New York State Department of Health Capacity Development Strategy

Introduction

One of the primary goals of the 1996 Amendments to the Federal Safe Drinking Water Act (SDWA) was to focus the country's drinking water programs on protecting public health by preventing problems in drinking water systems. The provision for the Capacity Development Program was one of the centerpieces of the amendments. The Capacity Development Program calls for states to develop a strategy to ensure that all public water systems (PWS) acquire and/or maintain the technical (T), managerial (M), and financial (F) abilities needed to properly operate, manage and finance their systems. The 2022 revised strategy replaces the original Capacity Development Strategy, drafted in 2000, and includes asset management.

New York State (NYS) Public Water Systems Facts

A water system that provides piped water to the public for human consumption is regulated as a PWS if it has at least five service connections or regularly serves an average of at least 25 individuals daily for at least 60 days out of the year. The source waters serving a PWS may consist of ground water, surface water, or a combination of both ground and surface water.

In New York State, as of 2022, there are nearly 9,000 PWSs that source or purchase their water from surface water and/or groundwater. Several different types of PWSs are regulated in New York State:

Community Water Systems (CWS)

A community water system is a public water system that serves at least five service connections used by year-round residents or regularly serves at least 25 year-round residents. Examples of CWSs include municipal water systems, investor-owned water companies that serve residential populations, county authorities, and major wholesalers, mobile home parks, apartment complexes, and permanent residential institutions such as nursing homes. In 2022, New York has 2,832 community water systems.

Noncommunity Water Systems (NCWS)

Non-community water systems are public water systems that serve the public but do not generally serve the same people year-round. These systems are further divided into whether they serve regular (nontransient) or variable (transient) consumers. In 2022, New York has 6,085 non-community water systems.

Non-Transient Noncommunity Water Systems (NTNCWS)

A non-transient noncommunity water system (e.g., schools, and commercial/industrial facilities) maintains its own drinking water sources and regularly serves at least 25 of the same people, four or more hours per day, four or more days per week, and 26 or more weeks per year. In 2022, New York has 712 non-transient noncommunity water systems.

Transient Noncommunity Water Systems (TNC)

A transient non-community water system is a non-community water system that serves different people for more than sixty days out of the year. Rest stops, parks, convenience stores and restaurants with their own water supplies are examples of a TNC water system. In 2022, New York has 5,373 transient non-community water systems.

Capacity Development

Water system capacity is the ability to plan for, achieve, and maintain compliance with all applicable drinking water standards. There are three components to capacity: technical (T), managerial (M), and financial (F). Technical capacity refers to a water system's ability to operate and maintain its infrastructure. Managerial capacity refers to the expertise of the water system's personnel to administer the system's overall operations. Financial capacity refers to the financial resources and fiscal management that support the cost of operating the water system. Adequate capability in all three areas is necessary for the successful operation of a public water system.

Capacity development is the process by which water systems acquire, maintain, and build upon their TMF capabilities to enable them to consistently provide safe drinking water to their customers in a reliable and cost-effective manner.

Asset Management

TMF capacity building includes asset management planning. Asset management is a process to document and assess the assets of a system. A PWS asset is a physical component (i.e., pipe, source water, pumps, valves, etc.) that a system owns and uses in its operations. Asset management can help PWSs meet a required level of service in the most cost-effective way through the creation, acquisition, operation, maintenance, rehabilitation, and disposal of assets to provide for present and future customers. The five core questions of asset management are:

1. What is the current state of the PWS' assets?
2. What is the PWS required "sustainable" level-of-service?
3. Which assets are critical to sustained performance?
4. What are the PWS best "minimum life-cycle cost" capital improvement plan and operations and maintenance strategies?
5. What is the PWS best long-term financing strategy?

Safe Drinking Water Act Requirements

One of the focuses of the 1996 SDWA Amendments was to ensure that PWSs can provide safe drinking water to the public. The Amendments sought to prevent compliance problems and associated health risks by ensuring that PWSs have the capability to produce safe drinking water now and in the future. To achieve these goals, the Amendments included provisions for several prevention programs – one of which was the Capacity Development Program.

As written in the SDWA, the Capacity Development Program provides a framework for state agencies, local governments, stakeholder groups or organizations, water systems and the public to work toward ensuring that drinking water systems acquire and maintain the TMF capacity needed to achieve public health objectives (i.e., compliance with applicable State and Federal drinking water regulations).

