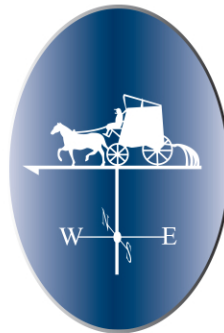




2023

Proposed Comprehensive Budget Report



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

Portland, Maine

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Portland Water District



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225 Douglass Street
Portland, ME 04101

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Incoming General Manager

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Treasurer

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Portland Water District Budget – Reader’s Guide

Welcome to the Portland Water District’s 2023 Budget document. This document is intended to provide practical and pertinent information about the Portland Water District’s (PWD’s) financial planning, policies, goals and priorities for 2023 and beyond. The book holds a wealth of information including how water and wastewater revenues are used to support infrastructure and fund future years’ development.

This Budget is a Policy Document.

It describes financial and operating policies, goals, and priorities for every fund and department of PWD for the coming year and for our 5-year planning horizon. Our Mission Statement, Strategic Goals, and Board Established Guidelines are found in the Introduction section. Significant Financial Policies are described in the section with that title.

This Budget is a Financial Plan.

It describes the costs of the services provided by PWD and how they are funded. The Revenue section presents the projected revenues from water sales, wastewater assessments, interest and other income. The Departmental Expense section details expenditures by category and also by department for the Water Operations, Wastewater Operations, Environmental Services, Engineering Services and Administrative Services Departments. The Capital Expenditures section presents details of major projects planned for 2022 and projected projects through 2026. The multi-year financial plan is included in the Appendix.

This Budget is a Means of Communication.

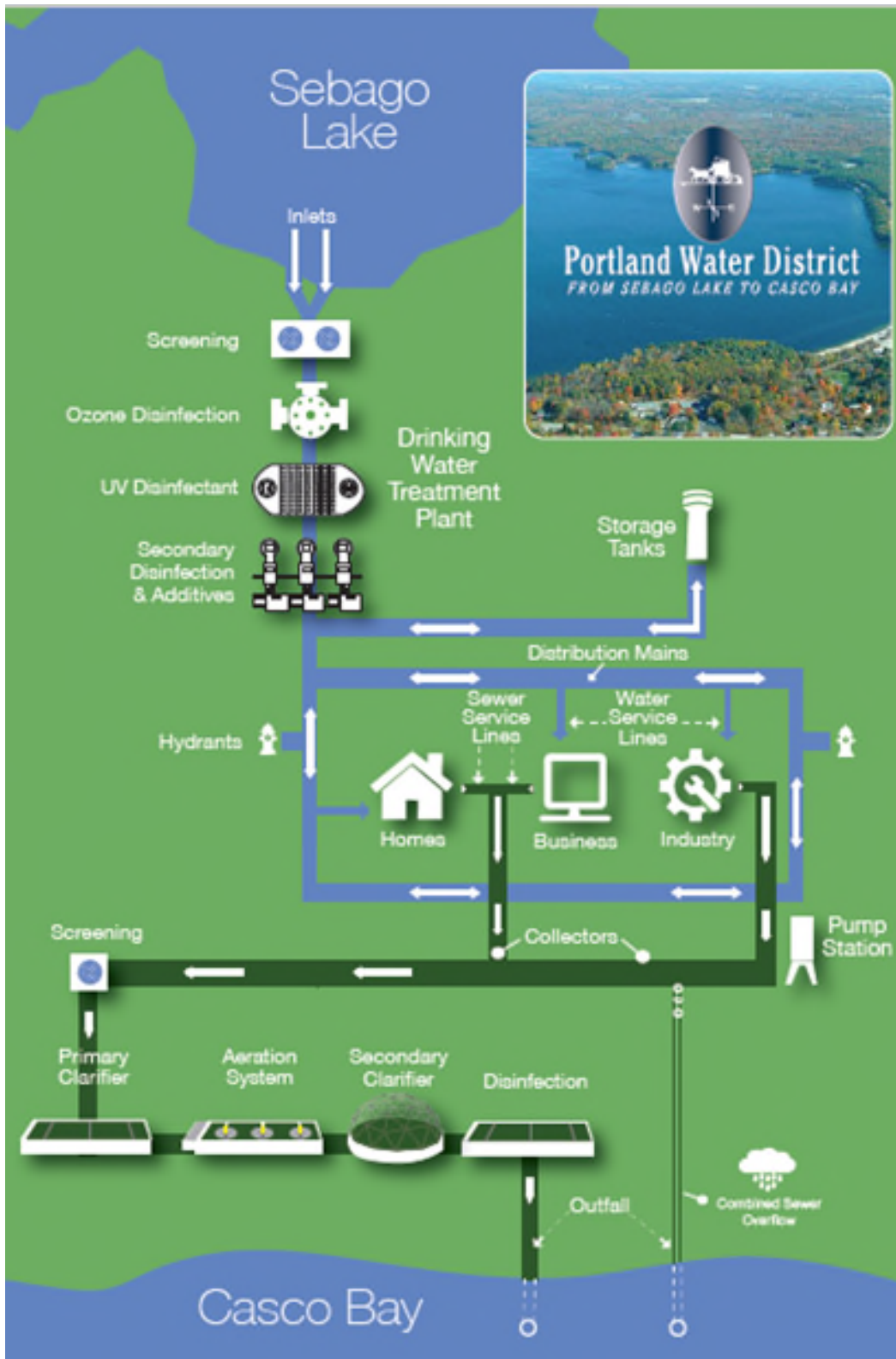
This budget is an easy-to-read document with summary information in charts and graphs that complement the details in the text. The Letter from the General Manager and Treasurer presents an organizational and financial overview of PWD. The budget for each fund- one water fund and six wastewater funds, one for each community served- is described in detail. Supporting information about the Portland economy, water benchmarks and results of the 2017 Customer Satisfaction Survey are included in the Appendix.

This Budget is an Operations Guide.

It shows each Department’s organizational chart and budget overview, followed by a detailed budget which includes goals, performance benchmarks and accomplishments for each. Current year projects and initiatives are described in detail. Following the operating budgets are sections for Human Resources, Capital Finance and Financial Policies.

Overview of the Water and Wastewater System

The diagram below provides a simplified schematic of the PWD water and wastewater systems.





Portland Water District

From Seabago Lake To Casco Bay

October 19, 2022

To the Members of the Board of Trustees,

On behalf of the entire Portland Water District (PWD) Team, we are pleased to submit for your consideration the Comprehensive Annual Budget Proposal for 2023. The document is designed to present the comprehensive financial framework for District activities for the budget year.

PWD continues to face an unusually challenging operating environment because of national and international factors. Historically high inflation and supply chain difficulties have made it both more complex and more expensive to obtain materials like pipe and chemicals. The tight labor market and the COVID-19 pandemic have added additional complications. Despite these challenges, PWD continues to provide our essential services affordably and without interruption.

PWD has taken a number of steps to respond to the challenges of the operating environment. Progress continues on development of the full suite of asset management functions. We have also implemented a much nimbler and more aggressive hiring process, which incentives like signing bonuses for individuals with CDL licenses to improve recruitment. Adjustments of salaries to market levels and creation of career ladders for some positions have been added to enhance retention.

Preparations to provide wastewater service to North Windham with collection, decentralized treatment, and disposal are proceeding. A construction manager has been selected and a new Project Manager has been hired to oversee this significant project. The project will provide a model for sewer service for other communities located away from urban treatment facilities.

New and ongoing challenges in 2023 that will impact this budget and projections for future years include:

- Changes in state regulations on disposal of biosolids. Changes were driven by concerns related to PFAS/PFOA and have impacted landfill operations. There is significant budgetary impact to PWD from these rule changes. PWD has already performed a review of long-term options for biosolids management. This Biosolids Master Plan has been completed and design of the initial phase improvements will begin in early 2023.
- Lead and Copper Rule Revisions. Changes were promulgated by the U.S. Environmental Protection Agency (EPA) in late 2021 that add many additional requirements for water systems. PWD has added a position to oversee the extensive data collection effort, which includes identifying water service lines materials, both public and private, and subsequent sampling and outreach efforts.

As you consider the budget for our upcoming 115th year, please reflect on our many ongoing challenges and accomplishments. Our dedicated staff of 188 employees work every day to ensure that safe and

abundant water is delivered to the 200,000 plus customers, and that wastewater is treated to remove pollution and protect the environment.

Water Services

Water Services ensures that safe and abundant drinking water is delivered throughout the 11 communities in our water service area. It all starts at our source, Sebago Lake. Because of the excellent water quality in the lake and strong watershed protection program, PWD was granted a waiver from filtration. Our continued compliance with the terms of this waiver saves ratepayers millions of dollars each year and eliminates the need to finance, construct, and operate a filtration plant. At the Sebago Lake Water Treatment Facility (SLWTF), an average of 20 million gallons of water are treated each day using state of the art technologies like ozone and ultraviolet light (UV).

After treatment, drinking water is distributed through a system of more than 1,000 miles of water mains, three major pump stations, and ten storage facilities. Infrastructure age, cold winter temperatures, and the underground location of many of our assets mean that staff must be skilled and diligent to operate and maintain the system with minimal disruption. Since 2010, we have invested over \$72 million in water main renewal, but additional annual investment is needed.

Wastewater Services

Wastewater treatment protects public health and the environment. Four wastewater treatment facilities operated by PWD remove pollution from the 21 million gallons of wastewater that is received at the facilities daily from the six communities served. Staff manages the wastewater collection system consisting of 118 miles of pipe and 76 pump stations which conveys wastewater to the facilities.

Engineering Services

The Engineering Services Department provides engineering and maintenance services and collaborates with stakeholders, including communities, state agencies and developers. They oversee design and construction of water and sewer infrastructure, support long range planning, operate and maintain facilities, and support instrumentation. These functions are carried out with a deliberate asset management approach that minimizes lifecycle costs and maximizes the value of infrastructure.

The District's Environmental Services Section of the Engineering Services Department monitors and protects water quality. The Water Resources Group champions the protection of Sebago Lake through source protection, environmental education and outreach, and security. The Laboratory Services Group provides certified analytical testing and operational support to water and wastewater treatment facilities and oversees the Industrial Pretreatment Program.

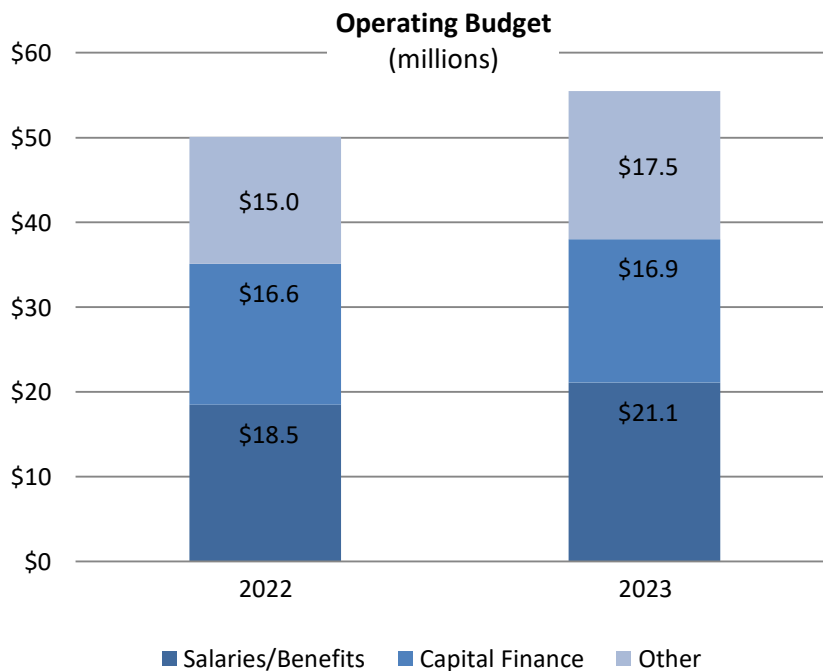
Administrative Services and Employee Services Departments

The Administrative and Employee Services Departments manage the financial, information services, customer services and other support functions of PWD. In addition, Corporate Counsel and the Public Relations Manager serve PWD and our customers in a number of ways. Within the Administrative Services Department, the Information Services group provides technology services. Financial Services engages in purchasing, payroll and financial transaction processing. The Customer Service Group manages a customer contact center and provides billing services. The Employee Services Department handles human resources, employee recruitment and development, benefits administration and safety services.

The proposed budget for 2023 recommends \$55.5 million for operations and \$23.1 million for the first year of a five-year Capital Improvement Plan. The operating budget consists of three major expense categories – salaries/benefits (38%), capital finance (30%) and all other materials and services (32%). Salaries reflects the impact of recently approved 3-year union contract, non-union market adjustments, and one additional employee (\$1,733,000). Benefit costs increased (\$943,000), primarily due to higher pension costs due to the decline in market value of the investments. Capital financing costs are higher primarily due to higher debt service costs (\$877,000) partially offset by lower capital fund contribution (\$709,000). Total other expenses increased \$2,501,000, or 16.7%, from the prior year.

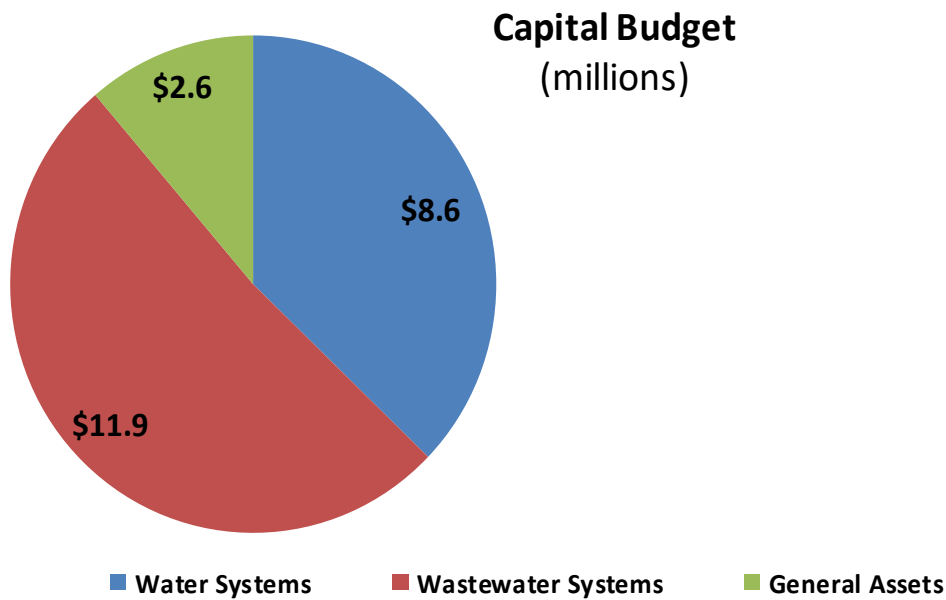
The significant changes in specific other expense line items include:

- Higher biosolids disposal costs (\$1,111,000) due to limited disposal options associated with PFAS/PFOA related concerns
- Higher unit costs for chemicals and an additional volume of chemicals needed at the Westbrook Regional Wastewater Treatment Plant (\$432,000)
- Higher road construction-related costs (\$306,000) due to price increases; and
- Lower regulatory fee due to the revocation of imposing a fee on biosolids by the state legislature (\$229,000)



The \$8.6 million water capital budget includes \$7.0 million replacing aging water mains.

The \$11.9 million wastewater capital budget includes \$8.0 million for the new North Windham Treatment facility and \$2.1 million of upgrades at Portland’s East End Treatment plant. Additionally, the capital budget includes an investment of \$2.6 million in general assets such as vehicles, computer system, Douglass Street main office and updating the master plan.



BUDGET HIGHLIGHTS		
<p>NEW INITIATIVES</p> <p>At the request of Town of Windham, the construction of a new wastewater treatment facility to serve the North Windham area will begin.</p> <p>Investing \$7.0 million in water main renewal; including the tenth year of financing \$2.0 million through capital reserve fund</p> <p>Reviewing installed water infrastructure to identify and replace any pipes with lead (\$185,000).</p>	<p>BUDGET SUMMARY</p> <p>The Operating Budget is proposed to be \$55.5 million, an increase of \$5.5 million or 10.9%.</p> <p>Total Revenues are projected at \$56.1 million, which includes a 5.6% water rate increase effective January 1, 2023 and wastewater assessments that meet the revised municipalities’ expectations, except for Gorham and Westbrook.</p> <p>The Capital Budget is proposed at \$23.1 million. It continues commitment to invest in water mains and wastewater facilities renovations.</p> <p>Full-time positions increase by one to 188.</p> <p>The proposed budget continues funding to implement technology solutions for knowledge management, continues to invest in staff training, and provides incentives for multi-skill development.</p>	<p>CHALLENGES AND ISSUES</p> <p>Long range biosolids management options related to PFAS/PFOA concerns</p> <p>Aging infrastructure requires asset replacement; federal dollars for infrastructure projects in our service area may test our ability to keep pace.</p> <p>Recruiting and retaining new employees and training existing employees to adjust to needed workforce skills.</p> <p>Supply chain concerns of certain items including water main, meters and chemicals.</p>

The 2023 budget guidelines established by the Board of Trustees are reflected in this budget proposal.

- Operating fund expenses are increasing 10.9%,
- Wastewater assessments meet the municipal expectations, except for Gorham and Westbrook,
- Water rates are affordable and sufficient to meet operational needs,
- Full-time positions are optimized to meet the workload, and
- Investment in our infrastructure continues as planned.

The proposed budget assumes water rate adjustment effective January 1, 2023. The typical residential customer's monthly bill would be \$28.50, which is \$1.28 or 4.9% higher than their current bill.

Assessments to wastewater communities meet or are lower than revised municipal expectations, except in Gorham and Westbrook. Higher operating costs at the Westbrook Regional Treatment facilities serving those communities is causing their assessment to be higher. Additionally, Gorham's wastewater relative plant flow has caused additional costs to be allocated to them. The Assessments for Cape Elizabeth, Cumberland, Portland and Windham increased by 11.6%, 17.8%, 13.2% and 10.9%, respectively; all of which are lower than the revised forecast provided earlier this year. Falmouth's assessment remained the same as the prior year.

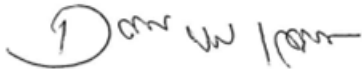
The entire team at PWD strives to successfully execute our mission statement and meet goals while providing the best value to our ratepayers both today and into the future.



Carrie Lewis (Outgoing General Manager)



Seth Garrison (Incoming General Manager)



David Kane, Treasurer

Community

Connections

The Portland Water District is proud to serve the public. As an integral part of the community, we strive to support various causes aligned with our company values and vision.

\$1,500 DiPietro Memorial Scholarships



In 2022, one scholarship was awarded to Dylan Anderson of Westbrook. He is attending Southern Maine Community College.

Environmental Education

Through our environmental education program, we connect with thousands of students--

teaching about our water resources and encouraging stewardship. Due to the impacts the pandemic has had on school operations, our programs have mostly shifted to providing virtual trainings and online resources.

Water Bottle Filling Fountain Grants

The Board of Trustees awarded seven grants: Windham Fire & Rescue Windham, Memorial Middle School, Falmouth Community Park, Animal Refuge League, Mayo Street Arts, YMCA Southern Maine, and City of Portland – DHS.

Over the past eight years, PWD has awarded \$43,500 to support the installation of approximately 32 Water Bottle Filling Fountains through its grant program. This program has been popular, especially among non-profits and schools. Acknowledging the positive results the program has had in the community to expand access to and promote our excellent public tap water, this year the Board increased the annual program funding limit from \$7,000 to \$10,000.

Annual Giving

Along with an active internal giving campaign that involves payroll deductions, the Portland Water District typically hosts a Charity Golf Classic. Due to the pandemic, the 2022 golf tournament was cancelled. Still, employees continued to contribute to charities through payroll deductions.

Lifeline Water Rates

PWD offers qualified residential customers discounted lifeline water rates.

Portable Potable Water

The Portland Water District provides various potable water solutions for community events including a portable water fountain, igloo containers, eco cups, and reusable water bottles. Hundreds of bottles have been donated to schools.



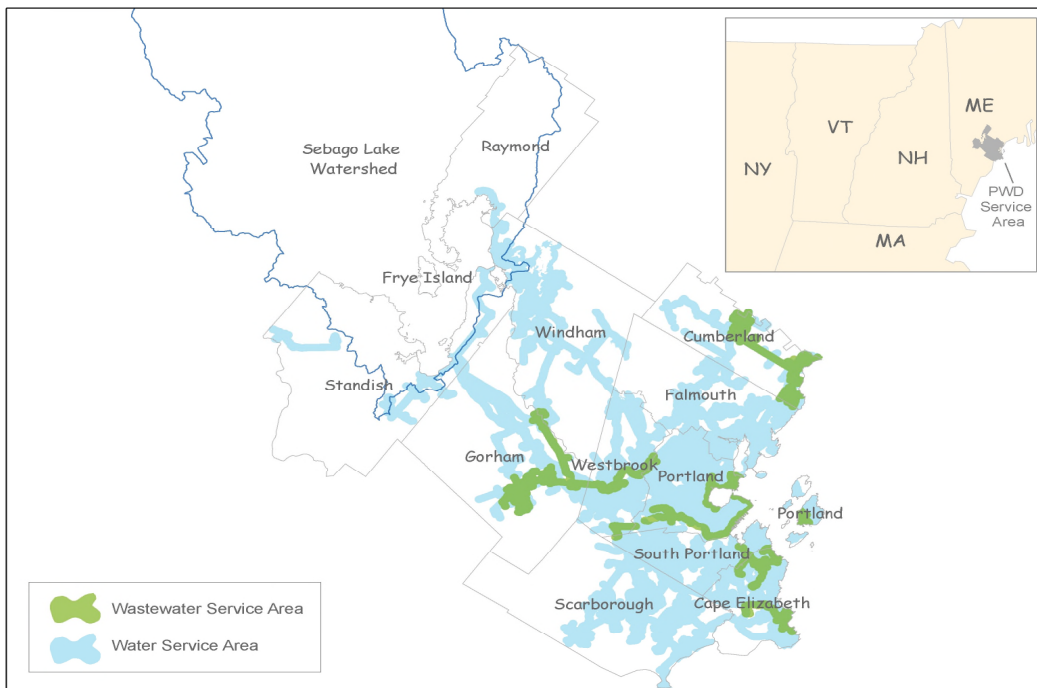
Introduction

The Portland Water District (PWD) is a quasi-municipal utility authorized by state charter to provide water service to eleven Greater Portland communities and wastewater treatment and interception services to six of those communities. Water service is provided to 54,057 customers. Sebago Lake provides virtually all the water delivered. A network of 1,000 miles of water mains delivers water from Sebago Lake to customers. The system provides fire protection through 5,230 fire hydrants and 2,549 sprinkler systems. PWD provides additional wastewater-related services through contracts with the communities. Additional services include sewer billing and collector/storm drain system operations.

Summary of Wastewater Services Provided:

Community	Customers	By Charter:			By Contract:		
		Treatment	Interceptors	Collectors	Storm Drains	Billing	
Cape Elizabeth	2,434	Yes	Yes	No	No	Yes	
Cumberland	1,259	No	Yes	Yes	No	Yes	
Falmouth	2,056	No	No	No	No	Yes	
Gorham	1,946	Yes	Yes	Yes	No	Yes	
Portland	17,278	Yes	Yes	Peaks Island (only)	Peaks Island (only)	Yes	
Scarborough	430	No	No	No	No	Yes	
South Portland	7,960	No	No	No	No	Yes	
Westbrook	4,800	Yes	Yes	No	No	Yes	
Windham	58	Yes	Yes	Yes	No	Yes	

Service Territory



History

In 1862, a group of citizens foresaw the necessity of improving the Greater Portland water supply to support continued growth. Private wells were no longer sufficient for domestic and fire protection use. This group formed the Portland Water Company. In 1869, the first water flowed from Sebago Lake to Portland, and the first water service was turned on in Portland on Thanksgiving Day.

In 1908, the Portland Water District bought the Portland Water Company and the Standish Water and Construction Company, and began serving water to Portland and South Portland. PWD later acquired the Gorham Water Company and the Falmouth Water Company. In the years that followed, Cumberland, Falmouth, Westbrook, Cape Elizabeth, Scarborough, Gorham, and the islands of Casco Bay also began receiving public water from the Portland Water District.

During the next 45 years, Greater Portland grew to be the industrial and financial hub of the state. Growth in the Portland area required several upgrades of the Portland Water District's system, including the construction of water supply systems to serve North Windham, Steep Falls, and Standish. The North Windham system was later decommissioned, partly due to the threat of MtBE contamination.

As a logical extension of its role as the regional water supplier, in the 1960s, the Portland Water District offered to handle and treat the region's wastewater. Since then, PWD constructed treatment plants in Portland (1979), Westbrook (1978), Little Falls (1987), Cape Elizabeth (1987), and Peaks Island (1993). In addition, PWD began providing wastewater maintenance and operating services to the town of Cumberland (1984) and now accepts septage from several Sebago Lake region communities.

During the 1990s water utilities around the country faced tighter regulatory requirements, more informed customers who expected a better product, and the emergence of newly detected contaminants and pathogens, which did not exist or were unidentified in years prior. The Portland Water District rose to meet these challenges with a state-of-the-art ozonation facility (built in 1994), a technologically advanced staff with expanded skills, more sampling and monitoring, and an emphasis on honest and ample communication.

The decade starting in 2000 also witnessed the aging of PWD's wastewater treatment facilities and an increased emphasis on odor control. Portland's East End Wastewater Treatment Facility started undergoing renovations to upgrade the facility and control odors, while a complete evaluation of the Westbrook/Gorham Wastewater Treatment Facility was conducted and upgrades began. Both facilities through the 2010's continue to address aging equipment with the focus in the next couple of years being the aerations systems. The East End project was completed in 2017. The proposed capital improvement plan includes a \$7.9 million Westbrook/Gorham/Windham upgrade in 2020.

In 2001, the Town of Raymond became the tenth member of the District; water service in the town began in 2002.

A focus on aging water mains began in 2011 when the Board committed to double the main renewal budget by 2016. In 2014, the Board established a capital reserve fund to provide an additional \$2 million available for main renewal. A \$7.0 million investment in water main replacement is budgeted for 2022. Also, new regulations required a second water treatment process be installed. In 2014, an ultraviolet process was added along the existing ozonation process.

Top Reasons to Choose Portland, Maine Now

Portland is Maine's business, financial and retail capital and the largest city in the state. Seascapes and cityscapes blend harmoniously in Portland, perched on a peninsula, jutting out into island-studded Casco Bay. The metropolitan hub of Maine's south coast region, Portland is a progressive, lively city incorporating the character of yesteryear into a modern urban environment. Historic architecture blends gracefully with the new as you stroll along her working waterfront or the cobblestone streets of the restored Old Port section of the city. With a metro population of 219,000, the Greater Portland area is home to almost one quarter of Maine's total population. (see appendix additional statistic on Portland and Maine.

High quality water delivered to homeowners/businesses and cleaned wastewater delivered back to the environment are a key expectation of our customers. Being a desirable place to visit during the summer contributes to variance in water consumption by almost 40% between winter and summer months. With a high concern for the environment, customers support our efforts to protect our watershed and realize the importance of wastewater treatment in protecting our coastal waters.

Portland: Yes. Life's good here.™

U.S. News & World Report, a respected and well-known media company, chose Maine's largest city as the eighth-best place to live in the country. It also ranked Portland as the safest place to live in the U.S. In addition to being one of the best places to live, U.S. News & World Report ranked Portland as the ninth best place to live for quality of life and 33rd among best places to retire.

5/17/2022

Wall Street Journal ranks Portland/South Portland area sixth on their Emerging Housing Market Index. The index uses a slate of housing market, economic vitality, and quality of life metrics to surface emerging housing markets—areas that are expected to see home price growth and that offer attractive lifestyle amenities.

7/20/21

Top 10 Best- and Most Affordable- places to Retire in America by Realtor.com

2022 Edition

Concerned About the Environment

Portland Ranked Seventh "Greenest City" in the United States, according to the readers of Travel & Leisure Magazine.

4/4/2012

Women's Health Magazine ranks Portland #10 - reflecting efforts to make it easy to live healthy active lives in Maine's largest city. 01/18/2013

Great Place to Visit

When it comes to being a food-lovers' city, Portland is no longer a small side dish – it's the main course. Bon Appetit magazine has chosen Portland, Maine, as its "City of the Year," calling it "one of the most unexpected culinary destinations in the country." 9/2018

Portland, Maine is 2018 Restaurant City of the Year, Bon Appetit magazine. August 2018

Fodor's travel guide has put Portland on its '2020 Go List' of the 52 best places to visit in the world. - 2019

Trip Advisor Ranks Portland as the – 19th on the list of Trending Destinations in United States - 2020

Economic Hub of Maine

Portland was listed as the ninth best city in America for female entrepreneurs and the fifth best city overall for starting a business by NerdWallet in 2016.

Forbes Ranks Portland Area in Top 10 for Job Prospects. 3/3/2012

Techie.com Lists Portland, Maine as One of its 10 Most Unexpected Cities for High-Tech Innovation Techie.com asked innovators, entrepreneurs, and city leaders this question: "What are the most unexpected cities that are leading the high-tech revolution?" 4/8/2013

The Regulatory Environment in Which We Function

The Portland Water District functions in a highly regulated environment. Its operations are regulated by federal, state, and local governments, and by a variety of government agencies. The laws and regulations created and implemented by these layers of government affect not only the District's direct operations in a regulatory sense, but its budget as it complies with various government directives.

The District's water operations are governed at the federal level by the Safe Drinking Water Act (SDWA). Originally enacted in 1974, the SDWA allows the Environmental Protection Agency (EPA) to promulgate national primary drinking water regulations to regulate contaminants that may pose health risks and that are likely to be in the public water supply. Under the SDWA, the EPA establishes a maximum contaminant level standard that regulates physical, chemical, biological and radiological substances in the drinking water supply. The best available technology and treatment techniques that are economically and technically feasible must then be used to meet this standard.

The SDWA allows the EPA to delegate to states the primary oversight and enforcement of the law, or primacy, to the state if the state meets certain requirements. The state of Maine has received primacy and its oversight and enforcement program is administered by the Department of Health and Human Services Drinking Water Program.

Wastewater regulation falls under the provisions of the federal Clean Water Act (CWA). Passed in 1972, with significant amendments in 1977 when it became known as the CWA, it is implemented and enforced by the EPA and the Army Corp. of Engineers. The CWA establishes the basic structure for regulating pollutants discharging into the waters of the United States. It gives the EPA authority to implement pollution control programs, such as setting wastewater standards for the industry. The CWA makes it unlawful to discharge a pollutant into navigable waters without a permit (National Pollutant Discharge Elimination System Permit (NPDES)).

As with the SDWA, the CWA provides that the EPA will create rules to implement the law, and will delegate to the state the administration and enforcement of the law on a day-to-day basis. In Maine, the Department of Environmental Protection (DEP) has been delegated this function, with EPA retaining concurrent authority to take enforcement action. The DEP has more stringent monitoring requirements for biosolids, whole effluent toxicity and mercury than the requirements established by the EPA. The District's treatment plants must obtain a discharge permit issued by the DEP utilizing those stricter requirements.

In addition to the environmental regulations which govern the District's operations, the District's water business is also partially regulated by the state Public Utilities Commission under a system of Maine law found in Title 35-A of the Maine Revised Statutes. In 2014, the state legislature passed a bill, An Act to Reform the Regulation of Consumer-Owned Water Utilities (2014 P.L. 2014 chapter 573) which authorized the Commission to grant exemptions of certain portions of Title 35-A. The District filed exemption requests from certain regulations. Effective January 1, 2016, the District is exempt from the Public Utilities Commission regulation related to its water rates and standards of service. Historically, the Public Utilities Commission regulated the District's water business operations through review and approval of the District's Terms and Conditions of Service, and established the rates the District charges.

The Regulatory Environment in Which We Function (continued)

for its water services rate adjustments, finance transactions and terms & conditions of service; this function is now performed by the District's elected Board of Trustees.

Local government regulations affect the District's construction activities, as the District must comply with street opening requirements in the municipalities where it conducts construction or repair operations.

The annual costs for the District's wastewater operations are assessed pursuant to the terms of its charter, enacted by the Maine Legislature (Ch. 84, P. & S.L. 1975 as amended through Ch. 18, P. & S.L. 2009). The District's charter provides that prior to January 15 of each year, the District shall determine the total anticipated amount to be raised from the participating municipalities based on the trustees' best estimate of the cost to operate the wastewater and sewage systems for the fiscal year. The amount assessed to the municipalities includes: regional costs, financing costs, and operation and maintenance costs. Municipalities are advised of their yearly assessments by the District and establish their respective sewer user rates considering the District's assessment and the costs of maintaining their respective sewer collection systems. The District's charter governs the manner of assessing participating municipalities and the treatment of any surplus funds existing at the end of a calendar year.

Act to Reform Regulation of Consumer-Owned Water Utilities

In 2014, a state law was enacted allowing the State Public Utilities Commission to exempt certain individual utilities from state regulation, if requested by the utility, or classes of utilities (PUC Rule 6114).

The District filed for exemptions from certain state regulations and the ability to implement local review and rules.

The changes include allowing water rate changes and bond issuance authorizations to be approved solely by the District's publicly elected officials without state commission review.

The exemption request was approved and became effective January 1, 2016.

Water Rate Change Process

In 2023, the District's Board of Trustees will consider a 5.6% rate adjustment. The chart on the next page outlines the process the District will follow for the 2023 rate adjustment. The District will continue the same Board and public review process and does not require Maine Public Utilities Commission approval.

A Public Utilities Commission rule (chapter 675) allowed for the creation of a capital reserve fund starting in 2014. The fund can be used to pay costs related to water infrastructure. For utilities our size, an additional 10% over other costs may be included in justifying proposed water rates. A system infrastructure assessment (SIA) must be submitted prior to getting approval to fund the reserve. The SIA would include the list of infrastructure projects that will be funded from the reserve. Annual updates of the status of the projects and reserve fund balances are required. The District filed the SIA in October 2013 and has incorporated funding the reserve by designating 1% of the proposed January 1, 2023 5.6% rate adjustment for the reserve.

Water Rate Case Process

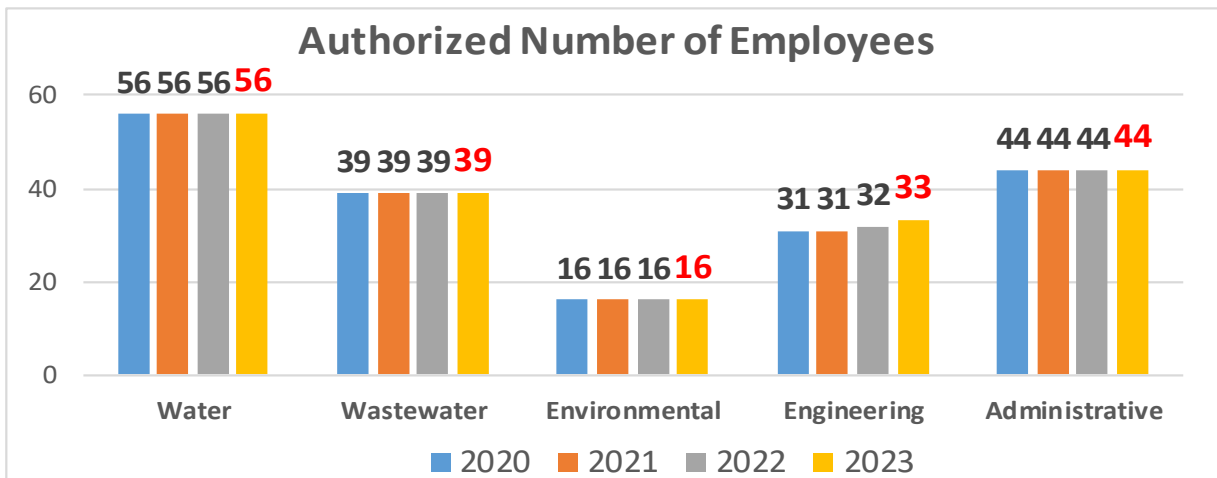
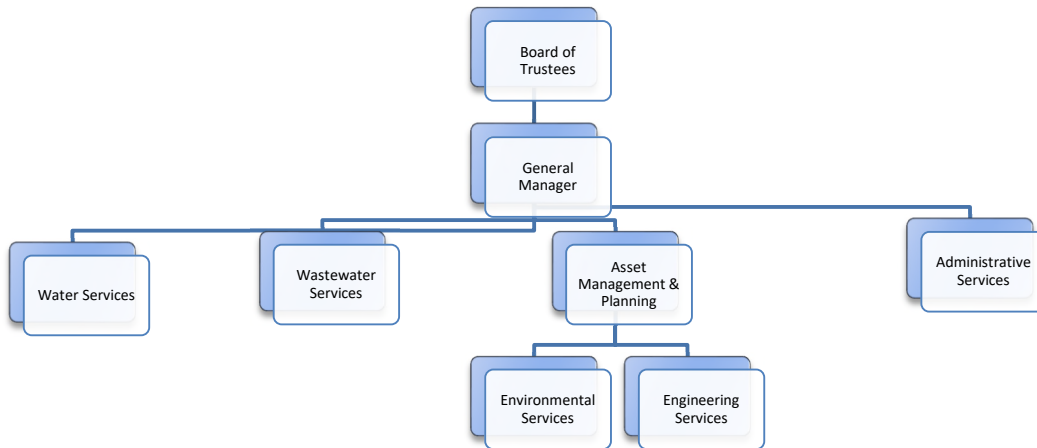
The next adjustment is proposed to be January 1, 2023.

