bullets added to mirror all of the items as listed in SDWA 1420(c)(2)(A-E), Content. The bullets that should be added are: a description of the institutional, regulatory, financial, tax, or legal factors at the Federal, State, or local level that encourage or impair capacity development; and, an identification of the persons that have an interest in and are involved in the development and implementation of the capacity development strategy (including all appropriate agencies of Federal, State and local governments, private and nonprofit public water systems, and public water system customers).

Note 50

Page 5, 1<sup>st</sup> paragraph: The first bullet should also include using SDWA resources to: encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems; and, assist public water systems in the training and certification of operators.

Note 51

Page 5, 2<sup>nd</sup> paragraph: We believe it is incorrect to say your fieldwork ended in November 2002. It is our understanding that your fieldwork ended in February 2002 with the last State site visit.

Note 52

#### Chapter 2

Page 11, 3<sup>rd</sup> paragraph: Because the evaluation was premature, it is unfair to say that "*The EPA Capacity Development Coordinator said that because of State flexibility, measures of capacity development success would have to be State-specific because all of the States' programs are unique. This means that the Agency will not be able to determine whether the capacity development initiative is working, whether some activities are more or less effective than others, and which components of the program need attention or help.*" Once we have an adequate amount of time for implementation, EPA and States will be able to determine that the capacity development provisions of SDWA are improving public health protection. There is also no value added by quoting statements made by the EPA Capacity Development Coordinator. Throughout your evaluation time frame, there have been several HQ staff working with the capacity development program.

Note 53

Page 13, 2<sup>nd</sup> paragraph: Please explain the basis for the statement "*...we found that the data that EPA has collected through various reporting efforts were not consistent enough, and were not always complete or accurate.*"

Note 54

Page 15, 2<sup>nd</sup> paragraph: The statement "EPA indicated it planned to periodically update this report (January 1997 report, "*Initial Summary of Current State Capacity Development Activities,*" EPA 816-S-97-001) as States developed and implemented their capacity development programs (although it had not been updated as of the date of our draft report)." is not a true statement. EPA did update this report in July 2001. The report, titled "*State Strategies to Assist*

*Public Water Systems in Acquiring and Maintaining Technical, Managerial, and Financial Capacity: A Comprehensive Summary of State Responses to Section 1420(c) of the Safe Drinking Water Act (EPA 816-R-01-019).*

Note 55

Page 15, 2<sup>nd</sup> paragraph under Analysis and Reporting, 1<sup>st</sup> sentence. Through June 30, 2002, States had only expended \$30.83 million on capacity development activities under the DWSRF set-asides, not “hundreds of millions of dollars”.

Note 56

### Chapter 3

Page 19, 1<sup>st</sup> paragraph: What is the basis for the following statement: “*While EPA provided guidance and publications to assist States in developing their capacity development strategies, the Agency has not continued to provide oversight to ensure that State strategies are being implemented to assist systems most in need of capacity assistance.*” We believe that EPA is providing adequate oversight to the States.

Note 57

Page 26, 1<sup>st</sup> paragraph: We believe that you are putting too much emphasis on incorporating managerial and financial capacity into sanitary surveys. Sanitary surveys are only required to be completed every three years for community water systems. State capacity development programs use system “self-assessment” forms to evaluate baseline technical, managerial and financial capacity. The self-assessments can be conducted on a more frequent basis than sanitary surveys. Through training developed by EPA’s Drinking Water Academy, we are promoting the linkages of all three elements of capacity into the sanitary survey process.

Note 58

Page 26, last paragraph: Enforcement on very small systems with managerial and financial capacity issues may or may not be a feasible method to achieve compliance, even as a last resort. In cases where community resources (manpower, financial) are severely limiting, a State may decide to take an approach which provides direct assistance as a more effective remedial tool. Usually, enforcement is reserved for a very small number of cases identified as deliberate recalcitrance or resistance to assistance efforts.

