

CAPACITY DEVELOPMENT PROGRAM ACTIVITIES
ANNUAL REPORT TO THE EPA
STATE FISCAL YEAR 2017



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 the State of 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 has been 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 are able to 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 establish 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 Capacity of existing public water systems.

The EPA requires each state to issue an annual report on its Capacity Development activities with regard to 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 2017 (July 1, 2016 to June 30, 2017).

New Systems Program

Legal Authority and Control Points for New Systems Program

No changes have occurred either legislatively or by judicial action that alter the New System Program's legal authority to carry on implementation of the Capacity Development Program. General Operations Permits remain the control point for assessing the TMF capacity of new community and non-transient, non-community water systems. New systems are assessed for TMF capacity prior to the issuance of a general operations permit and before the systems deliver drinking water to consumers.

New Community and Non-Community, Non-Transient Public Water Systems

The following table identifies the 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 2015, 2016, and 2017

PWSID	System Name	Quarters ETT ≥ 11*
State Fiscal Year 2015		
ME0092428	New Gloucester Water District	
ME0092552	Elliott Apartments	
ME0092553	Adventures In Learning	
ME0092560	First United Pentecostal Church-Augusta	July 2017, July 2016, April 2016, January 2016, October 2015
ME0092559	US Border Station-Long Pond Rd-Jackman	
ME0400642	Unity College-#400642	
ME0092571	Little Tykes II Child Care	
ME0092572	The Playcare Center	
ME0092570	Kerebear Child Care	January 2016
ME0092537	Kempaq LLC-Room To Bloom Early Learning	July 2016
State Fiscal Year 2016		
ME0092583	Poland Place Condo Association	
ME0092597	Stanley Subaru	
ME0092604	Amys Circle Mobile Home Park	
ME0000777	Oxford Resort Casino	
State Fiscal Year 2017		
ME0111183	George Stevens Academy-Tenney Hill Dorm	

PWSID	System Name	Quarters ETT ≥ 11*
ME0092515	RSU 64 Corinth Elementary School	
ME0092629	Katahdin Valley Health Center	
ME0110642	Unity College #110642	
ME0400899	New England Music Camp-Kitchen	
ME0092482	The Meadows At Fieldstone Landing	
ME0092635	York Childcare Center	
ME0092638	CLC YMCA Child Care	
ME0092649	Arundel Business Center	

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

Existing Systems Strategy

Capacity Development Programs 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 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 grants 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 systems are eligible for Capacity Development Grants of 50% of the document cost up to a maximum grant amount of \$15,000. 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 vulnerability 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.

11 water systems were approved for Capacity Development Grants during the reporting period.
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Drinking Water State Revolving Fund Capacity Development Reviews

Before DWSRF loans are approved by the DWP for construction projects or the purchase of land to safeguard water sources, applicants must 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. Most of the Capacity Development Reviews for 2017 DWSRF projects were completed after the reporting period and will be reflected in next year's report. 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 this year.

4 water systems underwent a 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 3 years, and Non-Community, Non-Transient and Transient water systems are required to undergo a Sanitary Survey every 5 years.

292 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.

433 water system operators and employees were trained utilizing the TRF during the reporting period.

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 has been developing fact sheets based on the core message. The DWP uses a template and has a process in place for designing the fact sheets so they are short 1-2 page documents 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.

Capacity Development Pre-Enforcement Site Visits

The DWP has developed a new process to assist water systems with compliance violations and/or sanitary survey deficiencies before they receive formal enforcement actions and penalties. The goal is to improve capacity by educating the public water system and assist them in correcting violations and/or deficiencies. The Capacity Development Pre-Enforcement (CDPE) process targets priority water systems on the Enforcement Targeting Tool (ETT), and any water system that a PWS Inspector refers for a CDPE site visit. PWS Inspectors and Maine Rural Water Association (MRWA) Water Quality Specialists conduct CDPE site visits.

12 Capacity Development Pre-Enforcement site visits conducted during the reporting period.

Collaborative Partners

The DWP directly collaborates with several professional organizations and governmental agencies 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 provides funds to the MWUA for the education and training of water system personnel. These activities directly aid water systems in TMF capacity. The trainings include webcasts, training seminars and underwriting attendance costs for small system operators at the MWUA's bimonthly meetings. Some DWP employees serve on MWUA committees in advisory and participatory roles.

580 water operators trained through MWUA training sessions during the reporting period.