SDWA requires states to include the following five elements in their Strategy:

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

Methods and Criteria Used to Prioritize Systems

Public Water Supply Capacity Assessment Scorecard Use and Implementation

In 2022, the New York State Department of Health (NYSDOH) developed a capacity assessment scorecard to assess the TMF capacity of PWSs in the State. NYSDOH will train local health departments (LHDs) to complete the scorecard on sanitary surveys, and report scores to the PWS and NYSDOH. Systems with a low score will be referred for technical assistance based on needs highlighted in the assessment.

- Goals of the Capacity Assessment Scorecard:
    - Proactively identify the systems that are in need of capacity improvement, especially for systems on the verge of losing capacity.
    - Help NYSDOH provide support for systems lacking TMF capacity.
    - Increase transparency among NYSDOH, LHDs, PWSs, and communities.
    - Account for a system's overall capacity, beyond what is covered in routine sanitary surveys.

Capacity Assessment Scorecard Pilot Program

NYSDOH developed a pilot program to test the scorecard and develop a baseline of information for refining the Capacity Development and Asset Management Program. CWSs were selected by LHDs and NYSDOH to participate in the pilot program. A representative sub-set of 24 CWSs were chosen across the State, drawing from different size systems in geographically diverse settings across the State. Six PWSs (two small, two medium and two large) participated in the pilot in each of the four NYSDOH regions. During 2022, NYSDOH Bureau of Water Supply Protection staff shadowed the LHDs during the 24 sanitary surveys and collected feedback on the scorecard.

LHDs, NYSDOH Regional Offices and water operators provided valuable feedback on the capacity assessment scorecard during the pilot. Based on their suggestions, several questions were either re-phrased, separated into two questions, or removed. Overall, participants in the pilot believed that the scorecard concept was valuable, sparked good conversations among water system personnel, and highlighted areas for improvement. Some LHDs voiced concern about the associated workload and follow up needed after the scorecards are complete. NYSDOH will work with LHDs and provide support and guidance as needed.

Non-Community Water Systems

NYSDOH plans to modify the capacity assessment scorecard and apply the same concept to non-community water systems over time.

The Factors that Encourage or Impair Capacity Development & Asset Management

Factors that Encourage Capacity Development

In 2021, the NYSDOH convened a diverse group of stakeholders over the course of three meetings to discuss factors that impact capacity development and asset management for PWSs in NYS. Stakeholders discussed factors that either enhance or impair water system capacity. The factors identified by the group that enhance capacity include the following:

- Programs and trainings to educate local leaders and elected officials

- Forming community partnerships
- Consolidation of management and operations at the local level or within neighboring communities
- Transparency between the State, water system operators, and the public
- Funding incentives
- Guidance from the State regarding rate setting, asset management, and budgeting

Existing Services that Already Contribute to Asset Management

Stakeholders unanimously supported the addition of asset management to the NYSDOH capacity development strategy. Each agency represented in the stakeholder group offered services that could contribute to asset management, including:

- Trainings
- Templates, guidance documents, and standard operating procedures
- Technical assistance, including but not limited to, assistance with system resiliency, asset management planning, and legal and procedural topics
- Source water protection
- Succession planning and workforce development

Factors that Impair Capacity Development

Stakeholders identified common barriers that impair a water system's ability to achieve and maintain capacity, including:

- Lack of education, training, and community investment at the local level
- Political turnover
- Water system operations staff recruitment and retainment challenges, including lack of time to train staff on topics beyond day-to-day operations
- Lack of capacity development training for water system operations staff
- Lack of investment funds and guidance for accessing funding opportunities
- Difficulty adjusting to technological advancements

Factors that Impair Asset Management

Stakeholders identified barriers that water systems face when incorporating asset management into their operations structure. The identified barriers are listed below:

- Lack of incentives
- Insufficient funding and reserve accounts
- Need for standardization or detailed review from the State
- Lack of support from local leaders
- Limited staff, stability, and time for long-term planning
- Staff turnover
- Complexity and continuous nature of asset management
- Unpredictability of infrastructure, particularly the difficulty in assigning realistic service life and budgeting future investments
- Reactive workflow, resulting in long-term planning becoming a low priority

The Way the State will use Authority and Resources of SDWA

The Role of the NYS Department of Health

NYSDOH, as the SDWA primacy agency, is responsible for developing and implementing a capacity development strategy for NYS. NYSDOH's original capacity development strategy was developed and approved by the United States Environmental Protection Agency (USEPA) in 2000. In response to the 2018 American Water Infrastructure Act (AWIA) amending the SDWA, NYSDOH revisited its strategy to incorporate asset management and improve its overall approach to capacity development.

