CAPACITY DEVELOPMENT PROGRAM ACTIVITIES ANNUAL REPORT TO THE EPA STATE FISCAL YEAR 2023





Maine CDC Drinking Water Program

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Introduction

In 1974 Congress enacted the Safe Drinking Water Act (SDWA) to protect public health through the regulation of drinking water quality supplied by public water systems. Drinking water regulation falls nationally under the purview of the United States Environmental Protection Agency (EPA). The EPA extends its regulatory authority to the state level through state agencies empowered by the EPA to administer and enforce drinking water regulations. In Maine, the Maine Drinking Water Program (DWP), located within the Maine Center for Disease Control and Prevention of the Department of Health and Human Services, is responsible for the administration and regulation of national drinking water standards.

Since its inception, the SDWA was amended in 1986 and again in 1996. The 1996 Amendments to the SDWA instituted capacity development as an aspect of drinking water regulation and public water system oversight and assistance. Capacity development aims to assess, maintain, and improve the technical, managerial, and financial (TMF) operations of public water systems to ensure that regulated public water systems can plan for and meet current and future SDWA requirements. Each state has instituted a Capacity Development Program with two major responsibilities: establish a New Systems Program and an Existing Systems Strategy. The New Systems Program is responsible for ensuring that new Community Water Systems (CWS) and new Non-Transient, Non-Community (NTNC) Water Systems that are created or developed after October 1, 1999 possess adequate TMF capacity before serving water to the public. The Existing Systems Strategy establishes goals intended to maintain and improve the TMF capacity of existing public water systems.

The EPA requires each state to issue an annual report on its capacity development activities regarding its New Systems Program and the implementation of the Existing Systems Strategy. This report is the annual report to EPA Region 1 on the State of Maine's Capacity Development Program activities for state fiscal year (SFY) 2023 (July 1, 2022 to June 30, 2023).

State Capacity Development Program

A. New Systems Program

1. State's Legal Authority

During the reporting period, no changes have occurred either legislatively or by judicial action that alter the New System Program's legal authority to carry out implementation of the Capacity Development Program.

2. Modifications to the State's Control Points

General Operations Permits remain the control point for assessing the technical, managerial, and financial (TMF) capacity of new Community (C) and Non-Transient, Non-Community (NTNC) Water Systems. New systems are assessed for TMF capacity prior to delivering drinking water to consumers.

3. New Community and Non-Community, Non-Transient Public Water Systems The following table identifies the new public water systems that were permitted within the last three years, and of those systems, which ones have had an Enforcement Targeting Tool (ETT) score greater than or equal to 11 at any point during their first 3 years. The ETT uses a formula that assigns each violation a weight or number of points based on the EPA-assigned threat to public health.

Table 1 New Systems Compliance Records for State Fiscal Years 2021, 2022, and 2023

PWSID	System Name	Quarters ETT ≥ 11*
	State Fiscal Year 2021	
ME0092731	Revision Energy Montville	
ME0107242	Sun Hancock Heights-West	
ME0092722	Silver Lake Estates	
ME0092755	Busy Bee Nursery	
ME0092764	Golden Sun Child Care	
ME0092760	The Curious Caterpillars	
ME0092747	Midcoast Regional Redevelop Authority	
ME0092756	Coastal Washington CIT	
ME0092412	Punkintown Place	4 th Quarter 2021, 3 rd Quarter 2022
ME0092723	Penobscot McCrum	
ME0092778	Snappers	
	State Fiscal Year 2022	
ME0092766	Little Farm School	
ME0092770	Sipayik Elementary School	
ME0092775	Little Owls Early Learning Day Care	

PWSID	System Name	Quarters ETT ≥ 11*
ME0092787	Leightons Little Bear Den	
ME0092768	Tiny Creations Daycare	
ME0093476	Bluetriton Brands Inc-Spruce Spring	
ME0092802	Kerebear Child Care	
ME0092806	Skyline Trailer Park	
ME0092808	Pleasant River Lumber Enfield	
ME0092809	Sensational Minds Ela-Charleston	
	State Fiscal Year 2023	
ME0092801	Little Schoolhouse Childcare	
ME0192808	Pleasant River Lumber Enfield-Saw Mill	
ME0092824	Maplestone School	
ME0092791	Rocky Ridge Subdivision	
ME0092821	Northern Light Sebasticook Valley Hosp	
ME0092833	The Ecology Learning Center	
ME0092741	Highpine Village	
ME0292808	Pleasant River Lumber Enfield-Boiler	

B. Existing Systems Strategy

1. Capacity Development Programs, Tools, and Activities

The DWP's Capacity Development Program continues the established activities described in the adopted Capacity Development Strategy. Primary activities include awarding Capacity Development Grants to eligible water systems, conducting Drinking Water State Revolving Fund (DWSRF) Capacity Development Reviews, and collaborating with other organizations to improve capacity development.