Rural Community Assistance Partnership Solutions

Rural Community Assistance Program (RCAP) Solutions provides direct assistance to communities and water systems. The DWP has referred a number of 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. RCAP also has an agreement with DWP to provide asset management training to public water systems that are receiving principal forgiveness on DWSRF construction loans. RCAP delivers a structured training onsite to the receiving water system. RCAP has been closely involved with the DWP and the EPA introducing the Check Up Program for Small Systems (CUPSS), a software-based, asset management program for water systems.

6 water systems received Asset Management training during the reporting period.

Maine Rural Water Association

The DWP provides funding for two Water Quality Specialist positions at the Maine Rural Water Association (MRWA). The Water Quality Specialists 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. Each visit to a system is referred to as a contact. The contact is a direct benefit to the water system with a goal of maintaining and improving the protection of public health. System contacts include on-site, and off-site that include but are not limited to, telephone and email communications, and class training participation.

The Water Quality Specialists provide education and training to public water system operators and owners, encourage system personnel to be actively involved and trained on the subject of the assistance provided, provide assistance consistent with EPA, DWP and accepted industry standards, provide DWP with observations and report issues related to drinking water quality, refer questions concerning current compliance status or deregulation to DWP, review system contact information to update DWP records, review remaining system needs with DWP and MRWA to provide services to the system to increase system capacity. Types of on-site visits include state referral, water system requested assistance, transient surface water system, transient and very small disinfecting system, seasonal system, recheck samples, new system/owner, technical assistance, leak detection, compliance assistance, sampling, and other.

936 technical assistance on-site contacts were conducted by MRWA during the reporting period.

Identifying Systems In Need Of Capacity Development Assistance

The DWP has relied upon several methods to identify systems in need of Capacity Development assistance. One of the more effective ways to identify systems needing assistance has been through the PWS Inspectors. Since PWS Inspectors pay personal visits to systems, they have personal knowledge of which systems need assistance. The ETT is also being used as a source for identifying systems in need of assistance. Other referrals for systems needing capacity assistance have come from the DWP's collaborative partners.

Asset Management Training for Loan Recipients Requesting Principal Forgiveness

As noted previously, the DWSRF Program has the requirement for loan recipients receiving principal forgiveness to undergo asset management training. While this is not a matter of identifying systems needing Capacity Development assistance, it is a method to identify systems that need to improve their planning for future capital upgrades. Since management and capital improvement planning is a financial and managerial capacity undertaking, this is one method to assist systems with development and improvement in financial and managerial capacity. This DWP requirement is an attempt to reduce reliance upon DWSRF loan funding assistance. The goal is to make the systems more financially and managerially responsible and self-sufficient.

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 the stakeholders. 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 (Program) and the public 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 to improve and streamline the Program's guiding documents.

Modification of the Existing Systems Strategy

There have been no modifications to the Strategy since 2010. However, the DWP underwent a program-wide organizational restructuring to ensure continuous improvement near the end of state fiscal year 2016. The DWP went from five teams down to three teams. The DWP now consists of the: Engineering and Water Resources Team, Data Management and Program Support Team, and Public Water System Inspection Team. All water systems have previously had two principal points of contact at the DWP - a Compliance Officer and a Field Inspector. Under the new structure, each water system now has a single point of contact - a Public Water System Inspector. The Public Water system Inspector serves as the primary point of contact for a water system for all direct compliance related activities including sanitary surveys, notices of non-compliance, sampling frequency changes, treatment requirements, on-site technical assistance, and emergency response.

Conclusion

Although there will always remain much work to be done, the Capacity Development efforts over the past several years have benefited public water systems and their consumers. 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 loan and grant programs are very successful and will continue for 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 projects that they would not have been able to complete without funding opportunities offered by the DWP.

On-site technical assistance is very important in helping water systems maintain and improve their technical, managerial, and financial capacity. On-site visits ensure that a water system's infrastructure is adequate to provide clean, safe drinking water to their consumers, 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 public water systems serve less than 500 people and the vast majority of violations are issued to these small water systems. Because small systems have very limited resources, the efforts of DWP staff and the Maine Rural Water Association Water Quality Specialists is critical 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 public water system.

The progress over the past year in improving public 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.

Appendix A

See attached *Public Drinking Water in Maine Annual Report 2016*. This report can also be found on the DWP website at <http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/documents/DWPAnnualComplianceReport.pdf>.

See attached *2016 Drinking Water Construction Project Report*. This report can also be found on the DWP website at <http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/imt/documents/2016DWSRFProjectReport.pdf>.