Note 59

Page 27, 3<sup>rd</sup> paragraph: The third sentence should be finished as follows, “Congress intended States to utilize all three elements of capacity to ensure the system can repay the loan.”

Note 60

Page 27, 5<sup>th</sup> paragraph: The first sentence indicates that “EPA requires that loans go to systems that are addressing all three TMF components”. This is incorrect. EPA requires that all systems have TMF capacity in order to receive a loan or agree to make changes to obtain capacity. [40 CFR 35.3520(d)]. Therefore, not all loans were used to solve TMF problems. The last sentence in the paragraph is not needed because States are already required to address managerial and technical issues. It seems odd that elsewhere in the report, States are faulted for spending too much time on technical capacity and not the other elements, while in the DWSRF they are faulted for spending too much time on financial capacity. Our sense is that States are addressing all three elements in their capacity assessment, but that in closing the loan they are looking beyond base financial capacity requirements to ensure repayment of the loan.

Note 61

Page 27, 6<sup>th</sup> paragraph: The report states that “*EPA recognizes that an infrastructure gap exists. Congress, to address this funding gap, allowed States...*”. There is no relationship between EPA’s recognition of an infrastructure gap and Congressionally allowed DWSRF set-asides. The Gap Report came out 6 years after the Amendments authorizing the DWSRF program.

Recommend deleting italicized text.

Note 62

Page 30, 1<sup>st</sup> paragraph: The report discusses that the accountability process is ineffective. For example, Region 7 performed a comprehensive evaluation to see how its States were doing after the first year of implementation, and to see if there was anything the region could do to assist the State. EPA holds the States accountable and will recommend a course of action if we see the insufficient implementation of this program. However, before we recommend withholding, we will do everything within our authority to assist the State to achieve in this program.

Note 63

Page 33, Table 3.1: You state that EPA HQ did not provide guidance to the regions on “how to” review the States’ Reports to the Governor. We believe that Congress did not intend for EPA to evaluate these reports for content, but rather to ensure the reports were written and submitted to each Governor.

Note 64

Page 34, 4<sup>th</sup> paragraph: What kind of “process” are you looking for? The process for withholding and noncompliance in the DWSRF program is outlined in the regulations (40 CFR 35.3515 and 35.3585) and described in section VII.A. of preamble to the DWSRF rule.

Note 65

Page 35, 1<sup>st</sup> paragraph: The report refers to a discussion with the EPA HQ Capacity Development Coordinator’s personal feelings and statements about EPA Regional office management that had instructed their regional coordinators not to use of DWSRF withholding as a sanction against States failing to meet the capacity development requirements (not implementing their strategies) of SDWA. This discussion, however untrue or true, gives the impression that EPA generally never had any intent to enforce non-compliance with the requirements of section 1420 of SDWA and does not belong in a factual report.

Note 66



**Attachment 3: Comments from State Participants**

Note 67



## ***OIG Analysis of Agency Response***

**Note 1:** EPA “expressed disappointment” in the substantive content, study design and evaluation methods, factual accuracy, and tone of our draft report. We strongly disagree with the overall characterization of our review by EPA for the following reasons:

- a. EPA expressed disappointment in the “substantive content” of our draft report. We reviewed the capacity development program for existing systems based on the fact that a substantial majority of community water systems are existing systems. These systems serve 264 million people. Therefore, we believed we reviewed areas that could have a significant impact on drinking water issues. We discussed this with EPA when we entered into fieldwork in October 2001, and held monthly meetings with EPA and States during the course of our evaluation, and no concerns were raised about the overall direction of our report.
- b. EPA also expressed disappointment in our “study design and evaluation methods.” Two issues that seem to be motivating this comment were our initial decisions to not include the names of the States visited, and to review performance measurement of capacity development.