Capacity Development Grant Program

The Capacity Development Grant Program offers grant money to eligible water systems for the development of plans, studies, or reports that enable grant recipients to maintain or improve TMF capacity. Capacity Development Grant awards are for 75% of the document cost up to a maximum grant amount of \$30,000. The types of plans, studies, and reports that are allowed include: comprehensive system facilities plans, capital improvement plans, system hydraulic modeling studies, comprehensive operations and maintenance manuals, risk and resiliency assessments, emergency response plans, management review studies, system consolidation studies, asset management plans, GIS infrastructure mapping, energy audit reports, water audit reports, water storage tank upgrade/replacement evaluations, hydrogeologic investigation reports for locating new groundwater well locations, comprehensive community planning studies which include a public water infrastructure component; consideration will be given for funding the drinking water portion of such studies, and other professionally prepared documents that can be used to enhance system capacity, as determined by the DWP.

24 water systems were approved for Capacity Development Grants during the reporting period.

Very Small System Capacity Development Grant Program

The Very Small Capacity Development Grant Program offers grants to eligible Community and non-profit, Non-Community Water Systems with a population of 100 or less for the development of plans, studies, or reports that enable grant recipients to maintain or improve TMF capacity. Very Small System Capacity Development Grant awards are for 90% of the document cost up to a maximum grant amount of \$9,000. The types of plans and studies that are eligible are the same as the Capacity Development Grant Program.

2 water systems were approved for a Very Small System Capacity Development Grant during the reporting period.

Drinking Water State Revolving Fund Capacity Development Reviews

Before the DWP approves Drinking Water State Revolving Fund (DWSRF) loans for construction projects, emerging contaminant projects, lead service line projects, or the purchase of land to safeguard water sources, applicants undergo a Capacity Development Review to assure that the systems possess adequate technical, managerial, and financial capacity. A Capacity Development Review assesses many aspects such as source water adequacy, infrastructure adequacy, implementation of technical knowledge, ownership accountability, staffing and organization, effective external linkages, short-term and long-term planning, revenue sufficiency, credit worthiness, and fiscal management and controls.

Capacity Development Reviews are completed when projects are ready to proceed. A water system does not need to have a Capacity Development Review completed in the current year if they have undergone one within the last two years.

13 water systems underwent a Capacity Development Review during the reporting period.

Very Small System Capacity Development Reviews

Very Small Capacity Development Reviews are completed when small water systems are approved for a Very Small System Compliance Loan, Very Small System Total Coliform Grant, or Small Public Water System Emerging Contaminant Grant.

The Very Small System Compliance Loan helps Community Water Systems with a population of 100 or less that are not regulated by the Maine Public Utilities Commission, and all non-profit Non-Transient, Non-Community Water Systems return to compliance by making treatment modifications. The Very Small System Compliance Loan allows qualifying water systems to receive loans for infrastructure projects that are needed to achieve compliance with a current or future standard of the SDWA, excluding the Total Coliform Rule.

The Very Small System Total Coliform Grant helps Community and non-profit Non-Transient, Non-Community Water Systems with a population of 100 or less served by a groundwater source return to compliance with the Total Coliform Rule by installing a continuous chlorination disinfection system.

The Small Public Water System Emerging Contaminant Grant helps Community Water Systems that are not regulated by the Maine Public Utilities Commission, and Non-Transient, Non-Community Water Systems address per-and polyfluoroalkyl substances (PFAS) contamination issues.

11 water systems underwent a Very Small System Capacity Development Review during the reporting period.

Assessing Baseline Capacity Development through Sanitary Surveys

The Public Water System Inspection Team performs on-site Sanitary Surveys of a public water system's water source(s), treatment, distribution system, finished water storage, pumps, pump facilities operations, and operator compliance with federal and state requirements. Sanitary Surveys are designed to identify conditions that may present a sanitary or public health risk. A Sanitary Survey identifies systems that may require assistance with technical or managerial capacity. Community Water Systems are required to undergo a Sanitary Survey every three years, and Non-Community, Non-Transient and Transient Water Systems are required to undergo a Sanitary Survey every five years.

437 Sanitary Surveys were conducted during the reporting period.

Capacity Development Training Reimbursement Fund

The Capacity Development Training Reimbursement Fund (TRF) allows training providers to receive funding for training water operators and water system owners or employees. The purpose of the TRF is to subsidize the costs associated with training water system personnel/operators on topics approved by the Maine Board of Licensure of Water System Operators. Training providers offered in-person, live virtual classes, and recorded on-demand classes.