NYSDOH, in conjunction with LHDs, has the primary responsibility for identifying which PWSs are in need of improving their TMF capacity. NYSDOH and LHDs will use the scorecard to prioritize systems and support them with technical assistance depending on the findings of the assessment. NYSDOH, LHDs, state agencies, and the state's partners can all provide technical, managerial, and financial assistance directly to PWSs in need. Assistance will enable such systems to achieve and maintain compliance with applicable State and Federal drinking water regulations.

In addition to the capacity assessment scorecard, NYSDOH and LHDs provide technical assistance to systems in need through the following programs.

- Sanitary Survey Program – This program provides a complete and detailed assessment of a public water system's physical plant, maintenance and operations, and administrative abilities. The goal of the program is to review and evaluate the capabilities of existing facilities to determine if they can assure compliance with current and future drinking water standards and regulations.
- Comprehensive Performance Evaluation Program – This program provides a detailed structural, operational, and administrative assessment of water filtration plants. The primary goal of the program is to review and evaluate the capabilities of existing treatment facilities to determine if they are meeting current standards and performance goals. Based upon the facility evaluation, an optimization plan for each facility is developed to assure compliance with current and future standards and regulations.
- Enforcement Activities – Prior to taking enforcement action on a public water system that persistently fails to comply with State and Federal drinking water regulations, NYSDOH engages in activities designed to assist the troubled system come into compliance. These activities include engineering support, training, and establishing compliance schedules.
- Drinking Water Source Protection Program (DWSP2) – DWSP2 is a voluntary state-run program created to assist municipalities with proactively protecting their drinking water sources. The goal is to help municipalities develop and implement their own unique drinking water source protection plan for the source(s) of their drinking water through the support of a free technical assistance provider.
- Direct Technical Assistance- LHDs provide direct technical assistance to PWSs on a daily basis. For example, LHDs investigate complaints, assure all applicable systems have updated Emergency Response Plans and Vulnerability Assessments, assist with implementation of new rules, track compliance, conduct plan reviews, review waivers, review certified operator applicants, add/maintain PWS inventory data, sample points and schedules and do surveillance monitoring. NYSDOH and NYSDOH Field Coordinators also have frequent communication with PWSs to help them navigate financial opportunities and other TMF concerns.

- Training- disseminating information and providing tools to public water systems is an essential component in fostering capacity development. The NYSDOH participates in the biannual meeting of the New York Section of the American Water Works Association (NYSAWWA) and the Annual Meeting of the NYRWA where technical presentations are made on topics ranging from regulations, compliance, financing and other tools available to assist public water systems.
- Partnering- NYSDOH partners with other organizations such as the NYSAWWA to provide or sponsor education and training of water system owners, managers and operators, government officials, other water system professionals, and consumers;
- New York Rural Water Association (NYRWA) Circuit Rider Contract - NYSDOH has had a technical assistance contract with NYRWA for over 17 years. NYRWA has provided small systems with the following support during that time:
    - Assisting with compliance;
    - Identifying, evaluating, and troubleshooting problems and violations;
    - Educating water operators, municipal officers, elected officials, and system owners;
    - Providing necessary training (on-site or in classrooms);
    - Assisting with the development of Emergency Response Plans;
    - Assisting with security and vulnerability assessments;
    - Assisting in developing rate structures;
    - Assisting with leak detection programs;
    - Collecting water samples for analysis;
    - Evaluating current operating procedures;
    - Locating funding and assisting with funding applications; and
    - Coordinating activities with other technical assistance providers.

Capacity Development Reporting:

Triennial Report to the Governor:

- NYSDOH, as the responsible SDWA primacy agency, must submit a report to the Governor, as well as make the report available to the public, on:
    - the efficacy of the capacity development strategy and the progress made toward improving the TMF capacity of public water systems in NYS.
    - efforts of the state to encourage development by public water systems of asset management plans and to assist PWSs in training relevant and appropriate persons in implementing such asset management plans.