When we began this study, the States selected for review expressed sensitivity about having been selected, and being characterized as “failing.” They were concerned that we had utilized information in SDWIS/FED, which they felt was unreliable. As a result, we indicated that we would not mention the States. However, we subsequently realized this was inappropriate, because including the State names would add significant, valuable information to the report. Further, we noted the information we used on the States was already available to the public via the internet and other sources. As soon as we decided the names of the States should be included in the report, we notified EPA and the six States, and the States accepted our decision. EPA also indicates on page six of its response that the SDWIS data are flawed. However, these are the same data that EPA utilizes to report performance to Congress. Furthermore, these are also the same data EPA used in its current draft “Report on the Environment,” stating that:

*An increasing number of people are served by community water systems that meet all health-based drinking water standards. In 2002, states reported that 94 percent of the population served by community water systems were served by systems that met all health-based standards, up from 79 percent in 1993. Underreporting and late reporting of data affect the accuracy of this information.*

While the data are considered to be flawed by EPA, at the same time, EPA uses the data to show progress and trend in their official documents.

Regarding performance measurement, as part of any evaluation or audit, we generally look at performance measurement related to what we are reviewing. Since capacity development is still in the early stages, we thought it was particularly useful to address this issue, since being able to adequately measure performance is very useful when implementing a new strategy. We do not expect EPA to dictate to the States how to measure their individual programs. However, EPA needs to develop a means to assess sets of capacity development data from States and be able to evaluate capacity development progress on a national basis.

- c. EPA also questioned the “factual accuracy” of the draft report. There were some minor factual inaccuracies in the draft, and we appreciate the Agency’s assistance in correcting those errors. One of the main purposes of issuing a draft report is to identify and correct such errors. The errors EPA identified were not significant and did not alter our positions. Further, as shown in additional comments that follow, most of the issues raised by EPA involved clarification rather than correction. We have added such clarification where appropriate.
- d. Lastly, EPA expressed disappointment in the “overall tone” of the draft report. We believe that we have presented a balanced and objective assessment of EPA’s and selected States’ design and early implementation of capacity development. Our presentation included positive aspects of what States and EPA are doing as well as areas that need improvement. However, based on EPA’s response, we have included additional information reflecting efforts that EPA and States are making in the continued implementation of capacity development programs.

**Note 2:** We strongly disagree with EPA’s assessment that our report is “seriously flawed” and demonstrates a lack of understanding of the capacity development program. As part of our evaluation, we clearly present all three facets of capacity development (T/M/F), and how EPA and States’ designed and implement capacity development efforts to address T/M/F efforts. EPA stated that we changed the focus of our report from capacity development to national performance measurement. While we looked at performance measurement because reviewing GPRA-related issues is a standard part of OIG evaluations, it was not the primary focus of our report.

EPA has chosen to narrowly interpret the SDWA Amendments in regard to what it can and cannot ask or expect States to do in order to meet Congressional intent. We asked our Counsel to review the Agency’s response to our draft report regarding this issue. Our Counsel stated that:

*The first legislative history excerpt cited by OW talks about EPA giving deference to the states. That doesn't mean complete abdication. Even the last sentence of the legislative history language begs the question when it says that EPA should give deference to a state's plan so long as the state solicited public comment "and has adopted a strategy that incorporates appropriate provisions." One could argue that this last phrase gives EPA some say in what "appropriate provisions" should look like to some degree.*

*In addition, OW's next statutory citation to 42 USC 300g-9(c)(4) -- which provides that a state's decision with respect to a particular public water system is not reviewable by EPA*

*and cannot serve as a basis for withholding SRF funds -- does not support OW's position that EPA is limited in evaluating a state's capacity development strategy. The plain meaning of this statutory provision precludes EPA from meddling with a state's decision regarding the capacity development of a "particular" system. However, this provision says nothing about EPA's responsibility in ensuring whether a state has executed its responsibility to develop an overall capacity development strategy. Nor does it preclude EPA from withholding SRF funds if a state does not develop such a strategy.*

EPA maintains that our position would infringe upon the flexibility Congress intended for the States, but we do not believe that is the case. EPA's position does not support Congress's expectation that EPA, through withholding provisions, ensure that public water systems are maintaining and achieving capacity. In our opinion, if Congress wanted this to be solely a State program, it would not have provided such accountability provisions for EPA to utilize.

