

EPA Regional Capacity Development Coordinator's Handbook

Information for EPA Regional Evaluation of State Public Water
System Capacity Development Programs



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Top Ten Regional Capacity Development Coordinator Tasks

1. Review states' annual reports (Section 2.1).
Maintaining effective oversight of state programs for both new and existing systems is a key goal of the EPA Regional staff involvement in the Capacity Development program. The EPA Regional coordinators receive Annual Implementation Reports from states and use them to ensure that states are working to build and maintain technical, managerial, and financial (TMF) capacity.
2. Receive Governor's report every 3 years (Section 2.2).
States prepare a triennial report to the Governor which explains their increases in TMF capacity, highlights the progress made in improving water systems, and addresses the efficacy of their Capacity Development strategy. The EPA Regional Capacity Development coordinators receive a copy of the report.
3. Be a resource to state coordinators (Section 3).
Regional coordinators support state programs during the continual process of implementing, assessing, and revising Capacity Development programs, and to review and approve any proposed changes to the development strategy. The EPA Regional coordinators help states to determine the TMF capacity of their systems and to strategize how best to implement the Capacity Development program in the context of each individual state.
4. Complete Capacity Development Tracker (CD Tracker) entries (Section 3.6.1).
A key tool in assessing the program's performance, the CD Tracker database documents Drinking Water State Revolving Fund (DWSRF) withholding determinations, identifies successful state practices, and demonstrates improvements in water systems brought about by the Capacity Development program.
5. Coordinate with other drinking water programs (Section 3.7).
Depending on how the program is implemented in the individual EPA Regions, Regional coordinators may work directly with other Regional drinking water programs including those that do oversight on the state Public Water System Supervision program. Capacity development is most effective when the process is collaborative, and all parties support one another.
6. Coordinate with the EPA Regional Operator Certification team (Section 3.7).
Regional coordinators must work closely with the EPA Regional Operator Certification coordinators at the EPA to exchange information on operator certification and training opportunities as well as the status of both programs.
7. Coordinate with the EPA Regional DWSRF team (Section 3.7).
Regional coordinators must inform the EPA Regional DWSRF coordinators when a 20 percent withholding is required to enforce capacity development eligibility restrictions.

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8. Quarterly review of Enforcement Targeting Tool (ETT) lists (Section 3.8).
The ETT assesses program compliance and TMF capacity for all water systems. The EPA headquarters and the EPA Regions meet quarterly to review any system that the ETT identifies as an enforcement priority.
9. Coordinate with technical assistance (TA) providers (Section C.2.5).
The knowledge and perspectives of TA organizations offer Regional coordinators a critical tool in establishing effective development programs and can assist in designing capacity-building activities.
10. Coordinate with other federal agencies (Section C.2.5).
Regional coordinators are best equipped to support the needs of states when they develop partnerships with other federal agencies, such as the United States Department of Agriculture (USDA), which may have goals that align with or complement those of the Capacity Development program.



Keep an eye out for this icon throughout the document. Whenever this appears it indicates that section is in support of one of the Top Ten Regional Capacity Development Coordinator Tasks.

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Purpose of the Handbook

The EPA Regional Capacity Development Handbook summarizes the capacity development provisions of the Safe Drinking Water Act (SDWA), including state responsibilities, tools that states can use to help public water systems (PWSs) develop technical, managerial, and financial (TMF) capacity, and links between Capacity Development programs and other SDWA initiatives.

Click “Safe Drinking Water Act” to review that section of the document and learn more about the capacity development provisions and history of SDWA.

Safe Drinking
Water Act

State responsibilities are included in this document to provide context for the kinds of assistance and guidance state staff may request from the EPA Regional coordinators. In addition to the roles and responsibilities discussed in this handbook, the EPA is also involved in providing resources, tools, and trainings internally (EPA Regions) and to the states. The EPA is also responsible for confirming that the states are continuing to implement their Capacity Development strategies and ensuring that all new community water systems (CWSs) and non-transient non-community water system (NTNCWSs) demonstrate adequate capacity.

1. Why is Capacity Development Important?

Capacity development is important because it protects public health. Capacity development focuses on resolving the challenges that many water systems (and particularly small systems) face. Such challenges include, but are not limited to, the following:

- **Regulatory compliance:** Changes to regulations can introduce potential changes to treatment, monitoring, and reporting. Changes to regulatory requirements can also lead to the need to update operator knowledge.
- **Infrastructure needs:** Long-operating water systems may need to replace aging infrastructure and changing regulations or population sizes can also result in the need for new or additional infrastructure.
- **Insufficient revenue:** Year-to-year differences in state, national, and local funds can lead to shortfalls in the funding needed to keep a PWS in compliance.
- **Aging workforce:** Retirements can lead to staffing shortages and subsequently greater training needs.
- **Training needs:** Changing PWS workforce compositions and regulations can introduce the need for additional training so that operators maintain the knowledge base needed to stay compliant.
- **Water security:** Preparation for natural disasters, cyber threats, and malevolent acts need appropriate planning, training, and infrastructure.
- **Declining populations:** Population loss can lead to personnel/staffing issues, fiscal constraints through the loss of tax revenue, and a loss in economies of scale.

Ultimately, building capacity can improve a water system’s capabilities to achieve and maintain compliance with drinking water standards, which can result in more effective provision of safe and affordable water.

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At the state level, Capacity Development programs help states to improve drinking water quality by providing a framework within which PWSs and the state can work together and cooperatively assess the current strength of the system and consider how the water system might address upcoming challenges. Capacity Development programs provide an additional opportunity for states to gain a more complete understanding of the extent to which PWSs are meeting the public health protection objectives of SDWA.

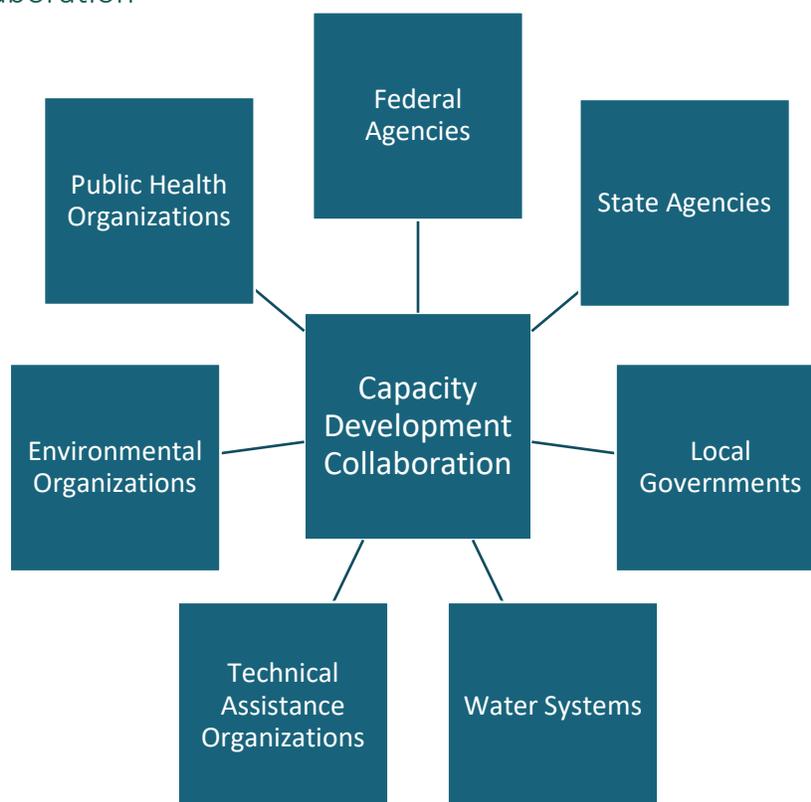
At the system level, Capacity Development programs allow water systems to obtain more robust TMF capacity which helps them provide safe drinking water. This comes through increased:

- Technical capacity, which pertains to source water protection, infrastructure improvement, or operator training and can help to ensure that the PWS provides water of adequate quality and quantity.
- Managerial capacity, which can include accountability programs, staffing plans, and external linkages, helps PWSs treat water efficiently and effectively.
- Financial capacity, which addresses revenue, credit, and fiscal concerns, ensures that PWSs have the funds they need to implement effective programs at the water system. Examples may include loan guarantee or grant programs, responsible rate setting, maintaining adequate operating and emergency cash reserves, and periodically reviewing budgetary projections.

Each of the three elements of TMF capacity contributes to safe drinking water. In addition, systems with TMF capacity are prepared to meet challenges to drinking water quality and quantity. Adequate TMF is central to a water system's ability to achieve the public health protection objectives of SDWA.

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Program Collaboration



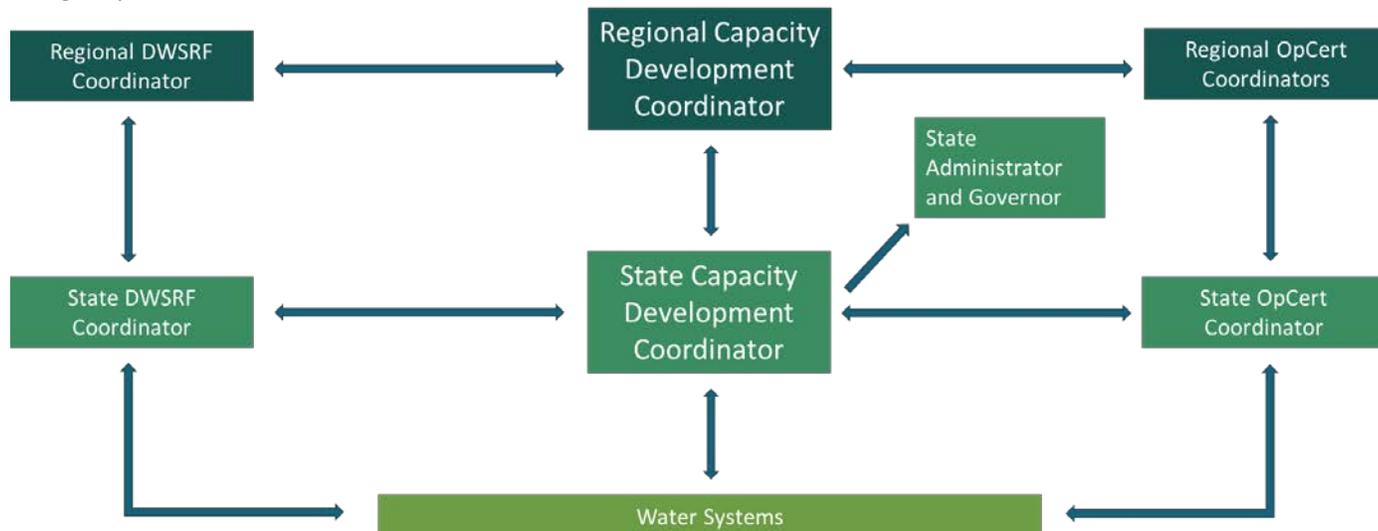
Click on the boxes in the Capacity Development Collaboration diagram to see examples of these programs.

Capacity development brings together a variety of stakeholders and programs to facilitate cooperation across local, state, regional, and national offices. Key roles and responsibilities of some key federal and state agency staff are reviewed in further detail on the next page.

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Key Roles & Responsibilities

Capacity Development programs seek input from a variety of stakeholders and programs. Soliciting input from relevant stakeholders through workshops, mailings, and meetings, is crucial to achieving a successful Capacity Development program. Key roles and responsibilities of some federal and state agency staff are reviewed in further detail below.



Please note that while a useful visual, this graphic does not represent all Drinking Water program roles that make for successful program collaboration. For more information about roles and how to interact, see the [Tabletop Exercise](#).

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2. Capacity Development Reporting

A major goal of the EPA's national Capacity Development program is to maintain effective oversight of state Capacity Development programs. To maintain effective oversight, EPA's Capacity Development program assesses state Capacity Development programs for both new systems and existing systems.

Each year, state Capacity Development coordinators must provide reports to their EPA Regional Capacity Development coordinators. These reporting requirements help the EPA Regions ensure that states are taking steps to demonstrate that all new CWSs and NTNCWSs have adequate TMF capacity and confirm the states' assistance to existing systems to build and maintain capacity.

Click "Key Roles & Responsibilities" to review that section of the document and learn more about specific roles.

Key Roles & Responsibilities

2.1 Annual State Report

States must send an Annual Implementation Report to the EPA that documents that their Capacity Development programs are effectively implemented. The annual implementation reporting period must consistently reflect either the state or federal fiscal year; only one of the two is used for the reporting period. States must send an Annual Implementation Report to the EPA documenting ongoing establishment of a fully functioning Capacity Development program within 90 days of the end of the reporting period. The EPA Regional Capacity Development coordinators can refer states to the EPA's "[Reporting Criteria for Annual State Capacity Development Program Implementation Reports](#)" memo for guidance on the development of the report.