Annual Report to USEPA:

- NYSDOH, as the responsible SDWA primacy agency, must submit a report to the USEPA including the following information:
    - The success of enforcement mechanisms and initial capacity development efforts in assisting PWSs in significant noncompliance status acquire, maintain, and build upon their TMF capacity.
    - A list of CWSs and NTNCWSs that have a history of significant noncompliance and, to the extent possible, the reasons for their noncompliance. NYSDOH has been preparing and submitting such lists on an annual basis since 1997.

- A list of new PWSs from the last three years and their USEPA Enforcement Targeting Tool (ETT) score.

All reports are posted on NYSDOH's website for the public to view.

The Drinking Water State Revolving Fund Intended Use Plan

The Drinking Water State Revolving Fund (DWSRF) develops an Intended Use Plan (IUP) that outlines how NYS meets the SDWA DWSRF Applicant requirements:

- Section 2.0: Under provisions of the 1996 Amendments to the SDWA, NYSDOH is required to ensure that all systems receiving DWSRF assistance have adequate TMF capabilities to provide safe drinking water. The failure to meet this requirement could result in a significant reduction of the DWSRF federal capitalization grant awarded to the State for the program. Therefore, systems that lack adequate TMF capacity may be determined as ineligible by NYSDOH to receive DWSRF assistance unless the project to be financed corrects the TMF deficiencies.
- Section 4.4: Ineligible projects include, but are not limited to, projects submitted by systems that lack TMF capacity or are classified as priority systems based on USEPA's ETT score unless the proposed project will ensure capacity or compliance.
- Section 8.4: Systems with Inadequate Capacity: For all systems that seek funding under the DWSRF, the NYSDOH will review any history of violations, outstanding compliance problems, reported source contamination or inadequacies, treatment failures, needs survey data, operations and maintenance issues, and operator and owner coverage to determine whether a system lacks adequate capacity. A system that requires improvements to obtain adequate capacity can apply to the DWSRF provided the improvements will ensure compliance and render the water system viable. Using the procedures outlined in Sections 8.1, 8.2, and 8.3 to evaluate the system's TMF capacity, the NYSDOH will assess whether DWSRF assistance will help to ensure compliance. In addition, the NYSDOH will consult with the local health department, which provides the daily oversight and regulation of the water system, to make this assessment.

Ensuring Capacity for New Public Water Systems:

- NY Codes, Rules and Regulations, Title 10, Part 5-1.22 outlines approval of plans and completed works.
  - No supplier of water shall make, install or construct, or allow to be made, installed or constructed, a public water system or any addition or deletion to or modification of a public water system until the plans and specifications have been submitted to and approved by the State.
  - Documentation in NYS' Capacity Development Program Implementation and Evaluation Plan for New Systems (approved by EPA, Appendix D) and the Environmental Health Manual Item entitled *Procedure for Granting Approvals to Operate New Community Water Systems and New Nontransient Noncommunity Water Systems* serves as guidance to Health Department personnel to ensure that they perform appropriate system reviews prior to granting new CWS and new NTNCWS the approval to begin operations.
  - In addition, these documents satisfy the reporting requirements for the annual Capacity Development Program Implementation Report by providing both "legal authority" and "control point" information. For NYS' New System Provision of the

Capacity Development Program, the legal authority and control points remain unchanged from the Capacity Development Program Implementation and Evaluation Plan for New Systems originally approved by EPA in 2000. See Table 1 for control points.

NYS Agency	Agency Action	Aspect of Capacity: Technical (T), Managerial (M), Financial (F)
NYSDOH	Plan & Specification Review	T
NYSDOH	Water Operator Certification	T, M
NYS Department of Environmental Conservation	Water Supply Application	T
NYS Office of State Comptroller	Approval of new/expanded water districts	T, M, F
NYS Public Service Commission	Proposed rate review	F

Table 1. Control Points that ensure the demonstration of capacity in new community public water systems and non-transient, non-community water systems.