**Note 3:** We believe that we have presented a balanced and objective assessment of EPA's and the States' design and early implementation of capacity development. We certainly identified positive aspects, especially in the area of flexibility. We duly noted that each of the States we visited had designed capacity development strategies in accordance with SDWA and met all reporting requirements to date. We also determined that EPA's approach to designing and launching the capacity development was proactive and used a high degree of stakeholder participation to develop applicable guidance.

EPA stated that by examining performance measures of this program we "shifted gears." However, as already discussed, we do not think that was the case. We generally always look at performance measures during our evaluations, and since we observed a management issue concerning the adequacy of measurement for the program we were reviewing, it was our duty to report on that issue. As noted, we discussed the performance measurement issues with EPA and the States at numerous meetings during our field work, and concerns were not raised at the time.

**Note 4:** Contrary to EPA's suggestion, we were unable, through our review of capacity development and EPA's GPRA measures, to identify measures of progress for this critical program. Our findings on this issue are presented on pages 8-9 in our final report.

**Note 5:** We don't share EPA's characterization of our report as a "critique of the legislation and its perceived shortcomings." Rather, in one respect our report can be viewed as a critique of EPA's inability to utilize all of the tools that Congress provided it with (notably the withholding provisions contained in SDWA) to encourage states to fully carry the capacity development provisions of the legislation.

**Note 6:** These challenges, although difficult, need to be addressed. We do not view challenges to success as excuses for not succeeding. EPA is not alone in facing challenges to measuring its performance. As GAO pointed out, throughout the government GPRA is facing several significant challenges. In our draft report, we recognized challenges facing EPA in measuring capacity development. We believe that the challenges to performance measurement of this program that we identified in the draft report are solvable. To this end, we offered recommendations to address these challenges. For

example, in Recommendation 4 [formerly Recommendation 2-1(b) and (c) in the draft report], we recommended that EPA work with States and stakeholders to develop a set of common measures that would minimize data burdens on the States. Therefore, we do not agree with the Agency's comments that we ignored these issues in our findings.

**Note 7:** EPA contends that we only allowed it a "brief" amount of time to comment. On the contrary, we provided 70% more time for its review than our agreement with EPA (set out in EPA Manual 2750) normally allows. According to this manual, the action official is provided 30 days to respond to draft reports. We granted an additional 3 weeks that was requested. However, we declined a second extension requested by your office. On balance we believe that we were quite fair. Moreover, during our monthly meeting in May 2002, and in prior meetings, States expressed the desire to respond to the draft report. We left up to your office the decision of whether to include comments from the states.

**Note 8:** We do not agree with EPA's assessment. Throughout our report, we indicate that this evaluation was a design and early implementation review. During our discussions with EPA and States, we explained the issues we were developing and provided an opportunity for EPA to address issues early on, before programs become too ingrained.

**Note 9:** EPA misconstrued our point. We were not suggesting in our draft report that EPA has the authority to get involved in States' assessments of individual systems. Rather, EPA is required to ensure, as part of its withholding determinations, that States, "continue to focus resources" on capacity development initiatives. (EPA expanded on this item at "Note 19" of its comments.

**Note 10:** We appreciate that EPA may feel that we should have studied new as well as existing systems. Our decision to review existing systems was one that we made early in our review. As we point out in Note 1(a) we decided to review the capacity development program for existing systems because they comprise a substantial majority of community water systems that provide drinking water to the public. This decision to review existing systems was made during our preliminary research phase, and discussed with EPA as part of the initiation of field work, in October 2001. We believed that this was a significant area to be reviewed. Additionally, our review was facilitated by the fact that EPA tracks and reports to Congress on the compliance of existing systems, as part of its GPRA performance reporting.

**Note 11:** This issue is addressed in Note 1(b).

**Note 12:** As we point out in Note 1(c) like most internal draft reports, this draft contained some errors. Correcting potential errors is in fact one of the principal reasons why we share our reports with program offices prior to release to the public. However, it should be noted that most of the items raised by EPA in this area were items requiring additional clarification rather than correction. We have added such clarification, where appropriate.

