Working Together for Safe Drinking Water

Drinking Water Construction Project Report 2013

with funding from the Drinking Water State Revolving Fund

$200 Million Invested and Counting...
Dear Reader,

Writing the opening message of the Annual Drinking Water Construction Project Report is always a great pleasure. This year, I am particularly proud to announce we exceeded the $200 million level in total loans and grants to public water systems in the spring of 2014. This report highlights the work done in 2013, as well as some of the more memorable and significant projects we have assisted with over the past 17 years.

This accomplishment demonstrates increased public health protection through helping water systems reliably serve safe drinking water. This accomplishment is also about great people doing great work. I am fortunate to find myself leading an exemplary team of professionals who are making a positive difference in the world they live in.

Of course, our success is in no way limited to the staff here at the Drinking Water Program and the Maine Municipal Bond Bank. There are countless dedicated men and women in the drinking water industry who daily apply their talents, and expertise, to serve their customers, community and state.

Safe, reliable and affordable drinking water is fundamental to the wellbeing and the economic prosperity of communities across the State. Drinking Water State Revolving Fund (DWSRF) financing of construction projects provides a significant cost savings to water rate payers who include residential customers, small and large businesses, manufacturing facilities and government entities. These savings enable rate payers to invest money in other activities, enabling further growth in the community.

As we celebrate the continued success of the DWSRF, I extend my thanks and gratitude to the men and women in Maine who work every day to keep safe drinking water flowing to our homes and businesses. Their work extends lives, protects our communities and makes life more enjoyable.

I hope this publication helps you appreciate the positive work accomplished through the DWSRF.

Yours for safe drinking water,

Roger L. Crouse, P.E.
Director, Maine CDC Drinking Water Program

---

**Table of Contents**

**ABOUT THE DWSRF**

**CONSTRUCTION PROJECTS AT A GLANCE**

**MAP OF PUBLIC WATER SYSTEMS RECEIVING 2013 DWSRF CONSTRUCTION FUNDING**

**NON-CONSTRUCTION PROJECTS AT A GLANCE**

**MAP OF PUBLIC WATER SYSTEMS RECEIVING 2013 DWSRF NON-CONSTRUCTION FUNDING**

**WHAT HAVE WE ACCOMPLISHED?**

**DWSRF FUNDING OF INFRASTRUCTURE IMPROVEMENT BY PROJECT TYPE (1997-2013)**

**MAP OF DWSRF FUNDING BY COUNTY (1997-2013)**

**A LOOK BACK**

**2013 DWSRF CONSTRUCTION PROJECTS**

**PROJECTS FROM PRIOR YEARS COMPLETED IN 2013**

**2013 DWSRF NON-CONSTRUCTION PROJECTS**

**ACKNOWLEDGEMENTS**

---

**Introduction**

The 1996 Amendments to the Safe Drinking Water Act (SDWA) included the creation of the DWSRF. The DWSRF program is a state operated program to provide loans and other financial assistance for drinking water improvement projects. The SDWA requires that states provide 20 percent matching funds to federal dollars, in order to secure the federal funding. This ratio means that every one dollar invested by the State of Maine secures five federal dollars. For 2013, Maine invested $1,684,200 to access $8,421,000 in federal funding for Maine public drinking water improvement projects.

The DWSRF provides funding to public water systems throughout Maine to improve or replace water system pipes, treatment plants, storage tanks and sources of water to ensure safe drinking water and provide essential public health protection. Funding for drinking water infrastructure improvement projects are available as low interest loans. Disadvantaged Community Water Systems may receive further assistance through principal forgiveness.

A portion of the DWSRF is used to fund non-construction projects that help improve and protect drinking water quality in Maine. These funding programs include Wellhead Protection Grants, Source Water Protection Grants, Capacity Development Grants, Very Small System Compliance Loans, System Consolidation Grants, and Land Acquisition Loans. These programs are designed to provide source water protection, technical assistance, system planning assistance, and land acquisition.

The Department of Health and Human Services (DHHS) and the Maine Municipal Bond Bank (MMBB) administer the DWSRF together. The Drinking Water Program is the Lead Administrator and is responsible for project management and technical support, as well as overseeing activities. The MMBB is the Financial Administrator and oversees the loan application process and tracks money to and from the fund.

Since 1997, the DWSRF has provided more than $200 million to public water systems through low interest loans and grants.
## Public Water Systems Receiving 2013 DWSRF Construction Funding