The proposed schedule to implement the next year's rate adjustment is as follows:

- September 12, 2022 Administration and Finance Committee reviews and makes final recommendation to be sent to customers. Finance staff will provide up-to-date financial information and revenue projections.
- September 19, 2022 Board considers approving Administration and Finance Committee's recommendation.
- October 14, 2022 Supporting documentation for rate adjustment is available to the Public
- October 28, 2022 Publish notice of rate adjustment and provide notice to all customers. Notice is mailed to all customers and includes an invitation to attend the public hearing.
- November 14, 2022 Special public hearing on proposed rate adjustment. General Manager and Treasurer provide information supporting the rate adjustment. Public has an opportunity to ask questions and provide feedback to the Board as they consider the proposed rate schedule.
- November 28, 2022 Board business meeting – Approve final rate schedule. The final rate schedule incorporates changes based on the public hearing and Board's feedback.
- December 28, 2022 File final rate schedule based on public hearing and Board review. Rate schedule is distributed to Maine Public Utilities Commission for informational purposes only.
- January 1, 2023 Rate adjustment effective date.

Organization Structure

The Portland Water District is overseen by an 11-person Board that is publically elected. The Board appoints a General Manager, who oversees the daily operation of the District. Operation is comprised of five departments – Water Services, Wastewater Services, Environmental Services, Engineering Services and Administrative Services.



- **Water Services** provides water treatment and distribution system operation and maintenance. In 2020 they added Water System and Equipment operators.
- **Wastewater Services** provides wastewater treatment and interception/collector system operation and maintenance services.
- **Environmental Services** provides watershed protection and laboratory services. A new Water Quality Program Manager to address compliance with the new federal regulation on lead in water distribution system. Eliminated Environmental Scientist position and outsourced education efforts.
- **Engineering Services** provides general engineering, facility and vehicle maintenance services. Added a Project Engineer position in 2023 to manage the North Windham Wastewater project.
- **Administrative Services** provides customer, computer, finance and general management services. In 2023, Customer Service reduced one position (control center operator) and Financial Services added a position (Administrative Assistant)

Board of Trustees

The affairs of the District are managed by a Board of Trustees composed of 11 members. The Board adopts a budget, approves the water rates and charges for public services, establishes District-wide policies and plans and appoints a general manager to administer the affairs of the organization. The Board generally meets twice monthly; a workshop session is held the 2nd Monday of each month, and a regular business meeting is held the 4th Monday of each month. The Board votes on topics only at the regular business meeting. The Board elects a President and Vice President annually. The President assigns members of the Board to serve on at least one of three standing committees: Administration & Finance, Operations, and Asset Management & Planning (AMAP). Standing committees and workshop meetings are generally held on the same day. Special meetings may be called as needed.

The 11 members serve staggered 5-year terms. In most years, two positions become open for elections. Trustees are elected from geographic areas designed to provide representation proportionate to the population of PWD's service area. This results in combining some towns and cities.

Notices of meetings are published on the District website (www.pwd.org) and notice of the business meeting is published in the Portland Press Herald. The meeting agenda is sent to the town and city managers of District member communities. At the beginning of each year, a notice is published in the Portland Press Herald reminding the public of the Board's schedule of meetings for the year. In addition, business meetings are broadcast on public access cable TV and live streamed on townhallstreams.com. Meeting minutes are also available to the public on the web site.

BOARD OF TRUSTEES



Matthew Beck
*South Portland &
Cape Elizabeth*

Jane Sexton
Gorham

Guy Cote
Westbrook

Louise Douglas
President
*Windham
& Raymond*

Vacant
Scarborough

Kenneth Levinsky
Portland



Gary Libby
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William Lunt, III
Vice President
*Falmouth &
Cumberland*

Kim Rich
Portland

Joseph Siviski
*South Portland
& Cape Elizabeth*

**Charles Shattuck-
Heidorn**
Portland

Annual Planning/Budget Process

An outcome of the annual planning/budget process is a document that outlines the financial and operational plan for the upcoming fiscal year. The resulting annual operating and capital plan provides an overview of the resources expected to be available and how those resources will be used. Decisions made in developing the annual plan incorporate information from other planning processes and sources including the following:

Other Planning Processes and Information Sources:	Budget Document Location:
Mission Statement and Strategic Goals. At the beginning of the annual budget process, management reviews and updates our mission statement and strategic goals. One focus of the review was to identify how resources allocation decisions should be different.	Introduction Section, Mission Statement and Strategic Goals
Annual Budget Guidelines by Board. Board guidelines were established providing important budget parameters.	Introduction Section, Board Established Annual Budget Guidelines
External Factors. A review of the industry, economic, and stakeholders' trends provided information to make better planning decisions.	Introduction Section, External Factors Impacting the Budget
Multi-Year Ratemaking Revenue Projections. Water revenues and wastewater assessments projections are made for three years to assist in rate making. The proposed budget is consistent with the projections.	Individual Fund Projection in the Budget by Fund Section. Summary is included in the Appendix.
Capital Master Plans and Asset Evaluations Studies. The proposed budget incorporates recommendations from the various infrastructure plans/studies.	Capital Expenditures Section, Infrastructure and Operational Evaluation Plans
Customer Satisfaction Survey. A review of the customer satisfaction survey's results provided guidance on how best to allocate resources in the upcoming year.	Appendix Section, Customer Satisfaction Survey
Workforce Management. As part of the review of current employee demographics and future employees' needs, action steps were identified. The budget incorporates those action steps.	Human Resource Section, Workforce Management
Financial Policies. Financial policies were reviewed to assure budget decisions were made consistent with good financial standards.	Financial Policies Section
Employee Satisfaction Survey/Comments. General Manager's forum was held to receive input from all employees. A formal survey was conducted in 2019	Human Resource Section, Introduction Section

Planning/Budget Process Calendar

The outline below illustrates the process used to arrive at an adopted budget. The only legal requirement is that wastewater communities must be assessed the operating budget by January 15, 2023. The process was streamlined in anticipation of the new computer system implementation in the fall. The Boards meetings are open to the public. Agenda, meeting minutes and meeting video is available on the our website - <https://www.pwd.org/trustee-meetings> .

April

25 Senior Management Team reviews budget process and timeline, stakeholders input, external factors impacting the budget, major policy and resource allocation issues, significant budget uncertainties, and long-term and short-term goals.

Jun

13 At a public workshop meeting, Staff provides high level operational and financial goals. The Board provides directions to Staff as the budget is prepared.

Jun

17 Department Managers submit draft Operating Budget and conceptual-level Capital & Non-capital projects and initiatives

Aug

15-19 Department Managers present draft Operating and Capital budget to the General Manager.

Sep

1 Department Managers submit final Operating Budget and Capital & Non-capital projects and initiatives.

Oct

24 Budget is presented to the Board of Trustees at a public meeting where the public can provide feedback.

Nov

14 Departments present Operating Budget and Capital & Non-Capital projects and initiatives to their respective Board Committee. The Full Board reviews the Five-Year Capital Improvement Plan at a public meeting where the public can provide feedback.

Board Committees' Department Review Responsibility

Administration and Finance – Executive Office, Customer Services, Information Services, Financial Services and Employees Services.

Operations – Water Services and Wastewater Services

Planning – Environmental Services and Engineering Services

28 Board considers adopting budget at a public meeting where the public can provide feedback.

Wastewater Communities: The proposed Wastewater Assessment for each municipality is presented and reviewed with each municipality at meetings scheduled between October 24 and November 28. By January 15, 2023, the District notifies each municipality of their certified assessment amount.

Mission Statement

The District's mission is to protect public health, safety, and the environment by providing our customers with reliable and affordable water, wastewater and related services. In order to fulfill the mission, the following six strategic goals have been established. The Board and Staff developed goals through a series of workshop discussions open to the public.

Goal 1 - Public Health:

The District will provide products and services that meet all federal, state and local quality standards.

Goal 2 - Public Safety:

The District will design and maintain its water system to meet modern firefighting needs.

Goal 3 - Environment:

The District will promote the sustainability of natural resources within Casco Bay watershed.

Goal 4 - Reliability:

The District can be trusted to provide its products and services in a manner that meets all reasonable customer expectations.

Goal 5 - Affordability:

The District will balance the delivery of products and services with customers' ability to pay water and wastewater rates and charges.

Goal 6 - Employees and Work Environment:

The District will have well trained and satisfied employees who will work in a safe and work environment conducive to productive work.

Strategic benchmarks have been created to indicate the District's performance over the long-term. The impact of variations in the benchmarks performance is best understood looking at the long-term trend. Additional background explanations of the strategic goals and benchmarks with the impact to the budget are provided on the next six pages.

Annual objectives and tactical benchmarks are established to guide and monitor annual performance towards meeting our strategic goals - see individual departments' objectives and benchmarks in the Operating Expenses section.

Strategic Goals

Strategic Goal 1: Public Health

The District will provide products and services that meet all federal, state and local quality standards.

Background

The District's water operations are governed at the federal level by the Safe Drinking Water Act (SDWA). Ensuring compliance with the SDWA requires short- and long-term initiatives aimed at protecting, monitoring, and treating for water quality from the source to the tap. Protecting the source begins with protecting the watershed, and protecting the watershed begins with protecting the forest's natural ability to produce clean water. Therefore, the District's approach to protecting public health includes programs aimed at promoting forest conservation, monitoring and inspecting development in the watershed, monitoring the water quality of the lake and its tributaries, providing security of the area around the intakes, and performing education/outreach to keep the public involved in the process.

Strategic Benchmarks (updated periodically):

The District is in compliance with all drinking water regulatory standards. Two key measures are the quality of the source water in Sebago Lake and the ability to maintain an adequate level of disinfectant throughout the distribution system. The state of the lake is indicated by the Trophic State Index - an index that tracks water clarity along with the amounts of phosphorus and algae in the water. The current trophic state for Sebago Lake is good for drinking water quality. Chloramines are added to maintain a level of disinfectant throughout the distribution system. The level of chloramines is measured weekly at forty-three locations throughout the service area, and the treatment process is adjusted continuously to maintain desired levels.

Benchmarks:	1998	2003	2008	2013	2018
Percent of Days in Compliance with Water Regulations	100%	100%	100%	100%	100%
Water Quality: Sebago Lake Trophic State Index (goal – 24 to 32)	31	27	30	32	29
10th Percentile Chloramine Residual (goal 0.4 mg/L)	N/A	N/A	0.2 mg/L	0.3 mg/L	0.77 mg/L
Land in Conservation in the Watershed (acres)	N/A	0	350	1100	5826
Service Area Communities served by Education/Outreach Programs	N/A	N/A	10	11	10
Security (violations per 1000 visitors)	N/A	N/A	12	7	12

Current Status, Challenges and Impact to Current Budget:

A new water storage tank station in the 407 zone (Windham and Gorham) will be constructed in 2023.

Continue to allocate money to work with watershed partners to prevent non-point pollution into Sebago Lake. Continue developing the Sebago Clean Water coalition to generate additional funds to protect watershed land. Coordinate the execution of projects, including watershed conservation easement purchases, of a \$8 million grant received from U.S. Department of Agriculture through its Natural Resources Conservation Service Regional Conservation Partnership Program.

A new federal law dealing with lead will require the District to increase its field sampling and monitoring program and address any lead piping found in its system. The 2023 budget includes a full-time staff person dedicated to managing the program as we work to meet the Revised Lead and Copper Rule's compliance deadline of September 16, 2024.

Strategic Goal 2: Safety

The District will design and maintain its water system to meet modern firefighting needs.

Background

One of the original reasons the District was created was to provide adequate water volume and pressure to combat fires.

A common benchmark measuring the fire-fighting capability is the community's public protection classification, a numerical grade given by the Insurance Service Office (ISO). The classification is developed based on grades given the community's fire department (60%) and water supply (40%) systems. The District is mainly responsible for the water supply system within our service territory. The classification is developed by the ISO, an international firm that provides information regarding property and liability risk.

Strategic Benchmarks (periodically by ISO):

The 2003 Comprehensive Water System Strategic Plan identified infrastructure and operational changes that would improve the water system rating within our service territory. The date indicates the last time the rating has been updated by ISO.

Benchmarks:

Stable or Improving Communities' ISO rating for Water Systems - Communities Improve/Stable Rating

Municipality	Percent of Municipality Served by the District	Water System (maximum = 40%)	ISO Rating Date
Cape Elizabeth	78%	36.54%	1995
Cumberland	43%	22.89%	2001
Falmouth	50%	32.93%	1992
Gorham	32%	34.20%	1993
Portland	94%	37.48%	2000
Raymond	3%	27.28%	2002
Scarborough	40%	32.46%	1991
South Portland	90%	37.35%	1999
Standish	13%	25.25%	1996
Westbrook	79%	36.84%	1996
Windham	37%	25.73%	2004

Current Status, Challenges and Impact to Current Budget:

The Capital Improvement Plan includes funding to replace water mains and hydrants, including \$6.0 million to continue upgrading the 407 zone, an area in Gorham and Windham, over the next 5 years. Additionally, staff will continue meeting with the municipal fire departments to identify action steps to improve. Annual inspection of all hydrants will be done and any inoperable hydrants will be fixed promptly.

Strategic Goal 3: Environment

The District will promote the sustainability of natural resources within the Casco Bay watershed.

Background

The District treats and returns to Casco Bay watershed 23 million gallons of wastewater each day. The discharged wastewater must meet certain wastewater regulations. Wastewater regulations fall under the provisions of the federal Clean Water Act (CWA). Passed in 1972, with significant amendments in 1977 when it became known as the CWA, it is implemented and enforced by the EPA and the Army Corp. of Engineers. The CWA establishes the basic structure for regulating pollutants discharging into the waters of the United States. It gives the EPA authority to implement pollution control programs, such as setting wastewater standards for industry. The CWA makes it unlawful to discharge a pollutant into navigable waters without a permit called the National Pollutant Discharge Elimination System Permit (NPDES).

The CWA provides that the EPA will create rules to implement the law, and will delegate to the state the administration and enforcement of the law on a day-to-day basis. In Maine, the Department of Environmental Protection (DEP) has been delegated this function, with EPA retaining concurrent authority to take enforcement action. The DEP has more stringent monitoring requirements for biosolids, whole effluent toxicity and mercury than the requirements established by EPA. The District's treatment plants must obtain a discharge permit issued by the DEP adhering to those stricter requirements.

Strategic Benchmarks (updated every 5 years):

The District meets the standards required by each plant DEP-issued wastewater discharge permit. The standards include numerous daily, weekly and monthly benchmarks. In addition, the elimination of any discharges of untreated wastewater during dry weather (i.e. – no rain or snow melt) to watershed is a goal.

	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
<u>Compliance with discharge permit:</u>				
East End Wastewater Treatment Facility	49	22	5	12
Westbrook / Gorham / Windham Treatment Facility	8	8	0	1
Cape Elizabeth Treatment Facility	10	13	2	5
Peak's Island (in Portland) Treatment Facility	0	3	0	8
Dry Weather Overflows	N/A	1	3	10

Current Status, Challenges and Impact to Current Budget:

Many of the non-compliance incidents occur during wet weather when the facilities cannot treat the volume of water resulting in untreated or less treated wastewater to be discharged to the watershed. In 2023, the focus in each system is as follows:

Cape Elizabeth – Assisting the town in identifying the source and solution for the overflow related to the Ottawa Road pump station, including a planned \$350,000 pump station upgrade in 2023.

Gorham/Westbrook/Windham – Assisting the city in eliminating combined sewer overflow in the city's collector system.

Portland - Assisting the city in eliminating combined sewer overflow in the city's collector system.

Strategic Goal 4: Reliability

The District can be trusted to provide its products and services in a manner that meets all reasonable customer expectations.

Background

The state has granted the District the exclusive authority to provide public drinking water service and wastewater treatment/interceptor service to customers in our service territory. Customers and regulators assume we will provide appropriate service 24/7. Water service standards are established by the Maine Public Utilities Commission and Department of Human Services; including standards related to customer service and billing. Wastewater service standards are established by the Maine Department of Environmental Protection.

Strategic Benchmarks (updated every 5 years):

The District periodically conducts a formal customer satisfaction survey. Customers expect us to provide two basic services reliably – to provide water to customers’ homes and to treat wastewater delivered to District’s system.

Current Status, Challenges and Impact to Current Budget:

	2003	2008	2013	2018
Water Service failure per million hours of available service - Total Customer Outage Hrs. / ((51,296 X 365 X 24) / 1,000,000)	15.8	15.7	9.4	13.2
Wastewater Reliability Index – WW Systems infrastructure that is In Service Full (ability to deliver design flow)				
WW Systems and Pumping Stations convey flow to treatment plants	Not available	98.6%	99.6%	Not available
WW Treatment Plants available to treat flow	Not available	100%	100%	Not available
Customer Satisfaction Survey Results	89%	85%	87%	75%

The 2017 customer satisfaction survey was completed and indicates satisfaction continues to be high with 75% of customers indicating they are satisfied or generally pleased with the level, quality and reliability of the water and wastewater services provided. We will continue investing in our ‘value of water’ campaign and explore offering additional self-help options including advance notification of certain events. In 2023, a customer survey will be conducted.

In 2023, the most significant water system project to increase reliability is the \$7.0 million investment in aging water mains, which will reduce main failures. Significant wastewater system projects/programs that will increase reliability include the renovating aging pump stations and treatment facilities; including a significant upgrade to the Portland’s East End WW Treatment plant electricity system and completion of the construction of a \$12 million Westbrook Regional WW Treatment plant aeration upgrade.

Strategic Goal 5: Affordability

The District will balance the delivery of products and services with customers' ability to pay water and wastewater rates and charges.

Background

An industry affordability benchmark is to compare the typical household bill as a percent of median household income. The national standard is the utility bill is considered affordable if the annual bill is less than 2% of median income. The District water rates are well below the affordability standard with the typical household paying only 0.43% of median income(2021). The Board established target is not to increase water rates greater than the rate of inflation. Since 1998, water rates are significantly below that target.

The Board's policy is to increase assessment to municipalities for wastewater service at or below the rate of inflation. Costs related to municipal requests for additional/expanded service and federal unfunded regulations may result in a higher assessment.

	1998	2003	2008	2013	2018	
Water Rates for a Typical 3-person household as a percent of Median Income	0.52%	0.42%	0.41%	0.46%	0.42%	
Water Revenue per Typical Customer Actual Inflation Adjusted	\$ 228.12	\$ 210.72 \$257.40	\$ 221.64 \$293.33	\$ 254.16 \$325.69	\$ 292.68 \$350.67	
Wastewater Assessments: (inflation 53.7%)						2013 vs 1998
Cape Elizabeth	\$ 944,000	\$ 863,052	\$ 1,049,052	\$ 1,365,084	\$ 1,575,912	67%
Cumberland	\$ 315,800	\$ 498,144	\$ 764,236	\$ 713,940	\$ 905,364	187%
Gorham	\$ 428,200	\$ 490,608	\$ 924,732	\$ 1,084,464	\$ 1,133,436	165%
Portland	\$ 6,972,900	\$ 8,753,220	\$ 9,951,852	\$ 10,540,044	\$ 12,616,080	81%
Westbrook	\$ 1,588,300	\$ 1,599,100	\$ 1,800,540	\$ 2,533,176	\$ 2,539,800	60%
Windham	\$ 46,000	\$ 45,996	\$ 214,320	\$ 351,756	\$ 366,768	697%

Current Status, Challenges and Impact to Current Budget:

Water rates are assumed to increase by 5.6% effective January 1, 2023. Since 1998, water rates have increased the same amount as the long-term inflation rate. The proposed increase is consistent with the Board of Trustees' direction to have incremental water rate increases annually. Increases are needed to meet the increasing capital costs to replace aging water mains and funding a new capital reserve fund contribution.

In 2023, Wastewater assessments increased on average by 14% - higher than rate of inflation. Higher biosolids disposal and chemicals costs are significant costs and are rising at a rate higher than inflation. Biosolids cost rise is due to the general concern in PFAS is making it more difficult to dispose of biosolids and more expensive. Supply chain issue and strong demand for chemicals has caused chemical costs to rise.

Strategic Goal 6: Employees and Work Environment

The District will have well trained and satisfied employees who work in a safe and productive work environment.

Background

Since 1995, a periodic survey of all employees is conducted. The survey provides employee feedback on the work environment including questions related to compensation, management and policies.

The premium paid on workers' compensation is partially based on a modification factor (MOD). The factor compares the District's injury rate with other organizations with similar risk exposure. The District seeks workers' compensation injury rate that is no higher than industry average (i.e. – a rating of 1 or less).

Finding time for training is an important goal. The goal that has been established is an average of 80 training hours per employee.

Strategic Benchmarks (updated every 5 years):

	1998	2003	2008	2013	2018
District's biennial Employee Satisfaction Average Score - Range 1 (lowest) to 6 (highest)	3.52	4.02	4.42	4.48	N/A
Workers' Compensation Modification Factor – 1.00 = Industry average (goal is less than 1)	1.62	0.99	1.06	1.06	087
Average Training Hours Per Employee – current goal is 80 hours	22	55	83	105	82

Note: The employee satisfaction survey format was changed in 2018 so comparable numbers are not available.

Current Status, Challenges and Impact to Current Budget:

Late 2019, an employee satisfaction survey was conducted. Based on the survey results, three areas of focus are: inconsistent application of policies, compensation, and improved internal communication.

The current workers' compensation modification factor indicates that our injury rate is below average for our industry. We will continue our efforts to maintain a rate below 1, which indicates an organization is average.

Management development and consistency of practice efforts continue through our commitment of an average of 80 hours of training per employee. The water and wastewater departments continue an apprentice program to provide a broad education to our new employees.

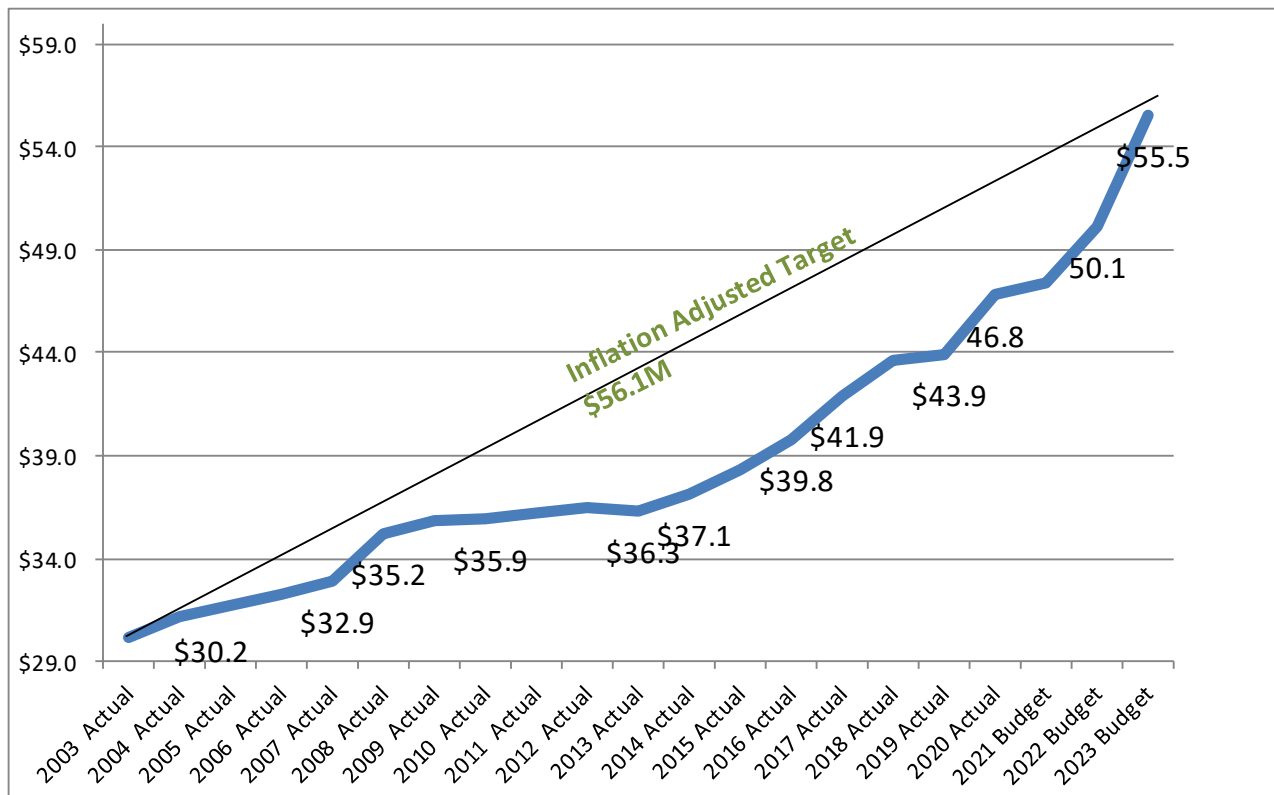
Starting in 2021, the Employees Services department staff was increased by an additional person for the full year to continue improving services and programs focusing on employment development and support.

Board Established Annual Budget Guidelines

To help guide staff, the Board of Trustees set four guidelines for the budget process.

<u>Guideline</u>	The Operating Funds' Budget will not increase more than the rate of inflation over the long-term. The annual target is rate of inflation plus any unfunded federal/state/local mandates and funding for water main renewal of up to 1% of water revenues.
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The Guideline is established to limit growth of the budget to a reasonable growth level not exceeding the inflation rate. Inflation for the past year 8.3%. The budget contains a 10.9% increase. **Over the long-term, the requested budget is \$0.5 million lower inflation** not adjusted for federal/state/local mandates.



<u>Guideline</u>	Capital expenditures will be consistent with the levels recommended in the Water and Wastewater system plans.
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A guideline was established to ensure capital projects are consistent with various plans including the Water Master Plan, Comprehensive Plant and System plans, and Combined Sewer Overflow plans. **The proposed capital expenditures meet the guidelines – see Infrastructure and Operational Evaluation Plans in the Capital Expenditures section for details.**

Board Established Annual Budget Guidelines (continued)

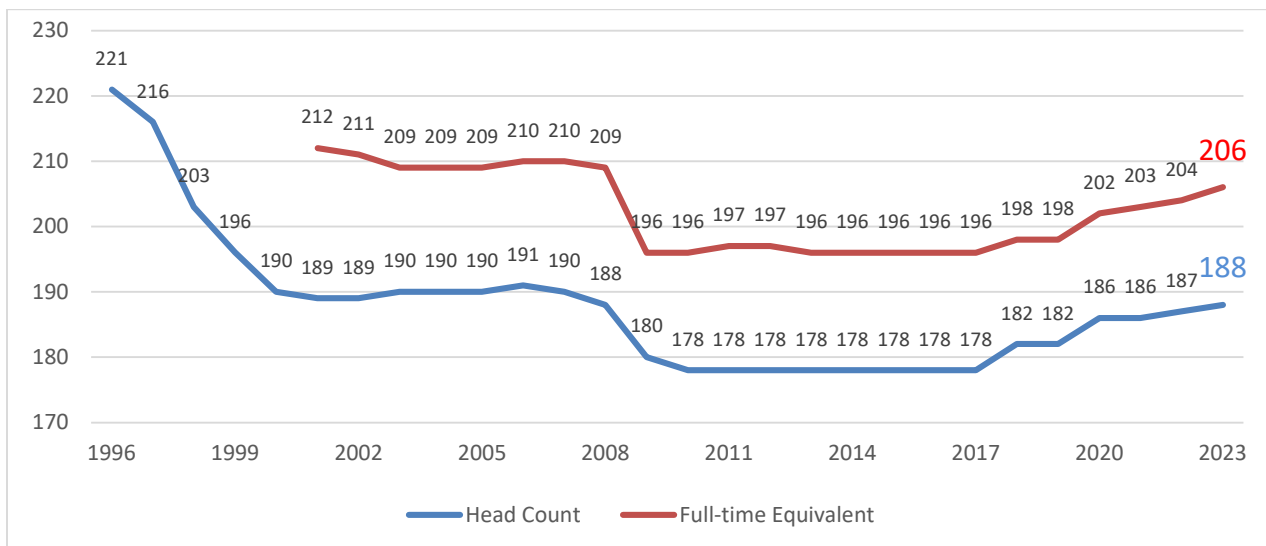
<u>Guideline</u>	Water Revenue Requirement and Wastewater Assessments increases will not exceed the rate of inflation excluding the impact of mutually agreed upon changes in services, capital investments, surplus fund utilization or Board's request to increase surplus balance.
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At the June 2022 Workshop, staff presented updated targets for 2023 that were higher than expected due to rise in prices for almost all services and products. Each wastewater community was informed to expect a higher 2023 assessment. **The proposed 2023 is better than those revised targets except for Gorham and Westbrook.** Westbrook Regional Treatment plant costs were higher than expected.

	2023 Revised Target		2023 Proposed Budget	
Water	\$29,200,000	8.9%	\$29,043,602	8.3%
Cape Elizabeth	\$2,338,972	13.5%	\$2,300,004	11.6%
Cumberland	\$1,232,983	22.6%	\$1,184,904	17.8%
Gorham	\$1,525,819	16.2%	\$1,566,816	19.3%
Portland	\$15,841,931	13.5%	\$15,798,744	13.2%
Westbrook	\$3,642,884	14.8%	3,723,096	17.3%
Windham	\$532,566	14.5%	\$515,808	10.9%

Salary and benefits are one of the District's most significant costs. To control costs, a targeted headcount is established. **The proposed budget contains 188 employees and 206 full-time equivalent employees – meeting the Goal.**

<u>Guideline</u>	The number of employees will not exceed 189 and the full-time equivalency (FTE) will not exceed 206.
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External Factors Impacting the Budget

Economy

Greater Portland's unemployment rate has declined to pre-Covid levels of 2.5%. During most of 2022, the real estate market has been extremely hot with the area ranked in the top 10 markets nationally. The national economy issues have impact the District with significant cost increases. Approximately 10% of the District's expenses are related to chemical, metal and fuel markets. The 2023 budget reflects the commodity prices available in mid-2022. Rising interest rates have an impact on borrowing costs and investments returns. For the planned 2023 bonds, the projected borrowing cost is estimated to increase by \$150,000 annually. Offsetting those costs are higher earnings on operating reserve balances, which are projected to be \$150,000 higher. The equity market returns were lower than the actuarial assumptions which caused the annual pension costs to increased by \$0.8 million resulting in a cont

Regulatory Mandates

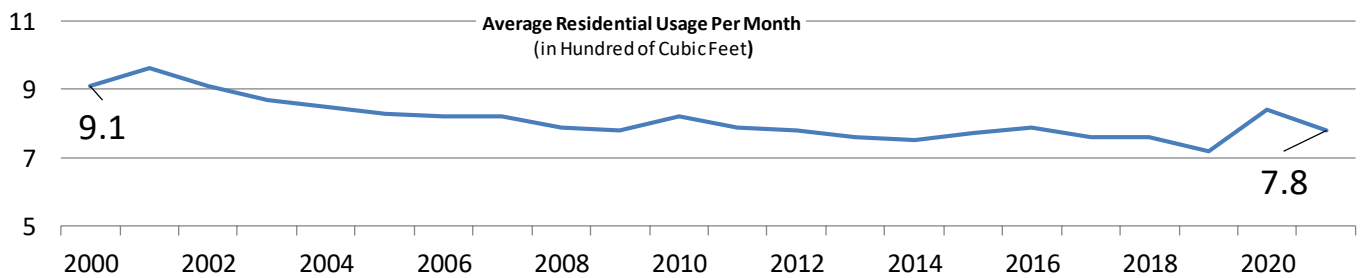
The water and wastewater industry must comply with various federal and state regulations with two of the most important regulations being the Safe Drinking Water Act (SDWA) and Clean Water Act (CWA). Regulatory focus has been the compliance with the long-term surface water disinfection rule under the SDWA and the combined sewer overflow requirements under the CWA. The 2023 Budget includes the impact of debt service of \$14.1 million in capital expenditures and approximately \$200,000 in operating expenses addressing these two focus areas. Two relatively new regulatory issues relate to drinking water's Lead and Copper Rule Revision and wastewater's PFAS concern. The 2023 Budget includes \$180,000, including hiring a Water Quality Program Manager, to address the rule revisions. The PFAS concern in wastewater biosolids has caused Maine to restrict where the biosolids can be disposed resulting in A \$1.1 million increase is costs.

Capital Project Funding from ARPA

Through the American Rescue Plan Act (ARPA), the Federal government has allocated significant dollars to state, local and county governments that may be used for water and sewer projects. In 2022, the District received \$400,000 for Portland Wastewater capital project. Several Water projects that will occur in 2023 have been awarded principal forgiveness in the amount of \$850,000. The Town of Windham intends to allocate \$1.7 million of federal funds to the new North Windham sewer systems. The amounts receive decrease the amount needed to be bonded or withdrawn from capital balances.

Water Consumption

Though the District has ample supply of water, consumers have reduced their water consumption. The average residential household usage (HCF) has declined by more than 15% since 2000. Some of the reasons for the long-term decline are rising wastewater fees encouraging conservation and the availability of more water efficient household appliances. The uptick in recent years relates to COVID.



Significant Budget Uncertainties

During the budget development, certain assumptions are made. Several budget areas have significant uncertainties including the following:

Salaries and Wages (\$14.52 million or 26.2% of total budget). The Union wage rates in the 2023 Budget are consistent with the Union Contract that was settled as the budget was being completed. In addition, Non-Union anticipated increases for 2023 are consistent with budget projections.

In addition, the operating budget assumes 18,560 hours of overtime and doubletime pay. The amount of overtime and doubletime is directly related to amount of emergency repair work that is needed. For every additional 1,000 hours of overtime/doubletime pay, costs increase by approximately \$50,349.

Purchased Power (\$2.10 million or 3.8% of total budget). Electricity costs consist of delivery charges purchased from Central Maine Power (\$930,621) and energy costs purchased from Constellation Energy (\$1,170,601). Typically, CMP implements a rate adjustment effective July 1st. The amount of the 2023 increase is unknown. The 2023 budget assumes a 3% increase. For every variance of 1%, the budget would be impacted by approximately \$9,300. Energy contracts lock in the prices for the whole year.

The actual amount of electricity used varies primarily based on weather conditions, which impacts the amount of water produced and wastewater processed. In the last five years the variance between the highest and lowest kilowatt amount of electricity for individual accounts in total is 7%, which would impact the budget by approximately \$147,000.

Chemicals (\$1.97 million or 3.6% of total budget). The chemical contract is put out to bid each December. Prices used for the budget are estimates using the June market prices. Chemical prices have been volatile and have reacted to the global/national economy.

Biosolids Disposal (\$3.44 million or 6.2% of total budget). The volume of material left at the end of the wastewater process can vary significantly based on weather and operational challenges. A key measurement is the percent of solids left after removing as much water as possible from the material. The 2023 budget assumes 21%. In the past 5 years, the annual average has varied from 18.6% to 20.1%. A 1% difference is approximately \$172,232.

In addition, the per wet ton disposal rate with the vendor is based on the consumer price index and other factors. The final price will not be determined until sometime during Q1 2023. The budget estimates a rate of \$142/wet ton. Given the projected volume of biosolids, each dollar of change in the rate is \$24,258.

Weather The weather is a noteworthy determinant of operating expenses. The timing and duration of below freezing weather impacts the number of water main and service leaks. The amount of snowfall and timing of snow melt and rainfall impacts the amount of storm water that must be pumped to and treated by wastewater plants. The duration of hot summer days impacts the amount of water produced by the water treatment facility. For this budget, the past three-year average of water produced and wastewater treated was assumed for operating expenses projections.

Major Policy and Resource Allocation Decisions

Operating Budget

Personnel. The authorized headcount was increased by one (1), the addition of an Project Engineer in Engineering Services. This position will mostly impact the Capital budget and will focus on the North Windham Wastewater Treatment project.

Other departments had position additions and eliminations that had no net impact on the overall headcount.

Overall, the budget continues our emphasis on training employees with the continued goal of providing an average of 80 hours training.

Employee Benefits The costliest employee benefits are pension benefits and health insurance. The defined benefit plan contributions in the 2023 Budget increased by \$826,178 due to the declines in the market value of plan assets. Health insurance premiums increased by 2.7%, and when also factoring in shifts in employee usage and plan changes, this resulted in a budget increase of 3.7% (\$102,858).

Wastewater Sewer Lines Inspection In 2008, a commitment was made to inspect all sewer lines at least once every 10 years. In 2023, \$61,250 was allocated to meet that commitment.

Wastewater Combined Sewer Overflow (CSO) Monitoring To assist the municipalities in meeting their federal CSO requirements, the District remotely monitors the flow. In 2023, \$154,000 was allocated to meet their request.

Water System Flushing Starting in 2012, a renewed effort was made to flush the whole distribution system over a 3-year cycle. Flushing the system improves the water quality in the distribution system. The 2023 budget continues this effort by allocating \$111,953.

Renewal and Replacement - The annual commitment of current revenue committed to capital projects was \$3.95 million which is a decrease of \$0.58 million over last year's budget. The contribution covers the expected capital expenditure withdrawal except for \$530,000. The funds have adequate surplus balances to pay the \$530,000.