2,318* water system operators and employees attended 221 in-person classes, live virtual classes, or recorded on-demand classes that utilized the TRF during the reporting period.

*Some people attended multiple classes.

Core Message and Fact Sheets

The DWP's "core message" is, Keep Your Drinking Water Safe: Protect Your Source, Take Your Samples, Maintain Your Treatment, Inspect Your Pipes and Tanks. The DWP develops fact sheets based on the core message. The DWP uses a template and follows a process for designing one to two page fact sheets that are to the point, easy to understand, and appealing to the eye with pictures. The fact sheets are available on the DWP website www.medwp.com, and are distributed by DWP staff and technical assistance providers.

Collaborative Partners

The DWP directly collaborates with several professional organizations on drinking water issues. Some of the closest and most active collaborations are with the Maine Water Utilities Association, Rural Community Assistance Program Solutions, and Maine Rural Water Association.

Maine Water Utilities Association

The Maine Water Utilities Association (MWUA) is an association of water systems, allied to provide mutual aid through the sharing of information and resources. The DWP funds MWUA through the DWSRF 15% Capacity Development set-aside. During the reporting year, MWUA focused on:

- Education and training of water system personnel through the Capacity Development Training Reimbursement Fund. Training classes directly aid water systems in TMF capacity.
- Leadership training for water system superintendents and governing boards. The training focuses on financial, budgetary, regulatory, legislative, human resources, and other subject matters.
- Trustee training for members of water system governing boards. The training focuses on trustee roles, responsibilities, and duties.
- A Water Operators Toolbox for water system personnel, which includes calculators for formulas requested by water systems such as chemical feed pumps, disinfection and treatment, water loss, and conversions.
- Mini regional tabletop scenario-based exercises. Different from traditional
 tabletop exercises, these mini exercises are by no means small, but gather regional
 groups of water system professionals together to work through multiple smaller
 facilitated emergencies. This style of exercise allows for increased participation
 and knowledge sharing. Topics can include things like contamination, drought,
 pandemic, or ice storms.
- A Funding Resources Guide for water systems. This an online and mobile
 friendly database that is easily searchable to allow water systems to quickly find
 funding sources relevant to their situations and needs by matching their
 information with different options in the database.
- A Helping Hand survey collects information, experiences, and relevant data from water systems about the tools, technologies, and digital systems they utilize daily to ensure safe drinking water, fire protection, and affordability for their customers. The data is collected and compiled in a centralized database so anyone can go to find the information they need to make an informed decision in choosing and maintaining their tools, technologies, and digital systems.

Rural Community Assistance Partnership Solutions

Rural Community Assistance Program (RCAP) Solutions provides direct assistance to communities and water systems. The DWP has referred water systems to RCAP Solutions for help in capacity building. RCAP specialists have assisted these water systems by providing advice, education, and direction on water system operations, budgeting and financial analysis, asset management, strategic planning, administrative operations, and improving overseer board operations. The DWP funds RCAP through the DWSRF 15% Capacity Development set-aside. During the reporting year, RCAP focused on:

 Capacity development training for water systems that are receiving principal forgiveness on DWSRF construction loans. RCAP delivers a structured onsite training to the receiving water system.

Maine Rural Water Association

The DWP provides funding to Maine Rural Water Association (MRWA) through the DWSRF 2% set-aside for the Water Quality Specialists (WQS) Program which includes:

• On-site visits to water systems by the request of the DWP or the water system. WQSs are experienced licensed operators who deliver personalized outreach to water systems that serve a population of less than 10,000. The outreach is performed to build communication between the system and DWP, and it helps the water system maintain and improve operations and systems that protect the public's health.

398 technical assistance on-site visits were conducted by MRWA during the reporting period.

The DWP also funds MRWA through a variety of DWSRF Capacity Development 15% set-aside activities including:

- Education and training of water system personnel through the Capacity Development Training Reimbursement Fund. These activities directly aid water systems in TMF capacity.
- A benchmarking database that contains key financial, operational, and asset metrics for Maine Public Utilities Commission regulated water systems. The database collects and analyzes public drinking water financial and operational data, which will help water utilities and the DWP develop, track, and prioritize long-term public drinking water infrastructure needs.
- Financial Circuit Riders (FCR) provide financial assistance to water systems serving less than 10,000 people. The FCRs provide technical assistance and training to build financial capacity. The FCRs accomplish this through personalized one-on-one, on-site training, remote assistance via phone or internet, and response to training requests for regional utility meetings. The FCRs make

pre-emptive visits, respond to water system requests for assistance, or respond to requests from the DWP to assist water systems.