Encouraging Asset Management

In 2018, AWIA amended this section of the SDWA to include additional elements related to asset management. These additional elements are listed below:

- A description of how the State will, as appropriate—
  - encourage development by PWS of asset management plans that include best practices for asset management
  - assist, including through the provision of technical assistance, PWSs in training operators or other relevant and appropriate persons in implementing such asset management plans

As required by the 2018 AWIA, NYSDOH will encourage assessment management in the following ways:

- NYSDOH integrated the 5 core Asset Management questions into the capacity assessment scorecard. The Department will analyze data to assess PWS needs for each core question. Please refer to capacity assessment scorecard in Appendix A; questions M[1] through M[5] and F[1] through F[8]
- Through the DWSRF program, the NYSDOH will continue to encourage communities that apply for financing to prepare and submit an asset management plan for their project. The Department may require an asset management plan for any project that has shown deficiencies with respect to technical, financial, and managerial capacity
- Continue to offer reimbursement for asset management planning through DWSRF's capital funds
- Encourage asset management planning through capacity assessment scorecard follow up correspondence
- Provide technical assistance for asset management planning internally and through partners such as NYRWA and Rural Community Assistance Program (RCAP)

- NYSDOH will consider adding asset management training into the NYRWA circuit riders' contract for training to water operators
- NYSDOH will consider adding an asset management component to the basic environmental health course, which is required to be taken by new NYSDOH public health specialists who conduct the sanitary surveys of water systems
- NYSDOH will continue to explore other partnerships and/or contracts to assist public water system development and implementation of asset management plans
- NYSDOH will consider creating asset management templates for PWSs use

The Way the State will Establish a Baseline and Measure Improvements

NYSDOH is replacing the 2000 ranking system with the capacity assessment scorecard (Appendix A). The scorecard will be completed during routine sanitary survey inspections. Sanitary surveys are conducted on varying schedules depending on the size and type of the PWS and/or the discretion of the LHD (e.g., if a PWS is on a 3-year sanitary survey schedule, the LHD may decide to conduct sanitary surveys every 2 years if more frequent inspections are needed at the PWS). Due to these factors, a new baseline cannot be determined until all systems are initially evaluated. Once all systems are initially evaluated, the new baseline will be established. For reporting purposes, NYSDOH will use the 2000 ranking system for those systems awaiting the new capacity assessment.

Completing the Capacity Assessment Scorecard at Existing Water Systems

PWSs will be provided a copy of the scorecard when a regular sanitary survey inspection is scheduled by the LHDs, NYSDOH, or another inspector. PWSs will receive instructions on pre-filling or researching information needed to complete the scorecard prior to the inspection.

Completed scorecards will be provided to the PWS by the LHD or other inspector after the sanitary survey. A completed copy will also be provided to the NYSDOH Central office for data entry and record keeping purposes.

Scoring Existing Water Systems

A critical component of the scorecard approach is utilizing a scoring methodology that identifies areas in which a PWS requires technical assistance to improve its TMF capacity. The scorecard utilizes a basic scoring approach where the total awarded points from each technical, managerial, and financial section are divided by the total possible points for each respective section. Overall system capacity is calculated in the same manner with total awarded points from all sections divided by the total possible points for all sections. Please see Appendix A for the capacity assessment scorecard.

During the pilot, NYSDOH acknowledged that the capacity assessment scorecard did not meet the specific needs of most water authorities. NYSDOH plans to investigate other assessment tools for water authorities. NYSDOH plans to modify the scorecard and apply the same concept to non-community water systems over time.

Scorecard Outcomes and Follow-up

Once scores for a completed scorecard are computed, the data are used to determine which PWSs are ranked as either high, medium, or low priority for technical assistance. If a PWS with an outlier score in one of the sections (higher or lower than other scorecard sections) is identified, further coordination with a LHD will determine the system's priority for technical assistance. LHDs may also recommend

PWSs for technical assistance regardless of the scorecard results. Systems with identified capacity development issues or otherwise designated by capacity assessments as 'low-performing' will be contacted and work directly with NYSDOH and LHDs to identify appropriate technical assistance resources for the identified areas of deficient capacity on a case-by-case basis. Current technical assistance available to water systems include technical, managerial, and financial trainings for water system staff and officials, as well as direct technical and regulatory support from state and local agencies. Water systems with specific needs not able to be met by existing state or local support programs, may be referred to external partners or contract firms to address identified deficiencies or to pursue relevant funding opportunities.