Biosolids –The budget assumes a disposal rate of \$142/wet ton, that is a 42.0% increase over the 2022 Budget assumption of \$100/wet ton. The 2023 Budget assumes that issues with per- and poly-fluoroalkyl substances (PFAS) will impact the budget. In the 2022 Budget the District expected the State of Maine has put in place a \$10/wet ton regulatory fee to deal with issues regarding PFAS, the impact of which was estimated at \$233,350. This fee was never enacted and was removed from the 2023 Budget.

Major Policy and Resource Allocation Decisions (continued)

Capital Projects

The 2003 water strategic master plan noted that a considerable amount of water mains will be reaching the end of their useful life in the next 20 years. In 2023, the amount dedicated to replace aging water mains will be \$7.0 million.

Other significant capital projects include the following:

- Windham – North Windham Treatment System: A new treatment wastewater system is being constructed to serve the North Windham area in Windham. For 2023, it is expected to spend \$8 million on the project.
- Portland’s East End Wastewater Treatment Plant: Significant upgrades are planned (\$2.1 million), including the beginning the upgrades of the secondary clarifier sludge rake and dewatering system.
- Pump Station upgrades in Cape Elizabeth (Peabbles Cove - \$75,000), Cumberland (Longmeadow - \$105,000), Portland (India Street - 201,000) and Westbrook (East Bridge and Cottage Place - \$300,000)
- Several projects started in previous years will be completed including Ward’s Hill water tank construction (\$7.5 Million), Portland’s East End Wastewater Primary Sludge Handling Upgrade (\$5.1M) and Westbrook Regional Wastewater Treatment Plant aeration system (\$12 million)

Revenues

To balance the desire to provide funding for infrastructure improvement and operational needs with keeping water rates affordable, the Board adopted a policy of small modest annual increases close to the rate of inflation. A 5.6% increase is planned to be implemented with an effective date of January 1, 2023.

The January 2023, 5.6% increase includes allocating 1.0% to the Capital Reserve fund. The Maine Public Utilities Commission adopted a rule in 2013 allowing the District to increase water rates up to 10% of water revenues and dedicate revenues for capital improvement. After the proposed increase, the percent of water revenue allocated to the Capital Reserve annually will be 10.0%. The proposed budget assumes the additional reserve will be used to pay the debt service of \$2 million bond to finance replacing aging water mains. Because of lower than anticipated interest cost and growth in water sales, the fund has a surplus balance. In 2023, \$1 million will be withdrawn from the fund reducing the need for the annual budget allocation.

2023 Operating Budget Summary

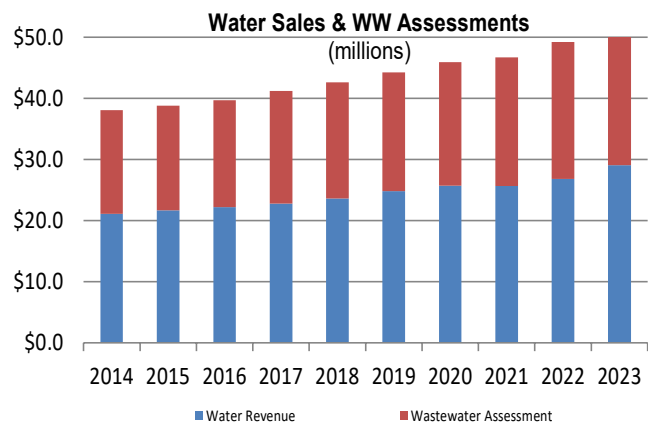
The proposed budget includes \$56.07 million in revenues and \$55.5 million in expenses.

Revenues

The two major revenue sources are water sales (\$29.04 million or 51.8% of total revenue) and wastewater assessment revenues (\$25.40 million or 45.3% of total revenue). Wastewater revenues have increased from \$16.97 million (49.7%) since 2014 principally due to addressing capital needs requested by municipalities or aging infrastructure.

Water revenues are generated from potable water and sprinkler charges to individual customers, and public fire protection charges to municipalities. The 2023 Budget assumes an increase of 5.6% over current rates effective April 1, 2022.

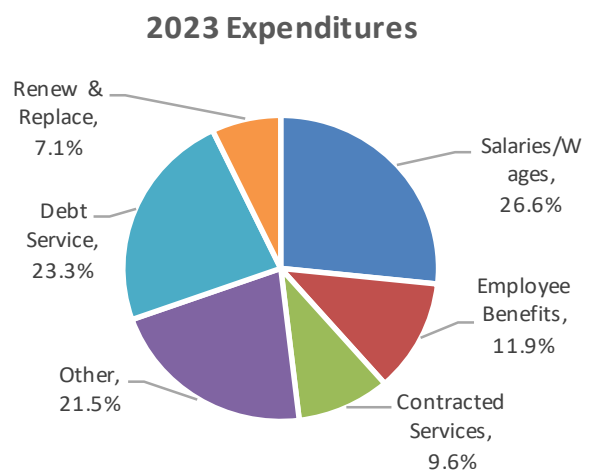
Wastewater assessments are the amounts billed individual municipalities to provide collection, sewer treatment, interception, utility billing services and, by request, collection and billing services. Assessments in 2023 increased 13.7% overall (\$3.06 million).



Expenses

Operating Expenses increased to \$55.5 million, an increase of 10.9%.

Personnel Costs, (Salaries/Wages and Employee Benefits) which are 38.5 % of the total budget, increased 14.5% due to the average labor rate increase and higher benefit costs (primarily pension). Debt Service (23.3% of expense) increased 7.2% due to new debt issues. Contracted Services (\$5.31 million) increased 11.9% (\$563,841). Renewal and Replace contributions decreased \$577,250 (12.8%) while Other Expense increased \$1.67 million (16.3%).



2023 Capital Budget Summary

The proposed Capital Budget is \$23.09 million with projects for the water and wastewater funds of \$11.23 and \$11.86 million, respectively.

Water

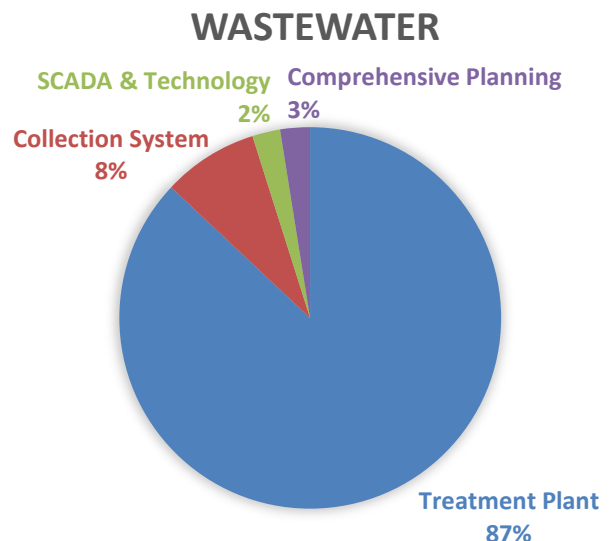
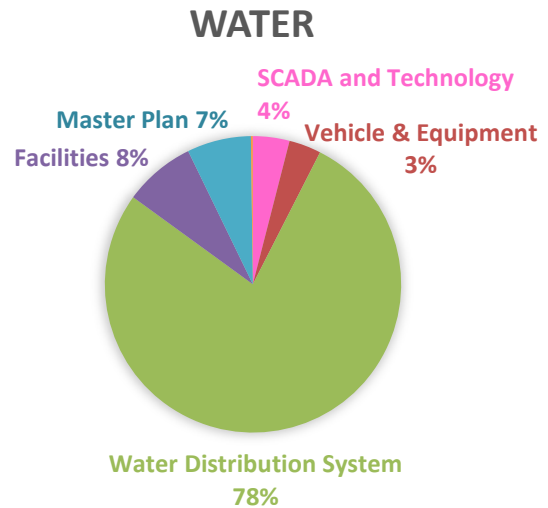
Of the \$11.23 million in water capital projects, the largest component (78%) involves the renewal of water distribution assets such as mains, services, meters and hydrants. The other categories include water facilities and security (8%), vehicles and equipment (3%), technology and SCADA (4%), master plan (7%) and water supply (<1%). The HVAC upgrade of the district's main office & garage was postponed a year to 2023-2025 and the overall budget has increased by \$0.50 million. \$0.80 million is budgeted for a Comprehensive Infrastructure Asset Management Plan that is done periodically to guide future Capital Plans.

The projects will be funded by issuing \$6.60 million in bonds, utilizing \$2.53 million in drawdowns from renewal and replacement funds, \$1 million from Capital Reserve, \$800k from the Master Plan Reserve and \$300k from Operating Expense.

Wastewater

The wastewater capital plan includes a wide variety of projects. In 2023 there is \$475k budgeted for roof replacements/rehabs on wastewater pump stations. For the Portland and Westbrook treatment facilities there is \$280k to replace SCADA servers. \$370k is designated to conduct condition assessments of outfalls and force mains in Cape Elizabeth, Peaks Island and Portland mainland. Also on Peaks Island is \$100k for stormwater upgrades. The construction portion of the North Windham treatment/collections system is starting with a budget of \$8 million.

The projects will be funded by issuing \$1.97 million from renewal and replacement funds, the issuing of \$9.50 million in bonds, and \$390k in Operating Expense funds these projects.



2023 Combined Water and Wastewater Operating Funds

Total revenues are \$56.07 million, \$5,843,164 or 11.6% higher than last year's budget. The Budget proposes a 5.6% water rate increase, along with a 5.0% increase for Public Fire Protection, effective January 2023. Wastewater Assessment increases for the full year are budgeted in Cape Elizabeth (11.6%), Cumberland (17.8%), Gorham (19.3%), Portland (13.2%), Westbrook (17.3%). Windham's assessment will have a small decrease (0.5%).

Operating Expenses are \$55.52 million, an increase of 10.9%. The following pages provide additional detail.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Beginning Fund Balance	\$12,077,892	\$12,329,462	\$12,689,933	\$12,402,544		
Water Sales	26,509,749	12,875,577	26,824,845	29,043,602	2,218,757	8.3%
Assessment Income	21,083,736	11,173,098	22,346,196	25,403,484	3,057,288	13.7%
Contracted Billing Income	212,796	110,118	220,236	242,268	22,032	10.0%
Interest Income	-27,737	-397,457	104,660	354,946	250,286	239.1%
Other Income	991,754	599,318	726,451	1,021,252	294,801	40.6%
Total Revenue	48,770,298	24,360,654	50,222,388	56,065,552	5,843,164	11.6%
Salaries & Wages	12,237,201	6,140,364	12,788,195	14,521,475	1,733,280	13.6%
Employee Benefits	5,928,646	2,712,287	5,669,276	6,612,066	942,790	16.6%
Biosolids Disposal	2,275,184	1,132,548	2,333,500	3,444,636	1,111,136	47.6%
Chemicals	1,238,597	774,192	1,296,355	1,974,650	678,295	52.3%
Contracted Services	4,567,713	2,330,043	4,744,771	5,308,612	563,841	11.9%
Heat/Fuel Oil	334,938	285,548	367,960	502,143	134,183	36.5%
Insurance	225,181	131,443	260,142	291,901	31,759	12.2%
Materials & Supplies	1,715,342	1,019,833	1,819,287	1,997,802	178,515	9.8%
Other Expense	487,686	272,346	708,958	723,479	14,521	2.0%
Purchased Power	1,978,899	1,037,183	2,086,722	2,101,222	14,500	0.7%
Regulatory/Taxes	333,961	263,383	560,236	329,406	-230,830	-41.2%
Tele/Other Utilities	452,739	239,643	433,662	453,184	19,522	4.5%
Transportation	1,156,609	592,403	1,222,561	1,332,618	110,057	9.0%
(less) Trans Offset	-787,208	-424,277	-841,512	-966,072	-124,560	14.8%
Department Expense	32,145,488	16,506,939	33,450,113	38,627,122	5,177,009	15.5%
Debt Service & Lease Expense	11,000,910	5,890,331	12,078,647	12,943,898	865,251	7.2%
Renewal & Replacement - Direct	3,244,849	1,723,250	3,446,500	2,749,250	-697,250	-20.2%
Renewal & Replace - Indirect	960,000	526,031	1,050,000	1,075,000	25,000	2.4%
Rewl & Replce - Contracted	30,000	15,000	30,000	125,000	95,000	316.7%
Operating Expense	47,381,247	24,661,551	50,055,260	55,520,270	5,465,010	10.9%
Current Surplus (Deficit)	1,389,051	-300,897	167,128	545,282		
Transfer to R&R	-100,000	-150,000	0	0		
Transfer to Capital Reserve	-216,041	-90,018	-180,036	-543,325		
Transfer to Land Fund	-821,441	0				
Return of WW Accumulated Surplus	0	-309,203	0	0		
Ending Fund Balance	12,329,461	11,479,344	12,677,025	12,404,501		

2023 Combined Operating, Capital and Grant Funds

The total combined revenue and funding for 2023 is \$79.17 million, total combined expenditures are \$78.64 million. The combined budgeted surplus for 2023 is \$527,140.

Operating fund details are included in Operating Revenues, Departmental Expense and Human Resources Sections. Capital funds details are included in the Capital Finance and Capital Expenditures Sections. The Budget by Fund Section provides a summary of the Operating and Capital budget by individual enterprise fund – water fund and six (6) wastewater funds for each community provided with wastewater service.

	Operating	Capital	Land Fund	Total
Water Sales	\$29,043,602	-	-	\$29,043,602
Assessment Income	25,403,484	-	-	25,403,484
Water Bond	-	6,600,000	-	6,600,000
Water R&R	-	2,535,000	-	2,535,000
Wastewater Bond	-	9,500,000	-	9,500,000
Wastewater R&R	-	1,965,000	-	1,965,000
Water Capital Reserve	-	1,000,000	-	1,000,000
Water Master Plan Reserve	-	800,000	-	800,000
Water Operating Fund	-	300,000	-	300,000
Cape Elizabeth Operating Fund	-	35,000	-	35,000
Gorham Operating Fund	-	20,000	-	20,000
Portland Operating Fund	-	335,000	-	335,000
Contracted Billing Income	242,268	-	-	242,268
Interest Income	354,946	-	15,000	369,946
Other Income	1,021,252	-	-	1,021,252
Total Revenue	56,065,552	23,090,000	15,000	79,170,552
Salaries & Wages	14,521,475	594,977	-	15,116,452
Employee Benefits	6,612,066	251,219	-	6,863,285
Biosolids Disposal	3,444,636	-	-	3,444,636
Chemicals	1,974,650	-	-	1,974,650
Contracted Services	5,308,612	21,596,428	-	26,905,040
Heat/Fuel Oil	502,143	-	-	502,143
Insurance	291,901	-	-	291,901
Materials & Supplies	1,997,802	538,912	-	2,536,714
Other Expense	723,479	-	-	723,479
Purchased Power	2,101,222	-	-	2,101,222
Regulatory/Taxes	329,406	-	-	329,406
Tele/Other Utilities	453,184	-	-	453,184
Transportation	1,332,618	108,464	-	1,441,082
Trans Offset	(966,072)	-	-	(966,072)
Operating Expense	38,627,122	23,090,000	-	61,717,122
Debt Service	12,943,898	-	33,142	12,977,040
Renewal & Replacement - Direct	2,749,250	-	-	2,749,250
Renewal & Replace - Indirect	1,075,000	-	-	1,075,000
Renewal & Replace - Contracted	125,000	-	-	125,000
Total Expense	55,520,270	23,090,000	33,142	78,643,412
Surplus (Deficit)	545,282	-	(18,142)	527,140

GFOA Budget Presentation Award

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Portland Water District, Maine for its annual budget for the year beginning January 1, 2021. In order to receive the award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and are submitting it to GFOA to determine its eligibility for another award.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Portland Water District
Maine**

For the Fiscal Year Beginning

January 01, 2022

Christopher P. Morrill

Executive Director

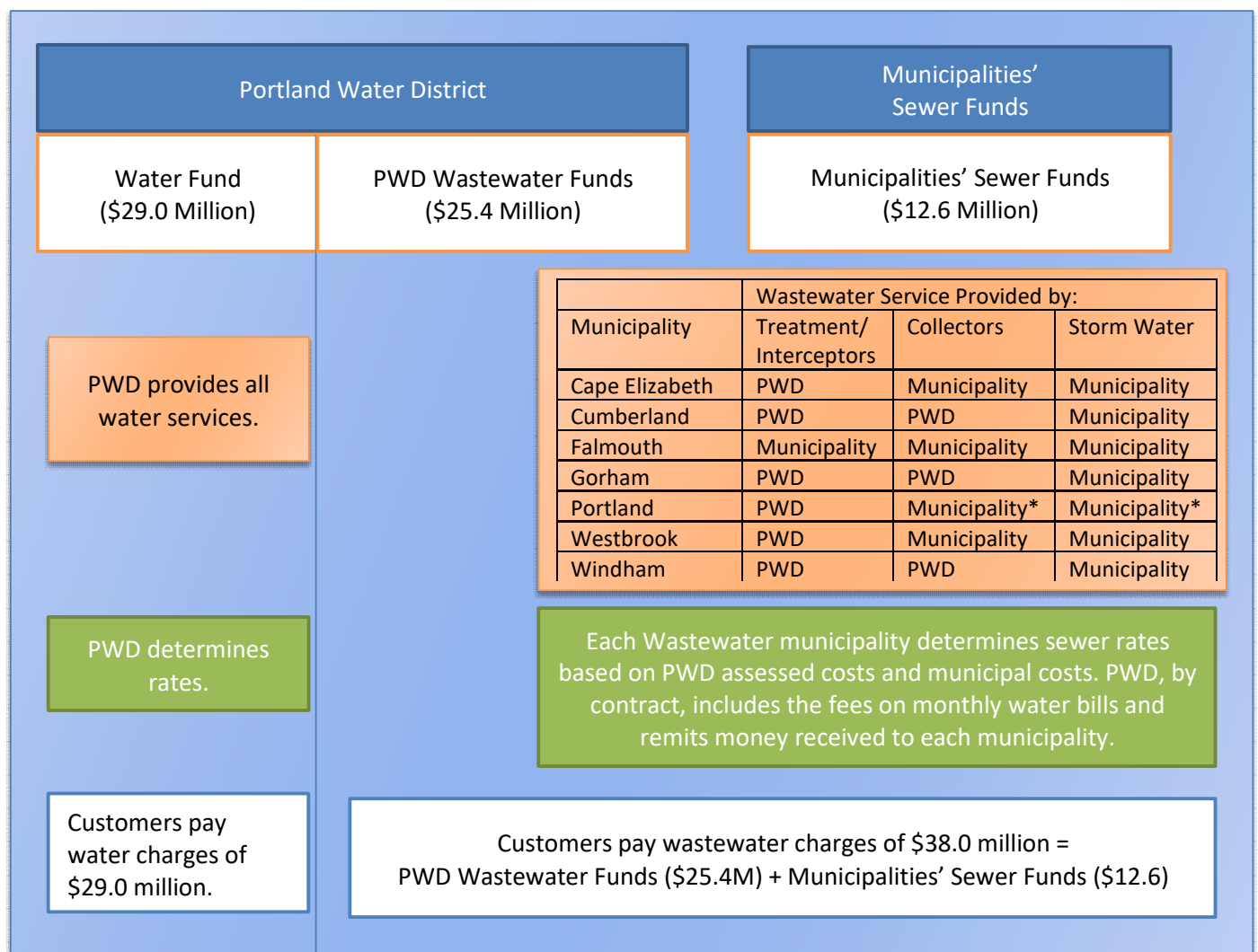
Introduction

The District uses seven enterprise funds – a water fund and six wastewater funds. The six wastewater funds are for the towns of Cape Elizabeth, Cumberland, Gorham and Windham and the cities of Portland and Westbrook. Each of the seven funds has a separate operating and capital budget appropriation. Details are provided for each fund in the Financial Summary section.

Relationship between Portland Water District Funds/Municipalities’ Sewer Funds and the Ratepayer

The District provides water service directly to ratepayers. The cost of water service is recorded in a separate enterprise fund. The District bills ratepayers’ individual monthly charges to the customer.

The District provides certain wastewater services on behalf of six communities – each with a separate enterprise fund. The services provided by the District and Municipality are listed below. The District bills the Municipality for services rendered. The Municipality determines the ratepayers’ rates to recover the District bill and their internal costs. The Municipality has requested the District to include these monthly fees on the water bill mailed to the Ratepayers.



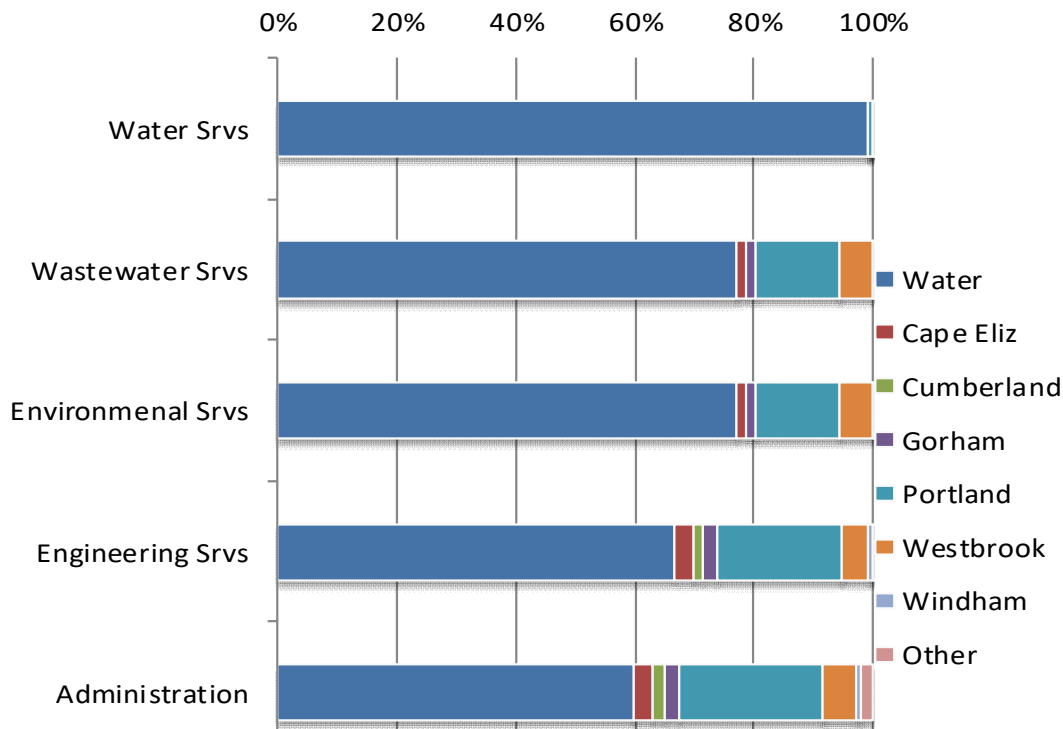
*By contract, the District maintains collectors and storm drain system on Peaks Island, a small part of Portland

Relation of Functional Units (Departments) to Funds

As expenses are incurred, each department charges a cost center, which indicates to what fund the expenditure belongs. The totals below show how the costs for each department are spread across the organization. Not surprisingly, 99.1% of the costs of the Water Services department are assigned to the Water Fund and 98.5% of the Wastewater Services department costs go to the Wastewater funds. The expenditures of the remaining departments assign between 59.6% and 77.2% of costs to the Water Fund with the remaining going to the Wastewater funds.

Department	Dept Exp	Water	Cape Eliz	Cumber	Gorham	Portland	Westbr	Windh	Other
Water Srvs	\$10,578,947	99.1%	0.1%	0.1%	0.0%	0.5%	0.1%	0.0%	0.1%
Wastewater Srvs	13,845,033	0.2%	9.2%	3.8%	4.4%	67.3%	14.0%	1.1%	0.0%
Environmenal Srvs	2,600,070	77.2%	15%	0.0%	1.4%	14.0%	5.7%	0.2%	0.0%
Engineering Srvs	5,083,882	66.5%	3.3%	15%	2.7%	20.6%	4.6%	0.6%	0.2%
Administration	7,188,767	59.6%	3.5%	1.8%	2.4%	24.1%	5.8%	0.7%	2.1%
<u>Non-Departmental</u>	<u>296,495</u>	<u>100.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Department Exp	39,593,194								

Allocation of Costs Between Departments and Funds



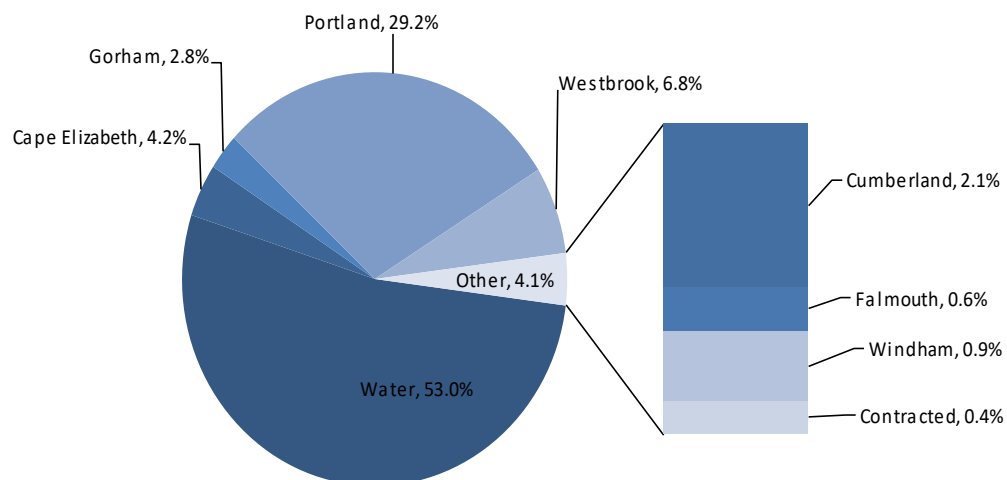
More details on how costs are allocated between departments and funds are included in the Financial Policy section.

2023 Operating Budget by Fund Summary

The table provides a summary of all funds and contract billing cost centers with a grand total. The individual fund information is on the following pages.

	Total	Water	Cape Eliz	Cumber	Gorham	Portland	Westbk	Windham	Falmouth/ Contract
Beg Balance	\$ 12,402,544	\$ 7,816,988	\$ 365,167	\$ 69,976	\$ 169,258	\$ 3,405,260	\$ 358,219	\$ 162,223	\$ 55,453
Water Revenue	29,043,602	29,043,602	-	-	-	-	-	-	-
WW Assess	25,403,484	-	2,300,004	1,184,904	1,566,816	15,798,744	3,723,096	515,808	314,112
Contract Billing	242,268	-	-	-	-	-	-	-	242,268
Interest Income	354,946	203,824	13,842	8,700	6,060	83,224	35,193	1,090	3,013
Other Income	1,021,252	452,119	14,514	4,134	7,861	461,856	78,856	1,912	-
	56,065,552	29,699,545	2,328,360	1,197,738	1,580,737	16,343,824	3,837,145	518,810	559,393
Depart Expense	38,627,122	19,839,010	1,708,816	722,747	932,784	12,313,784	2,697,422	236,783	175,776
Debt Service	12,943,898	7,402,275	432,929	293,408	523,708	2,793,570	915,530	239,778	342,701
Renew & Repl	3,949,250	1,914,935	186,615	181,583	124,245	1,236,470	224,193	42,249	38,961
	55,520,270	29,156,220	2,328,360	1,197,738	1,580,737	16,343,824	3,837,145	518,810	557,438
Surplus (Deficit)	545,280	543,325	-	-	-	-	-	-	1,955
Transfer-Cap Resrv	(543,325)	(543,325)	-	-	-	-	-	-	-
Ending Surplus	\$ 12,404,501	\$ 7,816,988	\$ 365,167	\$ 69,976	\$ 169,258	\$ 3,405,260	\$ 358,219	\$ 162,223	\$ 57,408

Revenues by Fund 2023

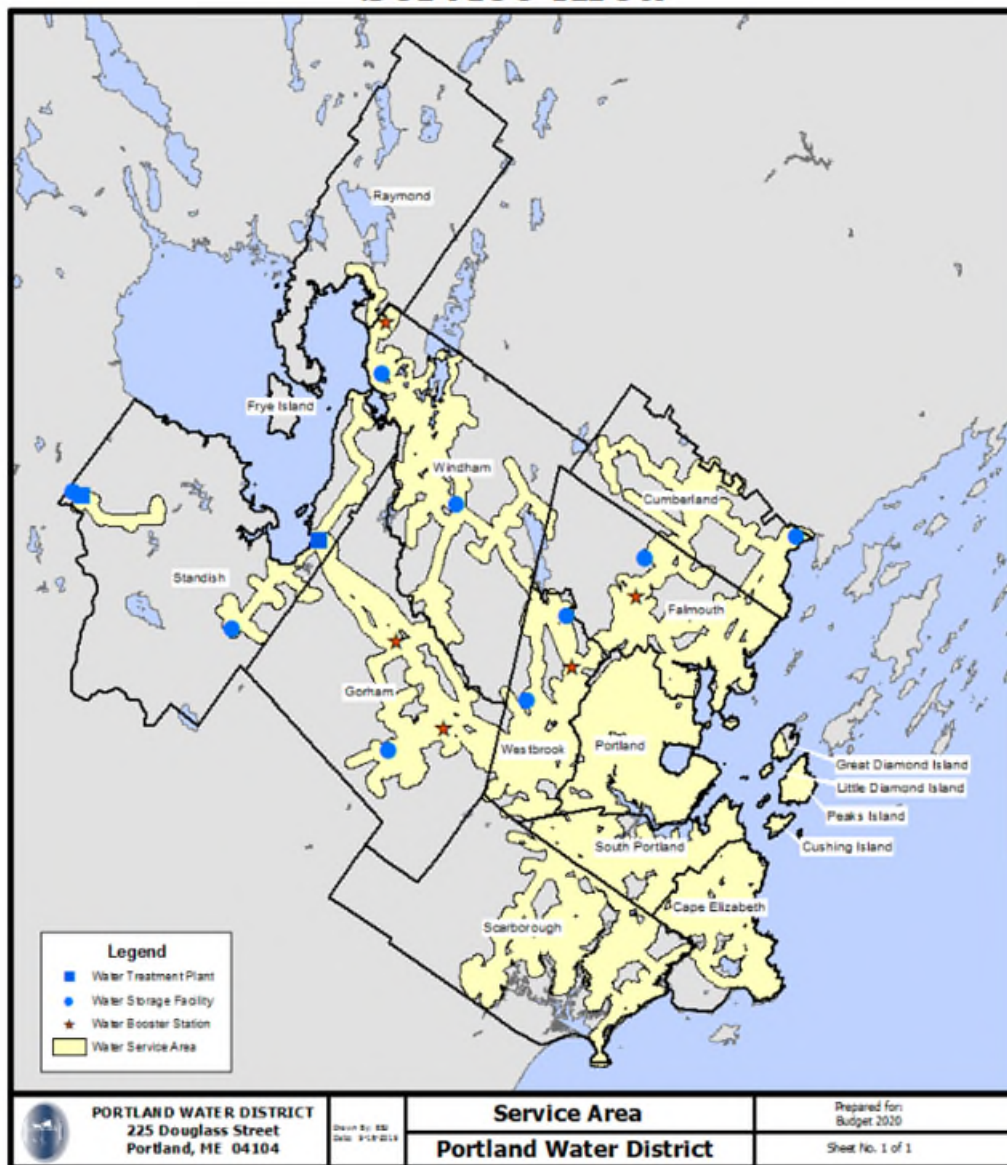


Fund: Water

Background

The Portland Water District's charter authorizes the District to provide service to the inhabitants of 11 cities and towns. Approximately 219,000 inhabitants are served potable drinking water. In addition, water for public and private fire protection is provided. Water operation is regulated by the Department of Health and Human Services for water quality and the Maine Public Utilities Commission. Effective January 1, 2016, the Commission granted a waiver from their laws/rules including the Board review of water rate changes, financing transactions, capital reserve and new customer service line standards.

Portland Water District Service Area



Fund: Water

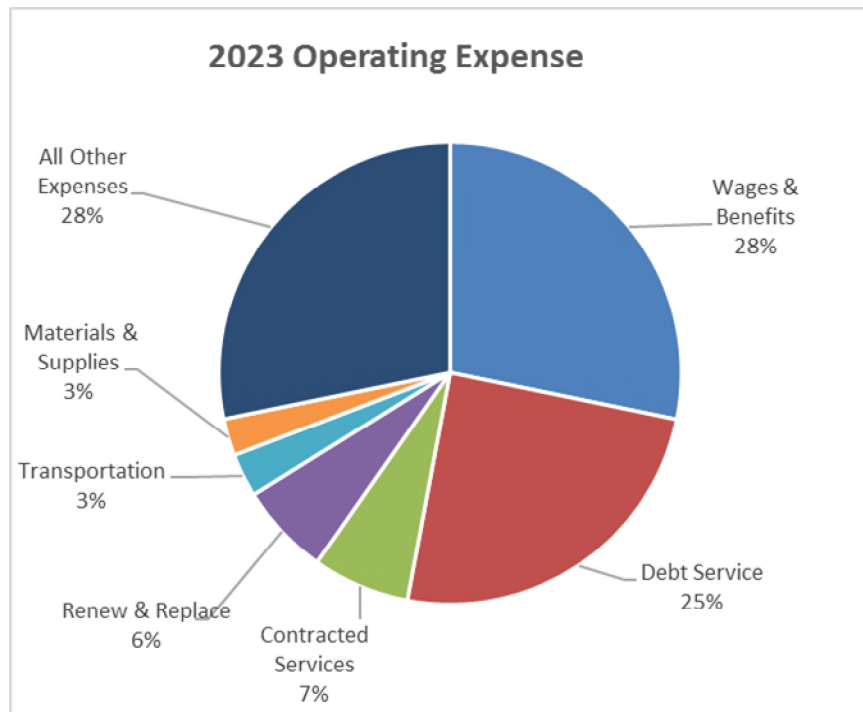
The Portland Water District operates two water systems; the Greater Portland System delivers 21 million gallons of water per day from Sebago Lake and the Steep Falls System delivers 30,000 gallons per day from a single well in Standish. The quality of the water from Sebago Lake is exemplary, and the District was fortunate to receive a waiver from the filtration requirement that is normal for most surface water supplies. In order to maintain this waiver, the District must have an effective source protection program and meet stringent requirements for disinfecting the water.

2023 Financial Summary

The proposed 2023 Operating expense and Capital budgets are \$29,156,220 and \$11,235,000, respectively.

Operating Expense are \$2,029,335 or 7.5%, higher than the previous year. Departmental Expense are up 13.3% (\$2,325,396) and Debt Service & Lease Expense increased \$446,669 (6.4%) due to newly issued debt. Renewal & Replacement decreased 27.9% (\$742,630).

The 2023 Capital budget includes \$7.0 million for distribution main renewals, \$0.8 million for a Comprehensive Infrastructure Asset Management Plan, and \$0.3 million for a preliminary study on emergency water storage/60" transmission system that is estimated to go to construction towards the end of the CIP 5-year plan.



2023 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted increased 1.5% (2,602 hours). This combined with the District's average wage rates increase of 12.2% resulted in a 14.5% (\$747,394) increase in Salaries/Wages

Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to increase by 16.5% (\$359,706).

Chemicals – Costs are budgeted to increase \$245,067 (52.0%). Chemical usage is project to be flat. The increase is entirely attributable to the rise in the per unit cost of all chemicals. All major chemicals have double digit increases in per unit cost ranging from 15% for Liquid Oxygen to 77% for Sodium Hypochlorite.

Contracted Services – This cost for services provided by third party vendors increased \$168,318 (9.0%). The 2023 Budget includes a new expenditure of \$75,000 for an outside contractor to do an inventory of service lines as part of compliance to the new lead/copper regulations.

Heat/Fuel Oil – This expense primarily covers the cost of fuel for the generator and heating at the treatment plant. Expense increased 59.6% (\$70,441) due to an increase in the per gallon cost of fuel from \$2.29 to \$3.80/gallon.

Purchased Power – Purchased Power is expected to increase 4.4% (\$17,709) mainly driven by higher estimated energy rates for the treatment facility resulting in a 32.7% (\$52k) increase in large energy. This is offset by a significant decrease in T&D rates for the facility; an impact of -23.2% (-\$30k). Generally across energy and T&D categories for medium and small accounts there was a reduction in rates and in usage.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as administrative time or training) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services allocated to the Water fund increased \$587,485 or 11.5%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.

Debt Service/Lease Expense – This is the annual principal and interest payments on bonds issued to finance capital projects. This expense will increase 6.4% (\$446,669) due to the issuance of new debt. Also starting to be a factor is the rise of interest rates. Overall debt is expected to increase from \$59.0 million at the end of 2022 to \$62.2 at the end of 2023.