### Water Systems

<table>
<thead>
<tr>
<th>WATER SYSTEM</th>
<th>TOWNS SERVED</th>
<th>DESCRIPTION</th>
<th>2013 DWSRF FUNDING AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangor Water District</td>
<td>Bangor, Clifton, Eddington, Hampden, Hermon, Orrington, Veazie</td>
<td>Water Main Replacement</td>
<td>$404,320</td>
</tr>
<tr>
<td>Portland Water District</td>
<td>Cape Elizabeth, Cumberland, Falmouth, Gorham, Portland, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham</td>
<td>Water Main Replacement</td>
<td>$1,072,000</td>
</tr>
<tr>
<td>Passamaquoddy Water District</td>
<td>Eastport, Perry</td>
<td>Treatment Plant Upgrades &amp; Water Main Replacements</td>
<td>$1,537,000</td>
</tr>
<tr>
<td>Southwest Harbor Water Department</td>
<td>Southwest Harbor</td>
<td>Water Main Replacement</td>
<td>$1,418,162</td>
</tr>
<tr>
<td>Hampden Water District</td>
<td>Hampden</td>
<td>Water Main Replacement</td>
<td>$525,000</td>
</tr>
<tr>
<td>Brewer Water Department</td>
<td>Brewer, Clifton, Eddington, Holden, Orrington</td>
<td>Construction of Ultraviolet Disinfection Treatment System</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Van Buren Water District</td>
<td>Van Buren</td>
<td>Treatment Plant Upgrades &amp; Water Storage Tank Replacement</td>
<td>$772,000</td>
</tr>
<tr>
<td>Old Town Water District</td>
<td>Old Town, Milford</td>
<td>Water Main Replacement</td>
<td>$1,724,511</td>
</tr>
<tr>
<td>Dixfield Water and Sewer Department</td>
<td>Dixfield</td>
<td>Water Main Replacement</td>
<td>$676,056</td>
</tr>
<tr>
<td>Gardiner Water District</td>
<td>Gardiner, Randolph, Farmingdale</td>
<td>Water Storage Tank Replacement</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Kennebunk, Kennebunkport, and Wells Water District</td>
<td>Kennebunk, Kennebunkport, Wells</td>
<td>Treatment and Source Upgrades</td>
<td>$375,000</td>
</tr>
</tbody>
</table>

### Public Water Systems

- **Bangor Water District**: $404,320
- **Portland Water District**: $1,072,000
- **Passamaquoddy Water District**: $1,537,000
- **Southwest Harbor Water District**: $1,418,162
- **Hampden Water District**: $525,000
- **Brewer Water Department**: $1,100,000
- **Van Buren Water District**: $772,000
- **Old Town Water District**: $1,724,511
- **Dixfield Water and Sewer Department**: $676,056
- **Gardiner Water District**: $1,500,000
- **Kennebunk, Kennebunkport, and Wells Water District**: $375,000
Public Water Systems Receiving 2013 DWSRF Non-Construction Funding

**CAPACITY DEVELOPMENT GRANTS**

<table>
<thead>
<tr>
<th>PUBLIC WATER SYSTEM</th>
<th>TOWNS SERVED</th>
<th>GRANT AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast Water District</td>
<td>Belfast, Northport</td>
<td>$2,500</td>
</tr>
<tr>
<td>Southwest Harbor Water Department</td>
<td>Southwest Harbor</td>
<td>$6,000</td>
</tr>
<tr>
<td>Houlton Water Company</td>
<td>Houlton</td>
<td>$4,000</td>
</tr>
<tr>
<td>Anson &amp; Madison Water District</td>
<td>Anson, Madison</td>
<td>$15,000</td>
</tr>
<tr>
<td>Stonington Water Company</td>
<td>Stonington</td>
<td>$6,000</td>
</tr>
<tr>
<td>Bryant Pond Spring</td>
<td>Woodstock</td>
<td>$3,000</td>
</tr>
<tr>
<td>Sugarloaf Water Association</td>
<td>Carrabassett Valley</td>
<td>$10,000</td>
</tr>
<tr>
<td>Castine Water Department</td>
<td>Castine</td>
<td>$6,500</td>
</tr>
<tr>
<td>Great Salt Bay Sanitary District</td>
<td>Damariscotta, Newcastle</td>
<td>$15,000</td>
</tr>
<tr>
<td>Portland Water District</td>
<td>Cape Elizabeth, Cumberland, Falmouth, Gorham, Portland, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

**WELLHEAD PROTECTION GRANTS**

<table>
<thead>
<tr>
<th>PUBLIC WATER SYSTEM</th>
<th>TOWNS SERVED</th>
<th>GRANT AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Village, Inc.</td>
<td>Presque Isle</td>
<td>$5,000</td>
</tr>
<tr>
<td>Springbrook Mobile Home Park</td>
<td>Wales</td>
<td>$6,000</td>
</tr>
<tr>
<td>Three Rivers Mobile Home Community</td>
<td>Brownville</td>
<td>$6,000</td>
</tr>
<tr>
<td>Pine Cone Mobile Home Park</td>
<td>Holden</td>
<td>$5,000</td>
</tr>
<tr>
<td>Bowdoinham Water District</td>
<td>Bowdoinham</td>
<td>$6,000</td>
</tr>
<tr>
<td>RSU 14 Jordan Small Middle School</td>
<td>Windham</td>
<td>$3,200</td>
</tr>
<tr>
<td>Stonington Water Company</td>
<td>Stonington</td>
<td>$2,000</td>
</tr>
<tr>
<td>Homestead Estates Mobile Home Park</td>
<td>Glenburn</td>
<td>$5,000</td>
</tr>
<tr>
<td>Hingham Heights MHP</td>
<td>Glenburn</td>
<td>$5,000</td>
</tr>
<tr>
<td>Grandeur Mobile Home Estates</td>
<td>Carmel</td>
<td>$5,000</td>
</tr>
<tr>
<td>South Slope Estates</td>
<td>Carmel</td>
<td>$5,000</td>
</tr>
<tr>
<td>Lake Region High School</td>
<td>Naples</td>
<td>$5,000</td>
</tr>
<tr>
<td>Belfast Water District</td>
<td>Belfast, Northport</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