During routine sanitary surveys, systems may also be assigned a significant deficiency if major capacity development and/or asset management issues are discovered during the scorecard assessment, even if the issue does not also contribute to a violation being issued to the system.

Data from the scorecards will be compiled and stored at the NYSDOH Central (Albany) office so the Bureau of Water Supply Protection can track capacity trends over time. This will help NYSDOH inform technical assistance/technical assistance contracts, meet training needs, and establish the most appropriate partnerships.

The Procedures Used to Identify Interested Persons

Strategy Revision Process

NYSDOH recognizes that a coordinated effort among state agencies, local governments, stakeholder groups or organizations, and water systems is necessary to ensure the successful preparation of a comprehensive capacity development strategy. Therefore, NYSDOH partnered with the Southwest Environmental Finance Center to host and help facilitate a series of stakeholder group meetings to revise the Capacity Development Strategy.

Stakeholder Group Meetings

To revise this strategy, NYSDOH revisited the original list of stakeholder groups that helped draft the 2000 strategy. Based on that list, the NYSDOH convened a diverse group of stakeholders who met for a series of three meetings in May and June 2021. A list of stakeholder affiliations can be found in Appendix C. The main points of feedback are listed below.

Stakeholder Group Feedback

Factors that Encourage Capacity Development

See above on pages 3-4.

Factors that Impair Capacity Development

See above on page 4.

Water Partnerships and Capacity Evaluation

Stakeholders were asked to identify how the State could encourage the formation of partnerships between water-related stakeholders across agencies. The Stakeholders recommended that the State should focus on the following:

- Utilize partnerships with nonprofits
- Encourage water systems to share services across jurisdictions or neighboring communities
- Provide low interest loans, other than DWSRF
- Improve co-funding for capital improvement projects

Additionally, the State recognizes the need for improved capacity evaluation. In order to better identify systems in need of capacity development, stakeholders suggested that the State should take the following measures:

- Increase coordination with LHDs, regional field coordinators, and local associations
- Incorporate additional measures into the capacity evaluation process, including:
    - Ensure water operators are trained properly
    - Update capacity development evaluation form
    - Assess water systems for capacity-related deficits, including:
        - Sudden lack of water operators
        - Lack of water operator training, including media training
        - Financial hardships, such as budget cuts or lack of rate adjustments
        - Lack of technology access
        - Insufficient revenue generated to meet expenses
        - Lack of ownership and control surrounding groundwater wells according to Part 5 regulations, if applicable

Strategy Implementation

Capacity Assessment Scorecard Rollout Across NYS

NYSDOH's capacity assessment scorecard pilot indicated that it was a beneficial process and appropriately assessed system capacity. NYSDOH plans to continue with this concept and start implementing the assessments at community water systems across the State, beginning in 2023/2024.

NYSDOH plans to do the following to implement the capacity assessment scorecard across the State:

- Update regulations and AWQR Guidance for PWS so they can integrate their score on their report each year.
- Update NYSDOH Environmental Health Manual items (internal policy documents) associated with capacity development to incorporate the capacity assessment scorecard.
- Provide training to LHDs on completing the capacity assessment scorecard and the importance of the data.
- NYSDOH Central office will provide technical assistance to LHDs completing the scorecard.
- Update NYSDOH's website to make this report and associated information more accessible to LHDs, water systems and the public.
- Establish a data processing and data management system for capacity assessment scorecard results for LHDs and NYSDOH Central office to share data.
- Update sanitary survey trainings to incorporate the capacity assessment scorecard.

- Develop a training for local government about capacity development and asset management.
- Modify the capacity assessment scorecard and apply the same concept to non-community water systems.

NYSDOH will review and make adjustments to the scorecard, if necessary, once the new baseline has been established.

Workforce Development

NYSDOH recognizes that many communities are facing workforce retirement and are contending with succession concerns. NYSDOH will utilize this strategy to explore new opportunities for partnership and collaboration to enhance the water operator workforce. General approaches to workforce development include:

- Technical assistance and trainings focusing on future workforce development planning and strategies.
- Enforce long-standing Davis-Bacon related act prevailing wage requirements across projects that receive DWSRF resources, as required under federal law.
- Encourage pre-apprenticeship, registered apprenticeship, and youth training programs that open pathways to employment.
- Encourage DWSRF funding recipients to support safe, equitable, and fair labor practices by adopting collective bargaining agreements, local hiring provisions (as applicable), project labor agreements, and community benefits agreements.
- Investigate partnerships with other agencies and organizations to increase water operator recruitment, retention and information sharing between water professionals.