The EPA Regions are responsible for reviewing the state's Annual Implementation Report. The EPA Regional Capacity Development coordinators review the annual reports and complete Annual Regional Capacity Development Program Evaluation Forms that include state-by-state information for new and existing systems. *Click on "Assessing New and Existing Systems" to read definitions of new and existing systems.*

Assessing New and Existing Systems

Each year, the EPA Regions compile information into the Capacity Development Tracker (CD Tracker) database. The EPA Regional staff are responsible for uploading Regional CD Tracker information and uploading state capacity development reports on the EPA national program SharePoint site. *Click on CD Tracker to learn more about the database.*

CD Tracker

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2.1.1 Information on New Systems for the Report

The annual state report should include the following new systems information (click on each of the four boxes below):



Enforcement Priorities List

The EPA previously identified systems facing compliance challenges through a Historical Significant Non-Compliers (SNC) List. Today, the EPA uses an Enforcement Priorities list that identifies systems with an [Enforcement Targeting Tool \(ETT\)](#) score of 11 points or more as systems that need to be prioritized. Instead of reporting SNCs, states indicate which new CWS and NTNCWSs have, at any point during their first three years of operation, incurred an ETT score of greater than or equal to 11. Compliance data helps states identify whether there are noncompliance patterns during the first three years of a new system's operation. The ETT list provides an additional resource for identifying systems possibly in need of state or EPA assistance in the areas of Capacity Development and sustainability.

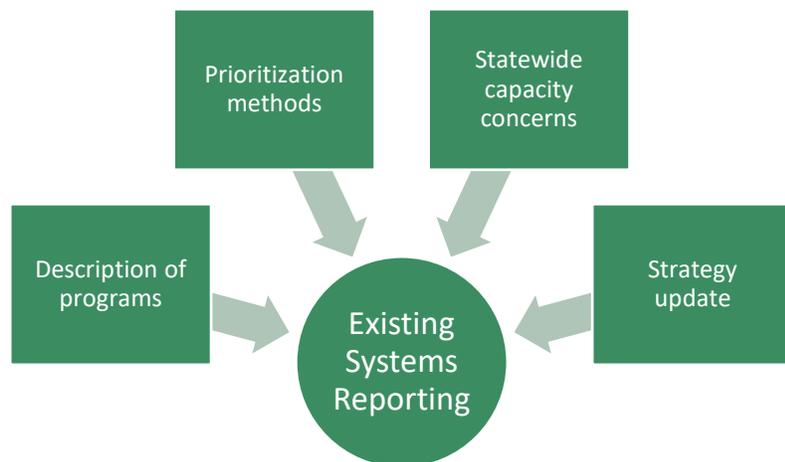
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2.1.2 Information on Existing System for the Report

The annual state report also includes the following existing system information (click on each of the four boxes below):



2.2 Triennial Report to the Governor

In addition to the annual reporting to the EPA, every three years states must also provide a report to the Governor (RTG) conveying the status of the Capacity Development program. These reports are made publicly available and include an explanation of the progress made towards improving the TMF capacity of the PWSs in the state. The report must also address the efficacy of the Capacity Development strategy and progress made toward water system improvements. A copy of the report must also be sent to the EPA Regional Capacity Development coordinator.

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3. EPA Regional Support for States Revising Their Capacity Development Strategy

A continuous step in the capacity development process is for the states to observe the effectiveness of capacity development efforts to make improvements. States should be in a continuous cycle of development, implementation, observation, and revision.

As in the other steps of developing and implementing state-level strategies, the following five elements can help states to organize their revision efforts by considering:

1. The methods or criteria used to prioritize systems,
2. The factors that encourage or impair capacity development,
3. The way the state will use authority and resources of the SDWA,
4. The way the state will establish the baseline and measure improvements, and
5. The procedures used to identify interested persons.

Because revision is a process of asking questions, these five elements can help states to ensure that they are asking the right questions to improve their plan.

Throughout the revision process, it is recommended that states continue to communicate with systems frequently to ensure that both sides' concerns are addressed. The EPA Regional Capacity Development coordinators

serve as a resource for states during the process and review and approve any changes to the strategy; it is vital that the EPA Regional Capacity Development coordinators understand state strategies to inform guidance they provide to states.

States with Recently Revised Capacity Development Programs

Many states have revised their Capacity Development programs to improve access to safe drinking water. Some examples are provided below.

[Alaska](#) updated its state-level strategy in 2011 to prioritize systems with the greatest risk.

[California](#) makes regular revisions to its state-level strategy. In 2015/2016, for example, it combined and simplified two of its strategies.

[Connecticut](#) updated its state-level strategy in 2008 and again in 2017 to change the strategy's emphasis.

[Iowa](#) revised its strategy in 2010 to include optimization activities, which dictate most of the state's current capacity development activities.

[New Jersey](#) revised the scoring process in its strategy in 2010. New Jersey reevaluates the strategy on an ongoing basis.

[New Mexico](#) revised their strategy in 2014 in part to establish programs that provide capacity development beyond the minimum requirements.

[Virginia](#) revised their strategy in 2014 to improve flexibility and target programs that were not included in the strategy before.



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3.1 Prioritization Methods

It is recommended that states reexamine the ways in which they are prioritizing systems. The EPA Regional Capacity Development coordinator can provide the following questions to states to help them evaluate the effectiveness of their prioritization methods:

- Are the systems that are receiving assistance the ones that need it most?
- Is our ranking scheme fair to all systems?
- Are there particular systems that may be at a disadvantage in our ranking scheme?
- How can we improve our system prioritization methods in a way that increases fairness and transparency but does not abruptly change standards?

3.2 Institutional Concerns

It is recommended that states reevaluate the institutional environment in which their Capacity Development program operates. The EPA Regional Capacity Development coordinator can provide the following questions to states to help them reconsider key institutional concerns:

- Have any new laws or statutes been passed that affect TMF capacity?
- Does the state's Capacity Development program take advantage of positive factors?
- Does the state's Capacity Development program effectively mitigate negative factors?
- What additional tools could the state use to mitigate negative factors?

3.3 State Resources

It is recommended that states refine the way that they incorporate the SDWA authority into their state-level strategies and the extent to which they are meeting their goals. The EPA Regional Capacity Development coordinator can provide the following questions to states to help them evaluate their use of state resources:

- Is the state effectively assisting PWSs in complying with NPDWRs?
- Is the state effectively encouraging the development of partnerships between PWSs to enhance their TMF capacity?
- Is the state effectively assisting PWSs in the training and certification of operators?
- In what ways could the state improve its progress toward each goal?

3.4 Baseline Indicators

Just as states evaluate the effectiveness of their prioritization methods, it is recommended that they evaluate the effectiveness of their measurements. The EPA Regional Capacity Development coordinator can provide the following questions to states to help them evaluate whether their chosen baseline indicators are effective:

- Is the volume of activity being measured accurately? As programs change, is the state taking those changes into account when tallying those programs?
- What additional types of data would it be useful for the state to have? How can the state gather these data?
- Have technology, system size, treatment techniques, or regulations changed? How do these changes affect the ways in which the state can evaluate compliance data?

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3.5 Stakeholders Identification

It is important for states to evaluate ways to improve their stakeholder community. The EPA Regional Capacity Development coordinator can provide the following questions to states to help them address stakeholder involvement:

- What potential stakeholders are not included in the community but could give an important perspective?
- Are all stakeholders being heard?
- What forums could increase stakeholder engagement?

These and other questions can help states to revise their state-level strategies.

3.6 Program Analysis

3.6.1 Capacity Development (CD) Tracker

In response to the Office of Inspector General's September 2003 [Impact of EPA and State Drinking Water Capacity Development Efforts Uncertain](#) report, the EPA's Office of Water made a commitment to establish consistent reporting criteria for the annual state reports. Recommendations within this evaluation also suggested that the EPA develop a process to help assess the performance of the Capacity Development program on a national level. The CD Tracker was developed to store state information for this purpose.

CD Tracker is a database that contains data from state's Annual Capacity Development Reports. This data is entered by the EPA Regional Capacity Development coordinators into a form fillable word document titled "Annual Regional Capacity Development Program Evaluation" and uploaded into a Microsoft Access database by the EPA headquarters (HQ) staff. This information is used to:

- Assess the performance of the state Capacity Development program.
- Provide documentation on annual EPA Regional decisions regarding Drinking Water State Revolving Fund (DWSRF) allotment withholding determinations.
- Identify successful activities and models initiated by states to further PWS sustainability and show progress made through the Capacity Development program in improving the capability of small systems to deliver safe water to the public.

Click on "CD Tracker Instructions" to view suggested information in Appendix B about what to consider when completing the CD tracker document.

3.7 Encouraging State Program Collaboration

State drinking water programs manage and oversee a variety of programs and activities that support PWSs, including: Capacity Development, Operator Certification, enforcement, and the DWSRF. Collaboration among these programs will help ensure the greatest public health protection for the American public.

Each state has a Capacity Development program to help PWSs, especially small PWSs, build and maintain TMF capacity. Each state also has an Operator Certification program to help ensure operators are qualified for the PWS they serve, a DWSRF program to provide financial assistance to water systems and, if the state has primacy, an enforcement group responsible for enforcing compliance with the

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SDWA. Capacity Development program staff can team up with staff and managers in other drinking water programs (such as enforcement, funding, regulatory, operator certification, and more) to address small system issues.

State staff can hold in-person meetings, conduct conference calls, correspond electronically, or use discussion boards to communicate regularly about the status of PWSs and to analyze PWSs that are not attaining or maintaining TMF capacity or compliance. These individuals can work together to develop ideas to assist struggling PWSs and to ensure that the PWSs can maintain capacity after assistance has ended.

This collaboration allows team members to share their department's expertise and perspectives to develop new potential solutions for small system concerns. Furthermore, discussions among the different individuals and departments responsible for assisting struggling or noncompliant PWSs can help everyone develop a more comprehensive understanding of these PWSs' unique situations.

EPA'S Table Top Exercise

The [EPA Table Top Exercise: Collaborating across State Drinking Water Programs to Support Sustainable Systems](#) (all materials for the exercise are included in the .zip file.) is an exercise to enhance understanding of state drinking water program roles and to emphasize the importance of collaboration between programs. In this exercise, participants (state staff who oversee or assist PWSs, either directly or indirectly) are asked to take on one of the roles in a state program, and then to collaborate as a group to evaluate the needs of example water systems and to prioritize state assistance. Further details on background and instructions are provided in the "Facilitator Packet" document.

3.7.1 TMF Capacity and Key Program Collaborations

Program	TMF Capacity
Funding and DWSRF Set-asides	The DWSRF set-asides provide the states with flexibility to help PWSs achieve and maintain TMF capacity. The availability of set-aside funds also provides necessary financial support to help PWSs implement projects, such as rate studies, that improve system sustainability.
Enforcement	Enforcement activities can highlight compliance challenges that PWSs face. Enforcement personnel have valuable information on the current state of compliance issues and challenges throughout the state. This information can be used to develop policies that help with capacity building projects that most directly impact the greatest challenges.
Operator Certification	The Operator Certification program oversees that water system operators perform their technical duties, which improves the technical capacity of systems. Systems with adequate managerial and financial capacity understand the importance of having a certified operator and can afford to obtain and keep qualified operators.

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3.7.2 Funding Collaboration

Funding collaboration involves the deliberate coordination and careful targeting of available funding sources to achieve maximum efficiency and derive the most benefit from each dollar spent. Efficient use of available funds can help state programs to maximize long-term performance of drinking water systems, helping them to achieve their public health protection goals.

States have found innovative ways to use the DWSRF and its set-asides to fund projects that help systems achieve and maintain TMF capacity. The EPA Regional coordinators can promote this creativity by providing guidance on prioritizing projects, potentially providing additional subsidies, and sharing innovative projects across the EPA Region. This innovation allows states to directly support PWSs in addressing capacity and sustainability challenges. States can assign priority points for projects that that will help systems achieve and maintain capacity and they can also coordinate funding with other departments and agencies to diversify funding sources and fund more projects overall. States have come up with many simple and innovative ways to coordinate funding. For example, some states hold quarterly meetings to utilizing statewide pre-application forms. While states have had to invest time to establish these coordinated activities, many have found that they are highly rewarding. The EPA's [Funding Collaboration Factsheet](#) includes more information and examples from states.

3.7.3 DWSRF Set-Asides

Collaboration between the state Capacity Development and DWSRF coordinators can help identify and fund projects that help PWSs achieve and maintain TMF capacity. It allows states to directly support PWSs in addressing capacity and sustainability challenges. When the DWSRF and Capacity Development programs communicate about shared challenges and solutions, the state can improve access to funding in a way that helps PWSs to build capacity.

South Dakota: Using the DWSRF to Promote Community Planning and Rate Analyses

Many of South Dakota's small systems were under-charging their customers because they did not have a method to determine what their appropriate rates should be. Many small systems would also apply for funding from the DWSRF without ever contacting an engineer to evaluate the system. Without a preliminary engineering report (PER), the state did not have a sense of whether the proposed projects were based on sound engineering principles which experienced engineers could recommend. South Dakota now requires systems to have an engineering firm complete a PER for the system to be eligible for any loans from the DWSRF. Small communities (serving 2,500 or fewer people) can also receive financial assistance to complete this PER through the Small Community Planning Grant (SCPG) Program, which utilizes the Small System Technical Assistance Set-Aside. There have been 72 DWSRF loans for infrastructure improvements awarded to communities that received SCPGs. All communities that have completed a rate analysis reimbursed through the SCPG Program have raised their water rates to more appropriate amounts.