**SOURCE WATER PROTECTION GRANTS**

<table>
<thead>
<tr>
<th>PUBLIC WATER SYSTEM</th>
<th>TOWNS SERVED</th>
<th>GRANT AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosewood Estates</td>
<td>Fort Kent</td>
<td>$6,510</td>
</tr>
<tr>
<td>MSU 104 Pembroke Elementary School</td>
<td>Pembroke</td>
<td>$3,995</td>
</tr>
<tr>
<td>Belfast Area Children’s Center</td>
<td>Waldo</td>
<td>$8,480</td>
</tr>
<tr>
<td>Sedgwick Elementary School</td>
<td>Sedgwick</td>
<td>$3,800</td>
</tr>
<tr>
<td>Auburn Water District</td>
<td>Lewiston, Auburn, Poland</td>
<td>$10,000</td>
</tr>
<tr>
<td>York Water District</td>
<td>York</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

**SYSTEM CONSOLIDATION GRANTS**

<table>
<thead>
<tr>
<th>PUBLIC WATER SYSTEM</th>
<th>TOWNS SERVED</th>
<th>PUBLIC WATER SYSTEM CONNECTING TO</th>
<th>REASON FOR CONSOLIDATION</th>
<th>GRANT AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Harbor Condominiums</td>
<td>Southwest Harbor</td>
<td>Southwest Harbor Water Department</td>
<td>Financial capacity issues</td>
<td>$7763</td>
</tr>
<tr>
<td>RSU 57 Waterboro Elementary School</td>
<td>Waterboro</td>
<td>Waterboro District</td>
<td>Arsenic, lead, copper compliance issues</td>
<td>$78,564</td>
</tr>
<tr>
<td>Rosewood Estates</td>
<td>Fort Kent</td>
<td>Fort Kent Water and Wastewater Department</td>
<td>Lead and copper compliance issues</td>
<td>$100,000</td>
</tr>
<tr>
<td>RSU 39 Ski Building</td>
<td>Caribou</td>
<td>Caribou Utilities District</td>
<td>Bacterial contamination</td>
<td>$15,301</td>
</tr>
</tbody>
</table>
$200 Million Invested and Counting...

What Have We Accomplished?

From Madawaska to South Berwick, from Eastport to Andover, and more than 115 locations in between, the Drinking Water State Revolving Fund (DWSRF) has been making a positive difference at public water systems across the State of Maine. More than $200 million was invested in over 300 construction projects in the past 17 years. This work improved the quality of life for many Maine residents, while saving ratepayers tens of millions of dollars.

This work also provided an economic boost to Maine communities. Based upon an estimate of 45 jobs per million spent1, the $200 million investment created 9,000 jobs. Additionally, a safe and reliable water supply is essential for investment, businesses and families to an area.

Maine received the first DWSRF grant award from the U.S. Environmental Protection Agency in December 1997. The first loan was made to the Madawaska Water District in March 1998. Since that first project, the DWSRF continues to help water systems find new sources of water, install and upgrade treatment processes, replace many miles of water pipe, increase or replace storage, as well as many other projects to improve the safety and reliability of the water supply.

1. Estimate from the American Society of Civil Engineers 2008 Infrastructure Report Card.

DWSRF Funding of Infrastructure Improvement by Project Type (1997-2013)

The DWSRF has played a critical role in funding needed improvements for many of Maine’s public water systems over the last 17 years. The DWSRF enabled public water systems throughout Maine to make essential public health improvements to replace water system pipes, upgrade or replace water treatment plants, increase or replace water storage tanks and find new sources of water—all to ensure the reliability and safety of drinking water for the people of Maine.

Total DWSRF Funding by County 1997 to 2013

[Map showing funding by county]
Gardiner Water District
DWSRF PROJECT LOAN AMOUNT $2,215,856
LOAN CLOSED ON March 31, 1998
ENGINEER: Earth Tech Inc. (now AECOM)
CONTRACTOR: 20+ subcontractors. Earth Tech Inc. acted as the Construction Manager

This project upgraded the drinking water treatment facilities for the Gardiner Water District. A new treatment facility was constructed on the existing water treatment plant site and the project included the re-use and improvements to existing structures at the site. Equipment was installed to remotely monitor and operate off-site facilities. Modifications and improvements included conversion of the existing filter building to a chemical feed building, a new filter building constructed on top of an existing clearwell, and rehabilitation of underground sand filters for use as backwash basins. The filter building included the pressure filter units, control room and laboratory. The improvements were made to ensure safe drinking water for the Gardiner Water District customers.

Waldoboro Water Department
DWSRF PROJECT LOAN AMOUNT $2,025,000
LOAN CLOSED ON June 21, 2005
ENGINEER: Earth Tech Inc. (now AECOM)
CONTRACTOR: Apex Construction Inc. and George C. Hall & Sons Inc.

This project completed the design and construction of a water storage tank to replace the deteriorating North End Tank. Due to original design problems associated with the North End Tank, substantial degradation of the concrete walls and metal diaphragm repairs were not considered effective. The new tank was constructed at the existing tank site and included upgrades to a 16-inch water main connection to the tank.