Renewal & Replacement – These are dollars put aside to fund capital projects. The total for this item is \$1,914,935 in the 2023 budget, an decrease of \$742,630 or 27.9%.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Water Sales	26,509,749	12,875,577	26,824,845	29,043,602	\$2,218,757	8.3%
Interest Income	-23,552	-274,709	57,000	203,824	146,824	257.6%
Other Income	<u>307,087</u>	<u>266,620</u>	<u>425,076</u>	<u>452,119</u>	27,043	6.4%
Total Revenue	26,793,284	12,867,488	27,306,921	29,699,545	2,392,624	8.8%
Salaries & Wages	4,907,106	2,285,664	5,161,371	5,908,765	747,394	14.5%
Employee Benefits	2,259,186	975,579	2,184,465	2,544,171	359,706	16.5%
Chemicals	415,913	253,476	472,809	718,471	245,662	52.0%
Contracted Services	1,749,578	703,594	1,867,966	2,036,284	168,318	9.0%
Facilities	96,124	50,245	110,723	105,381	-5,342	-4.8%
Heat/Fuel Oil	101,804	76,258	118,283	188,724	70,441	59.6%
Insurance	16,605	17,607	32,707	37,012	4,305	13.2%
Materials & Supplies	668,515	321,494	756,741	773,569	16,828	2.2%
Other Expense	106,664	-1,441	126,759	149,266	22,507	17.8%
Purchased Power	383,655	222,582	403,724	421,433	17,709	4.4%
Regulatory/Taxes	272,464	251,582	282,186	280,276	-1,910	-0.7%
Tele/Other Utilities	94,242	45,525	96,250	96,220	-30	0.0%
Transportation	792,722	395,815	811,305	903,528	92,223	11.4%
SS - Administration	3,819,586	2,022,907	3,880,027	4,300,768	420,741	10.8%
SS - Engineering Services	991,882	615,540	974,057	1,068,302	94,245	9.7%
SS - Environmental Services	101,108	64,525	122,535	193,695	71,160	58.1%
SS - Water Services	<u>92,882</u>	<u>96,461</u>	<u>111,806</u>	<u>113,145</u>	<u>1,339</u>	<u>1.2%</u>
Operating Expense	16,870,036	8,397,413	17,513,714	19,839,010	2,325,296	13.3%
Debt Service & Lease Expense	6,317,162	3,413,815	6,955,606	7,402,275	446,669	6.4%
Renewal & Replacement - Direc	1,964,000	1,000,000	2,000,000	1,250,000	-750,000	-37.5%
Renewal & Replace - Indirect	<u>604,604</u>	<u>329,445</u>	<u>657,565</u>	<u>664,935</u>	<u>7,370</u>	<u>1.1%</u>
Total Expense	25,755,802	13,140,673	27,126,885	29,156,220	2,029,335	7.5%
Current Year Surplus (Deficit)	1,037,482	-273,185	180,036	543,325		
Transfer to Capital Reserve	-216,041	-90,018	-180,036	-543,325		
Transfer to Land Reserve	-821,441	0	0	0		
Prior Year Surplus	<u>6,824,529</u>	<u>6,824,529</u>	<u>6,879,213</u>	<u>7,816,988</u>		
Accumulated Surplus	6,824,529	6,461,326	6,879,213	7,816,988		

Operation Summary

The current treatment processes at the Sebago Lake Water Treatment Facility (SLWTF) include ozone, ultra-violet energy (UV) and chloramines for disinfection, fluoridation for dental benefit, and the addition of a corrosion control inhibitor. In order to meet the requirements of the new Long-Term II Treatment Rule, the District installed a UV treatment system in 2014. The construction project also included the replacement of the 20-year-old ozone production system.

The District maintains approximately 1,015 miles of water mains that carry the water from Sebago Lake to customers' homes. During the past few years, more efforts are being focused on the renewal of older water mains in our system. In 2023, the District plans to spend \$7.0 million dollars to replace and upgrade these mains, and intends to maintain this level of investment in order to achieve our renewal objectives. In addition, the Transmission/Distribution group performs operation and maintenance procedures to ensure that our customers experience minimal disruptions in water service.

A multi-year effort continues to improve hydraulic capacity and meet system demands in the 407 pressure zones. The completed phases included construction of a new booster pump station in North Gorham and a water main from this booster station to Main St. in Gorham Village. The new Wards Hill Booster Station replaced an aging and under-sized pump station in Gorham Village, and removed this water demand from the transmission pipelines, freeing up capacity in the middle portion of the transmission pipelines for the cities.

The next phase is the replacement of a 300,000 gallon elevated tank in Windham Center. This is undersized and approaching the end of its service life. Its replacement, a two million gallon ground-level concrete reservoir, is in the final planning stages. As the ground level reservoir needs to be located at a higher elevation to maintain the desired water pressure in the distribution system, it will be constructed on a hill a few miles from the current location.

This phase will require many water main upgrades in the coming years, both to connect the new reservoir to the distribution system and upsize mains between the reservoir and the Wards Hill Booster Station. Eventually, Wards Hill will become the primary supply of water to this area, then the aging and under-sized Prides Corner Booster Station in Westbrook will be placed into a back-up role. In addition, the water travelling to Windham Center will no longer need to flow from the lake to Westbrook, and then be pumped back into Windham. The water will now flow a shorter distance through the transmission system, and be pumped from North Gorham over to Windham. This will also free up more capacity in the middle portion of the transmission pipelines for the cities.

Water quality in the distribution system is constantly monitored by routine sampling and through tracking of water quality inquiries. This information is reviewed and shared monthly with office and field employees to help make water quality everyone's responsibility. One of the most important means of ensuring high quality water is the maintenance of an optimized chlorine residual throughout the distribution system. Each month, plant and Lab Staff review the current state of the system and adjust the target chlorine dosage at the plant. Since the addition of UV in 2014, the additional level of treatment has significantly improved the water quality at the far ends of the distribution system.

Operation Summary (continued)

In an effort to improve system operation and prioritize activities, the District joined the Partnership for Safe Water in 2014. The Partnership is a voluntary continuous improvement program that uses optimization methods to improve drinking water systems. Initially, the partnership successfully developed and implemented a self-assessment and optimization program for surface water treatment plants by many organizations; including American Water Works Association, US EPA, Association of Metropolitan Water Agencies, National Association of Water Companies, Association of State Drinking Water Administrators, and the Water Research Foundation.



The District reported basic distribution system data for the first few years. In 2016, District staff began a multi-year process to prepare for what the Partnership refers to as the third-phase submittal. The focus of this work is to help utilities evaluate their own distribution system performance against regulatory requirements and industry Best Management Practices. In areas where improvement is desired, a continuous improvement process supports the creation of short-term and long-term goals.

The Distribution System Optimization Program focuses on topics such as maintenance of system chlorine residuals, hydrant and valve maintenance, management of main breaks, water loss, customer complaints, Cross Connection Control Program, main renewal programs, staffing, and funding. The District is not eligible to join the Treatment Plant Optimization Program because the District has a waiver from filtration.

In future years, the District expects it will adjust and/or change some service standards, develop projects and initiatives to support recommendations, and incorporate industry Best Management Practices into everyday operations.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections.

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2023 CIP</u>	<u>Total</u>
Projects:			
Water Only	\$ 5,500,000	\$ 8,640,000	\$ 14,140,000
Total by CIP Year	<u>\$ 5,500,000</u>	<u>\$ 8,640,000</u>	<u>\$ 14,140,000</u>

Source of Funds:

	<u>R&R Fund</u>	<u>Future Bond</u>	<u>Funding Total</u>	<u>Bond Issue Year</u>
Beginning Balance	\$ 5,771,904			
2023 Contribution	\$ 1,250,000			
Total R&R Balance Available	<u>\$ 7,021,904</u>			
Projects:				
Water Only				
407 Zone Tank Design & Land - 2658		\$ 400,000	\$ 400,000	2023
407 Zone Tank Construction - 3004		\$ 2,500,000	\$ 2,500,000	2024
407 Zone Reliability Improvements - 3067		\$ 1,800,000	\$ 1,800,000	2023
Water Protection Easement		\$ 800,000	\$ 800,000	2023
2023 CIP Budget - SCADA & Technology	\$ 50,000		\$ 50,000	
2023 CIP Budget - Water Operations	\$ 1,025,000		\$ 1,025,000	
2023 CIP Budget - Main Renewals	\$ 50,000	\$ 6,000,000	\$ 6,050,000	2023
2023 CIP Budget - Water Facilities/Other	\$ 215,000		\$ 215,000	
Total	<u>\$ 1,340,000</u>	<u>\$ 11,500,000</u>	<u>\$ 12,840,000</u>	
Ending Balance	<u>\$ 5,681,904</u>			

Capital Reserve	<u>\$ 1,000,000</u>
Future Operating Budget	<u>\$ 300,000</u>
	<u>\$ 14,140,000</u>

Note: The 407 Zone \$2m bond budgeted for 2023 comprises of \$1.8m reliability improvements and \$0.2m of the tank design. The other \$0.2m is expected to be received in the form of principal forgiveness. The total tank construction cost is anticipated to be more significantly more than \$2.5m. When the amount is known, staff will request the Board to authorize. The multi-year forecast assumed a \$7.3m bond in 2024.

Projections for Rate-Making Purposes

Multi-year projections are made for the water fund to provide an understanding of the future impact on water rates.

Major Assumptions:

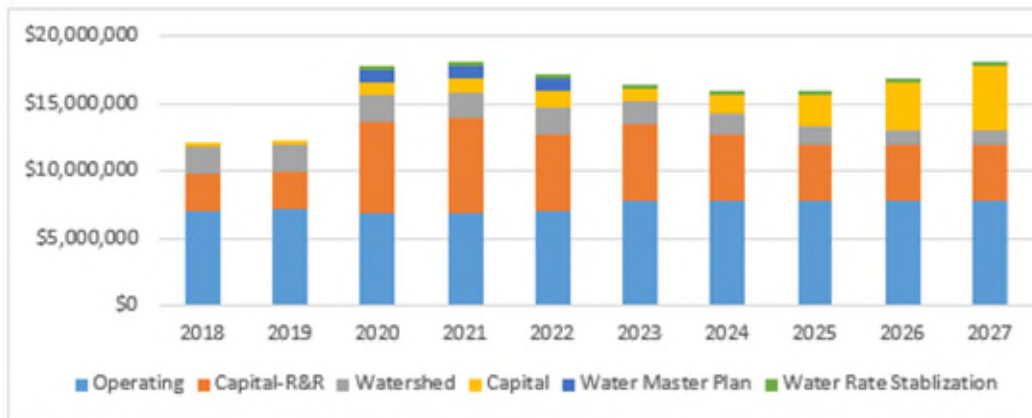
The assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$8.6 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.

Summary of Projection Impact:

Water Revenue is projected to increase to \$37,928,205 in 2027, a 41% increase over 2022 Budget, with the most significant cost change related to debt service issued to finance capital projects. Operating Ratios and Reserves are better than target and Capital Renewal & Replacement fund (R&R) balance is below the target balance.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2020	2021	2022	2023	2024	2025	2026	2027
23%	24%	26%	25%	27%	29%	30%	30%

Debt Service Ratio – Target: Greater or Equal to 125%

2020	2021	2022	2023	2024	2025	2026	2027
157%	141%	141%	133%	134%	135%	138%	139%

Projections for Rate-Making Purposes (continued)

Water Fund

Operating Fund:

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Water Sales	26,509,749	26,824,845	29,043,602	31,024,509	33,889,863	36,212,487	37,928,205
Assessment Income							
Contracted Billing Income							
Interest Income	-23,552	57,000	203,824	203,824	203,824	203,824	203,824
Other Income	307,087	425,076	452,119	452,119	452,119	452,119	452,119
Total Revenues	26,793,284	27,306,921	29,699,545	31,680,452	34,545,806	36,868,430	38,584,148
Operating Expenses:							
Salaries & Wages	4,907,103	5,161,371	5,908,765	6,145,116	6,390,921	6,614,603	6,846,114
Employee Benefits	2,259,183	2,184,465	2,544,171	2,671,380	2,804,949	2,945,196	3,092,456
Chemicals	415,912	472,809	718,471	740,025	762,226	785,093	808,646
Contracted Services	1,749,578	1,867,966	2,036,284	2,097,373	2,160,294	2,225,103	2,291,856
Facilities	96,123	110,723	105,381	108,542	111,798	115,152	118,607
Heat/Fuel Oil	101,806	118,283	188,724	194,386	200,218	206,225	212,412
Insurance	16,606	32,707	37,012	38,122	39,266	40,444	41,657
Materials & Supplies	668,517	756,741	773,569	796,776	820,679	845,299	870,658
Other Expense	106,666	126,759	149,266	153,744	158,356	163,107	168,000
Purchased Power	383,656	403,724	421,433	463,576	482,119	496,583	511,480
Regulatory/Taxes	272,464	282,186	280,276	288,684	297,345	306,265	315,453
Tele/Other Utilities	94,244	96,250	96,220	99,107	102,080	105,142	108,296
Transportation	792,720	811,305	903,528	930,634	958,553	987,310	1,016,929
SS - Administration	3,819,586	3,880,027	4,300,768	4,472,799	4,651,711	4,826,150	5,007,131
SS - Engineering Services	991,882	974,057	1,068,302	1,110,500	1,154,365	1,197,365	1,241,967
SS - Environmental Services	101,108	122,535	193,695	201,443	209,501	217,357	225,508
SS - Water Services	92,882	111,806	113,145	117,671	122,378	126,967	131,728
	16,870,036	17,513,714	19,839,010	20,629,878	21,426,759	22,203,361	23,008,898
Debt Service & Lease	6,317,162	6,955,606	7,402,275	8,238,794	9,707,267	10,603,289	11,213,470
Renewal & Replacement - Direct	1,964,000	2,000,000	1,250,000	1,550,000	1,900,000	2,250,000	2,400,000
Renewal & Replace - Indirect	604,604	657,565	664,935	661,780	661,780	661,780	661,780
Capital Finance Expense	8,885,766	9,613,171	9,317,210	10,450,574	12,269,047	13,515,069	14,275,250
Total Operating Expenses	25,755,802	27,126,885	29,156,220	31,080,452	33,695,806	35,718,430	37,284,148
Current Year Surplus(Deficit)	1,037,482	180,036	543,325	600,000	850,000	1,150,000	1,300,000
Transfer to Capital Reserve		-180,036	-543,325	-600,000	-850,000	-1,150,000	-1,300,000
Prior Year Surplus		6,992,486	7,816,988	7,816,988	7,816,988	7,816,988	7,816,988
Accumulated Surplus		6,992,486	7,816,988	7,816,988	7,816,988	7,816,988	7,816,988
Target Balance(25% of budget)		6,781,721	7,289,055	7,770,113	8,423,952	8,929,608	9,321,037
Above/(Below)		210,765	527,933	46,875	-606,964	-1,112,620	-1,504,049

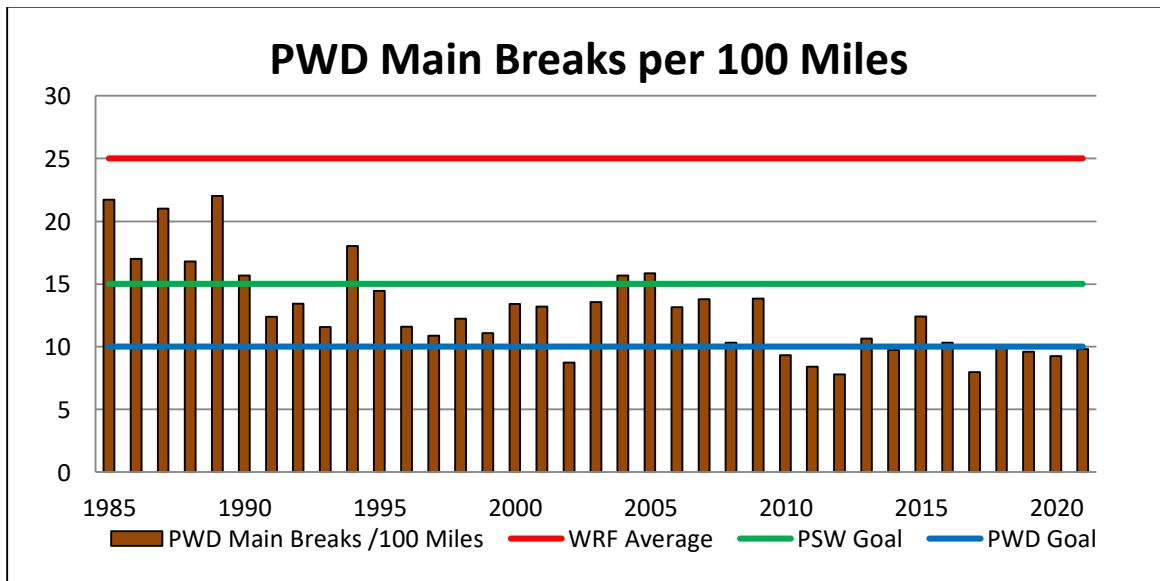
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$3,699,000

	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
R&R Balance BOY	\$ 5,771,904	\$ 5,681,904	\$ 4,831,904	\$ 4,126,904	\$ 4,076,904
Contribution	\$ 1,250,000	\$ 1,550,000	\$ 1,900,000	\$ 2,250,000	\$ 2,400,000
Withdrawals	\$ (1,340,000)	\$ (2,400,000)	\$ (2,605,000)	\$ (2,300,000)	\$ (2,300,000)
R&R Balance EOY	\$ 5,681,904	\$ 4,831,904	\$ 4,126,904	\$ 4,076,904	\$ 4,176,904

Water Main Renewals



Our commitment to maintain aging water infrastructure includes replacing water mains. The 2023 budget continues this commitment with planned projects totaling \$7.0 million dollars. The projects will be funded with a withdrawal from the capital reserve (\$1 million) and bond proceeds (\$6 million). The increased investment in main renewal has impacted the number of main breaks.

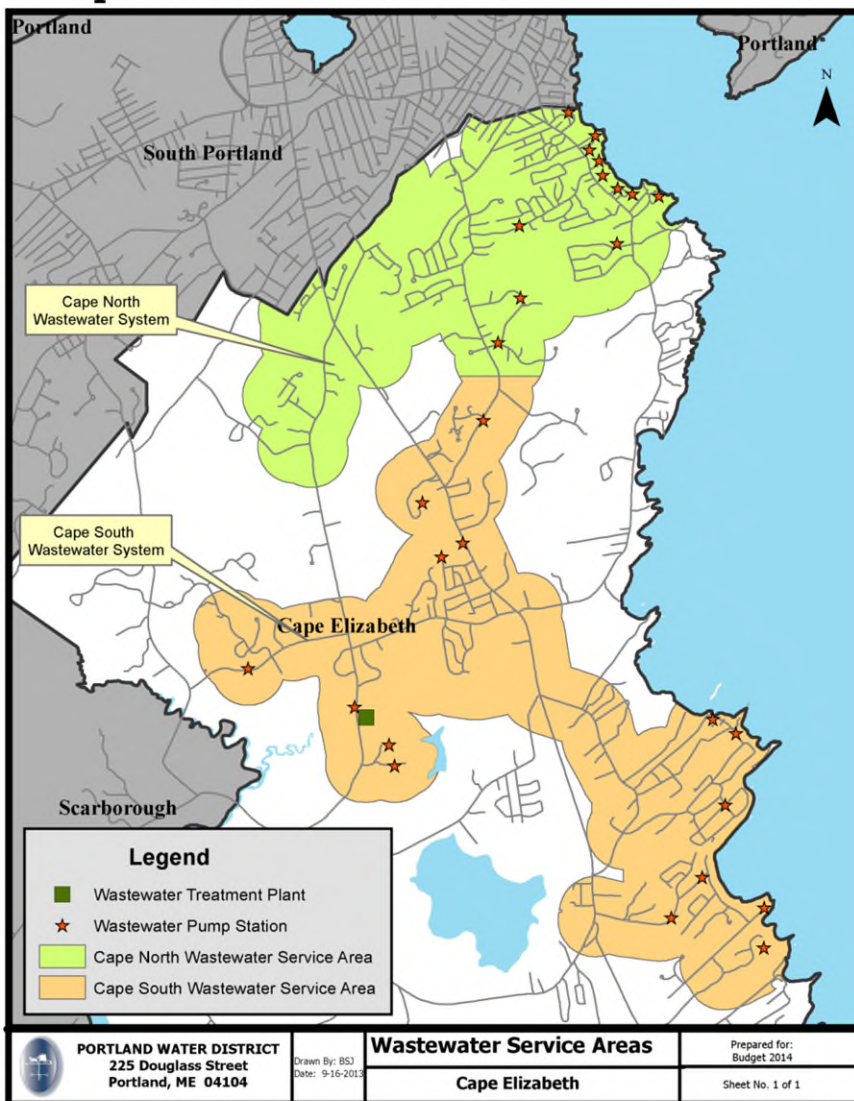


Fund: Wastewater - Cape Elizabeth

Background

The Portland Water District’s charter authorizes the District to provide wastewater treatment and collection system-interceptors service to the town. The town maintains most of the collection system but has contracted with the District to maintain several pump stations within that system. The District operates a treatment facility that treats wastewater from the southern section of the town and contracts with the City of South Portland to provide treatment services for the northern section of the town. Additionally, by contract, the District provides utility billing services.

Cape Elizabeth Wastewater Service Area



Summary of Services Provided:

Treatment:

Cape South 0.52 million gallons/day

Cape North 0.715 million gallons/day (by South Portland’s plant)

Collection System:

27 Pump Stations with 17.1 miles of pipe

Utility Billing Services:

Annual Billings of \$2,181,330 on 2,434 Customers (avg. \$74.68/month)

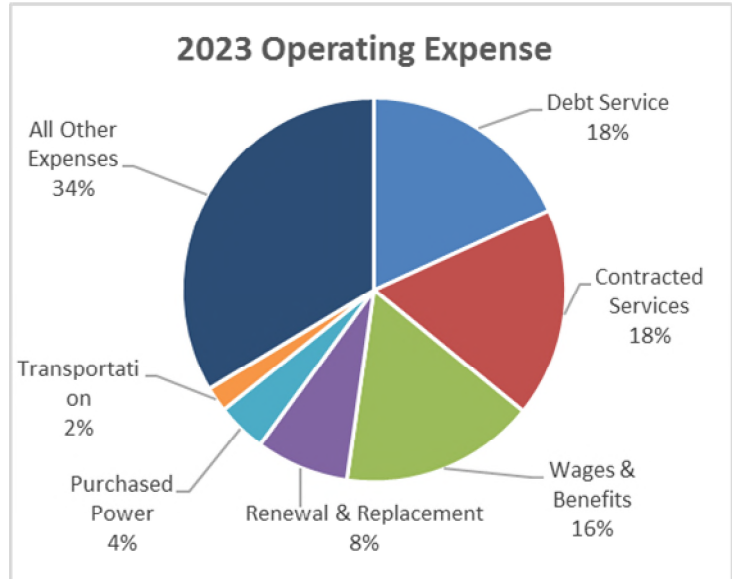
Fund: Wastewater - Cape Elizabeth

2023 Financial Summary

The proposed assessment of \$2,300,004 is a 11.6% increase.

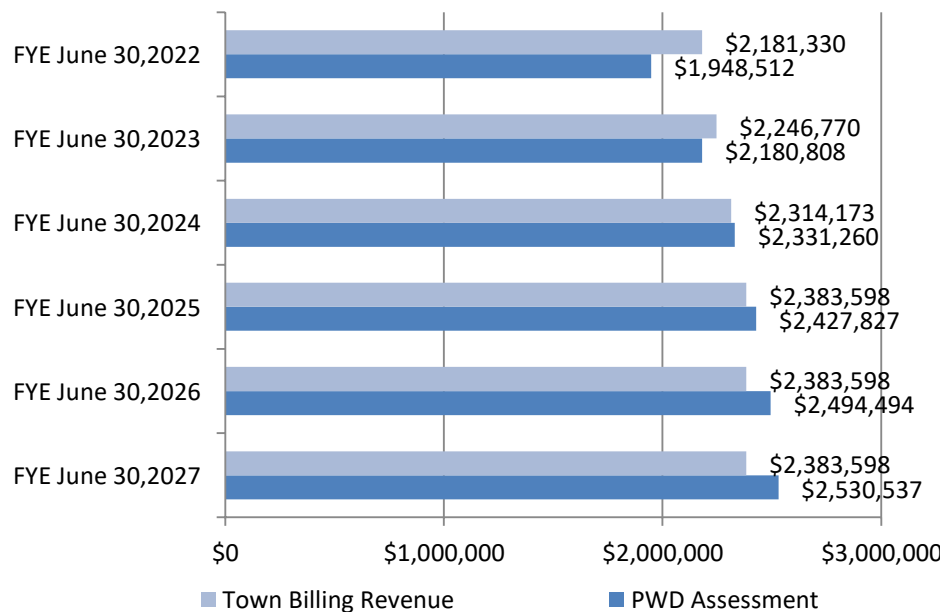
The proposed 2023 Operating Expense and Capital budgets are \$2,328,360 and \$160,000 respectively. The Operating Expense budget increased \$264,445 or 12.8%.

The 2023 Capital budget includes \$75,000 for an electrical enclosure at Peabbles Point wastewater pump station and \$35,000 for an outfall condition assessment. The remaining \$50,000 is the recurring budgets for projects that come up within the year.



Assessment Compared to Ratepayers' Billing

The municipality's fiscal year end is June 30, while the District's is December 31. The chart below compares the cash as collected by the District for sewer billing on their behalf and the District's assessment for services rendered. The municipality may incur additional sewer-related costs. The municipality determines when to increase the sewer billing rates.



Revenue Assumptions:

- Consumption is for the 12 months ending June 30, 2022
- Rates Assumed:

Effective Date:	Base/Per HCF
Mar 2013	\$43/\$5.25
Mar 2014	\$46/\$5.41
Mar 2015	\$48/\$5.57
Mar 2016	\$49.50/\$5.68
July 2022	\$50.99/\$5.85
July 2023	\$52.51/\$6.03
July 2024	\$54.09/\$6.21

2023 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted decreased 1.5% (129 hours). This combined with the District’s average wage rates increase of 12.2% resulted in a 9.0% (\$22,390) increase in Salaries/Wages.

Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to increase by 12.3% (\$13,021).

Biosolids Disposal – The budget assumes a disposal rate of \$142/wet ton, that is a 42% increase over the 2022 Budget assumption of \$100. The higher unit cost relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. That increase along with an assumed 7.0% decrease in overall volume resulted in a 32.1% (\$6,900) increase in Biosolids expense.

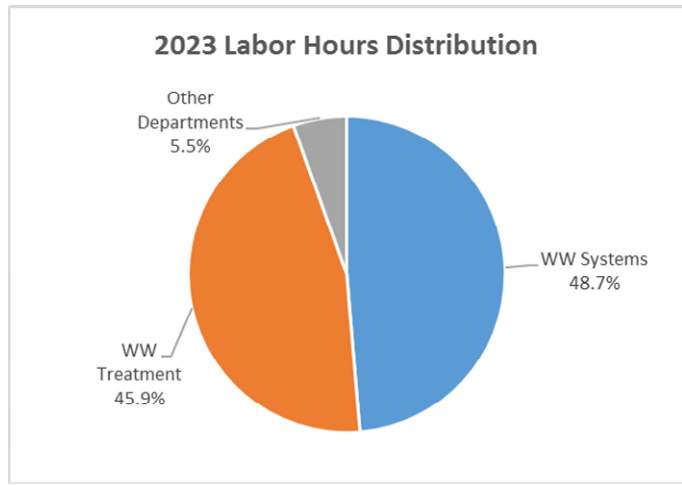
Chemicals – Sodium Bicarbonate usage is projected to increase 42% and to have a 7.7% per unit cost increase. The \$6,390 increase in this chemical accounts for the vast majority of the increase in this category.

Contracted Services – The budget increased 18.5% (\$65,465). The cost of Contracted Treatment Services paid to the City of South Portland was up \$30,380 (13.2%) due to costs (labor, benefits & biosolids disposal) at the South Portland treatment plant. District costs increased for general maintenance at the Cape Elizabeth Wastewater Treatment Facility for a perimeter fence clearing (\$10k) and the annual service contract on the HVAC system (\$5k).

Heat/Fuel Oil – The budget increased 30.3% (\$5,768) mostly due to an estimated increase in the cost of heating oil from \$2.29 to \$3.80 per gallon at the treatment plant.

Regulatory/Taxes – The 2022 Budget included a new regulatory fee totaling \$2,150 from the State of Maine to deal with statewide issues regarding PFAS. That fee was cancelled by the State and removed from the 2023 Budget.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer service, billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$66,156 or 12.3%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.



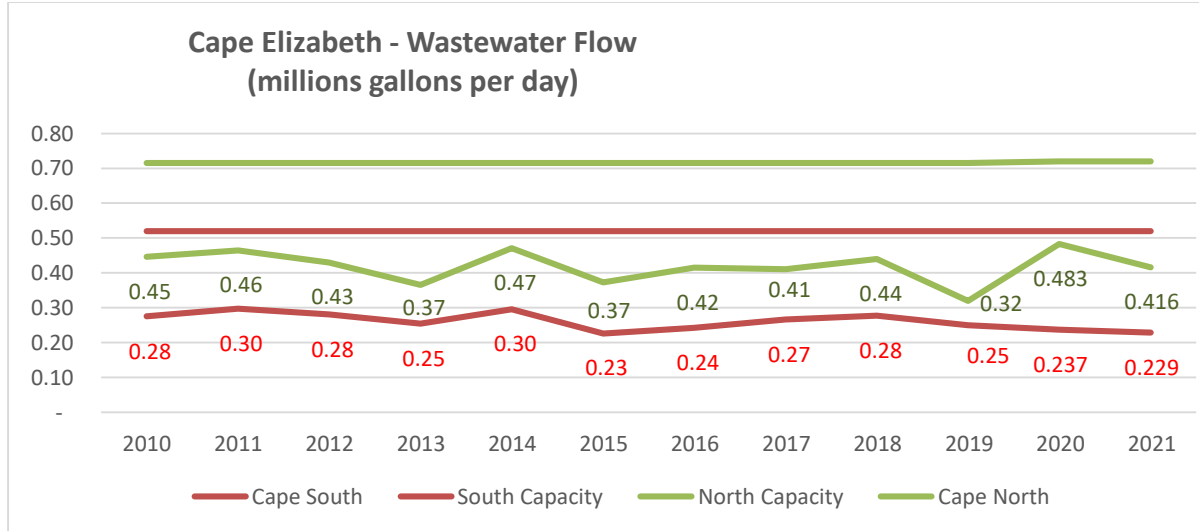
Debt Service/Lease Expense – This represents the annual principal and interest payments on bonds issued to finance capital projects. This cost increased \$55,249 (14.6%) from the prior year budget to \$432,929. The majority of this increase is from principal and full year interest payments that will be coming due in 2023 for a bond, to close in late 2022, related to upgrades at Maiden Cove pump station.

Renewal & Replacement – These are dollars put aside to fund capital projects and the replacement of equipment that has served its useful life. A contribution of \$186,615 will be made in 2023.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$1,835,412	\$1,030,806	\$2,061,612	\$2,300,004	\$238,392	11.6%
Interest Income	-\$1,520	-\$16,934	\$2,303	\$13,842	\$11,539	501.0%
Other Income	1,554	0	0	14,514	14,514	n/a
Total Revenue	1,835,446	1,013,872	2,063,915	2,328,360	264,445	12.8%
Salaries & Wages	225,645	111,867	248,999	271,389	22,390	9.0%
Employee Benefits	103,909	49,244	106,002	119,023	13,021	12.3%
Bio Solids Disposal	17,411	13,232	21,500	28,400	6,900	32.1%
Chemicals	25,294	9,945	14,360	21,576	7,216	50.3%
Contracted Services	312,512	167,034	354,280	419,745	65,465	18.5%
Heat/Fuel Oil	17,018	12,822	19,057	24,825	5,768	30.3%
Insurance	7,185	3,781	7,759	8,507	748	9.6%
Materials & Supplies	52,769	26,317	41,100	41,400	300	0.7%
Other Expense	172	4,000	1,000	750	-250	-25.0%
Purchased Power	89,739	48,914	102,527	99,638	-2,889	-2.8%
Regulatory/Taxes	2,345	1,240	3,450	1,600	-1,850	-53.6%
Tele/Other Utilities	11,807	8,241	20,769	19,256	-1,513	-7.3%
Transportation	38,246	18,916	33,944	50,163	16,219	47.8%
SS - Administration	207,511	112,430	216,337	258,462	42,125	19.5%
SS - Engineering Services	56,087	35,074	97,060	101,021	3,961	4.1%
SS - Environmental Services	35,835	17,616	36,203	36,704	501	1.4%
SS - Wastewater Services	169,586	92,187	183,611	203,285	19,674	10.7%
SS - Water Services	2,479	2,574	3,177	3,072	-105	-3.3%
Operating Expense	1,375,550	735,434	1,511,135	1,708,816	197,681	13.1%
					0	n/a
Debt Service & Lease Expense	302,152	175,724	377,680	432,929	55,249	14.6%
Renewal & Replacement - Direct	135,000	72,500	145,000	155,000	10,000	6.9%
Renewal & Replace - Indirect	26,312	15,084	30,100	31,615	1,515	5.0%
Capital Finance Expense	463,464	263,308	552,780	619,544	66,764	12.1%
Total Expense	1,839,014	998,742	2,063,915	2,328,360	264,445	12.8%
Current Year Surplus (Deficit)	-3,568	15,130	0	0		
Transfer to R&R	0	0	0	0		
Prior Year Surplus	361,999	358,431	456,544	365,167		
Accumulated Surplus	358,431	373,561	456,544	365,167		

Operation Summary Cape Elizabeth

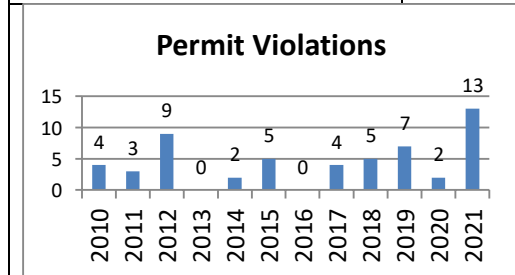
Wastewater Treatment: The Cape Elizabeth Wastewater System is comprised of two general areas, North and South. Flow generated in the Northern area is delivered to South Portland for treatment while flow generated in South Cape is treated at the Cape Elizabeth WWTF. The Cape Elizabeth treatment facility is designed to treat 520,000 gallons per day with a peak capacity of 2.75 mgd during wet weather. PWD owns 715,400 gallons per day of capacity at South Portland’s WWTF. The Cape Elizabeth treatment facility is currently operated in a way that provides some nitrogen removal.



In 2021, the flow in the Northern area averaged 0.416 mgd and the South Cape flow to the treatment plant averaged 0.229 mgd.

Effluent Permit Requirements:

Parameter	Discussion
Biological Oxygen Demand (BOD)	Measure of organic material and the strength of pollution. The treatment plant removed 95% of the BOD; well above the required 85% removal.
Total Suspended Solids (TSS)	Measure of suspended material in the incoming wastewater; also the strength of pollution. The treatment plant removed 96% of the TSS, well above the required 85% removal.
Total Residual Chlorine	Used previously for disinfecting the treated effluent, chlorine must be removed before the effluent is discharged. The permit limit was met at all times. The UV disinfection upgrade has eliminated the use of disinfection system chemicals and the need to monitor chlorine residual.
Fecal Coliform Bacteria	Following disinfection, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.



The Discharge Permit was renewed in late 2016. Renewal of the permit will begin the end of 2022. There were thirteen (13) effluent permit violations in 2021 that were generally related to an upset event in the spring.

Operation Summary (continued)

Wastewater Conveyance – interceptors and pumping stations: The Ottawa Road CSO Long Term Control Plan was submitted to Maine Department of Environmental Protection in December 2011 and was approved in September 2013. The 5-year plan began in 2014. The plan's projects were designed to lower the frequency and volume of overflow during extreme wet weather events by addressing private sources of infiltration and inflow in the collection systems of Cape Elizabeth and South Portland. Both the Town of Cape Elizabeth and the City of South Portland have completed an inventory of private sources of inflow & infiltration. Cape Elizabeth has installed additional storm drainage and redirected private sources of I/I to the storm sewer system. This effort has addressed 35 of 37 known sources of private I/I in 2018. South Portland has completed a project on Drew Rd. to remove 10 private sources of I/I. The project also lined the collection system pipe in the area to reduce infiltration. This project was completed in 2018. PWD completed a project that increased pumping capacity of the existing pumps at the Ottawa Rd. pump station and will monitor flows to determine if the collective efforts have sufficiently reduced extraneous flows and the volume of CSO overflows. A more complete upgrade of the Ottawa Rd. Pump Station is expected in 2023 or 2024.

PWD staff continues to respond and maintain service during various storm events and power failures, while we work to install emergency generators through our Capital Improvement process. This will assist in managing elevated flows during wet weather and often associated power losses. Additional work performed by the Systems group is shown in the table below:

Parameter	2022 Actual to September	2023 Projected
Preventive Work Orders	859	950
Corrective Work Orders	26	50
Wet wells cleaned	59	65
Debris removed (ton)	112	125
Dry Weather Overflows	3	0

2022 Other Highlights

- Staffing schedules were adjusted to provide more dedicated operator time to operations during daytime hours. This has resulted in a more informed team and the operation of the facility has been very stable. Additional efforts to coordinate maintenance have increased maintenance time spent at the treatment plant.
- The new asset management system is being used by treatment and maintenance to improve preventive maintenance and the identification of maintenance needs. Development and refinement of this system continues on a regular basis.
- The Maiden Cove Pump Station was upgraded.
- The treatment plant process evaluation is underway. Some operational insights have already been realized and effluent nitrogen levels have been reduced.
- Radio network upgrades are underway to maintain efficient monitoring of remote pump stations and the treatment plant.