3.8 Enforcement

The EPA Regional Capacity Development coordinator meets with the EPA Regional drinking water enforcement lead quarterly to review any systems that the ETT identifies as an enforcement priority.

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The 1996 Amendments streamlined processes for administrative compliance orders and penalties of up to \$5,000, raised the administrative and emergency penalty caps, made enforceable many SDWA provisions and requirements implemented by the EPA or states, and gave up to a 2-year enforcement moratorium for violations being remedied by a specific plan to consolidate with another system. These measures have facilitated more effective enforcement, encouraging compliance while keeping safeguards for systems. In coordination with Capacity Development programs, enforcement efforts can help prioritize systems that have the greatest need of capacity development assistance. The EPA's [Program Collaboration Factsheet](#) provides additional information and examples.

New Hampshire: Collaborating to Identify and Prioritize System Assistance

New Hampshire has always provided close TA to its public water systems so when the new Arsenic standard was implemented in 2006, Capacity Development program staff worked closely with Monitoring Program staff to assist over 200 small public water systems to achieve compliance as quickly and cost-effectively as possible. Compliance timelines were established and met by implementing innovative strategies such as blending, point-of-use, and side-stream treatment options. Technical expertise from the state's participation in the EPA's Arsenic Demonstration Technology projects was critical in assisting the small systems to implement viable solutions. The DWSRF, including principal forgiveness, provided funding to disadvantaged communities where needed. These strategies have also been applied for compliance with other standards such as radionuclides and disinfection byproducts, such that the state has seen reductions in the number of PWSs on the EPA's quarterly ETT violations.

3.9 Operator Certification

Maintaining TMF capacity and having a properly certified operator are key components of a well-run drinking water system. Ensuring the knowledge and skills of PWS operators is widely considered one of the most important, cost-effective means to ensure safe drinking water. Each state has an Operator Certification program that either meets the guidelines established by the EPA or equivalently meets the overall public health objectives of the EPA guidelines. The objective of the program is to ensure that every water system has (directly, under contract, or in conjunction with other systems) an operator to perform certain key compliance functions, and who is trained and certified to the level that each state determines is appropriate for the functions, facilities, and operations of that system.

Click on "SDWA and Operator Certification History" to go to that section of the document and learn more about the program.

**SDWA and Operator
Certification History**

State Capacity Development and Operator Certification programs both aim to ensure the provision of safe drinking water. Drinking water system performance depends on many factors, including adequate infrastructure to effectively and efficiently manage and maintain operations. Close communication and cooperation between the Capacity Development and Operator Certification programs can help determine gaps in operator skills and knowledge, promote appropriate training, assist PWSs with obtaining a qualified, certified operator, and improve system performance to protect public health. The EPA Regional Capacity Development coordinators play a large role in

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facilitating this cooperation; the EPA's [Capacity Development and Operator Certification Collaboration Factsheet](#) provides examples of how the programs operate together.

Colorado: Targeting Operator Training to Boost PWS Performance

In the past, many of Colorado's small drinking water systems did not have properly trained or certified operators. The state determined there had been a lack of coordinated, targeted, high quality training for operators and other personnel. Colorado employed a systematic planning process for evaluating and responding to training needs for PWS personnel. The process included evaluating system failures and root causes, preparing a Baseline Assessment Report, conducting a 1-day PWS training roundtable, and developing a 5-year strategic plan. Colorado also provides TA to PWSs through a highly-trained "Coaching" unit. Furthermore, the Capacity Development and Operator Certification programs meet monthly as part of the "Drinking Water Advisory Team." From 2005 to 2012, CWSs and NTNCWSs with certified operators in charge increased from 89 percent to 98 percent. There has been a measurable improvement in compliance in the areas of disinfection operations and management, and in the overall development of water quality monitoring plans.

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4. Key Resources

Regional Capacity Development coordinators can provide the following resources from the EPA and other organizations to state coordinators. These resources can be used by state or water system personnel to increase understanding about capacity development, to build a Capacity Development program, and to help improve communication and collaboration.

4.1 List of Links to Program Documents and Tools

Websites Capacity Development

[1996 SDWA Amendments](#)

The EPA's [Capacity Development](#)

The EPA's [Information for States about Building the Capacity of Drinking Water Systems](#)

The EPA's [TMF Capacity Resources for Small Drinking Water Systems](#)

Documents on Capacity Development

[Reporting Criteria for Annual State Capacity Development Program Implementation Reports](#)

[General Information on National Capacity Development Program Trends](#), including

- Re-Energizing the Capacity Development Program: Findings & Best Practices from the Capacity Development Re-Energizing Workgroup
- Public Water System Historical Significant Non-Compliers: National Trends Report
- National Capacity Development Strategic Plan
- Multiple Barrier Approach to Public Health Protection

[Capacity Building Program Management](#), including

- Assessing Water System Managerial Capacity
- State Programs to Ensure Demonstration of Technical, Managerial, and Financial Capacity of New Water Systems
- Guidance on Implementing the Capacity Development Provisions of the 1996 SDWA Amendments

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Capacity Building Program Collaboration, including

- Capacity Development and Operator Certification Collaboration: An Essential Partnership to Promote Small System Capacity
- Analysis of the Use of Drinking Water State Revolving Fund Set-Asides: Promoting System Sustainability
- Analysis on the Use of Drinking Water State Revolving Fund Set-Asides: Promoting Capacity Development
- Using Technical, Managerial, and Financial Capacity to Improve System Security - Suggestions for States

The EPA's Asset Management Resources

- Asset Management Resources for Small Drinking Water Systems, including
 - Successfully Protecting Your Investment in Drinking Water Infrastructure: Best Practices from Communities and Local Experts
 - Reference Guide for Asset Management Tools
 - Asset Management Switchboard
 - Asset Management: A Best Practices Guide
 - Asset Management for Local Officials
 - Building an Asset Management Team
- Asset Management: A Handbook for Small Water Systems — One of the Simple Tools for Effective Performance (STEP) Guide Series
- Taking Stock of Your Water System: A Simple Asset Inventory for Very Small Drinking Water Systems
- Implementation of Capacity Development Program – Related Safe Drinking Water Act Amendments in the America's Water Infrastructure Act – Memo
- Asset Management 101 Training

Trainings & Tools on Capacity Development

- Table Top Exercise: Collaborating Across State Drinking Water Programs to Support Sustainable Systems
- Capacity Development 101 Trainings

Additional Resources

- America's Water Infrastructure Act of 2018 (AWIA)
- Find an EPA Capacity Development Contact
- Partners providing assistance to states and small systems

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4.2 Using the SharePoint Site

File sharing sites like the EPA internal SharePoint allow the EPA staff to share materials with one another seamlessly and without the limitation of file size. The EPA maintains a SharePoint site where the EPA Capacity Development coordinators can contribute and download materials. To download pertinent files, navigate to the site, select the file, and “Download a Copy.” If the EPA Regional Capacity Development coordinators are adding content to the site, ensure that they have permissions to add to the site. With the appropriate permissions, the EPA Regional Capacity Development coordinators should be able to drag and drop files directly from their local drive. Please note that the SharePoint site referenced is an internal EPA tool and not available to those outside of the EPA.

The EPA SharePoint Site Link

<https://usepa.sharepoint.com/sites/OW/DWPB/SST/capacitydevelopment/SitePages/Home.aspx>

{This is an internal EPA tool and not available to those outside of the EPA.}

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Appendix A: History of the Capacity Development Program

A.1 The Safe Drinking Water Act

The SDWA was passed in 1974 to address public health concerns by regulating drinking water. The SDWA authorizes the EPA to set national health-based standards to protect consumers from both naturally-occurring and man-made contaminants that may be present in drinking water, as well as work with states and PWSs to ensure that those standards are met.

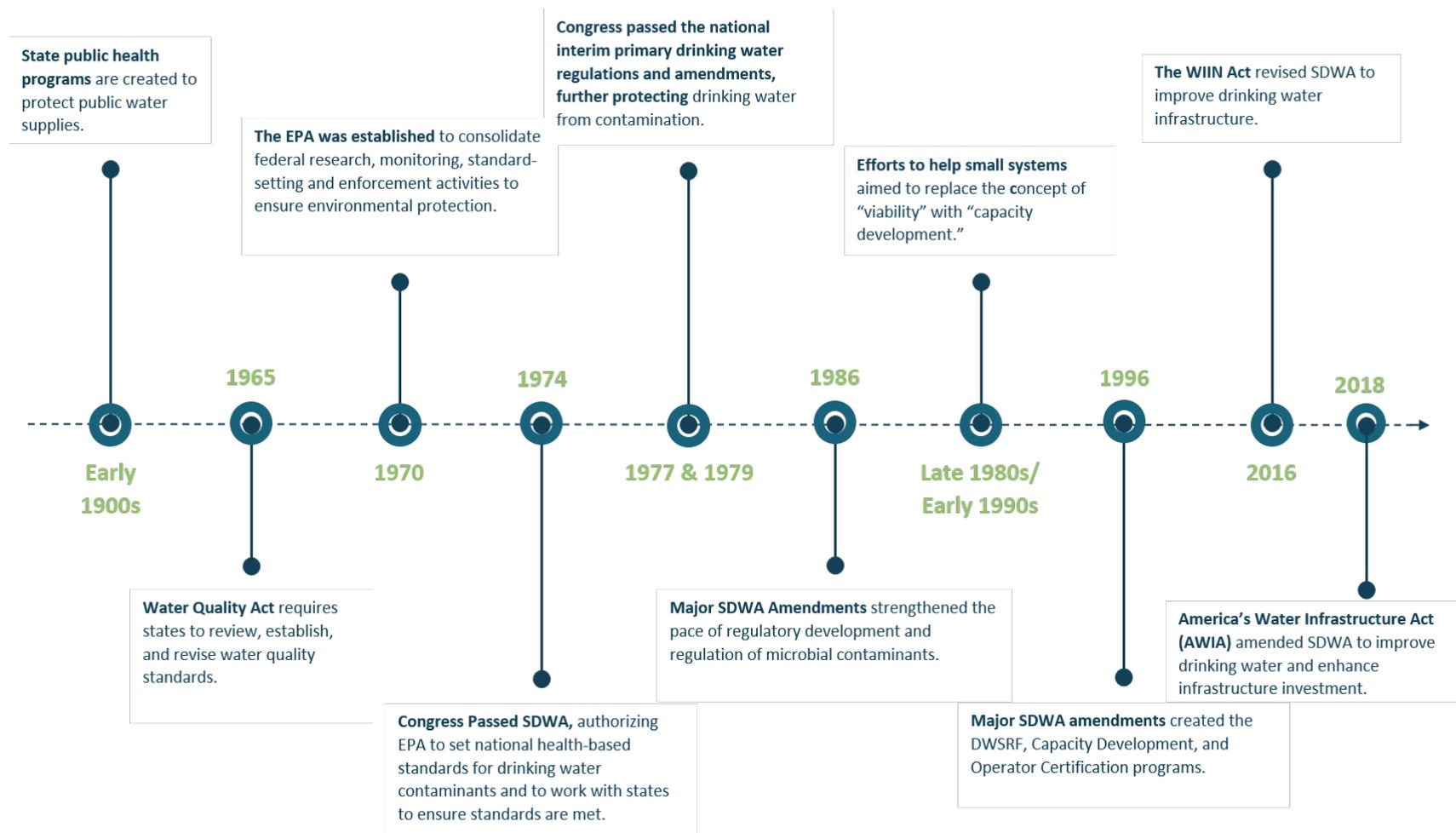
Originally, the SDWA focused on treatment as the primary means of providing safe drinking water. The 1996 SDWA Amendments established stronger prevention programs (e.g., source water protection), increased state flexibility, provided more in-depth information to consumers, and strengthened the EPA's regulatory development process. The 1996 Amendments also included initiatives to improve communication with the public, employ better science for risk assessment, and provide funding to systems, tribes, and states to achieve the public health protection objectives of the SDWA through the DWSRF program.



The next page depicts the timeline of how the U.S. protects public health and drinking water including how the SDWA is involved.

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Timeline



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A.1.1 The 1996 SDWA Amendments

The 1996 Amendments provided the framework from the Capacity Development program, DWSRF, primary enforcement authority, and Operator Certification program. Capacity development was introduced as part of the 1996 Amendments' as a stronger approach to preventing drinking water contamination. The 1996 Amendments created a national program through which states demonstrate their water systems' TMF capacity to deliver safe and reliable drinking water.

Capacity Development

Capacity development is the process through which water systems acquire and maintain the TMF capabilities necessary for them to continuously provide safe, reliable drinking water. The SDWA's capacity development provisions (outlined in Section 1420) provide a framework for states and water systems to work together to build capacity and meet the SDWA public health protection objectives. The 1996 Amendments focus on capacity development through two major provisions; both of which are associated with the DWSRF (the DWSRF provisions are outlined in Section 1452 of the SDWA).

- First, for states wishing to receive the full amount of DWSRF capitalization to which they are entitled, states must develop and implement programs for new and existing systems. Through these programs, new water systems must demonstrate capacity, while existing water systems must build and maintain capacity. States failing to develop and continue implementing such programs face having 20 percent of their annual DWSRF capitalization grant withheld.
- Second, the SDWA ties a water system's eligibility to receive assistance under the DWSRF to the system's TMF capacity. In short, providing DWSRF assistance to a system which, in the judgement of the state, lacks the TMF capacity to ensure ongoing compliance with SDWA requirements is prohibited.