Bath Water District
DWSRF PROJECT LOAN AMOUNT $2,100,000
LOAN CLOSED ON October 24, 2006
ENGINEER: Wright-Pierce
CONTRACTORS: H.C. Crooker and DN Tanks (formerly Natgun Corporation)

This project involved the replacement of distribution system mains. It completed all of the major loops in the system, along last remaining section of main in the MDOT right-of-way. Many existing mains in this project were not installed deep enough and susceptible to freezing. In addition, the mains installed in 1891 were significantly tuberculated, resulting in reduced flows.

Passamaquoddy Water District
DWSRF PROJECT LOAN AMOUNT $1,845,000
LOAN CLOSED ON April 25, 2008
ENGINEER: A.E. Hodsdon Engineers
CONTRACTOR: S.H. Bridges Construction, Inc.
Van Buren Water District

**TOWNS SERVED:** Van Buren

**2013 DWSRF FUNDED AMOUNT:** $772,000

**ENGINEER:** Dirigo Engineering

**CONTRACTOR:** TBD

Van Buren’s first two projects utilizing 2013 DWSRF funds will upgrade the present 24 year old water treatment system to improve efficiency and water quality. Primary areas of upgrade include filter system piping, filter media, filter tanks, service pumps, SCADA controls, chemical feed equipment, and energy improvement with VFD controls.

The second project is for the engineering designs to replace the 500,000 gallon Keegan Standpipe water storage tank and the 1,100,000 gallon Tower Drive Standpipe water storage tank (both of which were constructed in 1989) with new, pre-cast concrete tanks.

Van Buren’s first of two projects utilizing 2013 DWSRF funds will upgrade the present 24 year old water treatment system to improve efficiency and water quality. Primary areas of upgrade include filter system piping, filter media, filter tanks, service pumps, SCADA controls, chemical feed equipment, and energy improvement with VFD controls.

The second project is for the engineering designs to replace the 500,000 gallon Keegan Standpipe water storage tank and the 1,100,000 gallon Tower Drive Standpipe water storage tank (both of which were constructed in 1989) with new, pre-cast concrete tanks.

Portland Water District

**TOWNS SERVED:** Cape Elizabeth, Cumberland, Falmouth, Gorham, Portland, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham

**2013 DWSRF FUNDED AMOUNT:** $1,072,000

**ENGINEER:** Portland Water District

**CONTRACTOR:** Gidden (Debois & Longfellow), Gorham Sand & Gravel (Central)

Portland’s project replaces approximately 2,100 feet of water main on Central Street in Westbrook, replacing galvanized iron pipes from 1909; approximately 1,200 feet on Washington Avenue in Portland, replacing cast iron unlined pipe from 1939; and approximately 1,250 feet on Longfellow Street, and Debois Street in Portland. These projects are undertaken to improve water quality, water pressure and fire flows in the service areas.

“As a result of the water main replacements in Central Street in Westbrook and Longfellow Street/Debois Street in Portland, customers have received the benefit of improved water quality due to the improved flow characteristics in the larger pipe and the improved reliability of the water main due to the reduction in the probability of a main break or leak resulting in a service interruption.”

* Ned Pierce, Project Engineer, Portland Water District

Brewer Water Department

**TOWNS SERVED:** Brewer, Clifton, Eddington, Holden, Ormington

**2013 DWSRF FUNDED AMOUNT:** $1,100,000

**ENGINEER:** Woodard & Curran

**CONTRACTOR:** T. Buck Construction

This project provides funding to design and construct an Ultra-Violet (UV) disinfection facility to meet the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule, to further protect against disease-causing microorganisms.

*“Being my first time, I found the process to be remarkably simple and the drinking water staff to be very helpful with any questions that came up.”*

* Rodney Butler, Superintendent, Brewer Water Department

Dixfield Water & Sewer Department

**TOWNS SERVED:** Dixfield

**2013 DWSRF FUNDED AMOUNT:** $676,056

**ENGINEER:** A.E. Hodsdon Engineers

**CONTRACTOR:** TBD

The project consists of replacing 5,500 feet of leaded-joint cast iron water mains, services, and hydrants on Pine Street, High Street, North Street, Kidder Street, and Dix Street in Dixfield. Some of the mains to be replaced are galvanized iron pipe. The project will improve water quality and system reliability for approximately 53 homes in Dixfield. The project is being completed in conjunction with proposed street improvement by the Town of Dixfield.
Passamaquoddy Water District

**TOWNS SERVED:** Eastport, Perry  
**2013 DWSRF FUNDED AMOUNT:** $1,537,000  
**ENGINEER:** A.E. Hodsdon Engineers  
**CONTRACTOR:** Morgan Construction  
(Treatment Plant Upgrades),  
T. Buck Construction (Water Main Replacements)

The first project at Passamaquoddy involves upgrading the present 23-year-old surface water treatment plant. The treatment plant upgrade will help produce water quality in compliance with Safe Drinking Water Act (SDWA) regulations. Primary areas of upgrade include roughing filter, filters and clarifiers, filter to waste piping, SCADA controls, and an energy efficient main pump replacement.  
Passamaquoddy’s second project in 2013 replaced 3,020 feet of 1890’s leaded joint cast iron water, services, and hydrants on Dana, Middle, Shackford, and Third Streets in Eastport. The replacement water pipes improved water quality delivered to approximately 53 homes in Eastport, and is expected to reduce freeze-ups and water main breaks in those areas.