2023 Work Plan

- Flow monitoring will continue to assess the flow reductions that have been realized due to the Ottawa Rd. drainage area I/I flow reduction efforts by Cape Elizabeth and South Portland.
- Design of an upgrade to the Ottawa Rd. Pump Station will result in an upgrade of the station. This will include bypass valving (to be installed in late 2022), installation of the new generator, new pumps, upgraded controls, and other miscellaneous improvements.
- The treatment plant outfall will be assessed in the coming year.
- An upgrade to the aeration system and clarifiers will begin in 2024. This will, in part, increase the ability of the plant to reduce effluent nitrogen.
- The permit for the treatment plant will be renewed by Maine DEP in the coming year.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections.

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2023 CIP</u>	<u>CIP Total</u>
Projects:			
SCADA - radio modems - 3125 (prorated)	\$ 245,000		\$ 245,000
WW Collection & Pumping			
Ottawa Rd PS Upgrades - 3005	\$ 350,000		\$ 350,000
Pump Station R&R - 3130		\$ 25,000	\$ 25,000
Peabbles Point Electrical Enclosure - 3251		\$ 75,000	\$ 75,000
WW Treatment			
Treatment Plant R&R - 3129		\$ 25,000	\$ 25,000
Aeration & Clarification Upgrade - 3188	\$ 125,000		\$ 125,000
Outfall Condition Assessment - 3280		\$ 35,000	\$ 35,000
Total by CIP Year	<u>\$ 720,000</u>	<u>\$ 160,000</u>	<u>\$ 880,000</u>

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue</u>	<u>Bond Issue</u>	<u>Funding</u>
		<u>2023</u>	<u>> 2023</u>	<u>Total</u>
Beginning Balance	\$ 631,147			
2023 Contribution	\$ 155,000			
Total R&R Balance Available	<u>\$ 786,147</u>			
Projects:				
SCADA - radio modems - 3125 (prorated)		\$ 245,000		\$ 245,000
WW Collection & Pumping				
Ottawa Rd PS Upgrades - 3005		\$ 350,000		\$ 350,000
Pump Station R&R - 3130	\$ 25,000			\$ 25,000
Peabbles Point Electrical Enclosure - 3251	\$ 75,000			\$ 75,000
WW Treatment				
Treatment Plant R&R - 3129	\$ 25,000			\$ 25,000
Aeration & Clarification Upgrade - 3188			\$ 125,000	\$ 125,000
Total	<u>\$ 125,000</u>	<u>\$ 595,000</u>	<u>\$ 125,000</u>	<u>\$ 845,000</u>
Ending Balance	<u>\$ 661,147</u>			

Future Operating Budget

\$ 35,000

\$ 880,000

Prorated Projects: SCADA project costs are 'prorated' based on the assets used by the municipality.

Projections for Rate-Making Purposes

Multi-year projections are made for each of the wastewater funds’ assessment. The projections provide guidance to the wastewater municipalities to assist them in determining their wastewater sewer rates. A summary of the projection is provided on next page.

Summary

Major Assumptions:

Major assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$2.6 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.

Summary of Projection Impact:

Assessment is projected to increase to \$2,314,216 in 2027, a 24% increase over 2022 Budget, with the most significant cost change related to debt service issued to finance capital projects. Debt Percent of Budget is better than target and the Debt Service Ratio is higher than target but is declining over the coming years. Operating Reserve balance and Capital Renewal & Replacement fund (R&R) balance are below the target balances.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2021	2022	2023	2024	2025	2026	2027
16%	18%	19%	20%	24%	23%	25%

Debt Service Ratio – Target: Greater or Equal to 125%

2021	2022	2023	2024	2025	2026	2027
151%	146%	143%	137%	130%	130%	127%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	<u>2021 Actual</u>	<u>2022 Budget</u>	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>
Revenues:							
Assessment Income	1,835,412	2,061,612	2,300,004	2,362,515	2,493,139	2,495,848	2,565,226
Interest Income	-1,520	2,303	13,842	13,842	13,842	13,842	13,842
Other Income	1,554	0	14,514	14,514	14,514	14,514	14,514
Total Revenues	1,835,446	2,063,915	2,328,360	2,390,871	2,521,495	2,524,204	2,593,582
Operating Expenses:							
Salaries & Wages	225,645	248,999	271,389	282,245	293,535	303,809	314,442
Employee Benefits	103,909	106,002	119,023	124,974	131,223	137,784	144,673
Biosolids Disposal	17,411	21,500	28,400	29,536	30,570	31,487	32,432
Chemicals	25,294	14,360	21,576	22,223	22,890	23,577	24,284
Contracted Services	312,512	354,280	419,745	432,337	445,307	458,666	472,426
Heat/Fuel Oil	17,018	19,057	24,825	25,570	26,337	27,127	27,941
Insurance	7,185	7,759	8,507	8,762	9,025	9,296	9,575
Materials & Supplies	52,769	41,100	41,400	42,642	43,921	45,239	46,596
Other Expense	172	1,000	750	773	796	820	845
Purchased Power	89,739	102,527	99,638	109,602	113,986	117,406	120,928
Regulatory/Taxes	2,345	3,450	1,600	1,648	1,697	1,748	1,800
Tele/Other Utilities	11,807	20,769	19,256	19,834	20,429	21,042	21,673
Transportation	38,246	33,944	50,163	51,668	53,218	54,815	56,459
SS - Administration	207,511	216,337	258,462	268,800	279,552	290,035	300,911
SS - Engineering Services	56,087	97,060	101,021	105,011	109,159	113,225	117,443
SS - Environmental Services	35,835	36,203	36,704	38,172	39,699	41,188	42,733
SS - Wastewater Services	169,586	183,611	203,285	161,416	117,873	72,293	25,004
SS - Water Services	2,479	3,177	3,072	3,195	3,323	3,448	3,577
	1,375,550	1,511,135	1,708,816	1,728,408	1,742,540	1,753,005	1,763,742
Debt Service & Lease	302,152	377,680	432,929	484,199	600,691	592,935	651,576
Renewal & Replacement - Direct	135,000	145,000	155,000	155,000	155,000	155,000	155,000
Renewal & Replace - Indirect	26,312	30,100	31,615	23,264	23,264	23,264	23,264
Capital Finance Expense	463,464	552,780	619,544	662,463	778,955	771,199	829,840
Total Operating Expenses	1,839,014	2,063,915	2,328,360	2,390,871	2,521,495	2,524,204	2,593,582
Current Year Surplus(Deficit)	-3,568	0	0	0	0	0	0
Prior Year Surplus	361,999	456,544	365,167	365,167	365,167	365,167	365,167
Accumulated Surplus	358,431	456,544	365,167	365,167	365,167	365,167	365,167
Target Balance(25% of budget)	459,754	515,979	582,090	597,718	630,374	631,051	648,396
Above/(Below)	-101,323	-59,435	-216,923	-232,551	-265,207	-265,884	-283,229

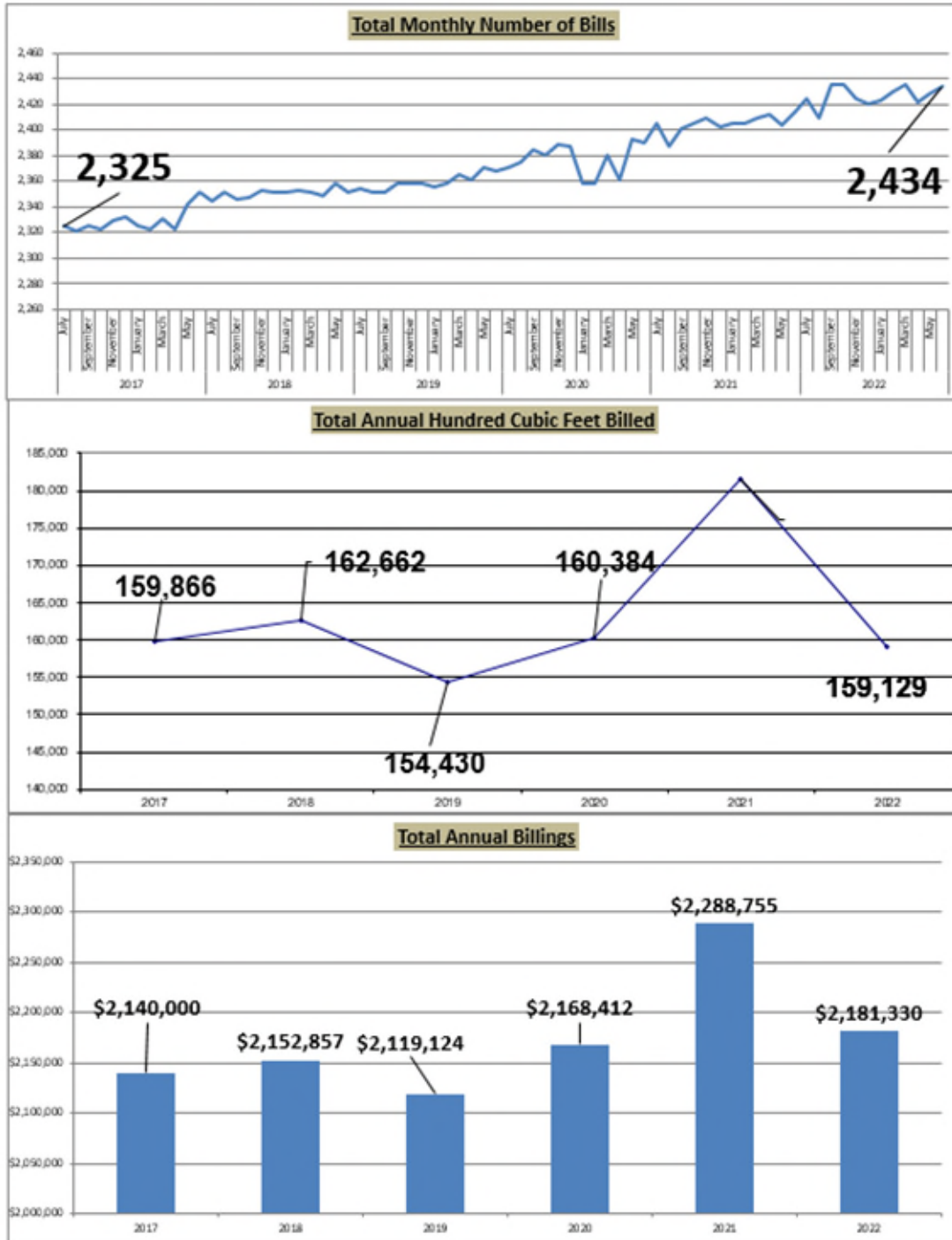
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$930,000

	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
	<u>Budget</u>	<u>Forecast</u>	<u>Forecast</u>	<u>Forecast</u>	<u>Forecast</u>
R&R Balance BOY	\$ 631,147	\$ 661,147	\$ 766,147	\$ 771,147	\$ 601,147
Contribution	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000
Withdrawals	\$ (125,000)	\$ (50,000)	\$ (150,000)	\$ (325,000)	\$ (50,000)
R&R Balance EOY	\$ 661,147	\$ 766,147	\$ 771,147	\$ 601,147	\$ 706,147

Sewer Billing Statistics

The District provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District’s water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.

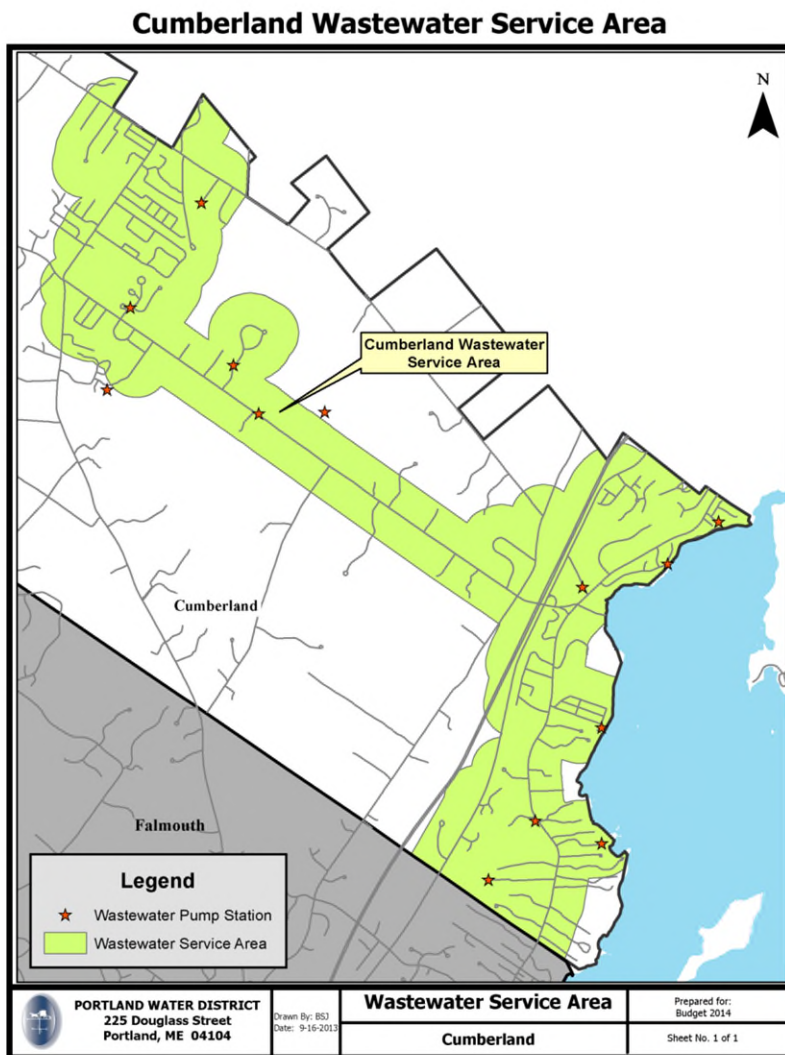
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater - Cumberland

Background

The Portland Water District's charter authorizes the District to provide wastewater treatment and collection system and interceptors service to the town. By contract with the town, the District additionally operates and maintains the collectors in the sewer collection system. The District contracts with the Town of Falmouth to provide treatment services. Additionally, by contract, the District provides utility billing services.



Summary of Services Provided:

Treatment
0.468 million
gallons/day

Collection System:
13 Pump Stations with
31.89 miles of pipe

Utility Billing Services:
Annual Billings of
\$1,118,742 on 1,259
Customers
(avg. 74.05/month)

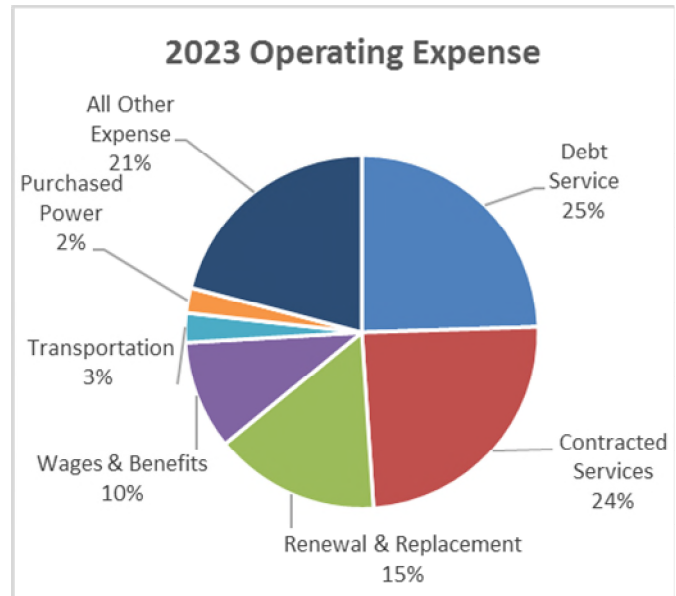
Fund: Wastewater - Cumberland

2023 Financial Summary

The proposed assessment of \$1,184,904 is an increase of \$179,304 or 17.8%.

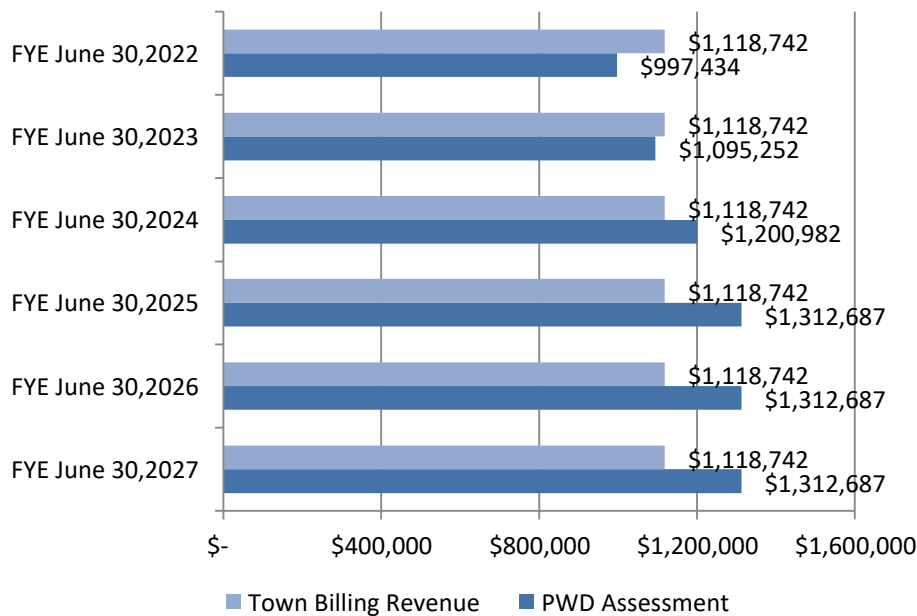
The proposed 2022 Operating Expense and Capital budgets are \$1,197,738 and \$125,000, respectively. The Operating Expense increase is 24.1% (\$189,929).

Cumberland’s 2023 Capital plan consists of \$105,000 for a generator addition at Longmeadow pump station and the usual \$20,000 from renewal and replacement funds for needs related to the wastewater pump stations.



Assessment Compared to Ratepayers’ Billing

The municipality’s fiscal year end is June 30, while the District’s is December 31. The chart below compares the cash as collected by the District for sewer billings on their behalf and the District’s assessment for services rendered. The municipality may incur additional sewer-related costs. The municipality determines if there are adjustments to sewer billing rates.



Revenue Assumptions:

- Consumption is the 12 months ending June 30, 2019

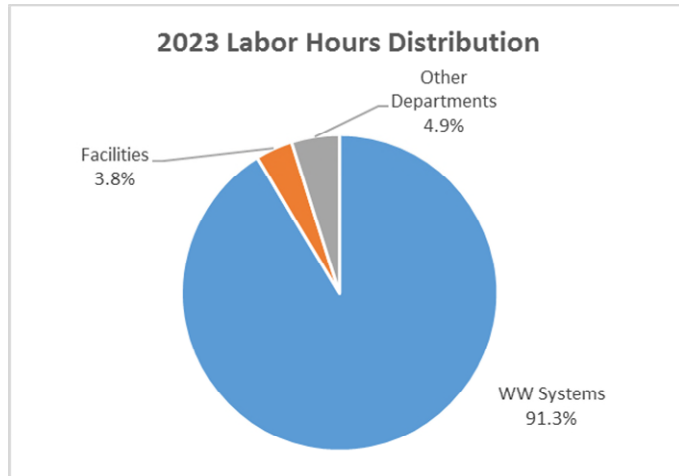
- Rates Assumed:

Effective Date:	Base/Per HCF
Jul 2013	\$34.25/\$4.96
Sep 2013	\$34.25/\$5.29
Sep 2015	\$35.58/\$5.29
Sep 2016	\$36.92/\$5.29
Sep 2018	\$36.92/\$5.52

2023 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted increased 3.2% (81 hours). This combined with the District’s average wage rates increase of 12.2% resulted in a 15.6% (\$11,229) increase in Salaries/Wages.

Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to increase by 16.9% (\$5,254).



Contracted Services – This category includes payments to the Town of Falmouth for wastewater treatment and pumping services. Overall Contracted Services increased 16.6% (\$41,600) to a total of \$292,760. The portion of that amount applicable to the treatment services from the Town of Falmouth is \$240,900, which is 17% (\$35,100) higher than last year.

Materials & Supplies – The budget increased \$2,900 to \$18,250. The increase relates to the continued focus on preventive maintenance and general inflation on materials.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer service, billing or computer support) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$28,982 or 14.7%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.

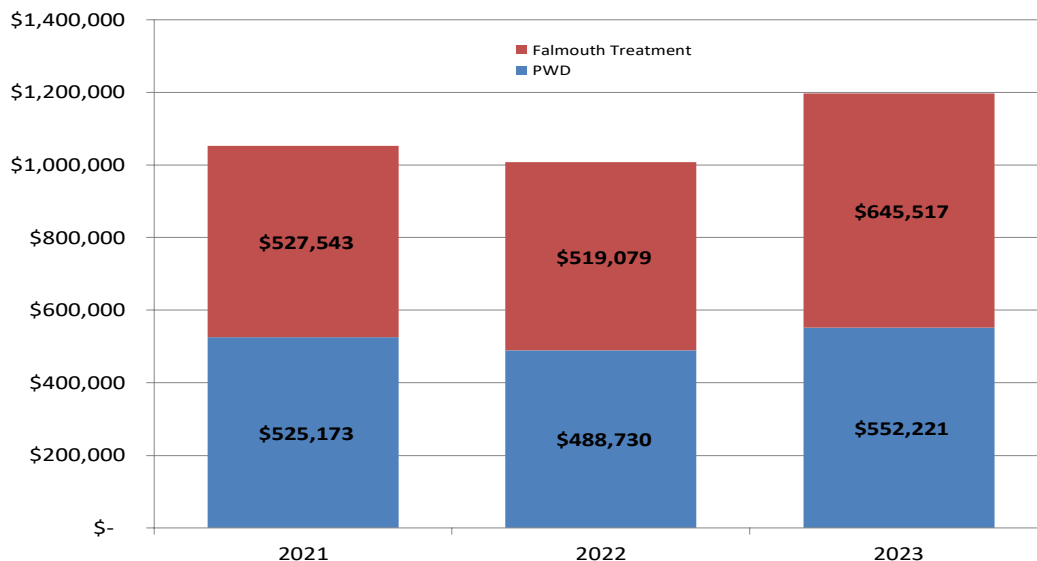
Debt Service – Debt service expense decreased 1.2% (\$3,705) due to a decline in interest expense as debt is paid down.

Renewal and Replacement – This is the annual contribution to a fund to finance smaller capital projects. A contribution of \$181,583 will be made in 2023, an increase of \$95,983 from the previous year. Most of this increase (\$95,000) is in the “Contracted” category and reflects Cumberland’s share of upcoming capital projects at the Town of Falmouth’s Wastewater Treatment Facility.

	2021 Actual	2022 Jan- Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$989,268	\$502,800	\$1,005,600	1,184,904	\$179,304	17.8%
Interest Income	-\$591	-\$9,517	\$2,209	8,700	\$6,491	293.8%
Other Income	441	0	0	4,134	4,134	n/a
Total Revenue	989,118	493,283	1,007,809	1,197,738	189,929	18.8%
Salaries & Wages	80,558	49,078	72,124	83,353	11,229	15.6%
Employee Benefits	37,911	20,542	31,014	36,268	5,254	16.9%
Contracted Services	293,558	134,820	251,160	292,760	41,600	16.6%
Heat/Fuel Oil	64	0	341	100	-241	-70.7%
Insurance	3,371	2,915	3,680	3,899	219	6.0%
Materials & Supplies	15,022	10,212	15,350	18,250	2,900	18.9%
Purchased Power	24,841	16,858	29,081	27,889	-1,192	-4.1%
Tele/Other Utilities	1,907	950	2,391	2,391	0	0.0%
Transportation	21,766	18,081	23,214	32,114	8,900	38.3%
SS - Administration	116,706	58,802	113,132	134,543	21,411	18.9%
SS - Engineering Services	25,356	16,655	43,625	46,402	2,777	6.4%
SS - Wastewater Services	45,722	19,422	38,224	42,963	4,739	12.4%
SS - Water Services	1,416	1,471	1,760	1,815	55	3.1%
Operating Expense	668,198	349,806	625,096	722,747	97,651	15.6%
Debt Service & Lease Expense	300,302	148,346	297,113	293,408	-3,705	-1.2%
Renewal & Replacement - Direct	40,000	20,000	40,000	40,000	0	0.0%
Renewal & Replace - Indirect	14,216	7,815	15,600	16,583	983	6.3%
Renw & Repl - Contracted	30,000	15,000	30,000	125,000	95,000	316.7%
Total Expense	1,052,716	540,967	1,007,809	1,197,738	189,929	18.8%
Current Year Surplus (Deficit)	-63,598	-47,684	0	0		
<u>Prior Year Surplus</u>	<u>225,537</u>	<u>161,939</u>	<u>259,019</u>	<u>69,976</u>		
Accumulated Surplus	161,939	114,255	259,019	69,976		

Contracted Services – Treatment Services from Town of Falmouth

A significant portion of Cumberland's total expense involves the treatment services provided by the Town of Falmouth:



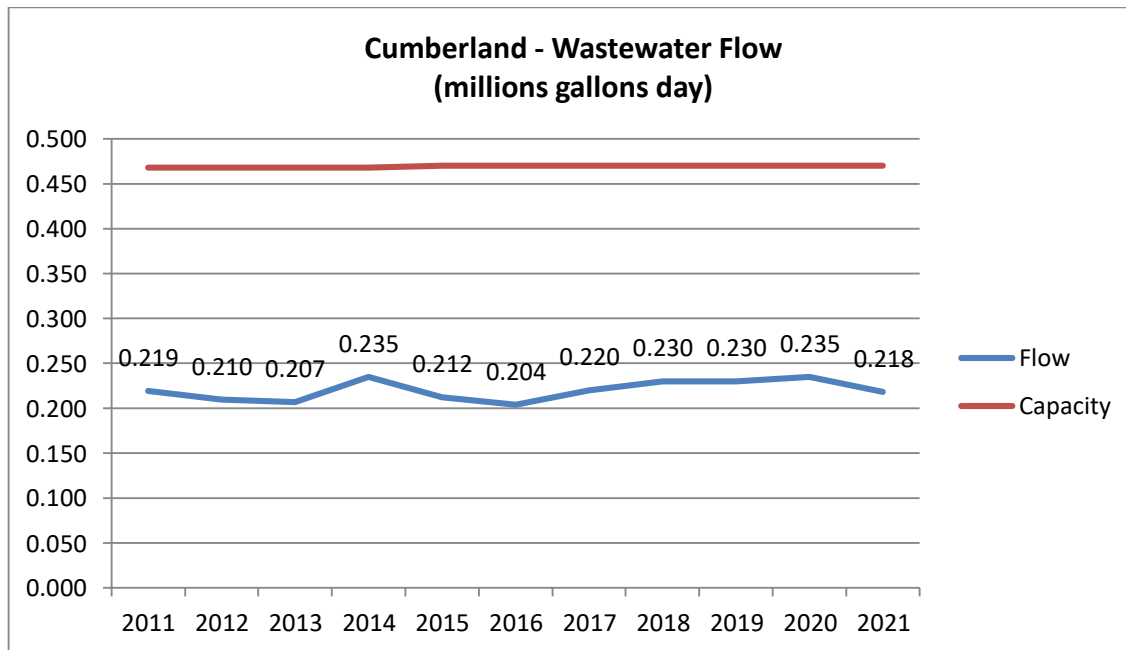
Operation Summary Cumberland

Wastewater Treatment: The wastewater generated in the Town of Cumberland is collected and pumped to the Falmouth Wastewater Treatment Facility (FWWTF). PWD, on behalf of Cumberland, owns 30% of the Falmouth Plant’s design capacity, or 468,000 gallons per day. The town is billed for operating costs based on the ratio of Cumberland flow to the total flow processed at the Falmouth facility. The table below illustrates Cumberland’s flow contribution to the Falmouth plant.

Year	Cumberland Flow	Falmouth WWTF Flow	% Cumberland Flow
2021	0.218 mgd	0.878 mgd	25%

FWWTF Capacity	Cumberland Cap (30%)	% Capacity Used	Capacity Remaining
1.56 mgd	0.468 mgd	47%	0.25 mgd

The flows from the Cumberland system for the past several years have essentially been constant, with Cumberland using just less than half of the allotted capacity in the Falmouth Plant.



Wastewater Conveyance – collectors, interceptors and pumping stations

Parameter	2022 Actual to Sept	2023 Projected
Preventive Work Orders	427	500
Corrective Work Orders	23	20
Wet wells cleaned	54	65
Debris removed (tons)	159	175
Dry Weather Overflows	2	0

Operation Summary (continued)

2022 Other Highlights

- All pump stations are continuously monitored with our SCADA system and dispatch service. Operations staff visit each station on a weekly basis. To enhance this, the radio network was upgraded.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis unless experience dictates otherwise. There was an increase in the number of wetwells cleaned and the debris removed attributed to the new vacator tractor and staffing.
- Staff remains responsive to operational and development needs in Cumberland.

2023 Work Plan

- The new software and our Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis unless experience dictates otherwise.
- Preparation will take place in advance of significant investment in a number of pump stations in the coming years.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections. The Contracted R&R fund is used to pay for Cumberland's share of capital projects done by the Town of Falmouth at their treatment facility. The annual contribution to the fund was increased to \$125,000 in 2023 from \$30,000.

Expenditures by CIP Year:

2023 CIP

Projects:

WW Collection & Pumping

Pump Station R&R - 3136	\$ 20,000
Longmeadow PS Generator Addition - 3243	\$ 105,000
Total by CIP Year	<u>\$ 125,000</u>

Source of Funds:

	<u>Regular R&R Fund</u>	<u>Contracted R&R Fund</u>
Beginning Balance	\$ 193,359	\$ (22,832)
2023 Contribution	\$ 40,000	\$ 125,000
Total R&R Balance Available	<u>\$ 233,359</u>	<u>\$ 102,168</u>
Projects:		
WW Collection & Pumping		
Pump Station R&R - 3136	\$ 20,000	\$ -
Longmeadow PS Generator Addition - 3243	\$ 105,000	\$ -
WW Treatment		
Town of Falmouth - estimated expenses	\$ -	\$ 133,400
Total	<u>\$ 125,000</u>	<u>\$ 133,400</u>
Ending Balance	<u>\$ 108,359</u>	<u>\$ (31,232)</u>

Projections for Rate-Making Purposes

Multi-year projections are made for each of the wastewater funds' assessment. The projections provide guidance to the wastewater municipalities to assist them in determining their wastewater sewer rates. A summary of the projection is provided on the next page.

Major Assumptions:

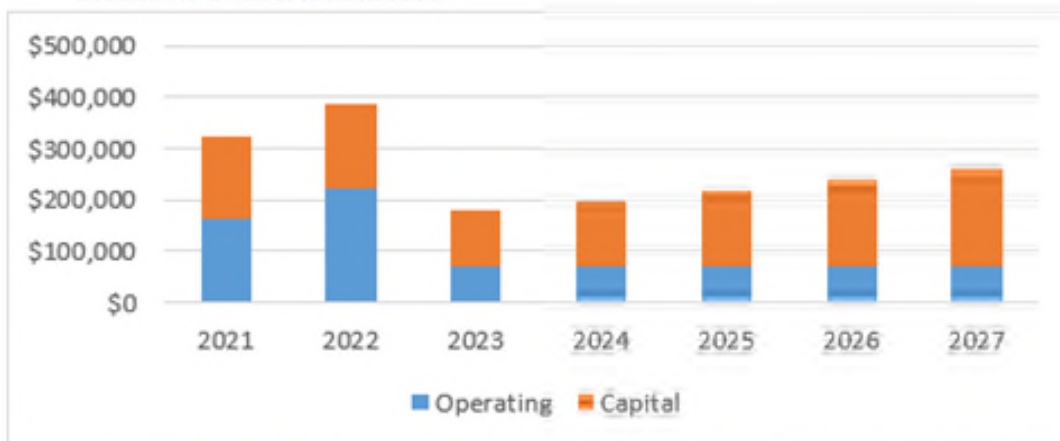
Major assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$2.6 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.

Summary of Projection Impact:

Assessment is projected to increase to \$1,448,210 in 2027, a 44% increase over 2022 Budget, with the most significant cost change related to debt service issued to finance capital projects.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2021	2022	2023	2024	2025	2026	2027
30%	29%	24%	24%	33%	32%	31%

Debt Service Ratio – Target: Greater or Equal to 125%

2021	2022	2023	2024	2025	2026	2027
128%	129%	162%	161%	139%	140%	140%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	<u>2021 Actual</u>	<u>2022 Budget</u>	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>
Revenues:							
Assessment Income	989,268	1,005,600	1,184,904	1,217,059	1,408,314	1,428,554	1,448,210
Interest Income	-591	2,209	8,700	8,700	8,700	8,700	8,700
Other Income	441	0	4,134	4,134	4,134	4,134	4,134
Total Revenues	989,118	1,007,809	1,197,738	1,229,893	1,421,148	1,441,388	1,461,044
Operating Expenses:							
Salaries & Wages	80,560	72,124	83,353	86,687	90,154	93,309	96,575
Employee Benefits	37,910	31,014	36,268	38,081	39,985	41,984	44,083
Contracted Services	293,558	251,160	292,760	301,543	310,589	319,907	329,504
Heat/Fuel Oil	64	341	100	103	106	109	112
Insurance	3,371	3,680	3,899	4,016	4,136	4,260	4,388
Materials & Supplies	15,024	15,350	18,250	18,798	19,362	19,943	20,541
Purchased Power	24,840	29,081	27,889	30,678	31,905	32,862	33,848
Tele/Other Utilities	1,906	2,391	2,391	2,463	2,537	2,613	2,691
Transportation	21,765	23,214	32,114	33,077	34,069	35,091	36,144
SS - Administration	116,706	113,132	134,543	139,925	145,522	150,979	156,641
SS - Engineering Services	25,356	43,625	46,402	48,235	50,140	52,008	53,945
SS - Wastewater Services	45,722	38,224	42,963	44,682	46,469	48,212	50,020
SS - Water Services	1,416	1,760	1,815	1,888	1,964	2,038	2,114
	668,198	625,096	722,747	750,176	776,938	803,315	830,606
Debt Service	300,302	297,113	293,408	298,134	462,627	456,490	448,855
Renewal & Replacement - Direct	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Renewal & Replace - Indirect/Contract	44,216	45,600	141,583	141,583	141,583	141,583	141,583
Capital Finance Expense	384,518	382,713	474,991	479,717	644,210	638,073	630,438
Total Operating Expenses	1,052,716	1,007,809	1,197,738	1,229,893	1,421,148	1,441,388	1,461,044
Current Year Surplus(Deficit)	-63,598	0	0	0	0	0	0
Prior Year Surplus	225,537	223,633	69,976	69,976	69,976	69,976	69,976
Accumulated Surplus	161,939	223,633	69,976	69,976	69,976	69,976	69,976
Target Balance(25% of budget)	263,179	251,952	299,435	307,473	355,287	360,347	365,261

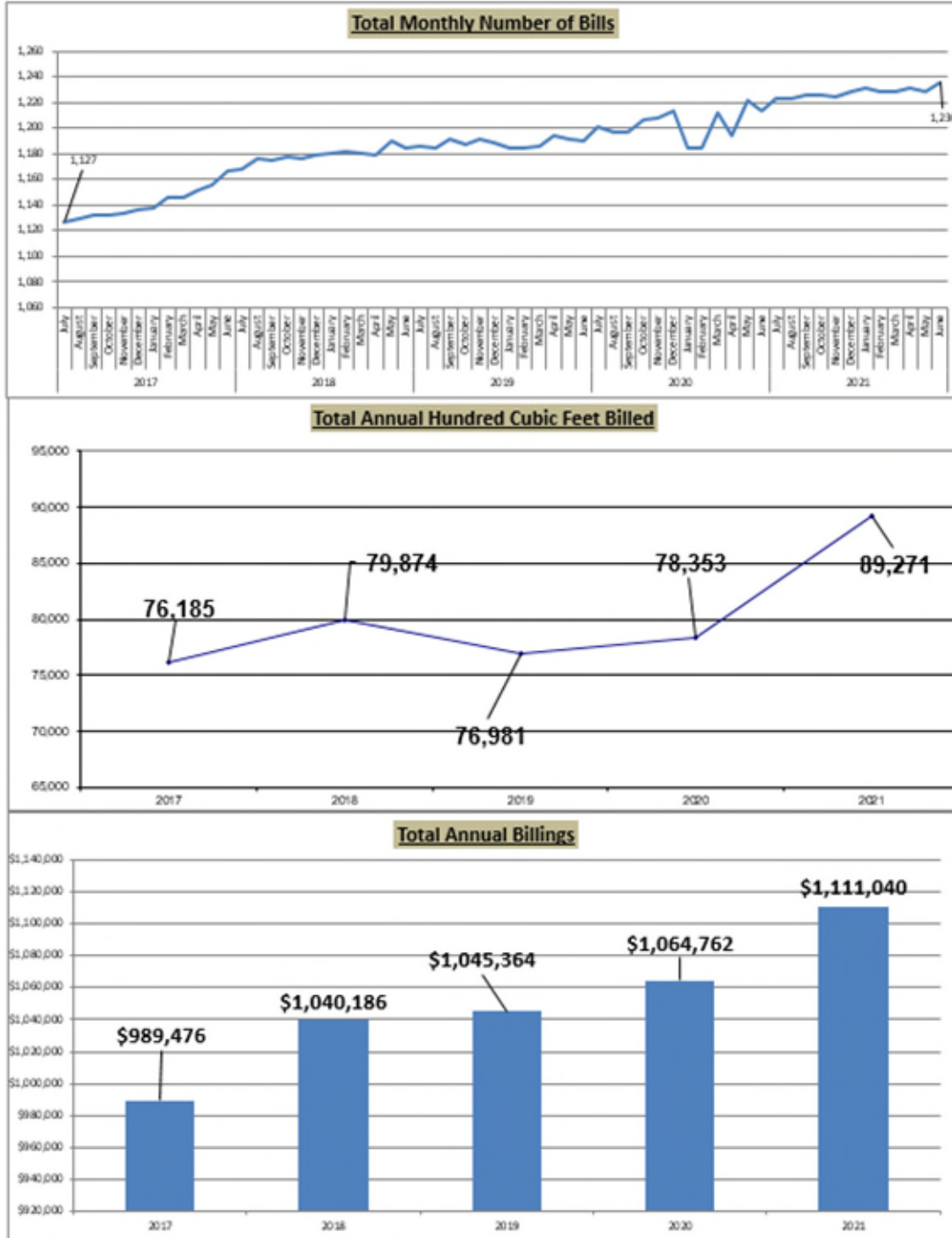
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$470,000

	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>
R&R Balance BOY	\$ 193,359	\$ 108,359	\$ 128,359	\$ 148,359	\$ 168,359
Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Withdrawals	\$ (125,000)	\$ (20,000)	\$ (20,000)	\$ (20,000)	\$ (20,000)
R&R Balance EOY	\$ 108,359	\$ 128,359	\$ 148,359	\$ 168,359	\$ 188,359

Sewer Billing Statistics

The District provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District’s water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.