Drinking Water State Revolving Fund

All 50 states and Puerto Rico are authorized to receive grants from the EPA to help capitalize their DWSRF. The District of Columbia and U.S. territories receive their share of DWSRF appropriations as grants to their water systems. States enjoy flexibility in establishing and managing their DWSRF in a manner most suitable to their circumstances.

Each year, as part of the application to receive its capitalization grant, each state develops an Intended Use Plan (IUP). IUP's describe how the state intends to utilize its DWSRF resources for the year. The IUP contains a Project Priority List (PPL) of projects which have requested assistance from the state DWSRF. Priority for receiving DWSRF assistance must be given to those projects that:

- Address the most serious risks to human health.
- Are necessary to ensure compliance with the SDWA.
- Assist systems most in need according to state affordability criteria.

The state must fund projects in the order they appear on the PPL except that projects which are not ready to proceed to construction may be skipped over to reach the next most highly ranked project that is ready to proceed. States may include provisions for funding emergency projects in the IUP. For more information, the [DWSRF Eligibility Handbook](#) is a one-stop-shop manual for DWSRF eligibility questions for states and interested stakeholders.

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Set-Asides

The 1996 Amendments established a process through which up to 31 percent of a state’s capitalization grant can be used in “set-aside” programs. Set-asides are a unique and important feature of the DWSRF program and states have the option to take some, none, or all of the authorized set-aside amounts. The set-asides give states the flexibility through a wide range of activities to help PWSs address compliance challenges, including those which do not require capital investment to resolve. The EPA’s [State-by-State Analysis](#) explores different ways in which the 50 state drinking water programs and Puerto Rico use DWSRF set-asides to support PWSs.

4%

Administration

This set-aside may be used to cover the costs of administering the DWSRF program and to provide TA to water systems of all sizes. (See text box at the bottom of the page for additional explanation.)

2%

TA to Small Systems

This set-aside may be used to provide TA exclusively to systems serving 10,000 or fewer persons.

10%

State Program Management

This set-aside may be used to: develop and implement an Operator Certification program, develop and implement a Capacity Development program, administer or provide TA through source water protection programs, and administer the state PWSS program.

15%

Local Assistance and Other State Programs

This set-aside may be used to develop local drinking water initiatives, including Capacity Development programs. However, no more than 10 percent of the state’s capitalization grant may be used for either of the following eligible activities: to provide assistance to any PWS as part of a state Capacity Development program or to make expenditures to establish and implement Wellhead Protection Programs under Section 1428 of the SDWA.

In Focus: 2016 WIIN Act & Looking Forward

The Water Infrastructure Improvements for the Nation (WIIN) Act increased infrastructure funding. It also changed the “4-Percent Set-Aside” to be the greatest of either \$400,000, one-fifth percent (0.002%) of the current valuation of the fund, or an amount equal to 4 percent of all grant awards to the fund for the fiscal year.

Today, SDWA and DWSRF are established programs that help water systems finance critical infrastructure improvements. Since the 1996 SDWA Amendments, SDWA has had a new emphasis on preventing contamination problems through source water protection and enhanced water system management.

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Other SDWA Provisions Related to Capacity Development

Operator Certification

Ensuring safe drinking water requires knowledgeable and skilled PWS operators. To ensure that operators are well-trained, Section 1419 of the 1996 Amendments required all states to establish an Operator Certification program that meets guidelines developed jointly by the EPA and the states in 1999. Before the SDWA and the Operator Certification Guidelines, the Surface Water Treatment Rule, promulgated in 1989, required that surface water systems were operated by qualified operators. In 1998, the regulatory requirement for operators to be qualified was added for systems that disinfect. The Operator Certification Guidelines published in 1999 specified the minimum standards for certification and recertification of operators of CWSs and NTNCWSs. Water system operators can be qualified based on their work experience and education, but they are certified according to each state's application and examination process. States may use a DWSRF set-aside to implement an Operator Certification program. The EPA is required to withhold 20 percent of a state's DWSRF funds if the state fails to implement a program that meets the published Operator Certification Guidelines. The withholding requirement ensures that states have both a public health and an economic motivation to implement an Operator Certification program.

The objective of the Operator Certification program is not to require that every water system operator be certified. Instead, the program is to ensure that water systems have (directly, under contract, or in conjunction with other systems) an operator who is trained and certified to the level that each state determines appropriate for the functions, facilities, and operations of that system to perform certain key compliance functions. Operator Certification programs may vary between states but must meet the nine Operator Certification baseline standards outlined in the [Final Guidelines for Operator Certification](#).

The EPA Regions oversee state Operator Certification programs by conducting annual reviews of state Operator Certification annual reports. Using the annual reports the EPA Regions evaluate if a state Operator Certification program meets the baseline standards set forth in the final guidelines. If the program meets the requirements, the EPA Region determines that the DWSRF grant should not be withheld.

A.1.2 Technical, Managerial, and Financial Capacity

A Capacity Development program is a key element of a state's Drinking Water program. Capacity development involves TMF which is necessary for water systems to achieve and maintain long-term sustainability and compliance with National Primary Drinking Water Regulations. TMF is defined as:

Technical (T): Technical capacity is the physical and operational ability of a water system to meet the SDWA requirements. Technical capacity refers to the physical infrastructure of the water system, including the adequacy of source water and the adequacy of treatment, storage, and distribution infrastructure. It also encompasses the ability of system personnel to adequately operate and maintain the water system and to implement requisite technical knowledge.

Managerial (M): The ability of a water system to conduct its affairs in a manner that allows them to achieve and maintain compliance with the SDWA requirements, including institutional and administrative capabilities. Managerial capacity includes identifying system ownership, ensuring appropriate staffing and organization, and communicating regularly with customers.

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Financial (F): The ability of a water system to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with the SDWA requirements. Financial capacity includes setting responsible loan rates, ensuring revenues exceed costs, maintaining financial records, and establishing good credit.

All three elements of capacity development are closely related. Many aspects of water system operations involve more than one kind of capacity. Infrastructure replacement or improvement, for example, requires technical knowledge, management planning and oversight, and financial resources. A deficiency in any of the three areas could disrupt the entire effort.

Capacity Development and DWSRF programs are also closely related. PWSs are not eligible to receive DWSRF loans unless they have sufficient TMF capacity, and DWSRF funding may be withheld from states that do not comply with the capacity development requirement.

Click on “Statutory Requirements” to go to the Statutory Requirements section of this document.

[Statutory Requirements](#)

The SDWA’s focus on capacity development continues to lay the foundation for the drinking water sector’s evolving focus on sustainability. This has led small systems to focus more on self-assessment and long-term planning. In addition, Capacity Development programs created a framework for states to explore integrated resource planning, which has helped to resolve conflicts over drinking water quality and management issues. The Capacity Development program also emphasizes and supports the goals of a separate effort, the Effective Utility Management (EUM) initiative. The EUM initiative provides a common framework for water systems to evaluate strengths, areas of improvement, set priorities, and measure progress. EUM practices are key to long-term sustainability.

Click on “1996 SDWA Amendment” to review that section of this document in order to learn more about the 1996 Amendments. .

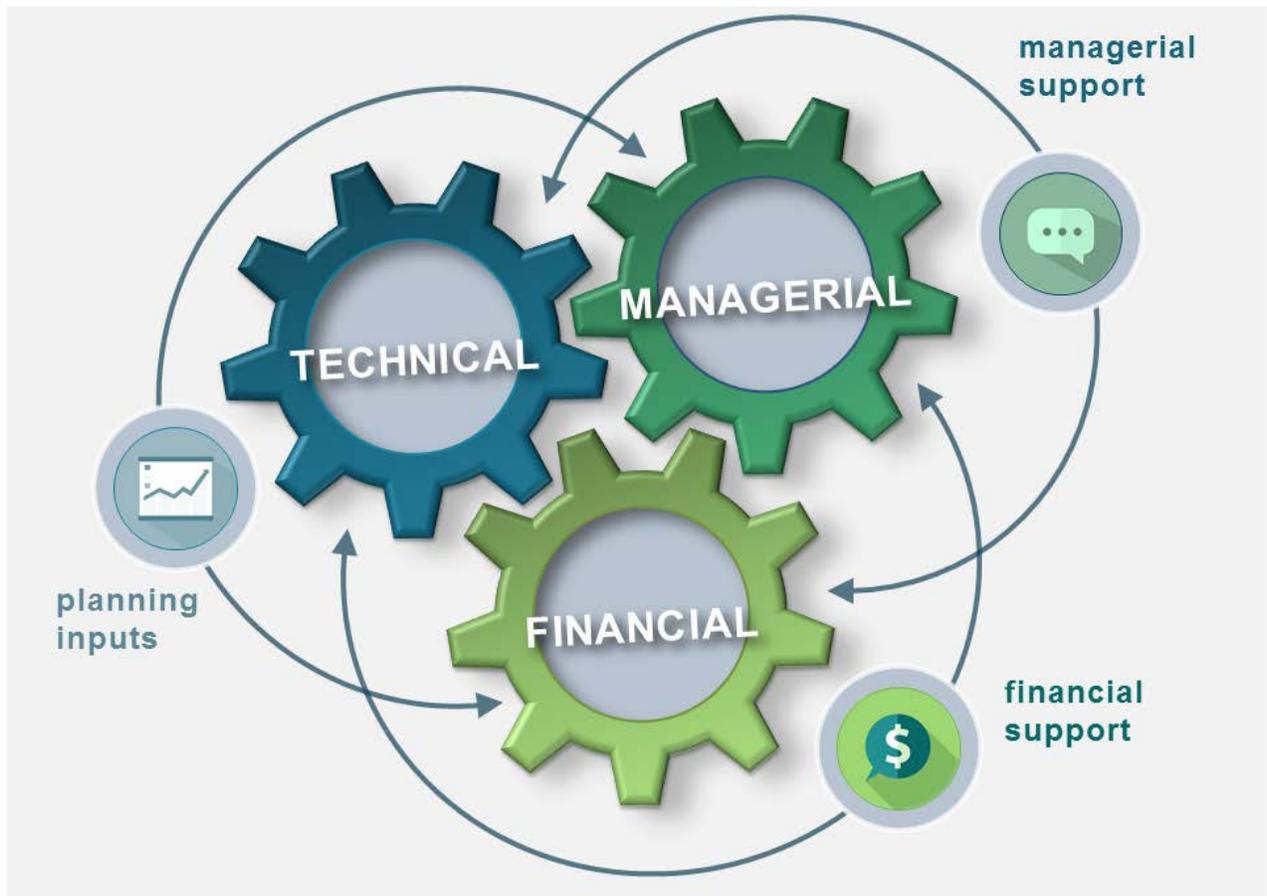
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How do Technical, Managerial, and Financial capacity relate to each other?



Technical and managerial capacity considerations **depend on financial** resources. Likewise, **technical and managerial** capacity evaluations **inform and affect financial** resources and considerations. Similarly, **technical** inputs are required to build **managerial** capacity, while **managerial** support is required to build **technical** capacity.

Isolating any of the capacity components is counter-productive, as they are an inter-related set of knowledge, skills, and resources that must be employed together for a water system to be successful into the future. Often a technical or managerial shortcoming may be due to poor financial capacity; sometimes a water system may have strong financial capacity and still lack strong managerial and/or technical capacity. It is important to keep all three categories in mind when assessing a water system.

In Focus: TMF Example

A PWS exceeds the maximum contaminant level (MCL) for arsenic. How the PWS proceeds is dependent on its TMF capacity: it requires the knowledge on the contaminant's BATs, which may be appropriate for the system, and the implementation of treatment (T); local decision makers need to understand and explain to the consumers why the treatment is needed (M); and the PWS must be able to afford the treatment option the it chooses (F).

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Appendix B: Capacity Development Program Overview

Each state has a Capacity Development program whose mission to implement the state's program. The 1996 Amendments' provisions for capacity development provide a framework for the EPA, states, tribes, and PWSs to work together to ensure that PWSs attain and maintain the TMF capacity needed to achieve the SDWA's objectives for short- and long-term capacity.

Systems with a lack of TMF often face challenges such as:

- Aging infrastructure, and inadequate funds to upgrade or replace it.
- Lack of availability of an adequate and safe supply of source water.
- The need to protect the water source.
- Public demands for lower utility costs.
- Declining population.
- The establishment of more enhanced and protective regulatory requirements or rules.

Each state has an approved program for ensuring TMF capacity in PWSs.

The Capacity Development program requirements offer flexibility and the opportunity to develop creative, state-specific solutions to achieve and maintain TMF capacity across the different states to address their own unique challenges (e.g., issues of scale, unregulated contaminants) while ensuring accountability to the provisions of the SDWA. Since the state Capacity Development programs were developed independently by each state they vary in their approach and implementation creating diversity between programs. The EPA's contribution to the state Capacity Development programs includes guidance and tools, rather than regulation. There are many acceptable approaches to meeting the minimal requirements outlined in the SDWA.