Bangor Water District

**TOWNS SERVED:** Bangor, Clifton, Eddington, Hampden, Hermon, Ortington, Veazie  
**2013 DWSRF FUNDED AMOUNT:** $404,320  
**ENGINEER:** Maine Dept. of Transportation & Bangor Water District  
**CONTRACTOR:** TBD

This project will replace a 100-year-old water main on the Union Street Bridge in conjunction with a bridge rehabilitation undertaken by the Maine Department of Transportation.

Kennebunk, Kennebunkport & Wells Water District

**TOWNS SERVED:** Kennebunk, Kennebunkport, Wells  
**2013 DWSRF FUNDED AMOUNT:** $375,000  
**ENGINEER:** Kennebunk, Kennebunkport, and Wells Water District  
**CONTRACTOR:** TBD

This project consists of installing water treatment, including disinfection, corrosion control and fluoridation, at the new Kimball Lane Pump Station. This project brings an additional groundwater source to the mix of water supplies for the District.

Old Town Water District

**TOWNS SERVED:** Old Town, Milford  
**2013 DWSRF FUNDED AMOUNT:** $1,724,511  
**ENGINEER:** Sewall & CES, Inc.  
**CONTRACTOR:** Sargent Corporation,  
Eastwood Contractors, and Sitewerx, Inc.

Old Town has an additional 2013 DWSRF project to replace 2,860 feet of old, undersized 2-inch galvanized iron and 4-inch cast iron pipe with 8-inch ductile iron pipe. The project will improve water quality and system reliability and is being completed in conjunction with proposed street improvements by Old Town and Milford.

Passamaquoddy Water District

**TOWNS SERVED:** Eastport, Perry  
**2013 DWSRF FUNDED AMOUNT:** $1,537,000  
**ENGINEER:** A.E. Hodsdon Engineers  
**CONTRACTOR:** Morgan Construction  
(Treatment Plant Upgrades),  
T. Buck Construction (Water Main Replacements)

This project will result in the replacement of the 500,000 gallon steel standpipe water storage tank in Farmingdale with a new, properly sized, pre-stressed concrete tank. The new tank will advance the integration plan for the Gardiner Water District and the Hallowell Water District to improve service delivery and reliability to customers.

Gardiner Water District

**TOWNS SERVED:** Gardiner, Randolph, Farmingdale  
**2013 DWSRF FUNDED AMOUNT:** $1,500,000  
**ENGINEER:** Wright Pierce  
**CONTRACTOR:** TBD

This project will result in the replacement of the 500,000 gallon steel standpipe water storage tank in Farmingdale with a new, properly sized, pre-stressed concrete tank. The new tank will advance the integration plan for the Gardiner Water District and the Hallowell Water District to improve service delivery and reliability to customers.
Southwest Harbor Water Department

**TOWNS SERVED:** Southwest Harbor

**2013 DWSRF FUNDED AMOUNT:** $1,418,162

**ENGINEER:** Olver Associates

**CONTRACTOR:** R.F. Jordan & Sons Construction, Inc.

This project includes the replacement of a deteriorated 6-inch water line on Main Street between Woods Road and Seal Cove Road. The project is occurring in coordination with a Maine Dept. of Transportation Municipal Partnership Initiative, which will include pavement resurfacing within the work area. The project is also being coordinated with sewer work.

Hampden Water District

**TOWNS SERVED:** Hampden

**2013 DWSRF FUNDED AMOUNT:** $525,000

**ENGINEER:** Woodard & Curran

**CONTRACTOR:** Sitewerx, Inc.

Hampden Water District replaced aging and undersized water mains ahead of a planned full depth reconstruction of Main Road North by the Maine Department of Transportation. Approximately 1,950 feet of 8- and 10-inch water main installed in 1938 was replaced with 12 inch ductile iron pipe on Main Road North in Hampden.

Calais Water Department

**TOWNS SERVED:** Calais

**2013 DWSRF FUNDED AMOUNT:** $430,000

**ENGINEER:** Olver Associates

**CONTRACTOR:** T. Buck Construction

This project replaced old, undersized, and deteriorated water mains on Clark and School Streets. The existing mains were undersized, had continued maintenance problems, and were costly for the District to repair. Many households complained of poor water quality. Replacing these mains and services has greatly improved the reliability and safety of the distribution system.

Bangor Water District

**TOWNS SERVED:** Bangor, Clifton, Eddington, Hampden, Hermon, Orrington, Veazie

**2013 DWSRF FUNDED AMOUNT:** $2,403,800

**ENGINEER:** Black and Veatch

**CONTRACTOR:** T. Buck Construction

This project provided partial funding to complete the construction of an Ultra-Violet (UV) disinfection facility to meet the Cryptosporidium inactivation requirements of the Long Term 2 Enhanced Surface Water Treatment Rule. The design of this upgrade was funded in a previous DWSRF project. The total project cost was approximately $4,900,000, including the design costs. Specific improvements included a new building, UV disinfection equipment, site work, and new piping.