**Note 13:** See Notes 1(b) and 3.

**Note 14:** See Note 3.

**Note 15:** See Note 3.

**Note 16:** We regret that EPA believes that our discovery during fieldwork of its failure to adequately measure performance (which it characterizes as "changing the focus" of our study) prevents us from drawing findings about this new information, and that the Agency is, therefore, unable to concur with our recommendations. We disagree with EPA's assessment that the data collection performed did not allow the States the ability to submit information directly to the OIG for consideration. The information collected on the performance measurement issues that related to the States was collected during field work, and reviewed by the States as part of the compilations we prepared and sent to the States for review. The national performance information relating to EPA is public information available on EPA's web site and, therefore, EPA should be able to address recommendations relating to performance measurement accordingly.

**Note 17:** See Note 3.

**Note 18:** See Note 8.

**Note 19:** See Note 9.

**Note 20:** See Note 10.

**Note 21:** During our evaluation, we specifically asked the States and Regions about the use of Environmental Financial Centers and Technology Assistance Centers. We have identified on page 3 of the report that SDWA funded these tools to assist States in implementing SDWA.

**Note 22:** See Note 1(b).

**Note 23:** See Note 12.

**Note 24:** We agree that EPA's presentation of the 31 percent of DWSRF funding for use for capacity development provides more detail, and offers a better picture on the availability of set-aside funds for capacity development.

**Note 25:** We reorganized our recommendations. As a result, we dropped this recommendation from the final report. It is subsumed under other recommendations (notably Recommendation 4). If EPA, as directed in Recommendation 4, can capture results on a national level for capacity development success, a specific definition of adequate capacity may not be needed. We disagree, however, with EPA's assertion that a national standard definition of adequate T/M/F capacity would effectively eliminate flexibility. We suggest that EPA consider outcome-based measures of this critical program. Adequate capacity is an end result, which all systems should be expected to achieve. The tools (or outputs) that States use to assist systems do not have to be uniform – States can and should be allowed the flexibility to implement programs.

**Note 26:** We completely disagree with EPA’s views that the SDWIS/FED based performance measure is adequate. EPA has identified significant errors in this information source. SDWIS/FED was designed to do one thing, but is being used for another. It is a repository of information about self-reported violations by public water systems. Only systems in non-compliance are tracked. SDWIS/FED was not designed to measure managerial or financial data. Therefore, at best, SDWIS/FED can provide some measure of technical capacity, but not managerial or financial capacity results. Also, as presented in our draft report, program managers make day-to-day decisions using annual performance plans, describing annual performance goals, and measuring outputs and outcomes, but EPA does not have any such information that specifically relates to capacity development.

During our fieldwork, the Massachusetts’ Drinking Water Program Director stated that he was working with OGWDW on how States can capture results and measure success of their capacity development programs. EPA should continue these efforts, and work to identify and adopt national capacity development annual performance goals. Our recommendation remains in the final report and is now Recommendation 4(a).

**Note 27:** We do not share EPA’s pessimism that nationally reportable measures are not available or effective to identify the contribution of capacity development to its overall GPRA objective. For example, OGWDW has been working with stakeholders to address data issues, including OGWDW’s efforts to obtain more parametric data. The Chief of OGWDW’s Infrastructure Branch said, during presentations that he held with various stakeholder groups, that there were perhaps 8 to 10 data elements that States probably already collect that EPA could use to better measure drinking water quality. As we stated in our report, performance measurement is not an easy process. However, we continue to believe that the Office of Water needs to address this issue, and work with its stakeholders and partners to get this process started, as part of the continued implementation of capacity development. Our recommendation remains in the final report, and is now Recommendation 4(b).