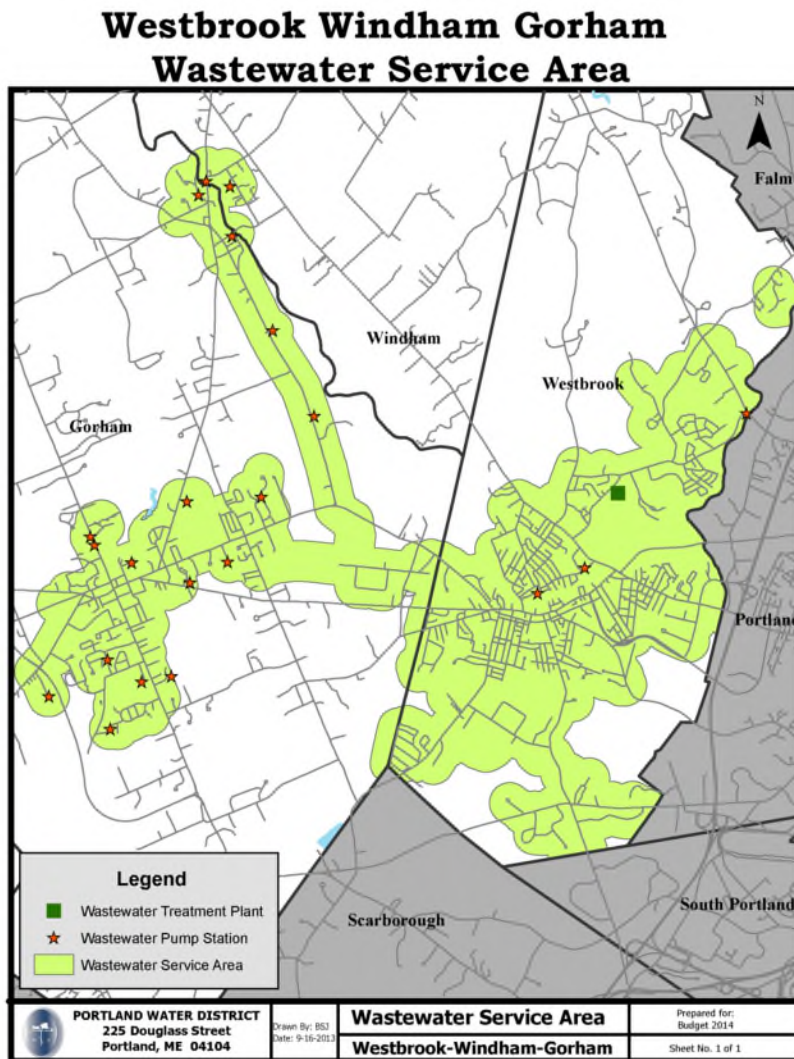
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater - Gorham

Background

The Portland Water District's charter authorizes the District to provide wastewater treatment and collection system-interceptors service to the town. By contract with the town, the District additionally operates and maintains the collectors in the sewer collection system. Gorham's wastewater is treated at the treatment facility located in Westbrook and jointly used by the Town of Windham and City of Westbrook. Additionally, by contract, the District provides utility billing services.



Summary of Services Provided:

Treatment

1.398 million
gallons/day

Collection System

14 Gorham only & 3
Joint use Pump
Stations with 33.7
miles of pipe

Utility Billing

Annual Billings of
\$1,301,085 for 1,946
Customers (avg.
\$55.72/month)

Fund: Wastewater - Gorham

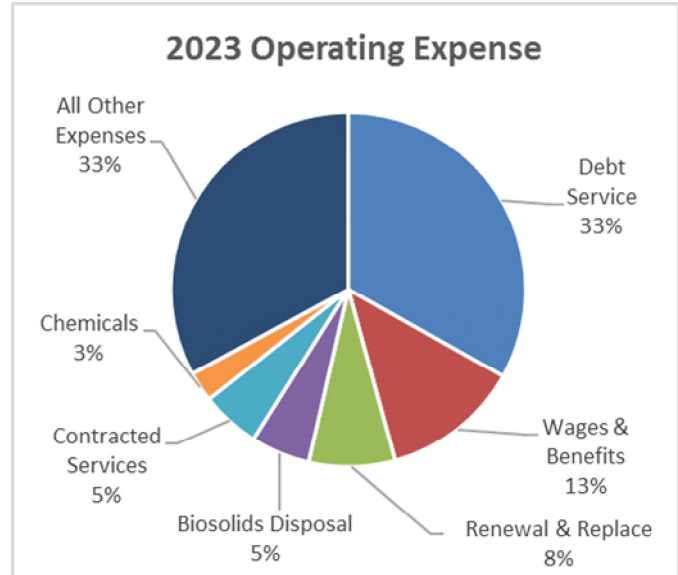
2023 Financial Summary

The proposed assessment is \$1,566,816; this is a 19.3% increase over the prior year.

The proposed 2023 Operating Expense and Capital budgets are \$1,580,737 and \$177,060, respectively.

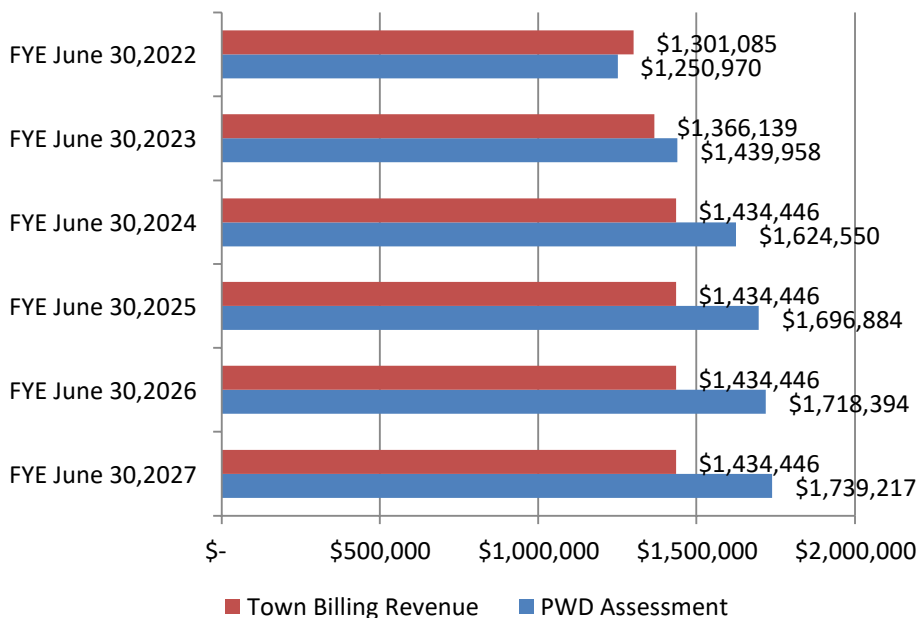
The Operating Expense budget increase is \$262,485 or 19.9%. Much of the Fund’s expense comes from joint use facilities with Westbrook and Windham. Gorham’s percentage of the wastewater flows increased in Westbrook Joint from 13.5% to 14.5% and in Little Falls Joint from 27.0% to 40.0%.

The 2023 Capital budget includes \$20,000 for a South Gorham sewer study, \$46,200 for a new roof on Cottage Place wastewater pump station, and \$35,420 for SCADA server replacements.



Assessment Compared to Ratepayers’ Billing

The municipality’s fiscal year end is June 30, while the District’s is December 31. The chart below compares the cash as collected by the District for sewer billings on their behalf and the District’s assessment for services rendered. The municipality may incur additional sewer-related costs. The municipality determines whether to increase the sewer billing rates.



Revenue Assumptions:

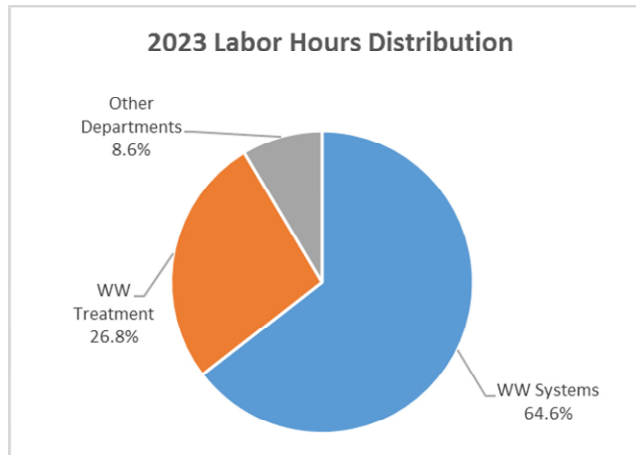
- Consumption is the 12 months ending June 30, 2021

- Rates Assumed:

Effective Date:	Base/Per HCF
Nov 2006	\$13.74/6.29
Apr 2021	\$14.39/\$6.64
Apr 2022	\$15.04/\$6.99
Apr 2023	\$15.69/\$7.34
Apr 2024	\$16.19/\$7.84

2023 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted increased 10.5% (410 hours). The majority, 239 hours, of the increase came from WW Treatment. Treatment plant costs are allocated based on flows. Higher Gorham flows combined with the District’s average wage rates increase of 12.2% resulted in a 23.2% (\$26,081) increase in Salaries/Wages.



Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to increase by 26.5% (\$12,803).

Biosolids Disposal – The budget assumes a disposal rate of \$142/wet ton, that is a 42% increase over the 2022 Budget assumption of \$100. The higher unit cost relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. That increase along with an assumed 2.3% decrease in overall volume resulted in a 49.1% (\$28,071) increase in Biosolids expense. Gorham’s share of allocated treatment costs increased 1.0% to 14.5%.

Chemicals – Chemical expense regional treatment plant rose 56.0% due primarily to higher per unit costs for Sodium Hypochlorite (77.3%), Polymer (36.4%) and Sodium Bisulfite (13.8%). In addition, Sodium Hypochlorite usage is projected to increase 29.4%.

Heat/Fuel Oil – The budget increased 47.5% (\$3,604) mostly due to an estimated increase in the cost of heating oil from \$2.29 to \$3.80 per gallon at the treatment plant.

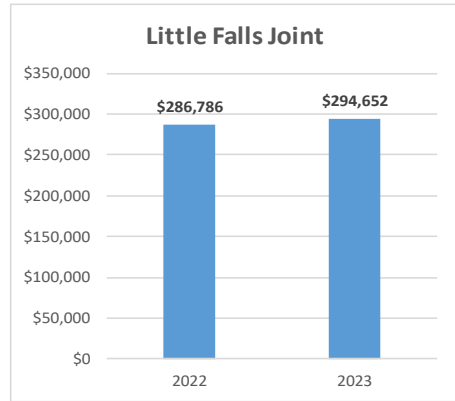
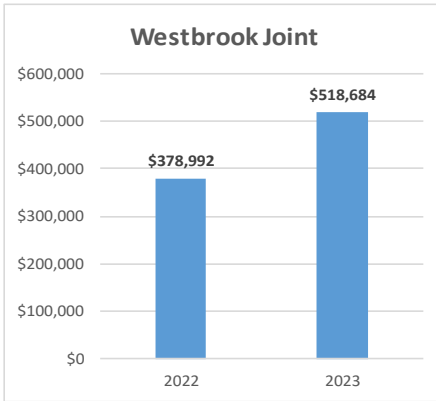
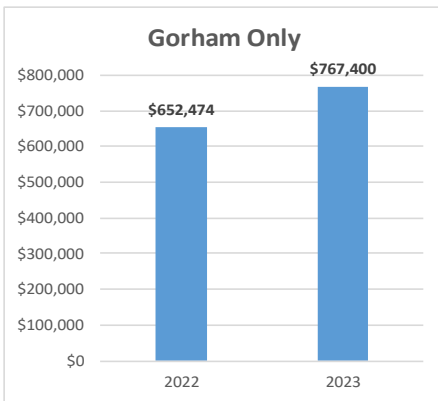
Regulatory/Taxes – The 2022 Budget included a new regulatory fee totaling \$5,721 from the State of Maine to deal with statewide issues regarding PFAS. That fee was cancelled by the State and removed from the 2023 Budget.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$65,122 or 20.4%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.

Debt Service - The annual principal and interest payments on bonds issued to finance capital projects. This item increased 15.0% (\$68,239) mainly due to aeration bonds for the Westbrook Regional Wastewater Treatment Facility having payments due sooner than originally proposed.

Renewal & Replacement - Dollars put aside to fund smaller capital projects. A contribution of \$124,245 will be made in 2023.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$1,188,840	\$656,550	\$1,313,100	\$1,566,816	\$253,716	19.3%
Interest Income	278	2,110	4,202	6,060	1,858	44.2%
Other Income	<u>1,579</u>	<u>33</u>	<u>950</u>	<u>7,861</u>	<u>6,911</u>	<u>727.5%</u>
Total Revenue	1,190,697	658,693	1,318,252	1,580,737	262,485	19.9%
Salaries & Wages	100,267	58,013	112,210	138,291	26,081	23.2%
Employee Benefits	47,692	25,447	48,325	61,128	12,803	26.5%
Biosolids Disposal	50,085	28,501	57,213	85,284	28,071	49.1%
Chemicals	23,940	18,489	26,157	43,185	17,028	65.1%
Contracted Services	129,364	25,539	74,869	85,146	10,277	13.7%
Heat/Fuel Oil	6,529	6,139	7,589	11,193	3,604	47.5%
Insurance	1,877	1,046	2,091	2,563	472	22.6%
Materials & Supplies	37,828	24,967	28,579	32,775	4,196	14.7%
Other Expense	435	238	1,010	868	-142	-14.1%
Purchased Power	47,103	26,434	51,960	53,445	1,485	2.9%
Regulatory/Taxes	853	885	6,329	935	-5,394	-85.2%
Tele/Other Utilities	3,170	2,040	4,012	4,422	410	10.2%
Transportation	22,546	13,659	25,662	28,960	3,298	12.9%
SS - Administration	143,192	75,060	144,577	177,152	32,575	22.5%
SS - Engineering Services	45,666	30,274	79,205	91,520	12,315	15.5%
SS - Environmental Services	23,166	10,754	23,192	25,482	2,290	9.9%
SS - Wastewater Services	69,413	35,161	69,698	87,520	17,822	25.6%
SS - Water Services	<u>2,252</u>	<u>2,339</u>	<u>2,795</u>	<u>2,915</u>	<u>120</u>	<u>4.3%</u>
Operating Expense	755,378	384,985	765,473	932,784	167,311	21.9%
Debt Service & Lease Expense	369,407	218,331	455,469	523,708	68,239	15.0%
Renewal & Replacement - Direct	100,000	37,500	75,000	100,000	25,000	33.3%
Renewal & Replace - Indirect	<u>20,196</u>	<u>11,179</u>	<u>22,310</u>	<u>24,245</u>	<u>1,935</u>	<u>8.7%</u>
Total Expense	1,244,981	651,995	1,318,252	1,580,737	262,485	19.9%
Current Year Surplus (Deficit)	-54,284	6,698	0	0		
Transfer to R&R	0	0	0	0		
Prior Year Surplus	<u>300,209</u>	<u>245,925</u>	<u>339,048</u>	<u>169,258</u>		
Accumulated Surplus	245,925	252,623	339,048	169,258		



- Overall costs up \$115k (17.6%)
 - Operating Expense up \$87.6k (16.1%)

- Overall Westbrook Joint up 26.9%
 - Gorham's share up 36.9% (\$140k)
 - Gorham's flow percentage up 1.0% (13.5% to 14.5%)

- Overall Little Falls Joint down 1.2%
 - Gorham's share up 2.7% (\$7.9k)
 - Gorham's flow percentage up 13.0% (27.0% to 40.0%)

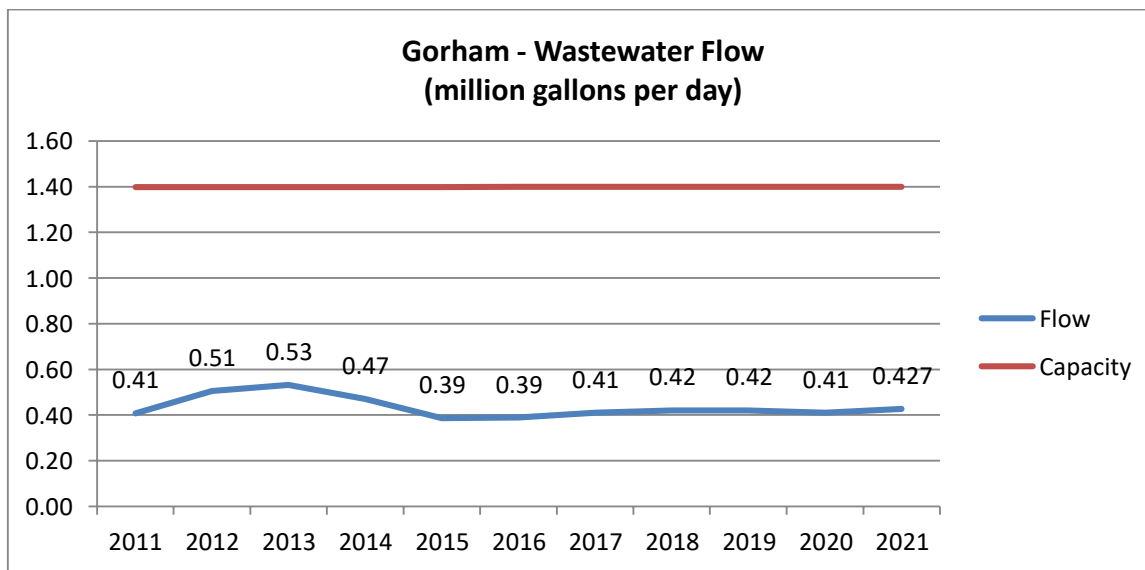
Operation Summary Gorham

Wastewater Treatment: All wastewater generated in Gorham is being treated at the Westbrook/ Gorham/Windham Regional WWTF. The table below shows flow from the Gorham and Little Falls section of Gorham to the regional facility. The Town of Gorham shares operational costs at the treatment facility in Westbrook based on the amount of flow the town contributes to the total flow through the treatment facility. Gorham has 30.8% of the treatment facility capacity, or 1,398,320 gallons per day.

Area	2021 Gorham Flow	Westbrook WWTF Flow	% Gorham Flow
Total Gorham Flow	0.427 mgd	2.951 mgd	14.5%

WGWWTF Capacity	Gorham Capacity (30.8%)	2021 - % Capacity Used	Capacity Remaining
4.54 mgd	1.398 mgd	30%	0.971 mgd

Flow from Gorham remained steady when compared to the past several years. The Town of Gorham utilized 30% of the allotted capacity at the treatment plant and has just under 1 million gallons per day of capacity remaining at the treatment plant.



Wastewater Conveyance – interceptors and pumping stations

Parameter	2022 Actual to Sept	2023 Projected
Preventive Work Orders	535	600
Corrective Work Orders	16	20
Wet wells cleaned	37	45
Debris removed (tons)	88	100
Dry Weather Overflows	0	0

Operation Summary (continued)

2022 Other Highlights

- The Asset Management Program continued to direct the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations. Staff continues to enhance their use of the new asset management system.
- Construction of the new diffused aeration system and clarifier upgrades are underway and will continue through 2023.
- Recognizing the increased loading at the treatment plant and in anticipation of the aeration system upgrade in 2020, acceptance of septage at the plant was stopped until after the completion of the aeration upgrade. Septage is accepted at the East End WWTF in Portland.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- Using the new vacor truck, and through a focus by staff on wet well cleanings, more wet wells were cleaning and more debris was removed.
- An effort to reclassify a section of the Presumpscot River was considered by the Maine State Legislature. The effort was paused while the potential impact on the allowable discharge from the treatment plant is evaluated alongside additional monitoring of water quality over the summer. These discussions are expected to continue.
- A biosolids management plan has been completed. This plan identified near, mid, and longer range options for biosolids management in the midst of some of the challenges brought about by the developing awareness of PFAS in Maine.
- An amended contract to reliably manage biosolids after this year's ban on land based biosolids management has been completed. In the face of significant uncertainty, this effort will provide service and price certainty.

2023 Work Plan

- The new software and Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- Construction of the aeration system at the treatment plant will continue and the plant team will be working to operate the facility through the project.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce.
- The initial phases of the biosolids management plan's recommendations will be evaluated. The initial goal is to enhance the ability of PWD's facilities to more quickly and efficiently produce biosolids to accommodate more restrictive management options and schedules.
- A study of basic options for the sewerage of South Gorham is included in the capital plan.
- The treatment plant permit will be renewed by Maine DEP.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections.

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2023 CIP</u>	<u>Total</u>
Projects:			
SCADA - server replacement - 3127 (prorated)		\$ 35,420	\$ 35,420
WW Collection & Pumping			
Gorham Only Pump Station R&R - 3137	\$ 20,000		\$ 20,000
South Gorham Sewer Study - 3276	\$ 20,000		\$ 20,000
Cottage Place Roof Replacement - 3284 (prorated)	\$ 46,200		\$ 46,200
WW Treatment			
<u>Westbrook Treatment Plant</u>			
Aeration & Clarifier Construction - 3023 (prorated)	\$ 1,232,000		\$ 1,232,000
Treatment Plant R&R - 3132 (prorated)	\$ 40,040		\$ 40,040
Access Rd & Parking Lot Resurfacing - 3190 (prorated)	\$ 4,620		\$ 4,620
Fire Monitoring System Upgrade - 3272 (prorated)	\$ 10,780		\$ 10,780
Total by CIP Year	\$ 1,232,000	\$ 177,060	\$ 1,409,060

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue</u>	<u>Bond Issue</u>	<u>Funding Total</u>
		<u>2023</u>	<u>> 2023</u>	
Beginning Balance	\$ 868,889			
2023 Contribution	\$ 100,000			
Total R&R Balance Available	\$ 968,889			
Projects:				
WW Collection & Pumping	\$ 101,620			\$ 101,620
WW Treatment	\$ 55,440	\$ 1,232,000		\$ 1,287,440
Total	\$ 157,060	\$ 1,232,000	\$ -	\$ 1,389,060
Ending Balance	\$ 811,829			

Future Operating Budget

\$ 20,000
\$ 1,409,060

Prorated Projects: Costs of projects done on infrastructure used by multiple communities are 'prorated' between the municipalities based on relative design capacity.

Projections for Rate-Making Purposes

Multi-year projections are made for each of the wastewater funds’ assessment. The projections provide guidance to the wastewater municipalities to assist them in determining their wastewater sewer rates. A summary of the projection is provided on next page.

Major Assumptions:

Major assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$5.4 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.

Summary of Projection Impact:

Assessment is projected to increase to \$1,753,129 in 2027, a 33% increase over 2022 Budget.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2021	2022	2023	2024	2025	2026	2027
31%	35%	33%	35%	34%	33%	32%

Debt Service Ratio – Target: Greater or Equal to 125%

2021	2022	2023	2024	2025	2026	2027
132%	121%	124%	121%	121%	122%	122%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Assessment Income	1,188,840	1,313,100	1,566,816	1,682,283	1,711,484	1,725,304	1,753,129
Interest Income	278	4,202	6,060	6,060	6,060	6,060	6,060
Other Income	1,579	950	7,861	7,861	7,861	7,861	7,861
Total Revenues	1,190,697	1,318,252	1,580,737	1,696,204	1,725,405	1,739,225	1,767,050
Operating Expenses:							
Salaries & Wages	100,267	112,210	138,291	143,823	149,576	154,811	160,229
Employee Benefits	47,692	48,325	61,128	64,184	67,393	70,763	74,301
Biosolids Disposal	50,085	57,213	85,284	88,695	91,799	94,553	97,390
Chemicals	23,940	26,157	43,185	44,481	45,815	47,189	48,605
Contracted Services	129,364	74,869	85,146	87,700	90,331	93,041	95,832
Heat/Fuel Oil	6,529	7,589	11,193	11,529	11,875	12,231	12,598
Insurance	1,877	2,091	2,563	2,640	2,719	2,801	2,885
Materials & Supplies	37,828	28,579	32,775	33,758	34,771	35,814	36,888
Other Expense	435	1,010	868	894	921	949	977
Purchased Power	47,103	51,960	53,445	58,790	61,142	62,976	64,865
Regulatory/Taxes	853	6,329	935	963	992	1,022	1,053
Tele/Other Utilities	3,170	4,012	4,422	4,555	4,692	4,833	4,978
Transportation	22,546	25,662	28,960	29,829	30,724	31,646	32,595
SS - Administration	143,192	144,577	177,152	184,238	191,608	198,793	206,248
SS - Engineering Services	45,666	79,205	91,520	95,135	98,893	102,577	106,398
SS - Environmental Services	23,166	23,192	25,482	26,501	27,561	28,595	29,667
SS - Wastewater Services	69,413	69,698	87,520	91,021	94,662	98,212	101,895
SS - Water Services	2,252	2,795	2,915	3,032	3,153	3,271	3,394
	755,378	765,473	932,784	971,768	1,008,627	1,044,077	1,080,798
Debt Service	369,407	455,469	523,708	600,859	593,201	571,571	562,675
Renewal & Replacement - Direct	100,000	75,000	100,000	100,000	100,000	100,000	100,000
Renewal & Replace - Indirect	20,196	22,310	24,245	23,577	23,577	23,577	23,577
Capital Finance Expense	489,603	552,779	647,953	724,436	716,778	695,148	686,252
Total Operating Expenses	1,244,981	1,318,252	1,580,737	1,696,204	1,725,405	1,739,225	1,767,050
Current Year Surplus(Deficit)	-54,284	0	0	0	0	0	0

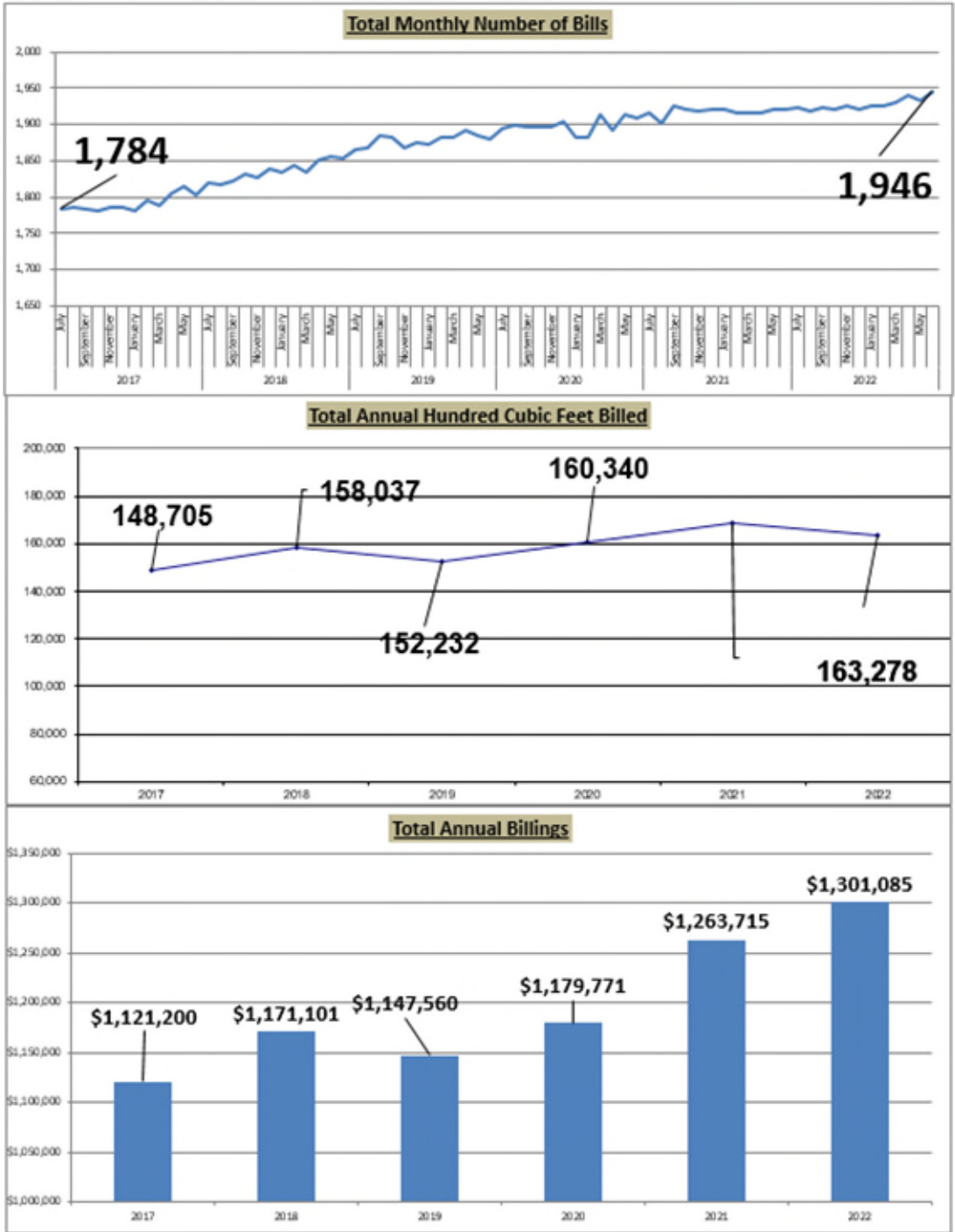
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$920,000

	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
R&R Balance BOY	\$ 868,889	\$ 811,829	\$ 522,229	\$ 357,829	\$ 376,229
Contribution	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Withdrawals	\$ (157,060)	\$ (389,600)	\$ (264,400)	\$ (81,600)	\$ (25,400)
R&R Balance EOY	\$ 811,829	\$ 522,229	\$ 357,829	\$ 376,229	\$ 450,829

Sewer Billing Statistics

The District provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District’s water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.

By Municipal Fiscal Year: Jul 1 to Jun 30

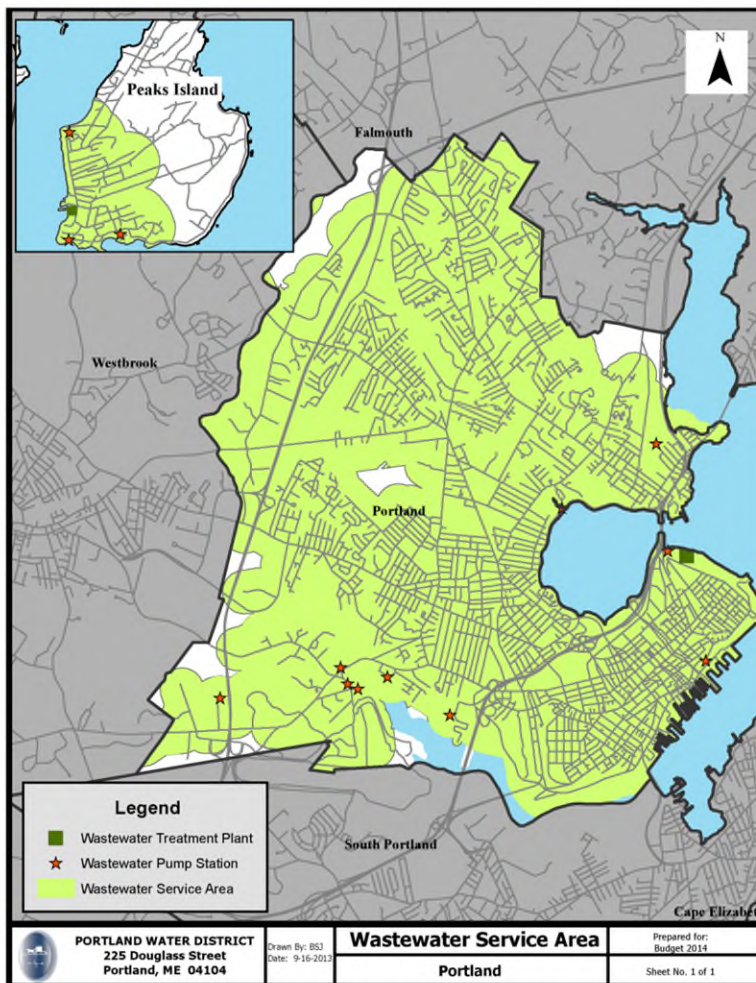


Fund: Wastewater - Portland

Background

The Portland Water District's charter authorizes the District to provide wastewater treatment, collection system and interception services to the city. By contract with the city, the District additionally provides Peaks Island's collection system-collector and storm water system services. The city maintains the mainland's collection system-collectors that transport wastewater from user's property to the District's interceptors. Additionally, by contract, the District provides utility billing services.

Portland Wastewater Service Area



Summary of Services

Provided:

Treatment

Mainland: 19.8 million gallons/day

Peaks Island: 0.101 million gallons/day

Collection System

14 Pump Stations with
23.5 miles of pipe

Storm Water system

Peaks Island with 1.9 miles of pipe

Utility Billing

Annual Billings of
\$27,599,202 on 17,278
Customers (avg.
\$133.11/month)

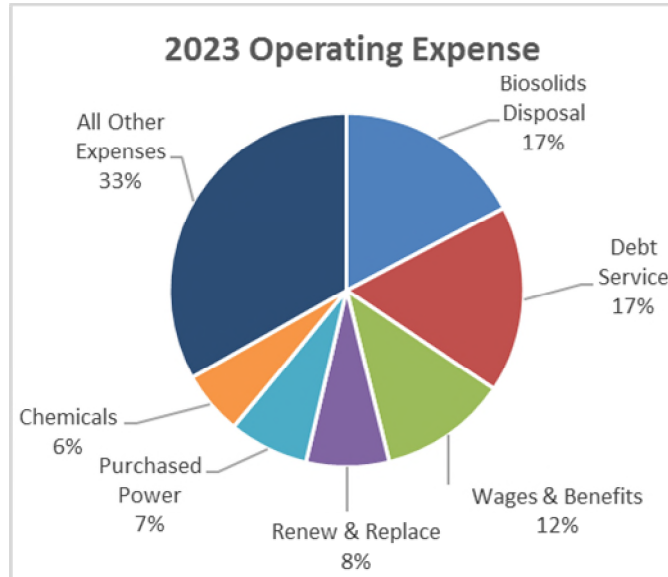
Fund: Wastewater - Portland

2023 Financial Summary

The city’s assessment will increase 13.2% or \$1,838,508 to \$15,798,744.

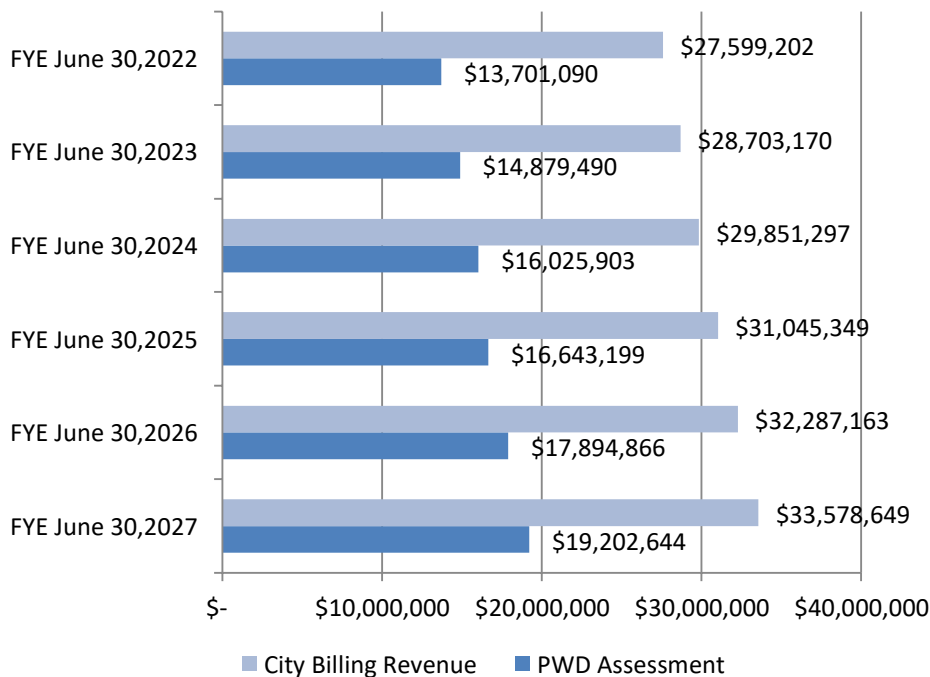
The proposed 2023 Operating Expense and Capital budgets are \$16,343,824 and \$2,895,000, respectively.