"THROUGHOUT THE DESIGN, CONSTRUCTION, AND START-UP IT WAS A TEAM EFFORT BETWEEN BWV, BLACK & VEATCH, CALGON, AND T BUCK TO BRING A LARGE-SCALE VERSION OF A RELATIVELY NEW TECHNOLOGY TO THE STATE. THIS ENSURED THAT THE RIGHT DECISIONS WERE MADE THAT WERE IN THE BEST INTEREST OF THE PROJECT."

- Mario Francucci, Black & Veatch

"SINCE THIS PROJECT WAS DONE, THE WATER SYSTEM HAS NOTICED A GREAT IMPROVEMENT IN THE WATER QUALITY IN THIS AREA AND DOES NOT NEED TO FLUSH THE HYDRANT ON SCHOOL STREET WEEKLY SINCE THE WATER MAIN IS NOW LOOPEd. WE NO LONGER GET CALLS REGARDING POOR WATER QUALITY ON THIS STREET."

- Annalesis Hafford, Olver Associates

**THE HAMPDEN WATER DISTRICT WILL CONTINUE TO USE THE SRF PROGRAM FOR MAJOR CONSTRUCTION PROJECTS THAT NEED TO BE FUNDED IN A LONG TERM MANNER. THE SRF PROGRAM IS A GREAT TOOL THAT SHOULD BE UTILIZED BY ANY UTILITY FACED WITH NECESSARY UPGRADES.**

- Jamie Holyoke, Working Superintendent, Hampden Water District
Portland Water District

TOWNS SERVED: Cape Elizabeth, Cumberland, Falmouth, Gorham, Portland, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham

DWSRF FUNDED AMOUNT: $3,000,000

ENGINEER: CDM Smith

CONTRACTOR: D & C Construction

This project provided partial funding to complete the construction of an Ultra-Violet (UV) disinfection facility to meet the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule and provide additional protection from disease-causing microorganisms. The total estimated project cost is $12,999,900.

Presque Isle Water District

TOWNS SERVED: Presque Isle

DWSRF FUNDED AMOUNT: $686,000

ENGINEER: Woodard and Curran

CONTRACTOR: T. Buck Construction

Presque Isle Water District replaced 1,800 feet of aging and undersized water mains on South Main Street. The project was completed in conjunction with a Maine Department of Transportation street improvement project.

Kennebunk, Kennebunkport, & Wells Water District

TOWNS SERVED: Kennebunk, Kennebunkport, Wells

DWSRF FUNDED AMOUNT: $1,175,040

ENGINEER: Kennebunk, Kennebunkport, and Wells Water District

CONTRACTOR: Kennebunk, Kennebunkport, and Wells Water District

KKW replaced 7,150 feet of 8-inch and 10-inch diameter water mains on Fortune’s Rock Road in Biddeford Pool. These mains were approximately 100 years old and served the densely populated coastal area of Biddeford Pool. The water main replacements improved aesthetic water quality and reliability of the distribution system serving this area. The project was completed concurrently with a major road reconstruction project with the City of Biddeford.

Canton Water District

TOWNS SERVED: Canton

DWSRF FUNDED AMOUNT: $106,125

ENGINEER: Wright-Pierce

CONTRACTOR: T. Buck Construction, Goodwin Well & Water, Inc.

This DWSRF loan involved two projects designed to lower the levels of contaminants that can form during treatment, known as Disinfection Byproducts (DBPs). Work included replacement of the media on one Slow Sand Filter and the addition of a Granulated Activated Carbon (GAC) layer in this same filter bed. To better clean the filter beds, a pressure backwash system was installed with an underdrain system. The second project consisted of drilling a 6-inch bedrock well for the purpose of blending with the surface water to further reduce levels of DBPs.

• Deborah Hutchins, Canton Water District

Portland + Presque Isle

• Nate McLaughlin, Woodard & Curran

“The South Main Street Sewer and Water Replacement Project was an important project for the utility district because it provided the opportunity to replace aging and undersized infrastructure in advance of an MDOT Road Reconstruction Project. Summer traffic in this area of Rt. 1 is very heavy and T. Buck did a good job staging the project to keep the work area as small as possible to allow traffic to flow.”

• Nate McLaughlin, Woodard & Curran

“THE PROJECT AS A WHOLE HAS RESULTED IN 3 QUARTERS OF PASSING DBP RESULTS (SO FAR) WHICH IS AWESOME. PASSING RESULTS SO FAR FOR OUR DBP TESTING WILL HOPEFULLY LEAD TO FULL COMPLIANCE. THE WASH SYSTEM HAS HELPED REDUCE THE AMOUNT OF TIME AND MANPOWER NEEDED FOR FILTER CLEANING WHILE IMPROVING THE EFFECTIVENESS OF THE CLEANING ITSELF. WE GET CLEANER FILTERS IN LESS TIME WITH FEWER PEOPLE.”
• Deborah Hutchins, Canton Water District
Capacity Development Grants

Capacity Development Grants provide assistance to public water systems for the preparation of documents that will assist them in the maintenance or enhancement of water quality, by identifying possible improvements in systems’ technical, financial and managerial operations (capacity development). Water systems can receive grants for 50% of the document cost, up to a maximum grant amount of $15,000.