To address the challenges facing small systems, Congress established several provisions of the 1996 Amendments that focused on small systems. This included the provisions that implemented the Capacity Development program, provisions that emphasized assisting small PWSs in acquiring and maintaining TMF capacity.

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B.1 Statutory Requirements

Congress established the goals of the Capacity Development program in 1996 with the following statutory requirements:

“[States must] ensure that all new CWSs and NTNCWSs demonstrate technical, managerial, and financial capacity for each NPDWR”; [§1420(a)]

“[States must] develop and implement a strategy to assist PWSs in acquiring and maintaining technical, managerial, and financial capacity”; [§1420(c)]

“No assistance shall be provided to a PWS that does not have the technical, managerial, and financial capability to ensure compliance with requirements of this title [SDWA]”; and [§1452(a)(3)(A)(i)]

“No assistance shall be provided to a PWS that is in significant noncompliance¹ with the requirements of this title [SDWA].” [§1452(a)(3)(A)(ii)]

“A public water system [without TMF capacity or in significant non-compliance] may receive assistance under this section if the use of the assistance will ensure compliance; and if [the system lacks TMF capacity] the owner or operator of the system agrees to undertake feasible and appropriate changes in operations (including ownership, management, accounting, rates, maintenance, consolidation, alternative water supply, or other procedures) if the State determines that the measures are necessary to ensure that the system has the technical, managerial, and financial capability to comply with the requirements of this title [SDWA] over the long term.” [§1452(a)(3)(B)(i-ii)]

B.1.1 Financial Implications for Capacity Development and DWSRF/Operator Certification Programs

To avoid DWSRF withholding, states must:

1. Ensure that all new CWSs and NTNCWSs demonstrate TMF capacity [§1420(a)].
2. Develop, maintain, and implement a strategy to assist public water systems to acquire and maintain TMF capacity [§1420(c)(1)(C)].
3. Meet operator certification requirements [§1452(a)(1)(G)(ii)].

Click “1996 Amendments” to review that section of this document to learn more about the 1996 Amendments.

**1996 SDWA
Amendments**

B.2 Capacity Development Program Features

Capacity development implies a process, not a static endpoint. Capacity Development programs are designed to better position water systems and states to ensure the provision, promotion, and protection

¹ The terms “historical significant noncompliance” and “significant noncompliance” are no longer used (starting in FY 2013). Instead of discussing these systems once every three years, EPA and the EPA Regions meet quarterly and review any system with an [Enforcement Targeting Tool \(ETT\)](#) score greater than or equal to 11 (identified as enforcement priorities). The EPA Regional and state Capacity Development coordinators work together to identify whether PWSs in the priority list lack TMF capacity before approving the state's Annual Capacity Development Report.

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of public health through safe drinking water. The effective promotion of capacity development depends on the program being:

Flexible so that the EPA and states can maximize the use of available resources and capabilities to implement capacity development processes that meet the unique needs of each state.

Proactive in identifying and targeting assistance to water systems most in need of improving their TMF capabilities.

Integrated so the resources of all federal and state drinking water programs are considered.

Accountable by demonstrating that capacity development helps water systems provide safe water to customers.

Collaborative to the extent that all entities, agencies, groups, and associations act together to support one another.

B.3 Assessing New and Existing Systems

Under Section 1420 of the 1996 Amendments, states must establish programs to assist in developing the TMF capacity of PWSs, which is considered the Capacity Development Framework. To do this, PWSs are categorized into “new” and “existing.”

“New” systems include all CWSs and NTNCWSs commencing operations after October 1, 1999 (this includes water systems becoming a CWS or NTNCWS through physical expansion of their infrastructure). New systems must demonstrate TMF capacity before they can provide water to the public.

“Existing” systems include all PWSs [CWSs, NTNCWSs, and TNCWSs]. Existing systems must continue to build and maintain TMF capacity through a Capacity Development program necessary for them to provide safe, reliable drinking water and to be eligible for DWSRF funding from their states. State-specific program strategies are used to identify and prioritize existing systems in need of capacity development assistance.

New Systems	Existing Systems
<ul style="list-style-type: none"> Section 1420(a) of the SDWA, the new systems provision, requires the EPA Regions and states to ensure that all new CWSs and NTNCWSs have the TMF capacity to comply with federal drinking water regulations. Success is measured in terms of the number of capacity assessments of new water systems (or proposed water systems) completed by the state primacy agency program, expressed as a percentage of total new CWSs and NTNCWSs. 	<ul style="list-style-type: none"> State Capacity Development programs must identify existing water systems that have inadequate capacity need assistance. Success is measured in terms of the annual percentage of existing water systems that have been assessed for capacity. States must consider five elements as they develop programs (see list below).



While establishing their Capacity Development programs, states are required to consider, solicit public comment on, and include the following five elements:

1. The methods or criteria used to prioritize systems;
2. The factors that encourage or impair capacity development;
3. The way the state will use authority and resources of the SDWA;
4. The way the state will establish the baseline and measure improvements; and
5. The procedures used to identify interested persons.

Click on “How Strategies Were Developed” to go to the section of this document that provides additional information on developing strategies.

**How Strategies
Were Developed**

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Appendix C: How Strategies Were Developed

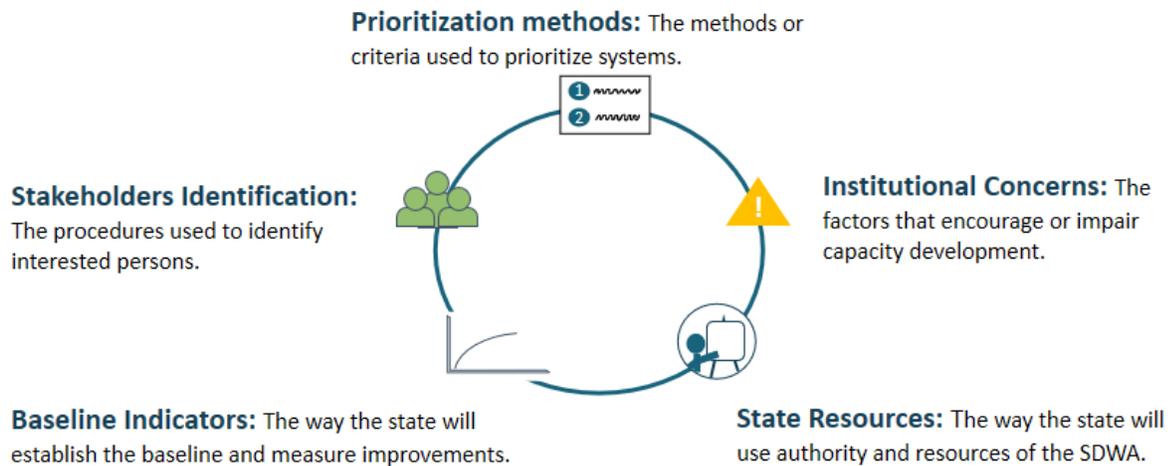
This section provides background information from guidance provided in the 1999 Handbook for Capacity Development. The 1999 Handbook provided an overview of capacity development, guidance on developing water system capacity, and information and tools for implementing a state Capacity Development program including developing a state Capacity Development strategy. The EPA Regional Capacity Development coordinators can use this information to provide guidance to state Capacity Development programs, particular if the state is looking to revise their program or strategy.

C.1 Where should states begin as they start to develop effective and feasible strategies?

The EPA recommends that states consider each of the five elements of a Capacity Development program. These elements can help states to conduct effective administration of the tasks for assessing new and existing system capacity, which can:

- Decrease the number of systems with long-term health-based violations,
- Reduce the number of new systems with inadequate capacity, and
- Help to develop a proactive working relationship with state co-regulators.

Following this recommendation, the five elements would be incorporated in each step of the capacity development process, including development, implementation, and revision. The five elements are:



States can be creative as they consider each of these elements. For example, instead of considering each PWS in a vacuum, it is recommended that states evaluate ways in which PWSs can cooperate with each other on a regional and state-wide scale. Similarly, instead of focusing on short-term strategies, states are recommended to address both short- and long-term ways to improve PWSs.

Each of the five elements has an important role to play in state-level strategy development.

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C.2 Developing State-Level Strategies

Developing smart and comprehensive state-level strategies can increase a state’s water system TMF capacity. States develop a comprehensive strategy that enables the water systems to allocate resources effectively and ensure safe drinking water is provided.

C.2.1 Prioritization Methods

The first element of developing a state-level strategy is prioritization [§1420(c)(2)(A)]. The element includes the methods or criteria that states will use to evaluate PWSs so that the water systems that need assistance can receive it.

Prioritizing systems will help states to maximize the benefit of a limited amount of funding. Deciding the ways in which states will prioritize systems will help states to develop a sound Capacity Development strategy. States may consider the following in developing their methods and criteria:

- Do the proposed methods or criteria for prioritizing systems permit the consideration of all systems in the state?
- Do the methods or criteria for prioritizing systems provide the state with a ranking scheme?
- Are the methods or criteria for prioritizing systems easy to implement? (This question will also come into play in the next step, Implementation.)
- What are the data requirements of the prioritization procedure? Does the state have an existing database, can an existing database be modified, or can a new data system be developed, given available resources?

C.2.2 Institutional Concerns

The second element of a developing a state-level strategy is addressing institutional concerns that could encourage or impair capacity development. Under Section 1420(c)(2)(B) of the SDWA, states must consider developing a description of the “institutional, regulatory, financial, tax, or legal factors at the federal, state, or local level that encourage or impair capacity development.” A broad spectrum of factors can influence capacity development.

Factors that can affect capacity development efforts within a state could include the following items which are important for states consider as they develop their Capacity Development strategies.

Positive Factors	Negative Factors
Statutes dealing with mergers and acquisitions, including statutes that encourage consolidation by allowing rate base adjustments.	A state’s lack of legal (or regulatory) authority or existing institutional barriers to develop and implement a Capacity Development program.
Statutes dealing with privatization or procurement to allow systems to contract for operations and maintenance or other services more easily.	Legal and financial issues associated with water rights.

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Positive Factors	Negative Factors
Statewide growth-management legislation to limit the growth of poorly-planned systems.	Insufficient state or local funding.
Statutes that require renewable operating permits for water systems, certificates of convenience and necessity (CCNs), or periodic sanitary surveys.	Barriers that preclude systems from obtaining variances or exemptions reasonably.
TA programs that provide help to small systems.	State statutes or regulations that hinder consolidation, regionalization, or interconnection or reciprocity for operator certification.

In its Capacity Development strategy, [Illinois](#) included consumers’ perceptions about drinking water as an institutional concern that could have a negative effect on capacity development. States must use effective communication to explain the reasons that capacity development is necessary.

C.2.3. State Resources

The third factor that for states to consider when developing a state-level strategy is state resources. States can use SDWA resources and authorities to help PWSs comply with the National Primary Drinking Water Regulations (NPDWRs), to encourage the development of partnerships between water systems that increase TMF capacity for all involved water systems, and to assist with operator certification and training.

Under Section 1420(c)(2)(C), states must describe the ways in which they will use the authority and resources of the SDWA to improve capacity in PWSs. Specifically, the states are asked to describe how they will accomplish three goals central to a sound Capacity Development strategy:

1. Assist PWSs in complying with the NPDWRs.
2. Encourage the development of partnerships between PWSs to enhance their TMF capacity.
3. Assist PWSs in the training and certification of operators.

The authority and resources that can be used to enhance a state’s Capacity Development program are provided throughout the SDWA and the programs must be carefully coordinated and with the use of the state authority and resources create the most effective Capacity Development program. This coordination of state and federal programs is vital to developing capacity, just as the development of greater TMF capacity through compliance is essential for the efficient functioning of other important sections of the SDWA.

C.2.4 Baseline Indicators

States are encouraged to identify baseline indicators that can measure capacity development. Establishing a baseline to measure improvements is crucial to fulfilling state responsibilities under Sections 1420(b)(2) and 1420(c)(3), which require states to report the success of their Capacity Development program to the EPA Administrator and the Governor. Because TMF capacity is difficult to



measure, especially in the short term, states may use a combination of the following approaches to measure TMF capacity:

Volume of activity: A state could assess its program based on its effectiveness in reaching water systems, using as a measure the number of sanitary surveys, comprehensive performance evaluations (CPEs), water system plans, or self-assessments conducted; amount of TA provided.

Operator certification: States could base their assessment on the prevalence of certified operators who have the training necessary to improve the capacity of the PWSs they operate, using as a measure the number of certified operators.

Planning mechanisms: States could use to measure improvements in capacity, the results of water system self-assessments, business plans, annual financial reports, and budgeting worksheets. This process would require a baseline measure of all PWSs at the time when the capacity development efforts began and a method to regularly update the PWSs assessments.

Compliance data: Since the SDWA explicitly mentions capacity with respect to NPDWRs, compliance data could be a useful way to analyze compliance trends, such as measuring the number of systems with an ETT score greater than or equal to 11, exceedances, monitoring and reporting violations, and time required to achieve compliance.



C.2.5 Stakeholders Identification

The final factor that states are recommended to consider when developing a state-level strategy is identify individuals who are involved in the development and implementation of the Capacity Development program. This includes people from all appropriate agencies of federal, state and local governments, PWSs, and PWS customers who can provide input on the state-level strategy.

