CAPACITY DEVELOPMENT PROGRAM ACTIVITIES ANNUAL REPORT TO THE EPA STATE FISCAL YEAR 2021





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 U.S. 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) 2021 (July 1, 2020 to June 30, 2021).

State Capacity Development Program

A. New Systems Program

1. State's Legal Authority

Within the State Fiscal Year covered by this report, 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 2019, 2020, and 2021

PWSID	Systems Compliance Records for State Fiscal Tears 2019, 20	Quarters ETT ≥ 11*
	State Fiscal Year 2019	
ME0092682	Seedlings To Sunflowers	
ME0092710	Saco River Apartments	
ME0092709	Countryside Apartments	
ME0092660	Caron Engineering	
ME0092708	Clarks Mills Apartments	
ME0392711	Village at Rockport #4	
ME0092711	Village at Rockport #1	
ME0092705	Milestones Preschool & Childcare	
ME0092712	Lighthouse Learning Center	
ME0292711	Village at Rockport #3	
ME0192711	Village at Rockport #2	
ME0092714	Smarties Early Learning Center	
	State Fiscal Year 2020	
ME0092654	Crossroads Community MHP	
ME0092716	Country Kids	
ME0092678	Blue Hill Co-Op-South Street	

PWSID	System Name	Quarters ETT ≥ 11*
ME0092727	Pleasant Ridge	
ME0092715	Noahs Ark Daycare Center	
	State Fiscal Year 2021	
ME0092731	Revision Energy Montville	
ME0107242	Sun Hancock Heights-West	
ME0092755	Busy Bee Nursery	
ME0092756	Coastal Washington CIT	
ME0092747	Midcoast Regional Redevelop Authority	
ME0092760	The Curious Caterpillars	
ME0092723	Penobscot McCrum	
ME0092412	Punkintown Place	
ME0092778	Snappers	

^{*}Months listed indicate the months that the quarterly ETT reports were produced.

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 engineering or consulting studies and plans that enable grant recipients to maintain or improve TMF capacity. Community and non-profit, Non-Community Water Systems are eligible for Capacity Development Grants of 50% of the document cost up to a maximum grant amount of \$20,000. The types of plans and studies that are allowed include: comprehensive system facilities plans, capital improvement plans, system hydraulic modeling studies, comprehensive operations and maintenance manuals, system 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.

22 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 engineering or consulting studies and plans that enable grant recipients to maintain or improve TMF capacity. Grant amounts are for 90% of the document cost up to a maximum grant amount of \$5,000. The types of plans and studies that are eligible are the same as the Capacity Development Grant Program.

1 water system was 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 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 DWSRF construction projects are ready to proceed. If a water system has undergone a Capacity Development Review within the last two years, they do not need to have a Capacity Review completed in the current year.

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

Very Small System Compliance Loan Capacity Development Reviews

The Very Small System Compliance Loan (VSSCL) Program 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 with treatment modifications. The VSSCL Program, under the DWSRF, 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.

0 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 (PWS) 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. Despite the COVID-19 pandemic, the DWP completed about 90% of the sanitary surveys during the reporting year.

350 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. Due to the COVID-19 pandemic, training providers offered live virtual classes and recorded on-demand classes in lieu of traditional in-person classes.

2,478* water system operators and employees attended 301 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 1-2 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.
- Development of leadership training classes for water system superintendents and governess boards. The training focuses on financial, budgetary, regulatory, legislative, human resources, and other subject matters.

Rural Community Assistance Partnership Solutions

Rural Community Assistance Program (RCAP) Solutions provides direct assistance to communities and water systems. The DWP has referred some 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:

- Asset management training to water systems that are receiving principal forgiveness on DWSRF construction loans. RCAP delivers a structured onsite training to the receiving water system.
- Licensed water system operator evaluation of contract operators. The evaluation was conducted to better understand the issues that contracted licensed operators experience, and provided recommendations to overcome the issues.
- COVID-19 assessment to assess water system response to the pandemic. The
 assessment collected data from public water systems and lessons learned were
 developed. Training sessions are being held to summarize the assessment
 findings, lessons learned, and provide emergency preparedness improvement
 opportunities.

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.

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

*Due to the COVID-19 pandemic, fewer than normal on-site visits were conducted during the reporting year.

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.
- Development and implementation of a benchmarking database containing key financial, operational, and asset metrics for Maine Public Utilities Commission regulated water systems. The database will collect and analyze 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-to-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).
- Limnological sampling and data analysis for surface water systems. As the climate in Maine changes, the likelihood of ecosystem changes in drinking water source supply lakes grows, which can affect water quality that could impede treatment and threaten public health.
- 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 updated in 2010. During the Strategy update, 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. As part of the Strategy revision, an Implementation Plan was developed to detail projects and activities. The Implementation Plan is reviewed on an annual basis and is revised as needed to meet the changing needs of the Capacity Development Program and water systems. The intent of the redesign was to update 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.

5. Modification of the Existing Systems Strategy

The DWP has not modified the Strategy since 2010. The Strategy will be revised in State Fiscal year 2022 to meet the America's Water Infrastructure Act of 2018 requirement.

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 despite the challenges posed by Covid-19 pandemic. 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.