The Operating Expense budget is \$2,113,381 or 14.9%, higher than the previous year. Departmental expense increased by \$1,926,019 or 18.5%. Debt service increased \$179,217 (6.9%) and renewal & replacement (direct and indirect) will increase \$8,145 to \$1,236,470. Some items included in the 2023 Capital plan are a force main evaluation/condition assessment, storm water upgrades on Peaks Island, and paving at the East End WWTF.



Assessment Compared to Ratepayers’ Billing

The municipality’s fiscal year end is June 30, while the District’s is December 31. The chart below compares the sewer billing cash as collected by the District on their behalf and the District’s assessment for services rendered. The municipality may incur additional sewer-related costs. The municipality determines whether to increase the sewer billing rates.

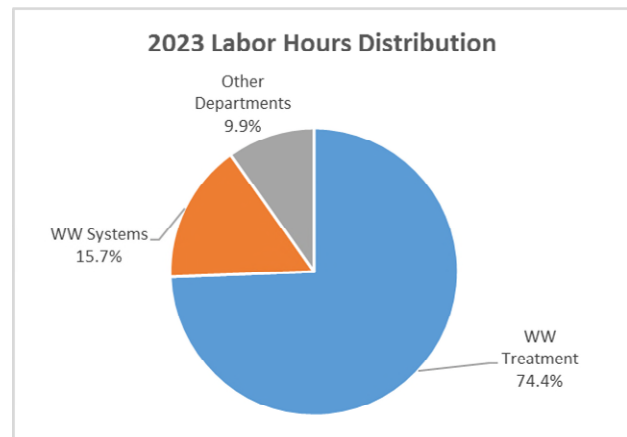


Revenue Assumptions:	
-	Consumption is the 12 months ending June 30, 2022
-	Rates Assumed:
Effective Date:	Base/Per HCF
Jul 1 2013	\$8.35
Jul 1 2014	\$8.81
Jul 1 2015	\$9.70
Jan 1 2016	\$8.20
Jan 1 2017	\$9.35
Jul 1 2017	\$9.65
Jul 1 2018	\$9.95
Jul 1 2019	\$10.40
Dec 1 2020	\$11.15
Sep 1 2021	\$11.80
Jul 1 2022	\$12.30
Assumed 4% increase in July 2023 to 2027.	

2022 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted decreased 0.6% (267 hours). The majority, 940 hours, of the decrease came from WW Treatment. This combined with the District’s average wage rates increase of 12.2% resulted in a 10.7% (\$129,495) increase in Salaries/Wages

Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to increase by 12.6% (\$64,664).



Biosolids Disposal – The budget assumes a disposal rate of \$142/wet ton, that is a 42% increase over the 2022 Budget assumption of \$100. The higher unit cost relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. That increase along with an assumed 5.5% increase in overall volume resulted in a 49.8% (\$939,872) increase in Biosolids expense.

Chemicals – Chemical expense rose 52.7% due primarily to higher per unit costs for Sodium Hypochlorite (77.3%), Polymer (36.4%) and Sodium Bisulfite (22.6%). In addition, Sodium Hypochlorite usage is projected to increase 8.3%.

Heat/Fuel Oil – The majority of this category is pipeline delivered natural gas and container delivered propane at the East End WWTF. This budget increased \$36,934 (32.8%) to \$149,601 as per unit cost increased substantially.

Purchased Power – Power is expected to increase 4.5% (\$50,785) driven by higher estimated energy rates on large accounts and increased usage of 350k kWh for the East End Wastewater Treatment Plant. These two factors result in a 24.6% (\$117k) increase in large energy. However, this is offset by a significant decrease in T&D rates; an impact of -11.0% (\$-57k) for large accounts.

Regulatory/Taxes – The 2022 Budget included a new regulatory fee totaling \$188,280 from the State of Maine to deal with statewide issues regarding PFAS. That fee was cancelled by the State and removed from the 2023 Budget.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$388,313 or 11.3%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.

Debt Service – This is the annual principal and interest payments on bonds issued to finance capital projects. The expense will increase \$179,217 (3.9%) due to the issuance of new debt.

Renewal and Replacement – This is the fund’s annual contribution to finance smaller capital projects. A contribution of \$1,236,470 will be made in 2023.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$13,441,944	\$6,980,118	\$13,960,236	\$15,798,744	\$1,838,508	13.2%
Interest Income	-5,050	-82,792	20,207	83,224	63,017	311.9%
Other Income	624,957	311,093	250,000	461,856	211,856	84.7%
Total Revenue	14,061,851	7,208,419	14,230,443	16,343,824	2,113,381	14.9%
Salaries & Wages	1,170,179	583,792	1,210,044	1,339,539	129,495	10.7%
Employee Benefits	520,996	241,780	511,797	576,461	64,664	12.6%
Biosolids Disposal	1,872,502	908,195	1,888,200	2,828,072	939,872	49.8%
Chemicals	615,095	379,096	625,767	955,826	330,059	52.7%
Contracted Services	793,004	413,846	673,568	818,502	144,934	21.5%
Heat/Fuel Oil	112,260	100,188	112,667	149,601	36,934	32.8%
Insurance	36,719	18,890	40,003	42,502	2,499	6.2%
Materials & Supplies	277,710	253,398	310,900	340,048	29,148	9.4%
Other Expense	-20,605	1,876	-4,895	-12,870	-7,975	162.9%
Purchased Power	1,109,528	561,995	1,140,786	1,191,571	50,785	4.5%
Regulatory/Taxes	51,959	3,385	225,220	38,580	-186,640	-82.9%
Transportation	55,917	26,963	75,633	72,612	-3,021	-4.0%
Tele/Other Utilities	166,794	93,259	150,588	157,540	6,952	4.6%
SS - Administration	1,516,093	811,487	1,561,392	1,792,203	230,811	14.8%
SS - Engineering Services	325,104	208,013	555,908	610,313	54,405	9.8%
SS - Environmental Services	289,546	130,831	274,597	280,885	6,288	2.3%
SS - Wastewater Services	1,063,236	502,372	1,005,624	1,102,328	96,704	9.6%
SS - Water Services	24,148	25,079	29,966	30,071	105	0.4%
Operating Expense	9,980,185	5,264,445	10,387,765	12,313,784	1,926,019	18.5%
Debt Service & Lease Expense	2,637,652	1,266,768	2,614,353	2,793,570	179,217	6.9%
Renewal & Replacement - Direct	700,000	500,000	1,000,000	1,000,000	0	0.0%
Renewal & Replace - Indirect	205,188	114,389	228,325	236,470	8,145	3.6%
Total Expense	13,523,025	7,145,602	14,230,443	16,343,824	2,113,381	14.9%
Current Year Surplus (Deficit)	538,826	62,817	0	0		
Transfer to R&R	-100,000	-150,000	0	0		
Return of WW Accumulated Surplus	0	-309,203	0	0		
Prior Year Surplus	3,427,987	3,866,813	3,848,794	3,405,260		
Accumulated Surplus	3,866,813	3,470,427	3,848,794	3,405,260		

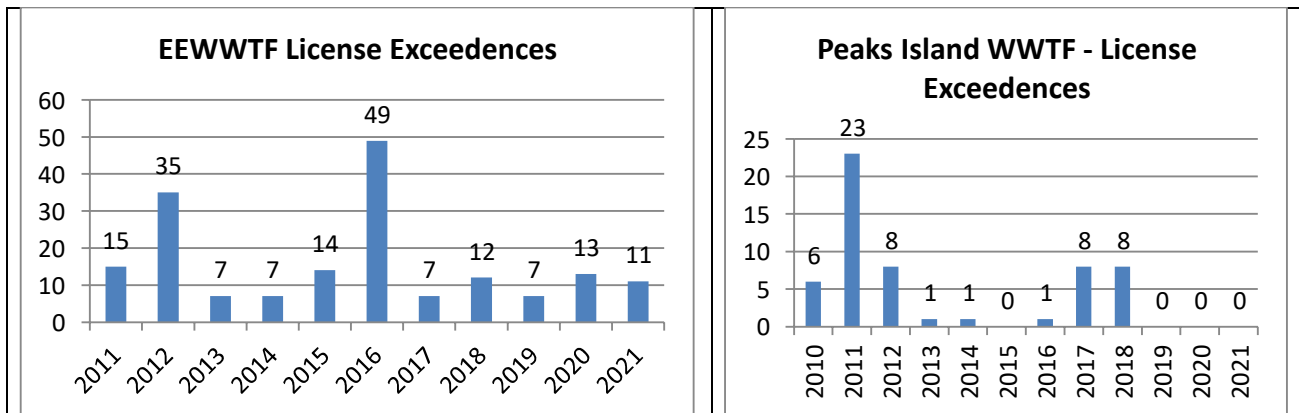
Operation Summary Portland

Wastewater Treatment: The Portland Water District owns, operates and maintains the interceptor and treatment facilities in the City of Portland. The largest facility, the East End WWTF is located off the Eastern Promenade while the Peaks Island facility is located by the ferry dock on the island.

EEWTF Parameter	Capacity	2021 Facility Avg	2021 - % Capacity Used
Flow (million gallons per day)	19.8 mgd	13.7 mgd	69%
Biosolids Removed (wet tons/month)	N/A	1,705 wt/month	

Effluent Permit Requirements:

Parameter	Discussion
Biological Oxygen Demand (BOD)	Measure of organic material and the strength of pollution. The treatment plant removed 97% of the BOD; well above the required 85% removal.
Total Suspended Solids (TSS)	Measure of suspended material in the incoming wastewater; also the strength of pollution. The treatment plant removed 96% of the TSS, well above the required 85% removal.
Total Residual Chlorine	Used for disinfecting the treated effluent, chlorine must be removed before the effluent is discharged.
Fecal Coliform Bacteria	Following disinfection with chlorine, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.
Effluent Nitrogen	Nitrogen is considered a pollutant that can contribute to water quality issues. The 2017 permit requires monitoring of nitrogen during the warmer months and the development of a “nitrogen optimization” approach where PWD will be asked to operate the plant to reduce the effluent nitrogen loading using existing facilities. In 2021, the plant demonstrated a 79% reduction in effluent nitrogen loading from historic levels from May to September. The average loading of 504 lb/d of total nitrogen is consistent with levels achieved in the past few years.

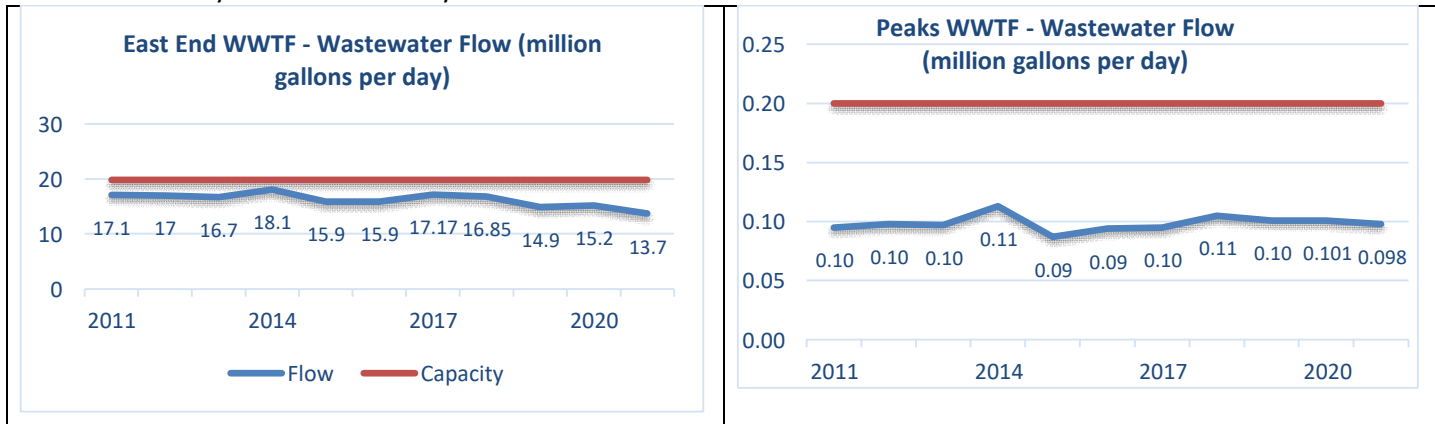


Operation Summary (continued)

Since the issuance of the effluent permit in 2017, PWD has been engaged in an adaptive management approach to reduce effluent nitrogen. To documents these efforts, PWD is required to submit an annual “nutrient optimization” report that includes effluent nitrogen results and our efforts to manage nitrogen. The new aeration system is anticipated to be able to achieve a 20 – 40% reduction in effluent nitrogen levels. The plant has demonstrated around a 70% reduction in effluent nitrogen loading from historic levels from May to September over the past few years. In 2021, the plant demonstrated a 79% seasonal reduction. Current performance is comparable to past results.

Of interest, were observations of slightly increased effluent nitrogen results during a brief period when the diffuser system in one of the three aeration basins was inspected and cleaned. Operating the plant with only two of the three aeration tanks seemed to have an affect on the performance of the plant. While not conclusive, this does highlight the adaptive management approach that has focused on the careful operation of existing infrastructure to reduce effluent nitrogen is limited by the lack of redundancy and full tankage to allow for such routine work (or equipment issues). A more stringent permit condition will likely require significant investment in new tankage and equipment in order for those limits to meet reliably.

The treatment facility on Peaks Island provides wastewater treatment to the residents and businesses on Peaks Island. The Peaks Island WWTF permit requires monitoring of effluent nitrogen from the treatment plant. Waste solids generated on the island are hauled to the mainland and processed at the Portland’s East End Wastewater Treatment Facility. With the completion of the Island Avenue sewer extension project and eventual connection of those customers adjacent to the new sewer, the capacity in the treatment plant will have essentially been reached (the summer months, when the population of residents and visitors increases, are the times that strain treatment capacity). In 2018, an analysis of the current capacity, along with suggested upgrades or opportunities for capacity improvements, was completed. Treatment plants have both a hydraulic (flow) and loading (amount of pollution that can be treated) capacity. As shown below, while specific high volume storm events are problematic, the plant flow is within the design capacity of the plant. Additional sewer connections beyond the current amount and those connected as part of the sewer extension, cannot be readily accommodated by the current facility.



Wastewater Conveyance – interceptors and pumping stations

Parameter	2022 Actual to Sept	2023 Projected
Preventive Work Orders	428	500
Corrective Work Orders	32	50
Wet wells cleaned	10	15
Debris removed (tons)	19.5	30
Dry Weather Overflows	1	0

Operation Summary (continued)

2022 Other Highlights

- Staffing schedules were adjusted to provide more dedicated operator time to operations during daytime hours. This has resulted in a more informed team and the operation of the facility has been very stable. Additional efforts to coordinate maintenance have increased maintenance time spent at the treatment plant.
- The new asset management system is being used by treatment and maintenance to improve preventive maintenance and the identification of maintenance needs. Development and refinement of this system continues on a regular basis.
- Monthly CSO activities continue to be monitored and reported by PWD for regular distribution to stakeholders. Sites are continuously monitored by web-based software. In 2016, many of these decade-old units had reached the end of their service life and were replaced with newer models. This should ensure that the monitors continue to provide monitoring and alarming of CSO sites for the next 10 years.
- The diffused aeration system construction was completed in the summer of 2017. This system has had several operational benefits, including: improved sludge settleability, reduced odors from the aeration system, and the ability to attempt nutrient optimization in the warmer months. Treatment efficiency has improved as well, with an average of 96% of pollution removed by the facility.
- The aeration system has allowed the East End facility to manage nitrogen in the warmer months. In 2021, the seasonal loading has been reduced by 79% from historical levels. We worked with the supplier of an effluent nitrogen analyzer and the unit has reliably measured nitrogen levels in the effluent. Nitrogen reduction will be a topic of interest as the treatment plant permits are renewed in the coming years.
- Construction of an upgrade to the Baxter Blvd. pump station and related force main were completed in 2022.
- An electrical distribution system upgrade is underway at the facility to address the aging system.
- A biosolids management plan has been completed. This plan identified near, mid, and longer range options for biosolids management in the midst of some of the challenges brought about by the developing awareness of PFAS in Maine.
- An amended contract to reliably manage biosolids after this year's ban on land based biosolids management has been completed. In the face of significant uncertainty, this effort will provide service and price certainty.

2023 Work Plan

- The new software and Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders.
- The City of Portland has embarked on a two-year Integrated Planning effort to prioritize water quality commitments. This effort will assess combined sewer, stormwater, and wastewater treatment obligations and prioritize the use of resources to address the various efforts with a goal of improving receiving water quality. PWD remains engaged as a partner in this ongoing effort.
- The initial phases of the biosolids management plan's recommendations will be evaluated. The initial goal is to enhance the ability of PWD's facilities to more quickly and efficiently produce biosolids to accommodate more restrictive management options and schedules.
- Design of the secondary clarifier mechanisms will begin with construction anticipated in the following year.
- The effluent permit for the treatment plant will be renewed by Maine DEP. Discussion of nitrogen reduction requirements will be part of this effort.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections.

Expenditures by CIP Year:

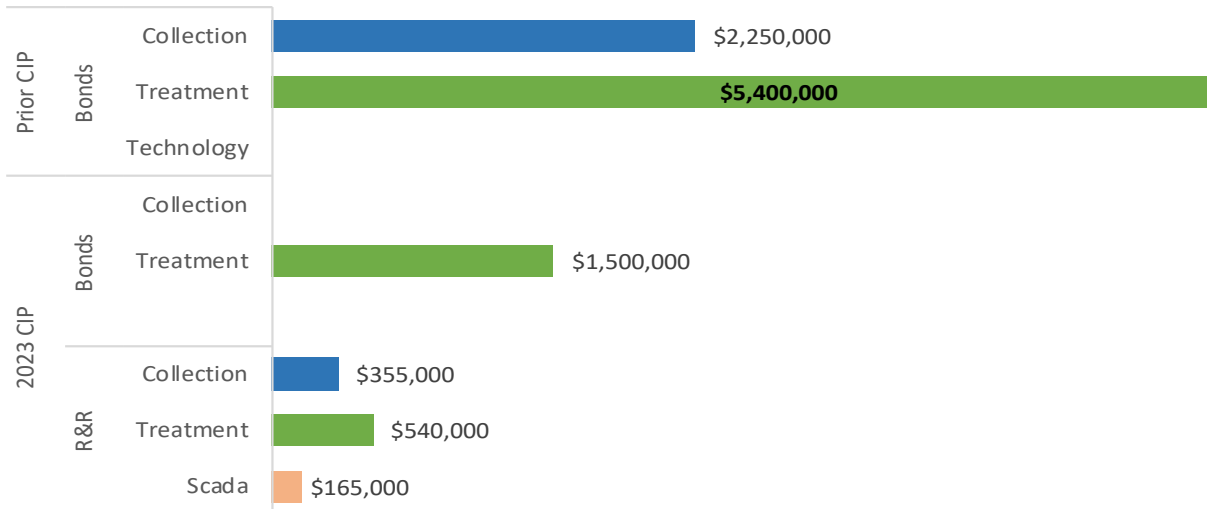
Projects:	<u>Prior CIP</u>	<u>2023 CIP</u>	<u>Total</u>
Comprehensive Planning	\$ -	\$ 300,000	\$ 300,000
SCADA & Technology	\$ -	\$ 165,000	\$ 165,000
WW Collection & Pumping	\$ 2,250,000	\$ 355,000	\$ 2,605,000
WW Treatment	\$ 5,400,000	\$ 2,075,000	\$ 7,475,000
Total by CIP Year	\$ 7,650,000	\$ 2,895,000	\$ 10,545,000

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue 2023</u>	<u>Bond Issue > 2023</u>	<u>Total Funding</u>
Beginning Balance	\$ 5,902,686			
2023 Contribution	\$ 1,000,000			
Total R&R Balance Available	\$ 6,902,686			
Projects:				
SCADA & Technology	\$ 165,000			\$ 165,000
WW Collection & Pumping	\$ 355,000	\$ 750,000	\$ 1,500,000	\$ 2,605,000
WW Treatment	\$ 540,000	\$ 1,500,000	\$ 5,400,000	\$ 7,440,000
Total	\$ 1,060,000	\$ 2,250,000	\$ 6,900,000	\$ 10,210,000
Ending Balance	<u>\$ 5,842,686</u>			

Future Operating Budget

\$ 335,000
\$ 10,545,000



Capital Summary (continued)**Projects:**

	<u>R&R Fund</u>	<u>Future Bond</u>	<u>Funding Total</u>	<u>Bond Issue Year</u>
SCADA - EEWWTF server replacement - 3128	\$ 165,000		\$ 165,000	
WW Collection & Pumping				
Stroudwater PS Conversion to Submersible - 3006		\$ 750,000	\$ 750,000	2023
Portland Pump Station R&R - 3135	\$ 50,000		\$ 50,000	
Garrison St PS Upgrade to Submersible - 3184		\$ 750,000	\$ 750,000	2024
Congress St PS Upgrade to Submersible - 3185		\$ 750,000	\$ 750,000	2024
Peaks Island Stormwater System Upgrades - 3279	\$ 100,000		\$ 100,000	
India St. PS Roof Rehabilitation	\$ 175,000		\$ 175,000	
India St. PS Landscaping	\$ 30,000		\$ 30,000	
WW Treatment				
<u>East End Treatment Facility</u>				
Dewatering Odor Control Rehab & Expansion - 3009		\$ 100,000	\$ 100,000	2024
Process Valve and Actuator Replacement - 3020	\$ 30,000		\$ 30,000	
East End WWTF R&R - 3133	\$ 210,000		\$ 210,000	
East End WWTF Paving - 3145		\$ 500,000	\$ 500,000	2023
Secondary Clarifier Sludge Rake Replace - 3147		\$ 500,000	\$ 500,000	2025
Return Sludge Piping Replacement - 3148		\$ 200,000	\$ 200,000	2024
Primary Sludge Handling & Gallery Upgrade - 3152		\$ 5,100,000	\$ 5,100,000	2024
Dewatering System Upgrade - 3204		\$ 500,000	\$ 500,000	2025
Disinfection Yard Piping Replacement - 3263	\$ 100,000		\$ 100,000	
Primary Clarifier Cross Collector #3 Replace - 3264	\$ 150,000		\$ 150,000	
<u>Peaks Island Treatment Facility</u>				
Peaks Island R&R - 3131	\$ 20,000		\$ 20,000	
Fire Monitoring System Upgrade - 3277	\$ 30,000		\$ 30,000	
Total	\$1,060,000	\$ 9,150,000	\$ 10,210,000	

Future Operating Budget

Portland Forcemain Eval/Condition Assessment - 3268	\$ 300,000
Peaks Island WWTF Outfall Condition Assessment - 3278	\$ 35,000
	\$ 10,545,000

Projections for Rate-Making Purposes

Multi-year projections are made for each of the wastewater funds' assessment. The projections provide guidance to the wastewater municipalities to assist them in determining their wastewater sewer rates. A summary of the projection is provided on next page.

Major Assumptions:

Major assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$36.4 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.

Summary of Projection Impact:

Assessment is projected to increase to \$19,648,893 in 2027, an 40% increase over 2022 Budget, with the most significant cost change related to debt service issued to finance capital projects.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2021	2022	2023	2024	2025	2026	2027
20%	18%	17%	16%	19%	24%	24%

Debt Service Ratio – Target: Greater or Equal to 125%

2021	2022	2023	2024	2025	2026	2027
133%	147%	144%	143%	126%	117%	125%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Assessment Income	13,441,944	13,960,236	15,798,744	16,253,061	17,033,337	18,756,395	19,648,893
Interest Income	-5,050	20,207	83,224	83,224	83,224	83,224	83,224
Other Income	624,957	250,000	461,856	461,856	461,856	461,856	461,856
Total Revenues	14,061,851	14,230,443	16,343,824	16,798,141	17,578,417	19,301,475	20,193,973
Operating Expenses:							
Salaries & Wages	1,170,179	1,210,044	1,339,539	1,393,121	1,448,846	1,499,556	1,552,040
Employee Benefits	520,996	511,797	576,461	605,284	635,548	667,325	700,691
Biosolids Disposal	1,872,502	1,888,200	2,828,072	2,941,195	3,044,137	3,135,461	3,229,525
Chemicals	615,095	625,767	955,826	984,501	1,014,036	1,044,457	1,075,791
Contracted Services	793,004	673,568	818,502	843,057	868,349	894,399	921,231
Deferred Cost W/O	0	0	0	0	0	0	0
Heat/Fuel Oil	112,260	112,667	149,601	154,089	158,712	163,473	168,377
Insurance	36,719	40,003	42,502	43,777	45,090	46,443	47,836
Materials & Supplies	277,710	310,900	340,048	350,249	360,756	371,579	382,726
Other Expense	-20,605	-4,895	-12,870	-13,256	-13,654	-14,064	-14,486
Purchased Power	1,109,528	1,140,786	1,191,571	1,310,728	1,363,157	1,404,052	1,446,174
Regulatory/Taxes	51,959	225,220	38,580	39,737	40,929	42,157	43,422
Tele/Other Utilities	166,794	150,588	72,612	74,790	77,034	79,345	81,725
Transportation	55,917	75,633	157,540	162,266	167,134	172,148	177,312
SS - Administration	1,516,093	1,561,392	1,792,203	1,863,891	1,938,447	2,011,139	2,086,557
SS - Engineering Services	325,104	555,908	610,313	634,420	659,480	684,046	709,527
SS - Environmental Services	289,546	274,597	280,885	292,120	303,805	315,198	327,018
SS - Wastewater Services	1,063,236	1,005,624	1,102,328	1,146,421	1,192,278	1,236,988	1,283,375
SS - Water Services	24,148	29,966	30,071	31,274	32,525	33,745	35,010
	9,980,185	10,387,765	12,313,784	12,857,664	13,336,609	13,787,447	14,253,851
Debt Service							
Renewal & Replacement - Direct	700,000	1,000,000	1,000,000	1,000,000	700,000	600,000	1,000,000
Renewal & Replace - Indirect	205,188	228,325	236,470	186,950	186,950	186,950	186,950
Capital Finance Expense	3,542,840	3,842,678	4,030,040	3,940,477	4,241,808	5,514,028	5,940,122
Total Operating Expenses	13,523,025	14,230,443	16,343,824	16,798,141	17,578,417	19,301,475	20,193,973
Current Year Surplus(Deficit)	538,826	0	0	0	0	0	0

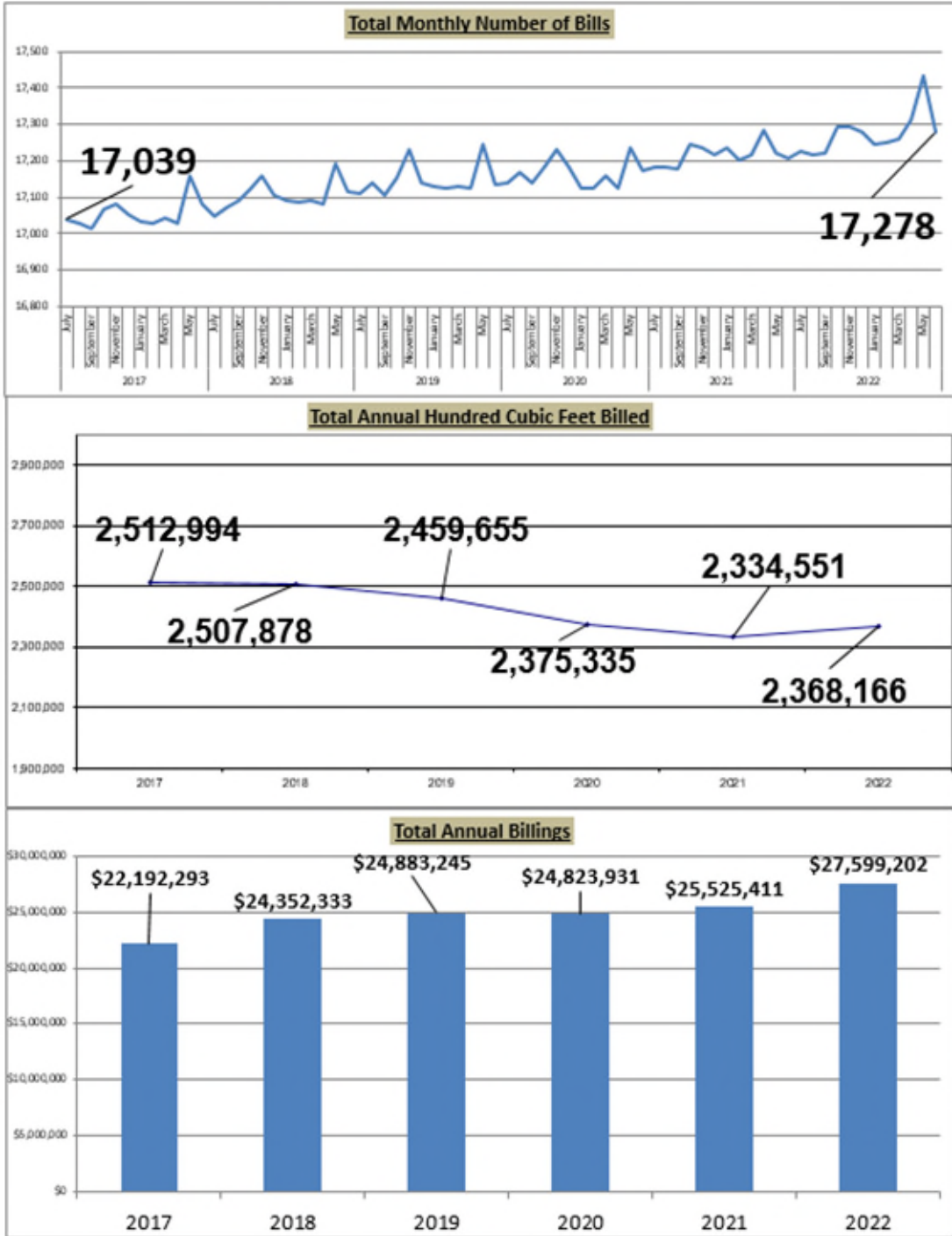
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$5,827,000

	2023	Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
R&R Balance BOY	\$ 5,902,686	\$ 5,842,686	\$ 5,137,686	\$ 3,857,686	\$ 4,012,686	\$ 4,012,686
Contribution	\$ 1,000,000	\$ 1,000,000	\$ 700,000	\$ 600,000	\$ 1,000,000	\$ 1,000,000
Withdrawals	\$ (1,060,000)	\$ (1,705,000)	\$ (1,980,000)	\$ (445,000)	\$ (950,000)	\$ (950,000)
R&R Balance EOY	\$ 5,842,686	\$ 5,137,686	\$ 3,857,686	\$ 4,012,686	\$ 4,062,686	\$ 4,062,686

Sewer Billing Statistics

The District provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District’s water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly. The total billing decline between 2016 and 2017 is the result of the City’s implementation of a storm water fee to cover costs previously collected as part of sewer billings.

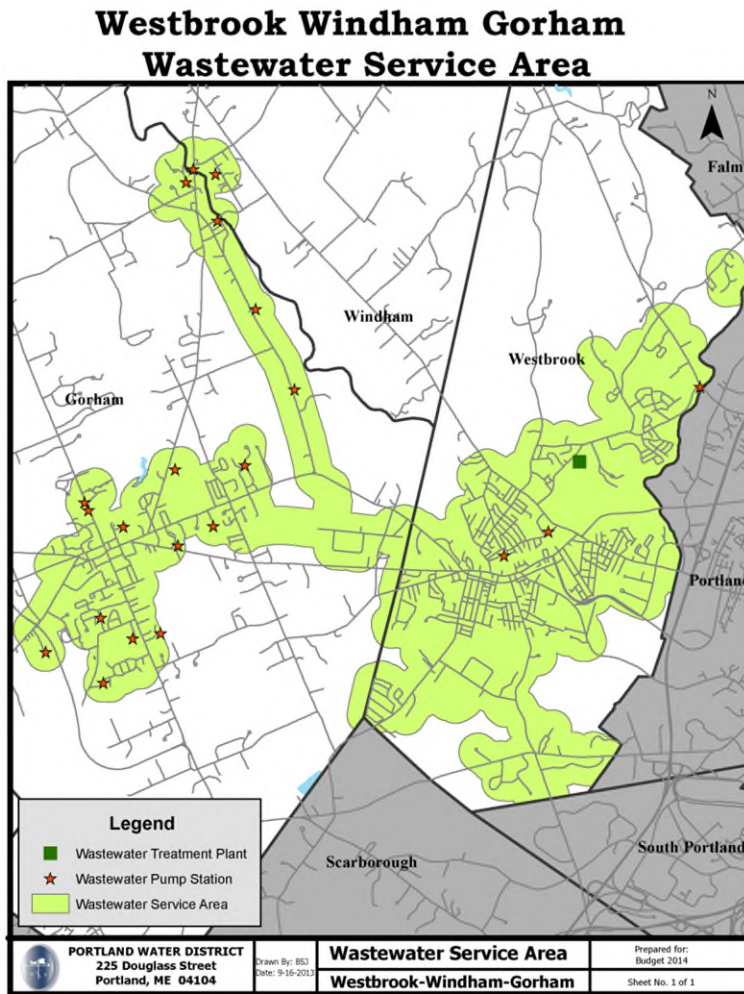
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater - Westbrook

Background

The Portland Water District's charter authorizes the District to provide wastewater treatment, collection system, and interceptor service to the city. Westbrook's wastewater is treated at the treatment facility located in Westbrook and jointly used by the towns of Windham and Gorham. The city maintains the collection system-collectors that transport wastewater from user's property to the District's interceptor system. Additionally, by contract, the District provides utility billing services.



Summary of Services Provided:

Treatment

4.54 million gallons/day

Collection System

*2 Westbrook only & 1
Joint use Pump Stations
with 8.2 miles of pipe*

Utility Billing

*Annual Billings of
\$5,431,974 on 4,800
Customers (avg.
\$94.31/month)*

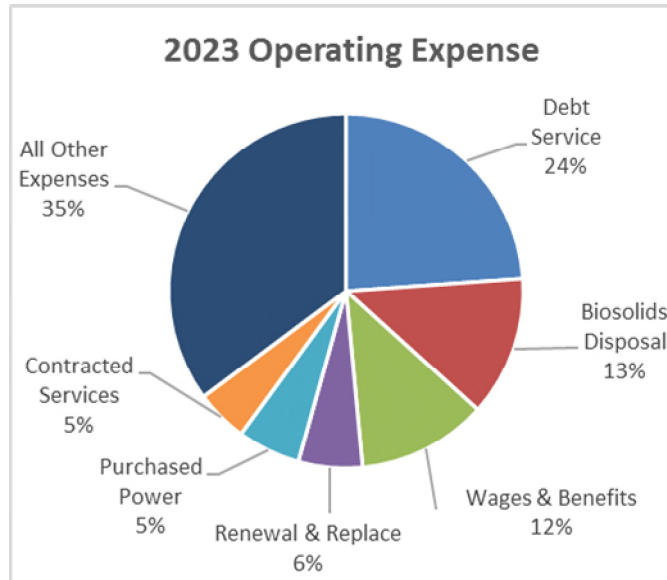
Fund: Wastewater - Westbrook

2023 Financial Summary

The proposed assessment of \$3,723,096 is 17.3% increase over the previous year.

The proposed 2023 Operating Expense and Capital budgets are \$3,837,145 and \$466,370, respectively.

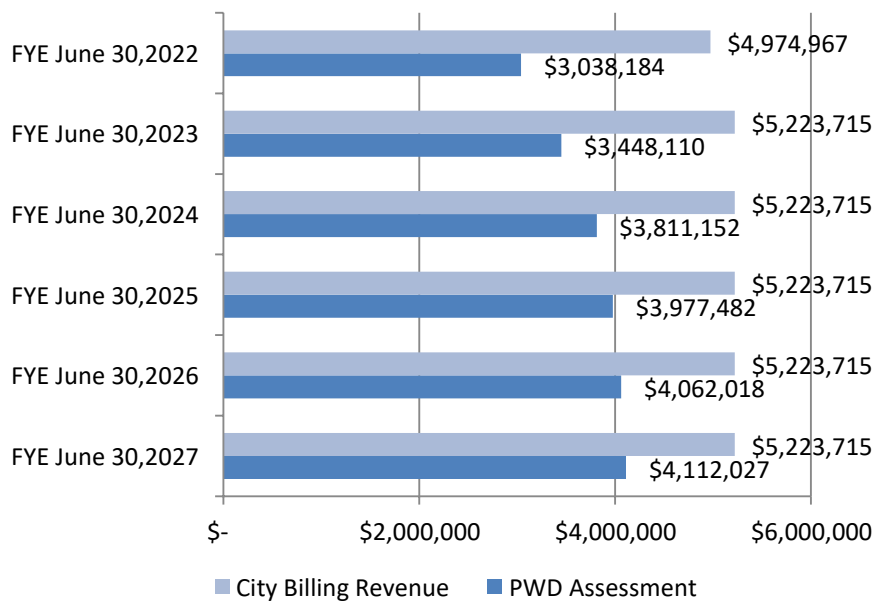
The Total Expense budget is \$596,883 higher (18.4%) than the previous year. Operating Expense increased by \$457,068 or 20.4%, Debt Service decreased 17.5% (\$136,157) and Renewal & Replacement (direct and indirect) funding increased \$3,658 to \$224,193.