One approach to identifying stakeholders is to use Operator Certification advisory boards. Operator Certification advisory boards can be key resources in disseminating capacity information. States might work with Operator Certification boards to develop a certification curriculum that would help ensure capacity.

As they identify stakeholders, states are encouraged to include representatives from CWSs as well as NTNCWSs such as public schools, day care centers, offices, and factories. It is also recommended that states reach out to organizations that represent TNCWSs, such as the American Automobile Association, which has an interest in water quality at highway rest stops, and tourism organizations, which have a keen interest in avoiding water related issues in the destinations that they represent.

In states that rely on tourism (e.g., Colorado, Florida, and California) the tourism industry has focused public attention on water quality in highway rest stops.

Potential interested parties for outreach programs include advisory panels for new system development and Operator Certification advisory boards.

C.3 Implementing State-Level Strategies

Once states have crafted sound state-level strategies, the next step is to begin to implement a Capacity Development program to improve TMF capacity. Although the SDWA requires that a state consider each

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of the five programmatic elements for inclusion in its Capacity Development program, it does not require the state to use specific tools to implement the selected elements. Each state is unique and should make policy decisions based on its unique characteristics and circumstances. The SDWA provides states with the flexibility to tailor their strategies to maximize the opportunity that they have to meet the public health protection goals. Several tools, listed below, may help states implement their Capacity Development program.

C.3.1 Prioritization Methods

The following sources of information can help state Capacity Development programs prioritize PWSs. This list is meant to serve only as a starting point—depending upon their unique circumstances, states may be able to take advantage of additional tools to help prioritize PWSs.

- Annual Financial Reports
- Capital Improvement Plans
- Compliance Data
- Comprehensive Performance Evaluations
- Consumer Confidence Reports
- DWSRF Loan Applications
- Operator Certification Programs
- Permitting Requirements
- Sanitary Surveys
- Self-Assessments
- Source Water Assessment Programs
- State/Federal Surveys of Infrastructure Needs
- Statewide Water Quality/Quantity Studies
- Water system plans or Business Plans

Washington State has developed a successful method to identify and prioritize those systems most in need of capacity development assistance. Washington tracks the performance of all systems in terms of their compliance histories, their water system plans, and the financial component of their business plans. Systems are then classified according to their compliance history and capacity.

C.3.2 Institutional Concerns

It is encouraged for states to implement state-level strategies in a way that takes institutional concerns into account. States' reports to their legislatures or governors on the subject of capacity development may prove useful in the creation and implementation of a Capacity Development program. Many of these reports include discussions of the factors that encourage or impair capacity development. States have several tools at their disposal that address the factors that impair TMF capacity at water systems. The following list is meant only as a starting point. As states build their Capacity Development programs, they are likely to find other tools to address factors that impair capacity efforts.

- Capital Improvement Plans
- Comprehensive Performance Evaluations
- DWSRF Resources
- Permitting Requirements
- Cooperation with Nongovernmental Organizations (NGOs)
- Coordination with Other Agencies
- Water Conservation Plans
- Operator Certification Programs
- Rate Reviews and Approvals
- Regional Plans
- Restructuring Programs
- Sanitary Surveys
- Satellite Management Programs
- Source Water Assessment Programs
- Training and TA Programs
- Variances and Exemptions
- Water System Plans or Business Plans

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C.3.3 State Resources

The activities set forth in the state resources part of the state-level strategy are at the heart of the linkages between the Capacity Development program and other sections of the SDWA. States have several tools that may permit them to exercise the authority and resources of the SDWA. This list is meant only as a starting point as states build their Capacity Development program.

Tools to Help States to Implement SDWA Authority	
<ul style="list-style-type: none">• Enforcement Records• Capital Improvement Plans• CCNs• Compliance Data• CPEs• Cooperation with NGOs• Cooperation with Industry Groups• Coordination with Other Agencies• DWSRF Loan Applications• Emergency Response Plans• Big Brother and “Buddy System” Programs• Operator Certification Programs• Permitting Requirements	<ul style="list-style-type: none">• Public Education Programs• Rate Reviews and Approvals• Regional Plans• Restructuring Programs• Bond Issue Review• Reviews of Audit Reports• Sanitary Surveys• Satellite Management Programs• Self-Assessments• Statewide Water Quality/Quantity Studies• Training and TA Programs• Water system plans or Business Plans• Water Conservation Plans

C.3.4 Baseline Indicators

Implementation of Capacity Development programs depends on states’ ability to measure those programs’ effectiveness. State Capacity Development programs are recommended to evaluate PWSs, based on the state-level indicators they identified during the development phase. It should be noted that because capacity building is an incremental process, it may take years before improvements are measurable. Even highly effective Capacity Development programs may not show immediate improvements in the actual capacity of water systems.

C.3.5 Stakeholders Identification

As states implement state-level strategies, they are encouraged to cast a wide net to ensure that all potential stakeholders are involved. The following tools can help states to identify additional stakeholders as they implement their plans:

Regional plans. Regional planning can promote communication and information sharing between water systems. **Memorandum of Understandings (MOUs) with Public Utility Commissions (PUCs).** Some state PUCs are involved in regulating public water districts or authorities and, on occasion, municipal

Tennessee: Planning Promotes Partnerships
In conjunction with Drought Management planning, Water Resources Technical Advisory Committee (WRTAC) and Tennessee Department of Environment and Conservation partnered with the U.S. Army Corps of Engineers and other regional planning experts to initiate a water resources planning pilot program in two regions: North Central Tennessee and Southern Cumberland. The pilot study was conducted to establish a statewide process for regional water supply planning process and to identify potential interconnections.

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water systems. The statutory authority for the PUCs' actions are defined in the statutes that authorize them to promote the public interest (e.g., safe and reliable service at reasonable cost) by regulating the way some services are provided. These statutory authorities make PUCs logical partners in capacity development. Permitting requirements. The permitting process alerts permittees to capacity development and helps the state identify stakeholders.



Cooperation of industry groups,

lenders and NGOs. Developing relationships with these important groups helps ensure their participation in the capacity development process.

Coordination with other agencies.

Coordinating with all involved agencies helps ensure that the capacity development process runs smoothly. This is particularly important in states where the primacy agency is not the only agency participating in the DWSRF process.

States Supporting Small Systems

Several state commissions have adopted more expanded roles in small water system capacity by: opening formal proceedings on the matter and requesting public comment (New York); developing and issuing a new policy statement adopted by the commissioners (California, Connecticut); and drafting MOUs that state the broad objectives of small system capacity development and itemize specific commission responsibilities (Connecticut, Pennsylvania, North Carolina).

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Appendix D: Example Desk Guide to Review Capacity Development Program Annual Reports

This section provides an example of how a Region can approach reviewing annual reports. The process included is from the “Desk Guide to Review Capacity Development Program Annual Reports” developed by EPA Region 7.

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EPA Region 7's Desk Guide to Review Capacity Development Program Annual Reports

Objectives:

The objectives of this desk review guide are to:

1. Provide a consistent way for the DRWM to review the R7 State's Capacity Development Annual Reports;
2. Communicate any identified issues with management and the State and
3. Provide a timeline for review and program determination completion.

Timeframe and Overall Determinations of Annual Report Review:

There is an expectation that EPA receives the annual report for Kansas and Nebraska before October 1 and Missouri and Iowa before January 1. In addition, as part of the capacity development strategy, all the states must provide a report to the Governor beginning in 2002 before October 1, and every three years thereafter, and have quarterly discussions with states about community and nontransient noncommunity water systems with scores of 11 or greater. At the completion of the annual report review process, the implementation of the State's Capacity Development Program will be determined as one of the following conclusions: acceptable, acceptable with deficiencies or not acceptable.

Acceptable program means:

1. State demonstrates full ongoing implementation of a fully functioning new systems program for CWS and NTNCWS.
2. The state must provide documentation showing the ongoing implementation of the capacity development strategy for all PWS:
 - a. Historical Significant Noncompliance for CWS and NTNCWS (ETT quarterly discussion/report) and
 - b. Requirements for the Report to the Governor (once every 3 years).

Acceptable	The annual report documents ongoing full implementation of the State's New Systems Cap Dev program and ongoing implementation of an Existing Systems Strategy.
Acceptable with deficiencies	Acceptable with deficiencies means that the state is not able to report the information required to complete CD Tracker and new system's spreadsheet. EPA cannot determine ongoing implementation of a fully functional new systems program and documentation showing the ongoing implementation of the capacity development strategy.
Not acceptable	The State has decided not to implement or repeatedly fails to demonstrate ongoing implementation of a fully functional new systems program and documentation showing the ongoing implementation of the capacity development strategy. Grant conditioning has failed to achieve desired results. A withholding is recommended.

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Capacity Development Program Annual Reports Review Process:

1. Cap Dev coordinator receives the State Annual Capacity Development Report and date received is documented (Review process starts).
2. The Cap Dev coordinator distributes the Annual Report and last year's recommendations, and the Report to the Governor if necessary, via email (Attachment 2) to the appropriate State Coordinator(s). The annual report is placed on the DRWM SharePoint site (within 1 day of receiving). Included in the email are specific dates identified for the review process including:
 - o The review start date,
 - o Completion date of the New System's spreadsheet (3 days, 3 days cumulative),
 - o Completion of the CD Tracker/PET templates (19 days, 22 days cumulative) and
 - o Discussion of templates and develop recommendations (7 days, 29 days cumulative).
3. Reports are reviewed in the order received with the first starting no later than 2 working days after the end of the Federal Fiscal year or five working days after returning from the December/January holiday break.
4. The Cap Dev Coordinator takes the previous year's state CD Tracker/PET form and new systems spreadsheet to populate with current year state capacity development report information on the DRWM SharePoint site, and shares with the state coordinator (2-3 weeks depending on complexity).
 - o The Cap Dev coordinator will complete the new system spreadsheet first and provide to the State Coordinator for review (3 days). The Cap Dev coordinator will use the ETT Scores Tracker, the most recent ETT list, Envirofacts database, and the State Drinking Water Watch to evaluate violations and confirm the new systems provided in the report.
 - o The Cap Dev coordinator will populate the CD Tracker/PET and provide to state coordinator for review (7-12 days). The Cap Dev/State coordinator should always read the most current version of the State's capacity development strategy during the review. Other documents which can be used are the Report of Findings, which helped develop the state strategy, Annual Compliance Report, State DWSRF Annual Report, ETT information from quarterly meetings, can use a variety of other reports as necessary or available.
 - o Should any questions arise during the review process, the Cap Dev coordinator should contact the state.
5. A State coordinator should focus the review from the unique perspective of the overall state PWSS program implementation and enforcement, including trends, with respect to the technical, managerial and financial capacity successes and challenges throughout the year. State coordinators are encouraged to ask questions to the Cap Dev coordinator as they arise during the review of the annual report and information in the new system's spreadsheet and the CD Tracker/PET (consider using latest program review for information).
6. Should any questions from either the Cap Dev Coordinator or the State Coordinator arise during the review for which there is a concern about withholding, both must immediately discuss and bring to the Branch Chief.
7. Five days after the Cap Dev coordinator has sent the completed form to the State Coordinator, both will meet to review the completed documents from the state report to identify trends, discuss any questions and share these comments to each other to develop recommendations or

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suggestions to be added directly to the CD Tracker/PET form during the discussion ([Refer to #6 if necessary](#)).

8. At this point, the process will follow one of the three paths, acceptable, acceptable with deficiencies (grant condition), not acceptable (withholding).

Acceptable:

State demonstrates full, ongoing implementation of its new systems program and is developing and implementing a strategy to assist PWSs in acquiring and maintaining technical, managerial, and financial capacity.

Within 1 day after meeting with State Coordinator, the Cap Dev coordinator uses **Attachment 3** and includes the recommendations and suggestions listed in the CD Tracker/PET form and provides to the Branch Chief for review ([1 day, 30 days cumulative](#)). Address changes to email and send to state with copy to Branch Chief and State Coordinator, and at the same time, use **Attachment 5** to develop acceptance memo to provide to DWSRF program ([1 day, 31 days cumulative](#)).

Acceptance memo: Suggest pick 3-5 highlights and mix activities in the report with recommendations, make copy for State Coordinator.

Follow-up of recommendations will be part of the quarterly meetings with the state.

Acceptable with Deficiencies

EPA cannot complete the CD Tracker and new system's spreadsheet. EPA cannot determine ongoing implementation of a fully functional new systems capacity development program and documentation showing the ongoing implementation of the capacity development strategy. Situations can occur where a state cannot meet the requirements under the statute in a timely manner. Grant conditioning is recommended until deficiencies are corrected. EPA and the State will coordinate to set a schedule to provide the necessary information to meet the grant condition. EPA HQ capacity development coordinator should be contacted and provided information since this action has the potential to cause a withholding determination. Additional protocols in conjunction with the delegations of authority should be reviewed (9-67).

Should the information provided from the state be insufficient, the following would be the process to get that information before conditioning the grant becomes a withholding decision:

1. EPA has a discussion with the state about deficiencies.
2. EPA sends email to state agency documenting the deficiencies and developing a timetable to correct deficiencies (Attachment 4).
3. Internal memo to DWSRF to recommend conditioning the grant and requesting final date for which the grant condition needs to change to a decision to withhold (Attachment 6).
4. Receive response from the State to correct deficiencies.
5. State sends information to satisfy the grant condition and now has an acceptable report or move to not acceptable.