### PUBLIC WATER SYSTEM

<table>
<thead>
<tr>
<th>Proposed Use of Grant Funds</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast Water District Update Capital Improvement Plan</td>
<td>$2,500</td>
</tr>
<tr>
<td>Southwest Harbor Water Department Asset Management Plan</td>
<td>$6,000</td>
</tr>
<tr>
<td>Hobein Water Company Water System Study</td>
<td>$4,000</td>
</tr>
<tr>
<td>Arson &amp; Madison Water District Source Water Protection Plan, Source Protection Ordinance, Development and Presentation of Drinking Water Protection Lessons in Local Schools</td>
<td>$15,000</td>
</tr>
<tr>
<td>Stonington Water Company Hydrological Evaluation of Groundwater Wells</td>
<td>$5,000</td>
</tr>
<tr>
<td>Bryant Pond Spring Source Water Protection Plan</td>
<td>$3,000</td>
</tr>
<tr>
<td>Sugarloaf Water Association Facilities and Capital Improvement Plan</td>
<td>$10,000</td>
</tr>
<tr>
<td>Castine Water Dept. Water Source Treatment Review Evaluation Processes Conceptual Design</td>
<td>$6,500</td>
</tr>
<tr>
<td>Great Salt Bay Sanitary District Hydraulic Assessment of Distribution System</td>
<td>$15,000</td>
</tr>
<tr>
<td>Portland Water District Revise Vulnerability Assessment</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

System Consolidation Grants

Water System Consolidation Grants provide partial funding to water systems for the purpose of consolidation with another water system. The public water system applying for consolidation must have a technical, managerial or financial capacity issue that will be addressed by the consolidation with the more viable public water system. The more viable, receiving public water system must not have technical, managerial or financial capacity issues, and the consolidation cannot result in system capacity issues. The Consolidation Grant funds up to 50% of the cost of the water system consolidation for For-Profit facilities and up to 75% of the cost of the water system consolidation for not-for-Profit facilities, up to a maximum of $100,000 reimbursement.

### PUBLIC WATER SYSTEM

<table>
<thead>
<tr>
<th>TOWNS SERVED</th>
<th>PROJECT DESCRIPTION</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewiston, Auburn, Poland</td>
<td>Implementation of new education and outreach programs in the Lake Auburn Watershed</td>
<td>$10,000</td>
</tr>
<tr>
<td>York</td>
<td>Between 600 and 800 feet of the Yellow Trail, an existing multiuse/management trail in the Chase's Pond watershed</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

Very Small System Compliance Loans

The Very Small System Compliance Loan Program was established in 2010. This program is directed at very small systems including all community systems (except those regulated by the Public Utilities Commission) with a population of 100 or less, and all not-for-profit, non-transient, non-community water systems. Examples include mobile home parks, apartment buildings, nursing homes, and schools.

This loan program provides 100% principal forgiveness (up to $50,000) for water treatment improvements required to achieve compliance with a current or future Safe Drinking Water Act requirement, excluding the Total Coliform Rule. Examples of eligible projects include, but are not limited to, treatment systems to resolve compliance issues with Lead, Copper, Radon, Arsenic, or Antimony levels.

As of December 31, 2012, 18 public water systems have received funding and resolved compliance issues. Total project expenses of $350,701 have improved water quality to 2,416 users for an average cost per user of $145.

<table>
<thead>
<tr>
<th># OF PEOPLE SERVED</th>
<th>TOWN</th>
<th>COMPLIANCE ISSUE</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Fort Kent</td>
<td>Lead and Copper</td>
<td>$6,510</td>
</tr>
<tr>
<td>115</td>
<td>Pembroke</td>
<td>Arsenic</td>
<td>$73,995</td>
</tr>
<tr>
<td>46</td>
<td>Waldo</td>
<td>Radon</td>
<td>$8,480</td>
</tr>
<tr>
<td>130</td>
<td>Sedgwick</td>
<td>Arsenic</td>
<td>$7800</td>
</tr>
</tbody>
</table>

Source Water Protection Grants

The Source Water Protection Grant Program awards grants to community and non-profit non-community public water systems for projects that will help to protect their surface water source from contamination. Specifically, grants are awarded for projects that clearly reduce the likelihood of contamination occurring in the Source Water Protection area by existing or future activities. Grants are awarded up to $5,000 per project, with a few $10,000 grant awards available, depending on the scope of the project. Projects that demonstrate a significant commitment to ongoing source water protection are considered for a higher grant award amount of up to $10,000.

<table>
<thead>
<tr>
<th>PUBLIC WATER SYSTEM</th>
<th>TOWNS SERVED</th>
<th>PROJECT DESCRIPTION</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewiston, Auburn, Poland</td>
<td>Implementation of new education and outreach programs in the Lake Auburn Watershed</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>York</td>
<td>Between 600 and 800 feet of the Yellow Trail, an existing multiuse/management trail in the Chase's Pond watershed</td>
<td>$10,000</td>
<td></td>
</tr>
</tbody>
</table>