**Note 28:** We understand the difficulties EPA may face in implementing this recommendation. However, as presented in the draft report, States (such as Massachusetts) are gathering a variety of data on capacity development activities and analyzing this information annually to assess progress, and identify trends for decision making and outcome measurement. As we recommended, EPA should partner with States, such as Massachusetts, to assist EPA in developing annual performance goals for capacity development. Our recommendation remains unchanged, and is now Recommendation 5(b).

**Note 29:** Depending on what capacity development annual performance goals are adopted, EPA would be in the best position to determine whether new information needs to be collected, or, as EPA indicated, existing data collection efforts provide data. Additionally, States, as they implement their capacity development strategies, should be gathering data to measure results against their baselines. Thus, States should already have information available for EPA to use. Our recommendation remains unchanged, and is now Recommendation 5(c).

**Note 30:** As we provided in the draft report, EPA has established annual performance goals for other drinking water activities. EPA believes that, in these instances, annual goals are useful for measuring



progress. EPA also stated, in its response, that capacity development is a cornerstone of the drinking water program. Thus, an important program, such as capacity development, should be measured, as well. EPA's program managers need periodic information as to progress being made in capacity development, in order to make resource and policy decisions. Our recommendation remains unchanged, and is now Recommendation 5(d).

**Note 31:** For the final report, our recommendation remains unchanged, and is now Recommendation 2. However, the Assistant Administrator stated that EPA can provide informal guidance to Regions and States to perform annual assessments (as part of the withholding determination process), including appropriate criteria. In responding to the final report, EPA should provide an action plan and milestone dates for completing such actions. The guidance, however, should be provided formally, to ensure consistent application by Regions and States.

**Note 32:** Based upon our findings in the draft report, EPA needs to better articulate proactivity, integration, and accountability, to ensure that States' capacity development efforts incorporate managerial and financial capacity assistance. A national strategic plan would include both short- and long-range goals, from which to measure progress. EPA does not have such measures. For the final report, our recommendation remains unchanged, and is now Recommendation 1.

**Note 33:** We do not agree with EPA's response. Providing guidance does not necessarily impede flexibility, especially if the guidance will help States to successfully development and implement their capacity development programs. As done with the current capacity development guidance, EPA can make changes to guidance using stakeholder participation, thus getting buy-in from stakeholders and ensuring that flexibility is maintained. Our recommendation remains unchanged, and is now Recommendation 1.

**Note 34:** Corrected.

**Note 35:** Agreed. We made changes to the final report accordingly.

**Note 36:** Agreed. We made changes to the final report accordingly.

**Note 37:** The information provided by EPA gives a more detailed explanation of what makes up the infrastructure gap. No changes were made to the final report.

**Note 38:** The Assistant Administrator's speech is located on EPA's web site, at [www.epa.gov/water/speeches/sustaining.html](http://www.epa.gov/water/speeches/sustaining.html). The Assistant Administrator included in his speech specifically that SDWA capacity development can assess management of water systems to be able to provide T/M/F to reduce long-term costs and improve system performance.

**Note 39:** Corrected.

**Note 40:** Agreed. We made changes to the final report accordingly.

**Note 41:** EPA did not agree with our conclusion, stating that it can analyze existing data submitted by States, but that data was not available at the time of our review to do this analysis. This implies that EPA in the future, will be able to analyze such data and report results to Congress. As Recommendations 4(b) and 5(c) indicate, EPA should begin setting up a framework to review available data, as well as identify data gaps, and determine how it will report results to Congress. We have not changed our conclusion in the final report.

**Note 42:** We do not agree with EPA's assessment. State budget problems could and do impact how States will spend resources, including for such programs as capacity development. In fact, two States (Arizona and Illinois) specifically mentioned budget constraints affecting implementation of capacity development when they responded to the draft report.

**Note 43:** Agreed. We made changes to the final report accordingly.

**Note 44:** The purpose of providing this information is to demonstrate the needs that small systems have for capacity development assistance, and not to imply that HSNCs are a way to gauge States' drinking water problems. Also, as stated in EPA's response, States' initial capacity development efforts have focused on those systems who are the " 'worst of the worst'... many of which have been in and out of compliance for years and may resist State attempts to provide assistance." These systems would be HSNCs; therefore, the information in our report is relevant.