Not Acceptable

The State has decided not to implement or repeatedly fails to demonstrate ongoing implementation of a fully functional new systems program and documentation showing the ongoing implementation of the

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capacity development strategy. Grant conditioning has failed to achieve desired results. A withholding is recommended.

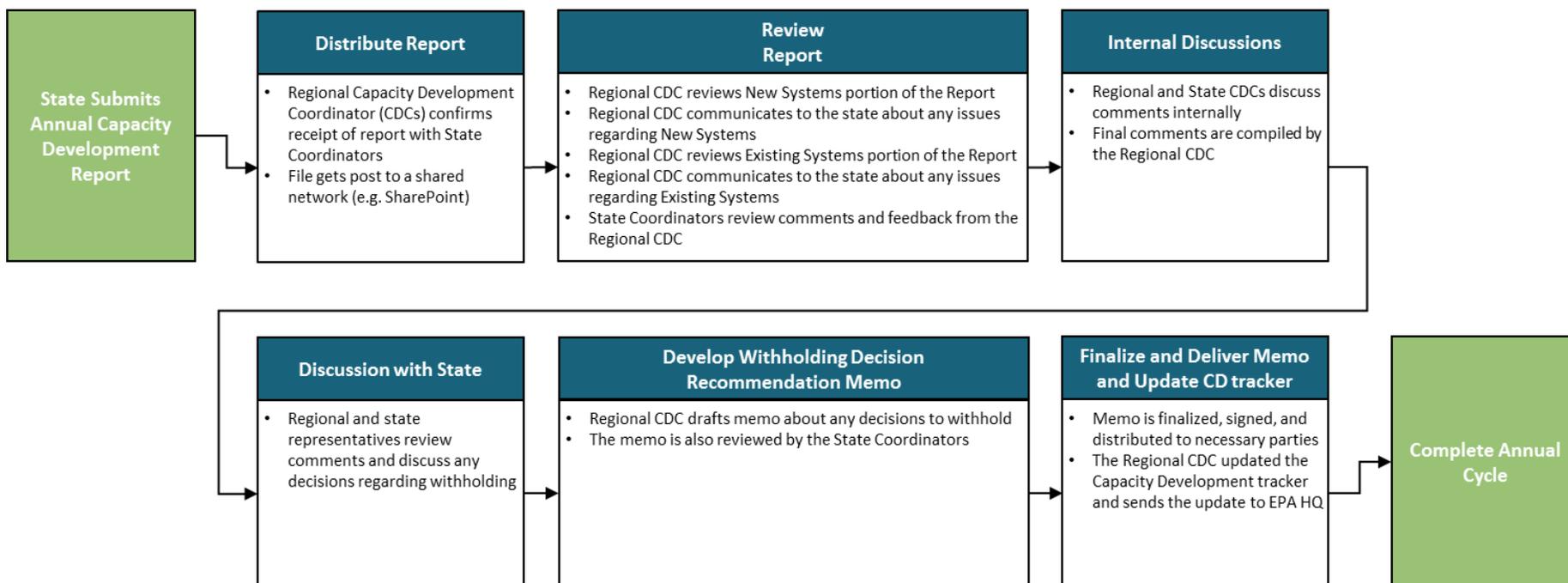
1. Communication with the state has already been occurring.
2. EPA sends letter to state agency addressing the withholding recommendation (No Template).
3. Internal memo to DWSRF recommending withholding (Attachment 7).
4. Should the DWSRF program agree with the recommendation, a decision document is developed for the Division Director.
5. Should Division Director agree to withhold, require concurrence memo from the Assistant Administrator for Water (OW).

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Attachment 1. Drinking Water State Revolving Funds Annual Report Review Process for Capacity Development Reports



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Attachment 2. Example of email to State PWSS Coordinators with instructions after receiving an initial State Capacity Development annual submittal.

(R7 State PWSS Coordinator):

Attached is the annual Capacity Development program report submittal from the (state agency) and the previous year's program recommendations (add Report to the Governor if necessary). I would appreciate if you would review the annual report and the previous year's recommendations during the time I work to complete the new system's and existing system's templates.

I will start the (State)review on (date) beginning with updating the new systems program spreadsheet then CD Tracker/PET. A link to the completed new system's spreadsheet will be provided on (date) and the completed CD Tracker/PET template on (date).

I will make an appointment for (five working days after providing links to completed templates) to discuss the report and make recommendations for the Branch Chief to review. Should any issues occur during the review which suggests a possible withholding of DWSRF funds, a discussion on the issue needs to occur with the Branch Chief as soon as possible.

Please contact me if you have any questions or comments any time during the review of the report or completed templates.

Thanks

(Cap Dev Coordinator)

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Attachment 3. Example of email to the Primacy State Cap Dev Coordinators found acceptable ([No major concerns](#)) with recommendations and suggestions for future reports.

([State Cap Dev Coordinator](#)):

We have reviewed the ([State agency](#)) Drinking Water Capacity Development program annual submittal provided to us on ([Date of annual program submittal](#)). The ([State agency](#)) Capacity Development program was fully implementing an acceptable new systems capacity development program, and was implementing an existing systems capacity development strategy for the (State, Federal) Fiscal Year (Date).

We do have additional comments to the annual submittal ([and the Report to the Governor](#)). We are not expecting any changes to the current annual submittal, but have recommendations and suggestions for improvements for future annual submittals ([and the Report to the Governor](#)).

Our recommendations and suggestions for the new and existing systems, ([and the Report to the Governor](#)) review is as follows:

[Comments, Suggestions and Questions]

We look forward to the discussion.

Please contact me if you have any questions.

Thanks

([Cap Dev Coordinator](#))

Send to State Cap Dev Coordinator, EPA State Coordinator, (Others as necessary)

Work with the state to have a conference call and send out invitations to everyone.

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Attachment 4. Example of email to Primacy State Cap Dev Coordinator with comments for discussion on the State Capacity Development annual report ([Major concerns](#)).

([State Cap Dev Coordinator and State PWSS Program Manager](#)):

We appreciate the discussion about the issues we have with the review of the ([State](#)) capacity development annual report and the inability to complete the CD Tracker form and/or new systems spreadsheet. We are recommending to the Drinking Water State Revolving Loan Fund Program that the ([State agency](#)) not receive the full allotment of the ([year State](#)) Drinking Water State Revolving Loan fund capitalization grant until the information to address these concerns has been provided.

EPA cannot determine ongoing implementation of a fully functional new systems program and documentation showing the ongoing implementation of the capacity development strategy. The following are what we require to address the implementation issues:

[\[List of Concerns/Issues\]](#)

We will work with ([State agency](#)) to develop a time table to provide the necessary information before the grant condition becomes a withholding decision.

If you have questions, you can contact {[insert name of Cap Dev Coordinator](#)} at ([Cap Dev coordinator's phone number](#)).

Thanks

{[Supervisor of Cap Dev Coordinator](#)}

Send to State Cap Dev Coordinator, R7 State Coordinator, DRWM Manager (Others as necessary)

(Work with the state on communications as necessary)

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Attachment 5. Sample of annual Capacity Development Program determination memo (acceptable)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

MEMORANDUM

SUBJECT: [Year] [State] Drinking Water Capacity Development Annual Evaluation for [Year] SRF Grant

FROM: [EPA R7 Capacity Development Coordinator]

Drinking Water Management Branch

TO: [EPA R7 SRF Coordinator]

Wastewater and Infrastructure Management Branch

We have reviewed the [State Agency] [Year] Drinking Water Capacity Development Program Annual Report submitted [Date]. Based on our review of the report, discussions at meetings and conference calls, the [State Agency Drinking water Capacity Development program] has provided documentation to show (State) was fully implementing an acceptable (approved?) new systems capacity development program, and was implementing an existing systems capacity development strategy for the (State, Federal) Fiscal Year (Date) for the reporting period of [Time frame].

[Summary of highlights or suggestions from the report submittal]

We would like to thank [if applicable, State of XX Capacity Development Program Manager Name] and his/her staff for their protection of public health through the drinking water Capacity Development program.

Questions regarding this matter can be directed to me.

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Attachment 6. Sample of annual Capacity Development Program determination memo (acceptable with deficiencies)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

MEMORANDUM

SUBJECT: [Year] [State] Drinking Water Capacity Development Annual Evaluation for [Year] SRF Grant

FROM: [EPA R7 Drinking Water Branch Chief]
Drinking Water Management Branch

TO: [EPA R7 SRF Branch Chief]
Wastewater and Infrastructure Management Branch

We recommend conditioning the [State, Date] Drinking Water State Revolving Fund Capitalization Grant allotment. The [State Agency] has failed to demonstrate full, ongoing implementation of its new systems program and/or document ongoing implementation of the strategy. We are working with the [State Agency] to develop a time table to provide the necessary information to complete our report.

The following are the issue(s) for which the [State Agency] needs to correct:

[Summary of issue(s)]

Please provide us a date which the recommendation to condition the grant needs to change to a withholding decision so that we may add it to the time table developed with the [State Agency].

We will keep you informed should the status of this recommendation change.

Questions regarding this matter can be directed to me.

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Attachment 7. Sample of annual Capacity Development Program determination memo (unacceptable)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

MEMORANDUM

SUBJECT: [Year] [State] Drinking Water Capacity Development Annual Evaluation for [Year] SRF Grant

FROM: [EPA R7 Drinking Water Branch Chief]
Drinking Water Management Branch

TO: [EPA R7 SRF Branch Chief]
Wastewater and Infrastructure Management Branch

We recommend 20% withholding of the [State, Date] Drinking Water State Revolving Fund Capitalization Grant allotment. The [State Agency] has failed to [demonstrate full, ongoing implementation of its new systems program and/or document ongoing implementation of the strategy]. The [State Agency] has said they will not provide the necessary information or reports.

The following are the issue(s) for which the [State Agency] has decided not to implement or repeatedly fails to demonstrate ongoing implementation of a fully functional new systems program and documentation showing the ongoing implementation of the capacity development strategy and grant conditioning has failed to achieve desired results:

[Summary of issue(s)]

We will keep you informed should the status of this recommendation change.

Questions regarding this matter can be directed to me.

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Appendix E: Capacity Development (CD) Tracker Instructions

The Annual Regional Capacity Development Program Evaluation is filled out by Regional Capacity Development coordinators based on data from state Annual Capacity Development Reports. The data from this evaluation is entered into an access database by the EPA HQ. The CD Tracker enables the EPA to establish consistent reporting criteria for annual state reports and assess the performance of the Capacity Development program on a national level. This appendix contains instructions and further explanation for Regional Capacity Development coordinators filling out the evaluation.

SECTION 1: GENERAL INFORMATION

Under section 1, the form will request basic information about your state and fiscal reporting dates. Questions include:

1. Select a state for this evaluation.
 - **EXPLANATION:** Select the name of the state being evaluated from the drop-down menu.
2. Does this state use the state fiscal or federal fiscal reporting year? Enter state date for state fiscal year or federal fiscal year.
 - **EXPLANATION:** If the state uses the state fiscal year for the reporting period, enter the start day of that state fiscal year. If the state does not use the state fiscal year for the reporting period, leave blank. If the state uses the federal fiscal year for the reporting period, select the fiscal year from the drop-down menu. If the state does not use the federal fiscal year for the reporting period, leave blank.
3. Date report was received
 - **EXPLANATION:** Enter the date the EPA Regional Capacity Development coordinator received the Capacity Development Annual Report from the state. If only the month and year is known, enter “1” as the date. For example, if the report was received in September 2017 enter 09/01/2017.
4. Date report was approved
 - **EXPLANATION:** Enter the date the date the EPA Regional Capacity Development coordinator approved the report

SECTION 2: NEW SYSTEMS

Under section 2, the form will request information on the implementation, documentation, and effectiveness of new systems. Questions include:

1. Has the state’s legal authority (statutes/regulations) to implement the new systems program changed within the previous reporting year? If yes: please explain and identify how this has affected or impacted the implementation of the new systems program. Additional documentation, including an Attorney General (AG) statement or a statement from a delegated department attorney, may be required.