Continued Communication

NYSDOH and stakeholders agreed to continue to meet on an annual basis to receive updates, feedback and status of programs. NYSDOH sees this strategy as a living document, to be updated over time based on feedback and insights gained from our partners.

NYSDOH will continue to communicate with LHDs regularly about this program by:

- Providing capacity assessment scorecard trainings on a frequent basis, or at the request of the LHD.
- Welcoming feedback on the capacity assessment scorecard during revision periods.
- Soliciting feedback on annual capacity development program implementation reports with regard to PWSs nearing or in critical need of technical assistance and questions about new systems.
- Coordinating with LHDs to determine best management practices for PWSs in critical need of technical assistance.
- Coordinating with LHDs to modify the capacity assessment scorecard and apply the same concept to non-community water systems.
- Creating a capacity development shared email address so LHDs can easily communicate with the NYSDOH capacity development staff.

Resources for Public Water Systems

Systems pursuing capacity improvement projects have access to resources that offer assistance in technical, managerial and financial development. NYSDOH has provided a list of resources systems can refer to as they seek guidance in capacity development and asset management. The State encourages systems to first contact their LHD. LHDs can offer guidance and direct systems to additional resources that are available to address their specific needs.

Organization	**Type of Assistance**	**Website Link**
County Health Departments and Regional District Offices	County Health Departments can offer guidance and direct systems to additional resources that are available to address their specific needs.	County and District Health Department Directory
USEPA	USEPA's Capacity Development website offers extensive information on capacity development and asset management. It is a great resource for systems of all sizes. The Reference Guide for Asset Management Tools document provides further guidance for systems developing an asset management plan.	▫ Building the Capacity of Drinking Water Systems Home Page ▫ Reference Guide for Asset Management Tools ▫ Taking Stock of Your Water System: A Simple Asset Inventory for Very Small Drinking Water Systems
New York Rural Water Association (NYRWA)	NYRWA provides hands-on technical assistance on a variety of topics including fiscal management, source water protection, and system operation and maintenance.	NYRWA Home Page
Rural Community Assistance Partnership (RCAP)	RCAP is a national network of nonprofit partners that provides technical assistance, training, resources, and support to rural communities across every state, the U.S. territories, and tribal lands.	RCAP Home Page

Southwest Environmental Finance Center (SWEFC)	SWEFC offers resources, tools, trainings, and direct assistance to utilities in understanding and implementing asset management.	▫ SWEFC Asset Management Switchboard ▫ SWEFC Asset Management Courses ▫ Small Community Assistance Planning (SCAP) Tool – Wastewater Assets ▫ SWEFC Water Loss Switchboard ▫ WAFU- Water Utility Financial Analysis

Appendix A

Capacity Assessment Scorecard

Appendix B

Capacity Assessment Definitions Guide

Appendix C

2021 Stakeholder Participants

- City of Rochester
- Environmental Protection Agency
- Erie County Water Authority
- New York State American Water Works Association
- New York State Department of Environmental Conservation
- New York State Environmental Facilities Corporation
- New York State Department of Health, Bureau of Water Supply Protection
- New York State Department of Health, Western and Capital Regional Offices
- New York State Division of Housing and Community Renewal
- New York State Department of State, Division of Local Government Services
- New York State Office of State Comptroller
- Mohawk Valley Water Authority
- Monroe County Water Authority
- Onondaga County Water Authority
- Rural Community Assistance Program
- Suffolk County Water Authority
- Southwest Environmental Finance Center
- Susquehanna River Basin Coalition
- Syracuse University Environmental Finance Center
- Syracuse Water Department/Skaneateles Lake Watershed Protection Program

- Troy Public Utilities

Additional Feedback Provided By

- New York Rural Water Association
- United States Department of Agriculture, Rural Development
- New York Department of Public Service

Appendix D

Capacity Development Program Implementation and Evaluation Plan for New Systems