**Note 45:** Of the total number of HSNCs for 2002 (4,752 systems), 4,281 of those systems were small.

**Note 46:** We paraphrased this information from the 1996 Amendments, Section 3(2), which stated: "because the requirements of the Safe Drinking Water Act (42 U.S.C. 300f et seq.) now exceed the financial and technical capacity of some public water systems, especially many small public water systems, the Federal Government needs to provide assistance to communities to help the communities meet Federal drinking water requirements...."

**Note 47:** We obtained this information from EPA's web site, at [www.epa.gov/OGWDW/kids/treat.html](http://www.epa.gov/OGWDW/kids/treat.html). This information was provided to give the general reader an understanding of the drinking water process.

**Note 48:** The purpose of providing this information was solely to give the reader an understanding of the value of DWSRF and the capacity development program, and to illustrate the important responsibility that EPA and the States have to ensure adequate strategy implementation.

**Note 49:** Corrected.

**Note 50:** Agreed. Because of editorial considerations, this information is not presented in the final report.

**Note 51:** Agreed. Because of editorial considerations, this information is not presented in the final report.

**Note 52:** EPA's information is incomplete. We made a second visit to Illinois in May 2002, and met with OGWDW officials in August 2002. We obtained additional information regarding performance measurement in October and November 2002. Therefore, field work completion is stated correctly as November 2002.

**Note 53:** During our evaluation, we did not have any contradictory statements to the one made by the Capacity Development Coordinator. We have emphasized in the report that this is an early implementation evaluation, and our observations concerning performance measurement are based on the fact that EPA has yet to develop any national capacity development goals.

**Note 54:** This is our conclusion, based upon our analyses of various data collection efforts. In EPA's response, EPA did not question this information specifically.

**Note 55:** This 2001 publication does not indicate that it was performed as a followup to the 1997 publication.

**Note 56:** EPA misunderstood our point that States could potentially lose out on the use of funds if they are not sufficiently implementing their capacity development strategies. While States may have expended only \$30.83 million on capacity development activities, the fact remains that EPA's annual withholding determinations for fiscal 2001-2003 could have impacted a total amount of \$359 million of DWSRF funding to States.

**Note 57:** This is our conclusion, based on our evaluation of the design and early implementation of States' capacity development programs, and the supporting evidence presented in Chapter 3 of the draft report.

**Note 58:** The reason we emphasize sanitary surveys is because the States selected for review rely heavily on this drinking water *program* to gather information on T/M/F capacities and to target systems for assistance. Other drinking water programs were discussed in the draft and final reports, including operator certification and enforcement. We consider self-assessments to be a tool, not a drinking water program; therefore, we did not present this information in the report.

**Note 59:** We do not disagree with EPA's comments. As stated in Note 45, enforcement is discussed because this was a program that the sampled six States were using as part of their capacity development efforts.

**Note 60:** Agreed.

**Note 61:** We have corrected language in the report that loan recipients either have or will achieve T/M/F capacity through their projects.

**Note 62:** Agreed. Information dropped from the final report.

**Note 63:** We have added information about Region 7's comprehensive evaluations, and included, as Recommendation 3, that all EPA Regions adopt a similar means to assess States' capacity development programs.

**Note 64:** We partially agree with this statement by EPA. While SDWA does not specifically require EPA to review the reports to the Governors as part of its oversight responsibilities, EPA should look at reports like these as an opportunity to assess State progress.

**Note 65:** We believe that information/instructions that were provided to Regions in an informal manner should be included formally in the capacity development guidance document.

**Note 66:** While we believe that the Capacity Development Coordinator's opinion sheds light on the difficulties faced in designing and implementing the capacity development program, his statement may give the impression that States should have had funds withheld. We have added clarifying language to the final report.

**Note 67:** Generally, the States presented the same issues raised by EPA in its response to our draft report. Therefore, we did not include the States' responses in the final report.

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