PWS (RECEIVING FUNDS) | TOWN | PUBLIC WATER SYSTEM CONNECTING TO: | REASON FOR CONSOLIDATION | Grant Amount |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Harbor Condominiums</td>
<td>Sds Wtr Hbr</td>
<td>Southwest Harbor Water Department</td>
<td>Financial capacity issues</td>
<td>$7763</td>
</tr>
<tr>
<td>RSU 57 Waterboro Elementary School</td>
<td>Waterboro</td>
<td>Waterboro Water District</td>
<td>Arsenic, lead, copper compliance issues</td>
<td>$78,564</td>
</tr>
<tr>
<td>Rosewood Estates</td>
<td>Fort Kent</td>
<td>Fort Kent Water and Wastewater Department</td>
<td>Lead and copper compliance issues</td>
<td>$100,000</td>
</tr>
<tr>
<td>RSU 39 Ski Building</td>
<td>Caribou</td>
<td>Caribou Utilities District</td>
<td>Bacterial contamination</td>
<td>$15,301</td>
</tr>
</tbody>
</table>

2013 DWSRF Non-Construction Projects

$200 Million Invested and Counting...
### Maine Public Water Systems Benefiting from the DSRIF (1997-2013)

<table>
<thead>
<tr>
<th>Towns Served</th>
<th>Project Description</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presque Isle</td>
<td>Pine Village, Inc.</td>
<td>$5,000</td>
</tr>
<tr>
<td>Wiscasset</td>
<td>Make single-walled above ground oil storage tanks located within 1,000 feet of the public water system well with double walled oil storage tank.</td>
<td>$5,000</td>
</tr>
<tr>
<td>Brownville</td>
<td>Three Rivers Mobile Home Park</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Pine Cone Mobile Home Park</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Brunswick Water District</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>PESU #16 Jenny Nig Small Middle School</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Stonington Water Company</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Homestead Estates Mobile Home Park</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Hingham Heights MHP</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Grandview Mobile Home Estates</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>South Slope Estates</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Lake Region High School</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Belleau Water District</td>
<td>$5,000</td>
</tr>
<tr>
<td>Windham</td>
<td>Maine Public Water Systems Benefiting from the DSRIF (1997-2013)</td>
<td>$200 Million Invested and Counting...</td>
</tr>
</tbody>
</table>

### Land Acquisition Loans

The Land Acquisition Loan Program provides low interest loans to community and non-profit community public water systems for the purchase or legal control of land in drinking water source protection areas. Land acquisition is a key component of safe and secure drinking water and the protection of public health. Shoreline and direct watershed land use and development have a major impact on the quality of water and the protection of public health. Shoreline and direct watershed land use and development have a major impact on the quality of water and the protection of public health. Shoreline and direct watershed land use and development have a major impact on the quality of water and the protection of public health. Shoreline and direct watershed land use and development have a major impact on the quality of water and the protection of public health. Shoreline and direct watershed land use and development have a major impact on the quality of water and the protection of public health. Shoreline and direct watershed land use and development have a major impact on the quality of water and the protection of public health.

### Special Thanks to the Following Individuals Who Have Made Administration of the DSRIF in Maine Possible Since 1997

- Karen Asselin
- Joy Adamsen
- Mary Bower
- Andrew Bower
- Edita Bohren
- David Daveau
- Beth DeShane
- Roger Dickey
- Susan Dyer
- Mike Goodwin
- David Gray
- Wendy Coffin
- David Greaves
- Howard Z. Green
- David Greene
- Tim Heap
- Rick Smith
- Dave Welch
- Carol Wulz-Croome

### Wellhead Protection Grants

The Wellhead Protection Grant Program awards grants to community and non-profit, non-community public water systems for projects that will help to protect their groundwater source from contamination. Specifically, grants are awarded for projects that clearly demonstrate the potential for reducing the likelihood of contamination occurring in the Source Water Protection area by existing or future activities. Grants are awarded up to $5,000 per project, with a few $10,000 grant awards available, depending on the scope of the project. Projects that demonstrate a significant commitment to ongoing source water protection are considered for up to $10,000 in project costs. Examples of projects that eligible for Wellhead Protection Grants include, but are not limited to, the following: assistance in the replacement of oil storage tanks in the source protection area, removal of septic systems from the source protection area, establishing or enabling a source monitoring program, removing hazardous chemicals from the source protection area, developing or implementing drinking water education programs, establishing local ordinances or local agreements in the source protection area, and many other types of projects that aim to reduce contamination of the wellhead protection area.
The Department of Health and Human Services (DHHS) does not discriminate on the basis of disability, race, color, creed, gender, age, sexual orientation, or national origin, in admission to, access to or operation of its programs, services, activities or its hiring or employment practices. This notice is provided as required by Title II of the Americans with Disabilities Act of 1990 and in accordance with the Civil Rights Acts of 1964 as amended, Section 504 of the Rehabilitation Act of 1973 as amended, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972 and the Maine Human Rights Act. Questions, concerns, complaints, or requests for additional information regarding civil rights may be forwarded to the DHHS' ADA Compliance/EEO Coordinator, State House Station #11, Augusta, Maine 04333, 207-287-4289 (V) or 207-287 3488 (V), TTY: 800-606-0215. Individuals who need auxiliary aids for effective communication in programs and services of DHHS are invited to make their needs and preferences known to the ADA Compliance/EEO Coordinator. This notice is available in alternate formats, upon request.

Maine CDC Drinking Water Program
11 State House Station
286 Water St., 3rd Floor
Augusta, ME 04333
Phone: (207)-287-2070
Emergency Phone: (207)-557-4214
Fax: (207)-287-4172
www.medwp.com