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- **Explanation:** If the state’s legal authority to implement has not changed, select “no” from the drop menu. If the State’s legal authority to implement has changed, please explain. Information provided may include programmatic changes or approaches as well as statute and/or regulation modifications, which can affect the implementation of the new systems program.
2. Control points: For each control point, indicate which factors (Technical (T), Managerial (M) and/or Financial (F)) are influenced by the control point.
 - **Explanation:** Each state’s new systems program identified a set of Control Points, which is an integrated feature of a state’s program. A control point identifies a place where the primacy agency (or other unit of government) can exercise its authority to ensure the demonstration of new system capacity. In the column titled “Control Points” enter a brief description of the state’s control points. In the column titled “Factor Name, select the technical, managerial, and/or financial factors associated with each control point. You may select multiple Factors for each Control Point (see the “How to Use this Document” section on the CD Tracker document for instructions on selecting multiple Factors). If any modifications were made to the Control Point/Factor during the reporting period, enter a brief description of the change and the impact made by the change in the third and fourth column, respectively. If no modification were made during the reporting period, leave blank.
 3. Formal documentation on the state’s implementation of its new systems program
 - **Explanation:** Based on the report provide information that demonstrates that the state is successfully implementing its new systems program. Information provided may include a brief discussion on the number of new systems that accumulated a score of 11 higher the ETT list, the number of new systems permits issued/being reviewed and any programs/activities the regarding the new system program.
 4. Are you satisfied that the state is adequately implementing its new systems program? **If no:** please explain why you are not satisfied that the state is adequately implementing its new system program.
 - **Explanation:** Based on the report and communication between the state and the EPA Regional Capacity Development coordinator during the reporting period, if the EPA Regional Capacity Development coordinator is satisfied that the state is adequately implementing its new systems program, select “yes.” If not, please explain.
 5. Are there trends in new system noncompliance within the past 3 years? **If yes:** please identify the trends and how the EPA Region will assist the state in addressing the trends.
 - **Explanation:** An examination of any trends may trigger the need to make adjustments to the state’s new system program implementation. Based on the report provide information that showcase trends in new system compliance during their first three years of commencement. Information provided may include sanitary survey results, capacity assessments results, trends in non-compliance with the NPDWRs, etc.

SECTION 3: EXISTING SYSTEMS

Under section 3, the form will request information on the programs, strategies, and overall success of existing systems, as well as states' effort in identifying systems in need. Questions include:

1. Existing systems programs/tools/activities: In referencing the state's approved existing systems strategy, which programs, tools, and/or activities were utilized in acquiring and maintaining Technical (T), Managerial (M), and Financial (F) capacity?
 - **Explanation:** It is recommended that states describe the broad range of programs and activities employed in their approved strategies and discuss what role those programs and activities played in building or maintaining capacity of existing systems. In the column titled "Program Name", enter the name/ brief description of the program. In the column titled "Category, select from the list the category from the list provided in the drop menu that best describes the program. More information regarding each category is provided below. In the next column, provide a brief description on how the program improves the capacity of drinking water systems. If the program improves technical, managerial, and/or financial capacity select "yes" or "no" in the corresponding columns. In the column titled "Program Characterization" select "Successful" from the drop-down menu if the program has proven success. If the program has been challenging, Select "Challenging" from the drop-down menu. In the final column titled "Target Audience" select the targeted audience for the described program form the drop-down menu. You may select multiple audiences.
 - Based on the report provide information on existing programs, tools, and activities in the following categories:
 - i. **Asset management:** Information provided may include asset management trainings, grants/ funding incentives for asset management, or any activities to promote asset management programs in water systems.
 - ii. **Coordinating Funding:** Information provided may include grants or funding opportunities created using multiple funding sources.
 - iii. **Energy Management:** Information provided may include grants/funding incentives for energy management, or any activities identified to promote energy management.
 - iv. **Program Collaboration:** Information provided may include programs involving coordination among staff in different programs, divisions or organizations to achieve a common goal.
 - v. **Rate Setting:** Information provided may include grants/funding incentives for rate setting, number of conducted rate studies, trainings on rate setting
 - vi. **Water Efficiency:** Information provided may include leak detection surveys, grants/funding incentives for water efficiency, or any activities that promote reducing water wastage.
 - vii. **Water Reuse:** Information provided may include initiatives to increase water reuse.
 - viii. **Water System Partnerships:** Information provided may include system consolidations, operator sharing, etc.

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- ix. **Workforce:** Information provided may include operator trainings, number of certified operators, initiatives to increase workforce development
 - x. **Other:** Information provided may include
2. Based on the existing system strategy, how has the state continued to identify systems in need of capacity development assistance?
 - **Explanation:** This question refers to the method(s) prescribed within the state strategies for identifying, selecting or prioritizing PWS' s in need of assistance. Information provided may include priority points systems, sanitary survey result, ETT list, or any methods used to identify and prioritize systems in need of capacity development assistance.
 3. How did the state provide assistance based on systems most in need?
 - **Explanation:** Based on the report, provide information on the methods the state uses to provide assistance to systems in need. Information provided may include assistance provided by state staff or a third-party TA provider, grant funding through the DWSRF, or any other methods state use to provide assistance.
 4. Describe any changes the state has made from previous years regarding how it identifies systems in need. Does the state need to change its existing system strategy to reflect those changes?
 - **Explanation:** Based on the report, describe any changes or updates the state has made from the previous year regarding identifying systems in need. If no changes were made, leave blank.
 5. Did the state perform a review of the existing systems strategy during the reporting period?
 - **Explanation:** Based on the report, if the state performed a review of the existing select “yes” from the drop-down menu and answer. If no, select “no” and leave all subsequent questions blank.
 6. Did the state make any modifications to the existing systems strategy? **If yes:** describe the modifications to the existing systems strategy.
 - **Explanation:** Based on the report, if the state has made modification to the existing strategy during the reporting period select “yes” from the drop-down menu and provide a brief description of the modifications.
 7. During the reporting period, were any statewide PWS capacity concerns or TMF capacity development needs identified? **If yes:** please enter concern(s) or need(s) below.
 - **Explanation:** Based on the report, list all of the concerns identifying in the “Concern/Need” column of the table. In the “Is this concern/need a continuing issue?” select yes of the concern is ongoing and select no if the concern has been addressed during the reporting period. If the concern impacts technical, managerial, and/or financial Capacity select yes or no in the corresponding column. Next in the column titled “How was the concern/need identified?”, provide a brief description of methods used to identify the needs. In the final column provide information.
 8. Provide formal documentation on the state’s implementation of its existing systems strategy.

- **Explanation:** Based on the report provide information that demonstrates that the state is successfully implementing its existing systems program. Information provided may include compliance rates among PWSs, capacity assessments, assistance from stakeholders, etc.
9. Are you satisfied that the state is adequately implementing its existing systems strategy? **If no:** please explain why you are not satisfied that the state is adequately implementing its existing systems strategy.
 - **Explanation:** Based on the report and communication between the state and the EPA Regional Capacity Development coordinator during the reporting period, if the EPA Regional Capacity Development coordinator is satisfied that the state is adequately implementing its existing system strategy, select “yes.” If not, please explain.
 10. Are there trends in existing system noncompliance within the past 3 years? **If yes:** please identify the trends and how the EPA Region will assist the state in addressing the trends.
 - **Explanation:** An examination of any trends may trigger the need to update the state’s existing system strategy. Based on the report provide information that showcase trends in existing system compliance during the past three years. Information provided may include trends in data from the ETT list, noncompliance rates among PWSs, etc.
 11. List of the documentation used in this assessment of the state’s Capacity Development implementation report for this year
 - **Explanation:** List the titles of documents used to assess the state’s capacity development implementation during the reporting period. If possible, include the state Annual Report and the ETT List in this list.
 12. Describe how the state measures the success of the program and indicate how the state will respond to these measures. This discussion could also include discussion about goals and measures that are being used in the state.
 - **Explanation:** Based on the report provide a brief description of how the state measures the success of the program and any noteworthy successes during the reporting period.

SECTION 4: REGIONAL PERSPECTIVES

Under section 4, the form will request information on the states’ Triennial Report to the Governor and the ETT. Questions include:

1. Date of most recent Report to the Governor
 - **Explanation:** Enter the date of the most recent Report to the Governor.
2. Describe your thoughts on the Report to the Governor.

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- **Explanation:** Based on the most recent Report to the Governor, provide a brief description of your thoughts on the quality/content of the report. This section only needs to be updated triennial.
3. What feedback on the Report to the Governor did the EPA Region provide to the state?
 - **Explanation:** Based on the most recent Report to the Governor, provide a brief description comments made to the states regarding the report. This section only needs to be updated triennial.
 4. Date range (by quarter) of the latest ETT list derived from the ETT Tracker Report (ideally encompasses a three-year timeframe)
 - **Explanation:** Enter the date range of the latest ETT list. This list should include new and existing systems.
 5. Discuss the EPA Regional analysis of the ETT list (this list includes systems that have a score greater than or equal to 11 at least once during any three-year time period).
 - **Explanation:** Based on the ETT data from the date range in question 25, provide a brief overview. Information provided may include a brief discussion of systems that have accumulated a score of 11 or higher during the given timeframe, and what was done to bring those systems back into compliance.
 6. What feedback on the ETT list did the EPA Region provide to the state?
 - **Explanation:** Based on your communication with the state during the reporting period, provide a brief overview of feedback on the ETT list. Information provided may include quarterly calls held with the state, etc.
 7. Discussion on identification of Regional trends and how those trends are being addressed.
 - **Explanation:** Based on all of the state reports in the EPA Region. Provide an analysis of any Region wide commonalties seen in the state report. Information provided may include compliance with new regulations.

SECTION 5: STATE CONTACT INFORMATION

Under section 5, the form will request contact information. Questions include:

1. Contact information for the state's Capacity Development coordinator, Operator Certification coordinator, and Drinking Water Administrator.

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Appendix F: Glossary of Terms

Term	Definition
Appropriations	The right to withdraw water from its source.
Capital improvements	Fixed outlays needed for the initial design and construction of water system infrastructure and equipment, such as pumps, pipes, treatment facilities, etc.
Community water system (CWS)	According to the Safe Drinking Water Act, a drinking water conveyance system serving at least 15 service connections used by year-round residents of the area served by the system or regularly serving at least 25 year-round residents.
Control point	The point in a new system's development at which a state (or other unit of government) can exercise its authority to ensure the new system's capacity.
Consolidation	The physical interconnection of two or more water systems without a transfer of ownership. This is an example of a water system partnership.
Contaminant	Any physical, chemical, biological, or radiological substance or matter that has an adverse effect on air, water, or soil.
Contamination	The introduction into water of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the water unfit for its next intended use.
Cost-effectiveness	A comparison of costs required for achieving the same benefit by different means. Costs are usually expressed in dollars, but benefits can be expressed in another unit (such as a quantity of water).
Distribution system	A network of pipes leading from a treatment plant to customers' plumbing systems.
Drinking Water State Revolving Fund (DWSRF)	State loan fund for drinking water systems established under the Safe Drinking Water Act.

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Term	Definition
Exemption	Relief from an MCL, treatment technique, or both. A state with primacy may grant an exemption if the following conditions exist: 1) the system cannot comply with an MCL or treatment technique due to compelling factors which may include economic factors; 2) the system was in operation on the effective date of the MCL or treatment technique requirement; and 3) the exemption will not result in an unreasonable public health risk.
Financial Capacity	The ability of a water system to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with SDWA requirements. Part of a state's Capacity Development Program.
Integrated resource planning	An open and participatory planning process emphasizing least cost principles and a balanced consideration of supply and demand management options for meeting water needs.
Managerial Capacity	The ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with SDWA requirements, including institutional and administrative capabilities. Part of a state's Capacity Development Program.
Maximum contaminant level (MCL)	The maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the ultimate user of a public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the system. Contaminants added to the water under circumstances controlled by the user are excluded from this definition, except those contaminants resulting from the corrosion of piping and plumbing caused by water quality.
Non-community water system (NCWS)	A public water system that is not a community water system. A non-community water system is either a transient, non-community water system or a non-transient non-community water system.
Non-transient, non-community water system (NTNCWS)	A public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year. Examples include schools, day-care facilities, and factories.
Primacy	The responsibility for ensuring that a law is implemented, and the authority to enforce a law and related regulations. A primacy agency has primary responsibility for administrating and enforcing regulations.
Public water system (PWS)	A system for the provision to the public of piped water for human consumption, if such system has at least fifteen service connections that regularly serves at least 60 days out of the year.

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Term	Definition
Restructuring	Changing the operational, managerial, or institutional structure of water systems in order to meet the increasing costs and responsibilities. It is an example of a water system partnership.
Safe Drinking Water Act (SDWA)	Federal drinking water quality legislation administered by the U.S. Environmental Protection Agency through state primacy agencies; amended in 1986 and 1996.
Technical Capacity	The physical and operational ability of a water system to meet SDWA requirements, including the adequacy of physical infrastructure and the technical knowledge and capability of personnel. Part of a state's Capacity Development Program.
Transient non-community water system (TNCWS)	A non-community water system that does not regularly serve at least 25 of the same persons over six months per year. Examples include hotels, restaurants, and campgrounds.
Variance	A mechanism through which a state with primacy may relieve a public water system from a requirement with respect to an MCL if certain conditions exist. The conditions are: 1) the system cannot meet the MCL despite the application of best available treatment technology, treatment techniques or other means (taking costs into consideration), due to the characteristics of the raw water sources which are reasonably available to the system, and 2) the variance will not result in an unreasonable public health risk. A system may also be granted a variance from a specified treatment technique if it can show that, due to the nature of the system's raw water source, such treatment is not necessary to public health.
Water System	A series of interconnected conveyance facilities owned and operated by a drinking water supplier.
Water System Partnerships	Collaborative agreements between water systems to help systems address challenges, share costs, and improve technical, managerial, and financial capacity with options ranging from informal arrangements, such as sharing equipment, to transferring ownership of a system through consolidation.
Withholding	An irreversible and permanent decrease in DWSRF funding that will occur by failing to implement a variety of programs (e.g., operator certification).