- Tabletop Exercises (TTX) to test a water system's ability to respond to an emergency. Each TTX identifies a single point of failure and creates a hypothetical scenario that stresses water quality or quantity (e.g. chemical spill, water transmission/main break, malevolent act, severe weather event, failure of critical asset, etc.). TTXs are attended by water systems, local emergency response partners, county emergency management agencies, and State agencies to build working relationships before an emergency occurs.
- Emergency preparedness support for water systems including the Maine Water/Wastewater Agency Response Network (MEWARN).
- Vulnerability assessments for community water systems with a population of 501-3,300 to identify and address threats from malevolent acts and natural hazards that could threaten safe drinking water.
- Business continuity plans to help water systems maintain financial, managerial, and functional operations following a disruptive incident.

2. Identifying Systems in Need of Capacity Development Assistance

The DWP relies upon several methods to identify systems in need of capacity development assistance. PWS Inspectors have in-depth knowledge of water system needs. Because PWS Inspectors conduct on-site visits to systems, they know first-hand those most in need of assistance. The DWP also uses the Enforcement Targeting Tool as a source for identifying systems in need. Other referrals for systems needing capacity assistance come from the DWP's collaborative partners.

3. State's Approach in Offering and/or Providing Assistance

The DWP uses multiple approaches for water systems in need of assistance. Each water system has an assigned PWS Inspector. The PWS Inspector serves as the primary point of contact for all compliance related activities including sanitary surveys, notices of non-compliance, sampling frequency changes, treatment requirements, on-site technical assistance, and emergency response. DWP's collaborative partners assist water systems with on-site technical assistance, sampling, leak detection, education on water system operation, etc. The collaborative partners also provide training on a wide array of topics for water operators and water system staff and trustees.

4. Review of the Implementation of Existing Systems Strategy

The Capacity Strategy (Strategy) was written in 2001, and was reviewed and revised in 2010 and 2022.

As part of the 2010 Strategy revision, and Implementation Plan was developed to detail projects and activities. The intent of the redesign was to revise the Strategy goals for the future and distinguish between the Strategy, which outlines the goals but does not state

the processes by which they will be carried out, and the Implementation Plan, which describes how the Strategy will be implemented. The Implementation Plan is reviewed and revised as needed to meet the changing needs of the Drinking Water Program and water systems.

During the 2022 Strategy revision, each goal was revisited and expanded upon based on suggestions received from drinking water stakeholders. The stakeholders included water systems, drinking water associations, technical assistance providers, and other State agencies. The 2022 revision incorporated asset management into the Strategy as required by America's Water Infrastructure Act of 2018 (AWIA).

5. Modification of the Existing Systems Strategy

The Strategy was revised in 2010 and 2022. The DWP will review and revise the Strategy as needed.

Conclusion

The progress over the past year in improving water system capacity has increased public health protection through helping water systems reliably serve safe drinking water. Safe, reliable, and affordable drinking water is fundamental to the wellbeing and the economic prosperity of communities across the State. Although much work remains to be done, capacity development efforts continue to provide important benefits to water systems and their consumers.

The DWP loan and grant programs are successful and will continue as long as state and federal funding sources are available. Water systems are very appreciative of the funding assistance they receive from the DWP. Funding assistance allows them to undertake critical projects that they would not have been able to complete without funding opportunities offered by the DWP.

On-site technical assistance is important in helping water systems maintain and improve their technical, managerial, and financial capacity. On-site visits ensure that the water system's infrastructure is adequate to provide safe drinking water to their consumers, the water system operators and trustees understand their roles and responsibilities, and the water system has adequate financial oversight to be a viable business. The vast majority of Maine's water systems serve less than 500 people, and a large percentage of the total compliance violations in Maine are being issued to these small water systems. Because small systems have limited resources, the efforts of DWP staff and the Maine Rural Water Association Water Quality Specialists are crucial in helping water systems understand the current regulations and how to properly operate and maintain their water systems.

Training is essential to ensuring that water operators are staying up-to-date with current regulations and technologies. Water operators are required to take training to renew their water operator licenses every two years. The DWP and other industry organizations strive to provide training that will build an operator's knowledge on the operation and maintenance of a water system.

The capacity development efforts in Maine can be best summarized in the Drinking Water Program's vision statement of "Working Together for Safe Drinking Water." The efforts and

successes are the result of many people working towards a common goal of safe and reliable supplies of drinking water. The DWP looks forward to continuing the implementation of the Capacity Development Program in the coming year.