The 2023 Capital budget includes \$150,000 for a new roof on East Bridge wastewater pump station (WWPS) and \$99,900 for a new roof on Cottage Place WWPS. Westbrook’s portion of SCADA server replacements is \$76,590. The majority of the rest of the budget is geared towards pump station and treatment facility capital work that comes up throughout the year.

Assessment Compared to Ratepayers’ Billing

The municipality’s fiscal year end is June 30, while the District’s is December 31. The chart below compares the sewer billing cash as collected by the District on their behalf and the District’s assessment for services rendered. The municipality may incur additional sewer-related costs. The municipality determines whether to increase the sewer billing rates.

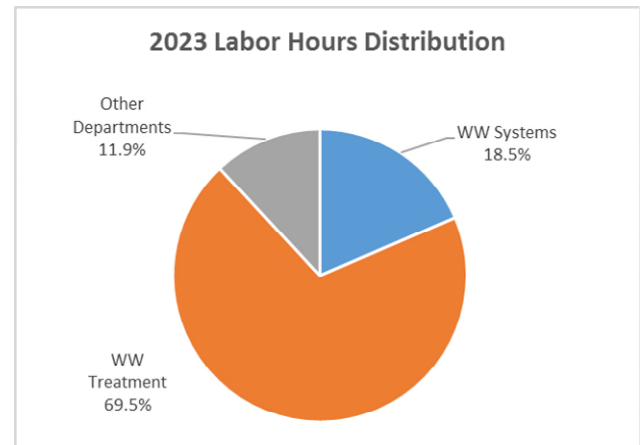


Revenue Assumptions:	
-	Consumption assumed is based on consumption through December 31, 2019
-	Rates Assumed:
Effective Date:	Base/Per HCF
Jan 2013	\$11.13/\$6.13
Jan 2019	\$11.53/\$6.53
Jan 2020	\$11.93/\$6.93
Jan 2021	\$12.33/\$7.00
Jan 2022	\$12.73/\$7.73

2023 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted increased 12.4% (1,065 hours). The majority, 974 hours, of the increase came from WW Treatment. This combined with the District’s average wage rates increase of 12.2% resulted in a 25.8% (\$65,038) increase in Salaries/Wages

Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to increase by 26.2% (\$28,517).



Biosolids Disposal – The budget assumes a disposal rate of \$142/wet ton, that is a 42% increase over the 2022 Budget assumption of \$100. The higher unit cost relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. That increase along with an assumed 2.3% decrease in overall volume resulted in a 38.8% (\$137,244) increase in Biosolids expense. Westbrook’s share of allocated treatment costs was unchanged at 83.5%.

Chemicals – Chemical expense regional treatment plant rose 56.0% due primarily to higher per unit costs for Sodium Hypochlorite (77.3%) , Polymer (36.4%) and Sodium Bisulfite (13.8%). In addition, Sodium Hypochlorite usage is projected to increase 29.4%.

Heat/Fuel Oil – The budget increased 37.7% (\$12,732) mostly due to an estimated increase in the cost of heating oil from \$2.29 to \$3.80 per gallon at the treatment plant.

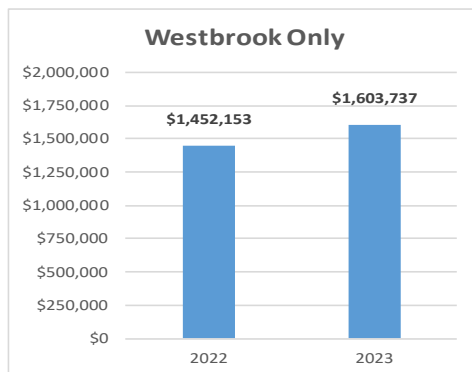
Purchased Power – Purchased Power decreased 12.5% (\$31,375) mainly due to a significant decrease in delivery rates. Contracted energy rates also went down, 2.9%. Net budgeted usage was reduced by 31.6k kWh based on usage trends.

Regulatory/Taxes – The 2022 Budget included a new regulatory fee totaling \$35,387 from the State of Maine to deal with statewide issues regarding PFAS. That fee was cancelled by the State and removed from the 2023 Budget.

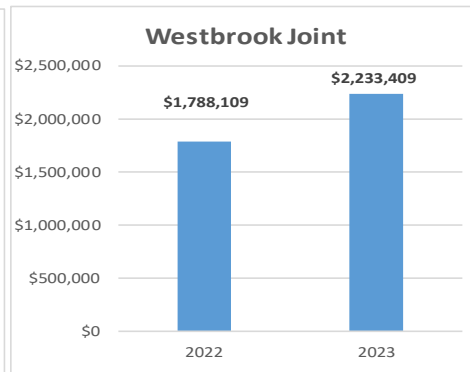
Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$147,640 or 18.5%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.

Debt Service – The annual principal and interest payments on bonds issued to finance capital projects. Increased 17.5% (\$136,157) mainly due to aeration bonds for the Westbrook Regional Wastewater Treatment Facility having payments due sooner than originally proposed.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$2,903,244	\$1,586,562	\$3,173,124	\$3,723,096	\$549,972	17.3%
Interest Income	3,168	-16,066	16,938	35,193	18,255	107.8%
Other Income	55,689	21,564	50,200	78,856	28,656	57.1%
Total Revenue	2,962,101	1,592,060	3,240,262	3,837,145	596,883	18.4%
Salaries & Wages	263,233	143,348	252,011	317,049	65,038	25.8%
Employee Benefits	121,476	60,632	108,878	137,395	28,517	26.2%
Biosolids Disposal	323,628	176,285	353,873	491,117	137,244	38.8%
Chemicals	146,536	104,076	141,517	220,723	79,206	56.0%
Contracted Services	129,483	80,302	147,268	182,538	35,270	23.9%
Heat/Fuel Oil	31,674	25,128	33,752	46,484	12,732	37.7%
Insurance	10,087	5,376	10,798	12,096	1,298	12.0%
Materials & Supplies	68,882	50,479	51,769	64,742	12,973	25.1%
Other Expense	1,781	1,613	5,440	4,272	-1,168	-21.5%
Purchased Power	226,702	116,541	251,974	220,599	-31,375	-12.5%
Regulatory/Taxes	5,516	5,473	39,145	5,386	-33,759	-86.2%
Transportation	11,103	7,375	13,298	15,856	2,558	19.2%
Tele/Other Utilities	28,988	16,531	34,504	35,398	894	2.6%
SS - Administration	350,582	189,895	365,694	425,711	60,017	16.4%
SS - Engineering Services	68,721	43,219	114,912	140,496	25,584	22.3%
SS - Environmental Services	115,512	52,642	110,453	115,112	4,659	4.2%
SS - Wastewater Services	225,728	98,848	197,656	254,734	57,078	28.9%
SS - Water Services	6,005	6,237	7,412	7,714	302	4.1%
Operating Expense	2,135,637	1,184,000	2,240,354	2,697,422	457,068	20.4%
Debt Service & Lease Expense	598,205	385,456	779,373	915,530	136,157	17.5%
Renewal & Replacement - Direct	270,000	84,000	168,000	168,000	0	0.0%
Renewal & Replace - Indirect	47,040	26,318	52,535	56,193	3,658	7.0%
Total Expense	3,050,882	1,679,774	3,240,262	3,837,145	596,883	18.4%
Current Year Surplus (Deficit)	-88,781	-87,714	0	0		
Transfer to R&R	0	0	0	0		
Return of WW Accumulated Surplus	0	0	0	0		
Prior Year Surplus	704,619	615,838	771,710	358,219		
Accumulated Surplus	615,838	528,124	771,710	358,219		



- Overall costs up \$152k (10.4%)
 - Operating Expense up \$87.6k (16.1%)

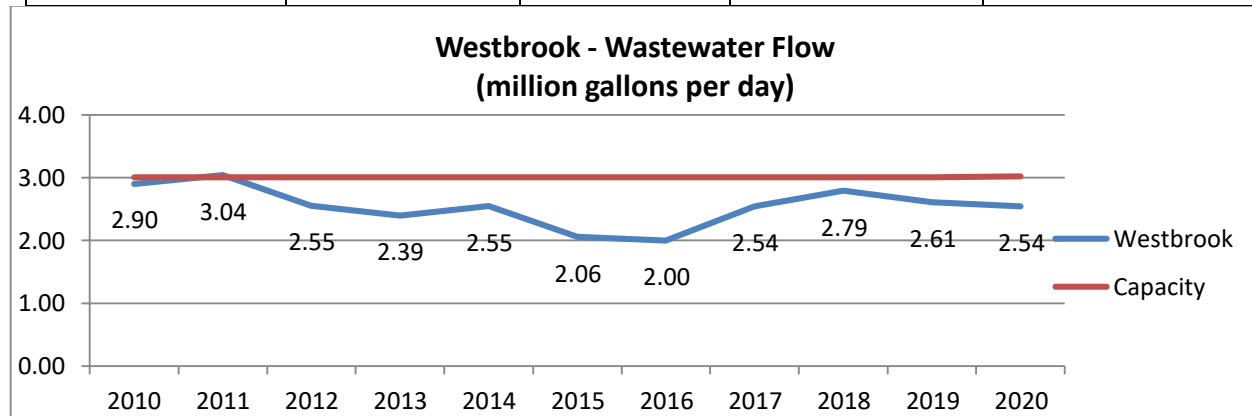


- Overall Westbrook Joint up 26.9%
 - Westbrook's share up 24.9% (\$445k)
 - Westbrook's flow percentage unchanged at 83.4%

Operation Summary Westbrook

Wastewater Treatment: The wastewater generated in the City of Westbrook is pumped to the Westbrook/Gorham/Windham Regional WWTF on Park Road. Flows from the Little Falls section of Gorham and the Town of Windham, including the Maine Correctional Center, are conveyed to this facility. The table below depicts flows from each contributing community. The chart illustrates capacity used for each community and total plant capacity being used based on the treatment plant capacity of 4.54 MGD.

Municipality (Design Flow)	2021 Flow (mgd)	% of 2021 WWTF Flow	Reserved Capacity (mgd)	% of Capacity Used
Westbrook (66.6%)	2.46	83.4 %	3.023	81 %
Gorham (30.8%)	0.427	14.5 %	1.398	30 %
Windham (2.6%)	0.060	2.1 %	0.118	51 %
Total Plant Flow	2.951		4.54	65 %



The following tables depict some of the key parameters that are monitored at the facility.

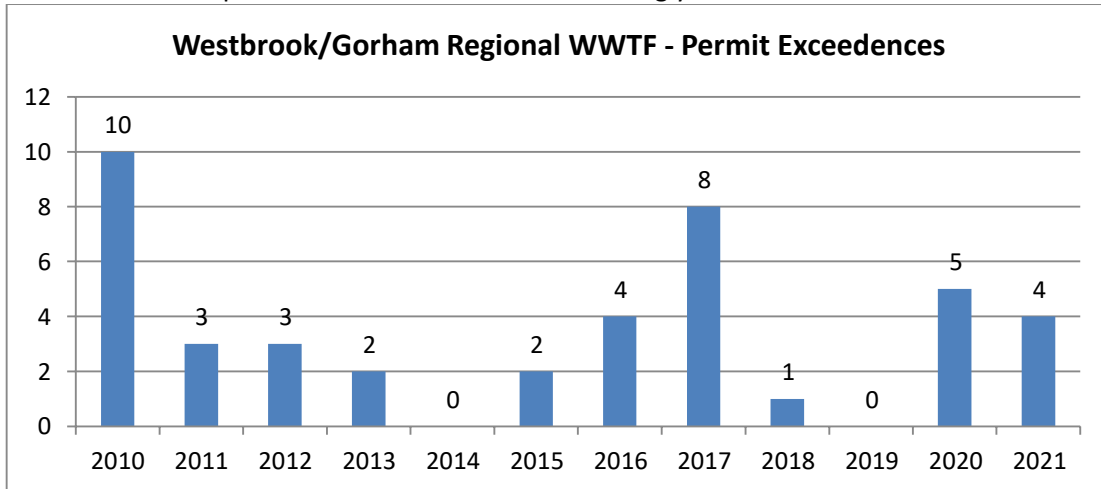
WGWWTF Parameter	DEP Limit	2021 Facility Average
Biosolids Removed (wet tons/month)	N/A	346 wet ton/month

Parameter	Discussion
Biological Oxygen Demand (BOD)	Measure of organic material and the strength of pollution. The treatment plant removed 91% of the BOD, well above the required 85% removal.
Total Suspended Solids (TSS)	Measure of suspended material in the incoming wastewater. The treatment plant removed 90% of the TSS, well above the required 85% removal.
Total Residual Chlorine	Used for disinfecting the treated effluent, chlorine must be removed before the effluent is discharged. The permit limit was met at all times.
Fecal Coliform Bacteria	Following disinfection with chlorine, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.
Phosphorus	The renewed 5-year permit includes a requirement to monitor phosphorus in the plant's effluent discharge. Phosphorus can contribute to water quality concerns that might include algae and low dissolved oxygen. The monitoring will likely create a baseline for consideration if effluent permit limitations are established in the future.

Operation Summary (continued)

Effluent Permit Requirements:

The effluent permit was renewed in 2017. The permit included reductions in effluent monitoring requirements due to the plant's past performance and the inclusion of a requirement to monitor effluent phosphorus. The City of Westbrook is a joint permittee for their obligations under the CSO Long Term Control Plan. The permit will be renewed in the coming year.



Wastewater Conveyance – interceptors and pumping stations

Parameter	2022 Actual to Sept	2023 Projected
Preventive Work Orders	206	250
Corrective Work Orders	14	20
Wet wells cleaned	1	3
Debris removed (tons)	2.1	6
Dry Weather Overflows	0	0

2022 Other Highlights

- The Asset Management Program continues to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations. The Maintenance Manager/Planner Scheduler position, which was created in 2018, has helped to increase reliance on our program and is helping to implement a new system.
- Construction of the new diffused aeration system and clarifier upgrades are underway and will continue through 2023.
- An effort to reclassify a section of the Presumpscot River was considered by the Maine State Legislature. The effort was paused while the potential impact on the allowable discharge from the treatment plant is evaluated alongside additional monitoring of water quality over the summer. These discussions are expected to continue.
- A biosolids management plan has been completed. This plan identified near, mid, and longer range options for biosolids management in the midst of some of the challenges brought about by the developing awareness of PFAS in Maine.
- An amended contract to reliably manage biosolids after this year's ban on land based biosolids management has been completed. In the face of significant uncertainty, this effort will provide service and price certainty.
- The Combined Sewer Overflow Long Term Control Plan Update began in 2022. This plan will assess the reductions in overflows following the significant work over the past 5 years and develop initiatives required to further reduce overflow frequency and volumes.

2023 Work Plan

- The Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- Construction of the aeration system at the treatment plant will continue and the plant team will be working to operate the facility through the project.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce.
- The screens at our feeder pump stations (which supply all of the flow to the treatment plant) will be replaced with finer screens that will remove additional materials. This is expected to protect the equipment installed during the aeration system upgrade.
- Construction of the aeration system at the treatment plant will continue and the plant team will be working to operate the facility through the project.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce.
- The initial phases of the biosolids management plan's recommendations will be evaluated. The initial goal is to enhance the ability of PWD's facilities to more quickly and efficiently produce biosolids to accommodate more restrictive management options and schedules.
- A study of basic options for the sewerage of South Gorham is included in the capital plan.
- The treatment plant permit will be renewed by Maine DEP.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections.

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2023 CIP</u>	<u>Total</u>
Projects:			
SCADA - server replacement - 3127 (prorated)		\$ 76,590	\$ 76,590
WW Collection & Pumping			
Westbrook Pump Station R&R - 3134		\$ 20,000	\$ 20,000
East Bridge Roof Replacement - 3274		\$ 150,000	\$ 150,000
Cottage Place Roof Replacement - 3284 (prorated)		\$ 99,900	\$ 99,900
WW Treatment			
Aeration & Clarifier Construction - 3023 (prorated)	\$ 2,664,000		\$ 2,664,000
Treatment Plant R&R - 3132 (prorated)		\$ 86,580	\$ 86,580
Access Rd & Parking Lot Resurfacing - 3190 (prorated)		\$ 9,990	\$ 9,990
Fire Monitoring System Upgrade - 3272 (prorated)		\$ 23,310	\$ 23,310
Total by CIP Year	\$ 2,664,000	\$ 466,370	\$ 3,130,370

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue</u>	<u>Bond Issue</u>	<u>Total Funding</u>
		<u>2023</u>	<u>> 2023</u>	
Beginning Balance	\$ 3,939,093			
2023 Contribution	\$ 168,000			
Total R&R Balance Available	\$ 4,107,093			
Projects:				
SCADA & Technology	\$ 76,590			\$ 76,590
WW Collection & Pumping	\$ 269,900			\$ 269,900
WW Treatment	\$ 119,880	\$ 2,664,000	\$ -	\$ 2,783,880
Total	\$ 466,370	\$ 2,664,000	\$ -	\$ 3,130,370
Ending Balance	\$ 3,640,723			

Prorated Projects: Costs of projects done on infrastructure used by multiple communities are ‘prorated’ between the municipalities based on relative design capacity.

Projections for Rate-Making Purposes

Multi-year projections are made for each of the wastewater funds’ assessment. The projections provide guidance to the wastewater municipalities to assist them in determining their wastewater sewer rates. A summary of the projection is provided on next page.

Major Assumptions:

Major assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$8.9 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.

Summary of Projection Impact:

Assessment is projected to increase to \$4,155,772 in 2027, a 31% increase over 2022 Budget.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2021	2022	2023	2024	2025	2026	2027
21%	24%	24%	27%	25%	23%	22%

Debt Service Ratio – Target: Greater or Equal to 125%

2021	2022	2023	2024	2025	2026	2027
152%	128%	124%	111%	118%	120%	120%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Assessment Income	2,903,244	3,173,124	3,723,096	3,899,208	4,055,755	4,068,281	4,155,772
Interest Income	3,168	16,938	35,193	35,193	35,193	35,193	35,193
Other Income	55,689	50,200	78,856	78,856	78,856	78,856	78,856
Total Revenues	2,962,101	3,240,262	3,837,145	4,013,257	4,169,804	4,182,330	4,269,821
Operating Expenses:							
Salaries & Wages	263,233	252,011	317,049	329,731	342,920	354,922	367,344
Employee Benefits	121,476	108,878	137,395	144,265	151,478	159,052	167,005
Biosolids Disposal	323,628	353,873	491,117	510,762	528,639	544,498	560,833
Chemicals	146,536	141,517	220,723	227,345	234,165	241,190	248,426
Contracted Services	129,483	147,268	182,538	188,014	193,654	199,464	205,448
Heat/Fuel Oil	31,674	33,752	46,484	47,879	49,315	50,794	52,318
Insurance	10,087	10,798	12,096	12,459	12,833	13,218	13,615
Materials & Supplies	68,882	51,769	64,742	66,684	68,685	70,746	72,868
Other Expense	1,781	5,440	4,272	4,400	4,532	4,668	4,808
Purchased Power	226,703	251,974	220,599	242,659	252,365	259,936	267,734
Regulatory/Taxes	5,516	39,145	5,386	5,548	5,714	5,885	6,062
Tele/Other Utilities	28,988	34,504	35,398	36,460	37,554	38,681	39,841
Transportation	11,103	13,298	15,856	16,332	16,822	17,327	17,847
SS - Administration	350,582	365,694	425,711	442,739	460,449	477,716	495,630
SS - Engineering Services	68,721	114,912	140,496	146,046	151,815	157,470	163,336
SS - Environmental Services	115,512	110,453	115,112	119,716	124,505	129,174	134,018
SS - Wastewater Services	225,728	197,656	254,734	264,923	275,520	285,852	296,571
SS - Water Services	6,005	7,412	7,714	8,023	8,344	8,657	8,982
	2,135,638	2,240,354	2,697,422	2,813,985	2,919,309	3,019,250	3,122,686
Debt Service							
Renewal & Replacement - Direct	270,000	168,000	168,000	100,000	168,000	168,000	168,000
Renewal & Replace - Indirect	47,040	52,535	56,193	23,577	23,577	23,577	23,577
Capital Finance Expense	915,244	999,908	1,139,723	1,199,272	1,250,495	1,163,080	1,147,135
Total Operating Expenses	3,050,882	3,240,262	3,837,145	4,013,257	4,169,804	4,182,330	4,269,821
Current Year Surplus(Deficit)	-88,781	0	0	0	0	0	0
Prior Year Surplus	704,619	638,566	358,219	358,219	358,219	358,219	358,219
Accumulated Surplus	615,838	638,566	358,219	358,219	358,219	358,219	358,219
Target Balance(25% of budget)	762,721	810,066	959,286	1,003,314	1,042,451	1,045,583	1,067,455
Above/(Below)	-146,883	-171,500	-601,067	-645,095	-684,232	-687,364	-709,236

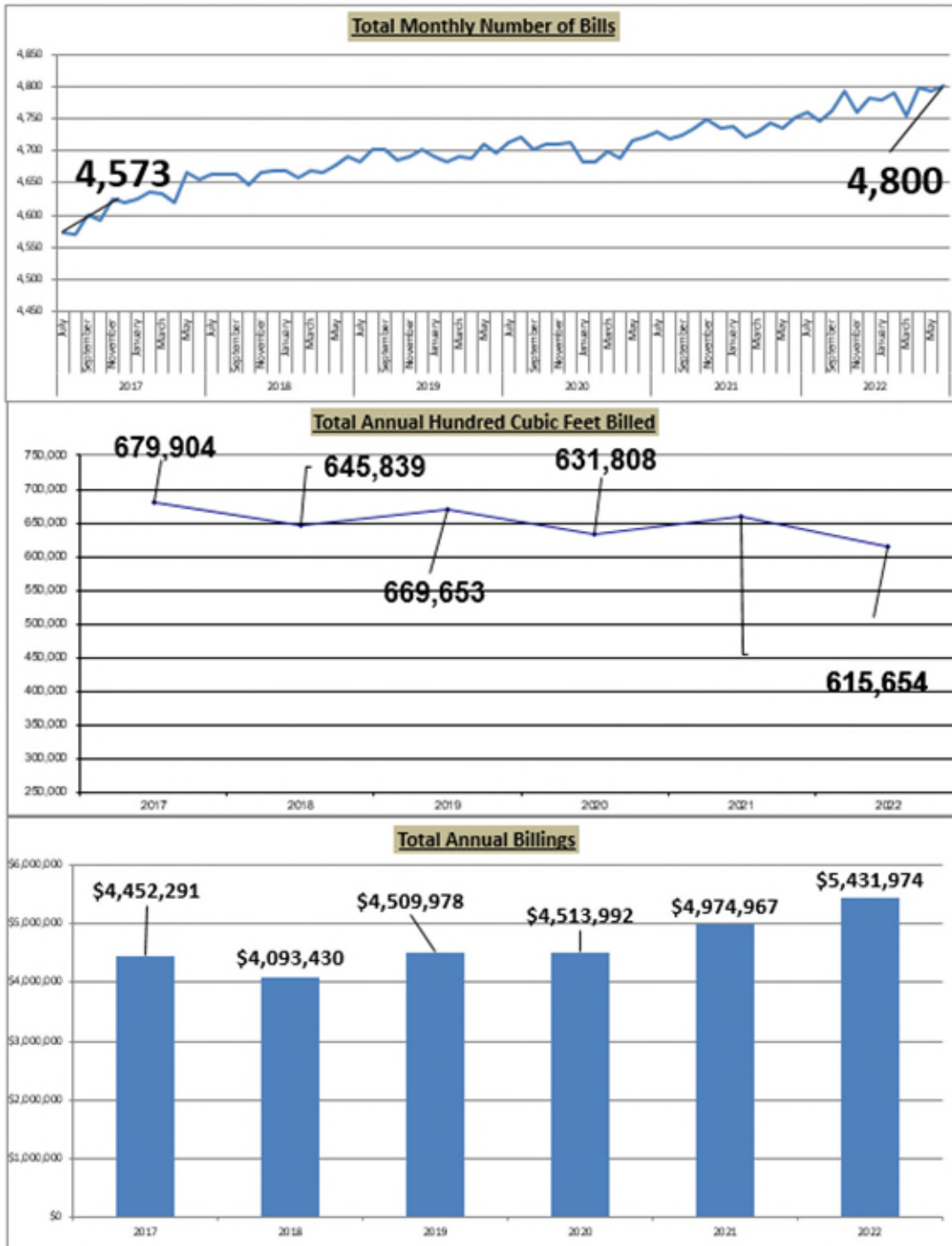
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$1,149,000

	2023	2024	2025	2026	2027
	Budget	Forecast	Forecast	Forecast	Forecast
R&R Balance BOY	\$ 3,939,093	\$ 3,640,723	\$ 2,721,523	\$ 2,503,223	\$ 2,518,023
Contribution	\$ 168,000	\$ 100,000	\$ 168,000	\$ 168,000	\$ 168,000
Withdrawals	\$ (466,370)	\$ (1,019,200)	\$ (386,300)	\$ (153,200)	\$ (53,300)
R&R Balance EOY	\$ 3,640,723	\$ 2,721,523	\$ 2,503,223	\$ 2,518,023	\$ 2,632,723

Sewer Billing Statistics

The District provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District’s water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.

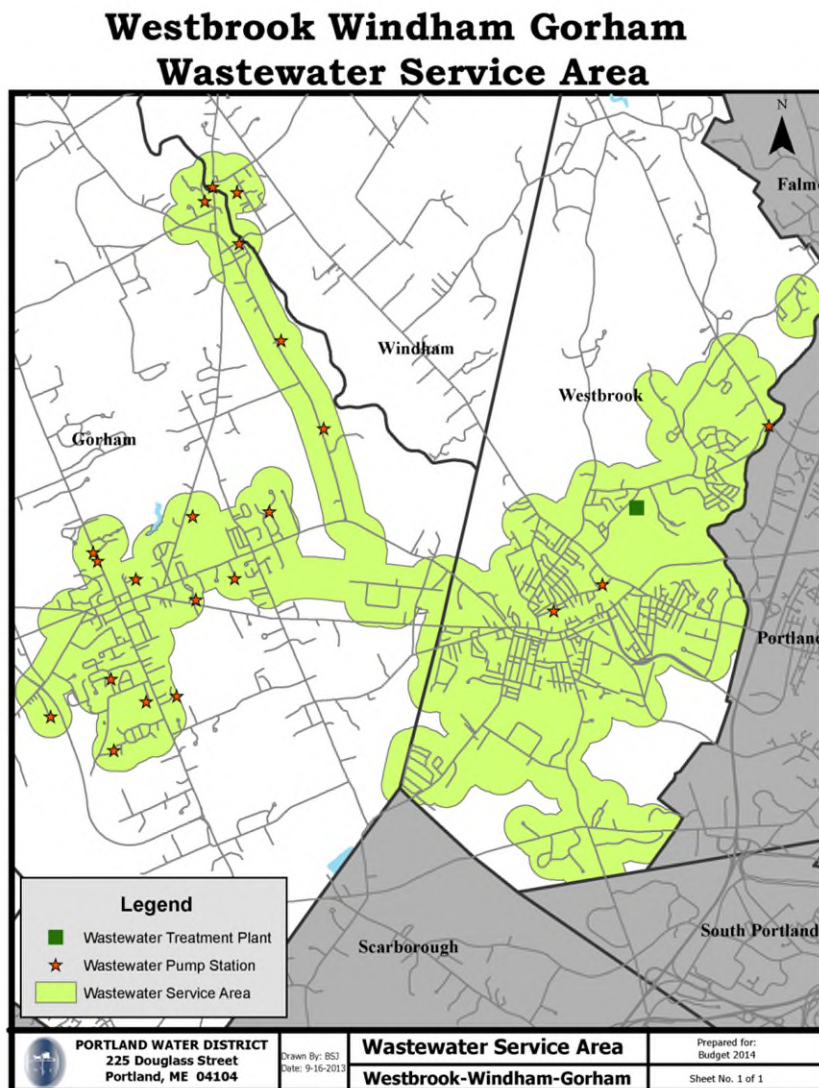
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater – Windham

Background

The Portland Water District's charter authorizes the District to provide wastewater treatment and collection system-interceptors service to the town. By contract with the town, the District additionally operates and maintains the collectors in the sewer collection system. Windham's wastewater is treated at the treatment facility located in Westbrook and jointly used by Windham, the Town of Gorham and City of Westbrook. Additionally, by contract, the District provides utility billing services.



Summary of Services Provided:

Treatment

*0.188 Million
gallons/day*

Collection System

*2 Windham only & 3
Joint use Pump Stations
with 7.9 miles of pipe*

Utility Billing

*Annual Billings of
\$347,740 with 58
Customers.*

Fund: Wastewater - Windham

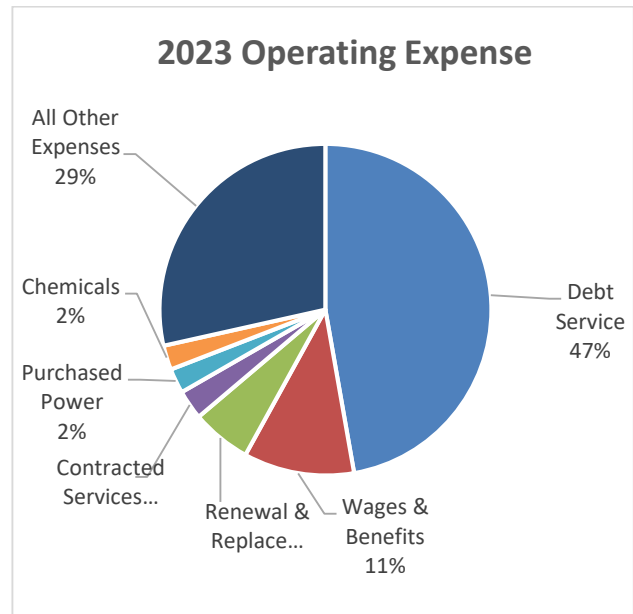
2023 Financial Summary

The town’s proposed assessment of \$515,080 is 0.5% decrease (\$2,604).

The proposed 2023 Operating Expense and Capital budgets are \$518,810 and \$8,031,570, respectively.

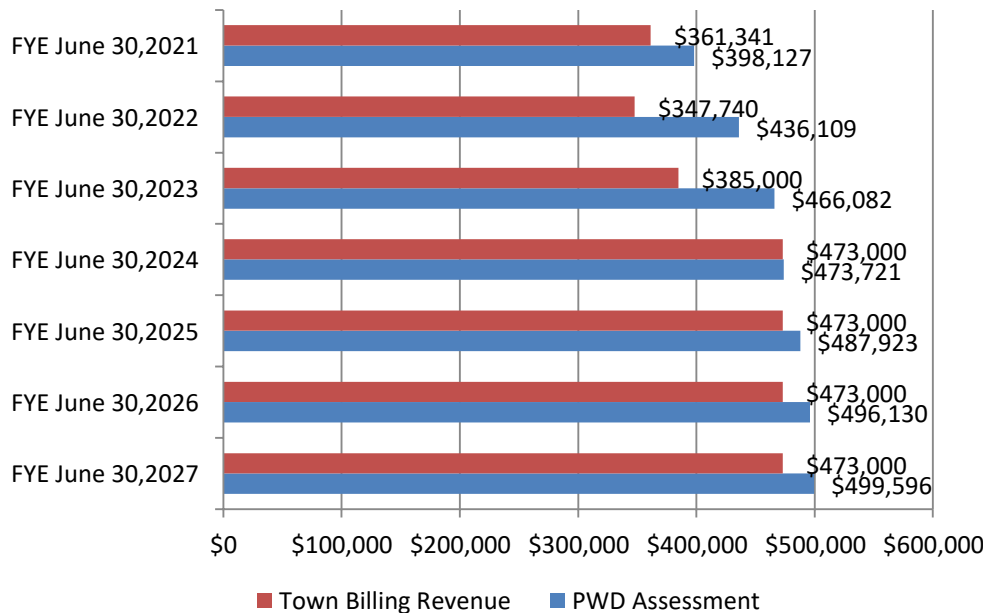
Operating Expense was down \$9,601 (3.9%). Windham’s share of the flow percentages used to determine the percent of costs for the Joint Westbrook and Little Falls systems were both down for the 2023 Budget.

The 2023 Capital Budget includes \$8 million for the start of the North Windham treatment and collections system construction. Other project budgets of note are \$2,990 for SCADA server replacements and \$3,900 for a new roof on Cottage Place wastewater pump station.



Assessment Compared to Ratepayers’ Billing

The municipality’s fiscal year end is June 30, while the District’s is December 31. The chart below compares the cash as collected by the District for sewer billings on their behalf and the District’s **South Windham** assessment for services rendered. Any shortfall of billing revenue is made up from the Town’s general funds.

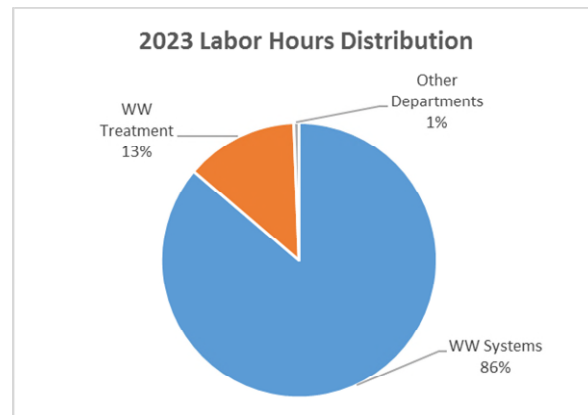


Revenue Assumptions:	
-	Consumption is the 12 months ending June 30, 2019
-	Rates Assumed:
Effective Date:	Base/Per HCF
April 2009	\$48.84/\$3.24
May 2020	\$48.84/\$7.00
Planned:	
Jul 2022	\$48.84/7.75
Jul 2023	\$48.84/9.77

2023 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted decreased 14.3% (201 hours). The majority, 153 hours, of the decrease came from WW Systems. This combined with the District's average wage rates increase of 12.2% resulted in a 4.9% (\$2,207) decrease in Salaries/Wages.

Employee Benefits – The benefit rate (including FICA) increased from 46.84% in 2022 to 48.72% in 2023 due to higher pension expenses. The amount of Employee Benefits expense allocated to decrease by 2.0% (\$358).



Biosolids Disposal – The budget assumes a disposal rate of \$142/wet ton, that is a 42% increase over the 2022 Budget assumption of \$100. The higher unit cost relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. That increase along with an assumed 2.3% decrease in overall volume resulted in a 7.5% (\$137,244) decrease in Biosolids expense as Windham's share of allocated treatment costs was reduced from 3.0% in 2022 to 2.0% in 2023.

Chemicals – Chemical expense regional treatment plant rose 56.0% due primarily to higher per unit costs for Sodium Hypochlorite (77.3%) , Polymer (36.4%) and Sodium Bisulfite (13.8%). In addition, Sodium Hypochlorite usage is projected to increase 29.4%.

Heat/Fuel Oil – The budget increased 22.2% (\$839) mostly due to an estimated increase in the cost of heating oil from \$2.29 to \$3.80 per gallon at the treatment plant.

Purchased Power – Purchased Power is expected to decrease \$7,559 (36.9%). The significant reduction in T&D rates for the Westbrook Regional Wastewater Treatment Facility is the largest contributor to this change.

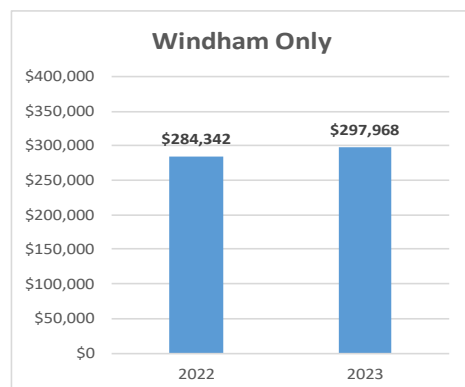
Regulatory/Taxes – The 2022 Budget included a new regulatory fee totaling \$1,284 from the State of Maine to deal with statewide issues regarding PFAS. That fee was cancelled by the State and removed from the 2023 Budget.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$11,621 or 12.9%. This increase is mostly driven by the increases in labor rates and benefits expense as noted above.

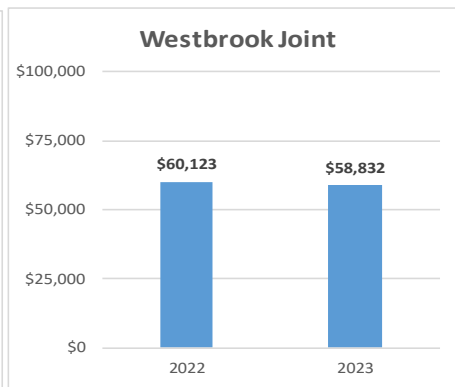
Debt Service - The annual principal and interest payments on bonds issued to finance capital projects. This item decreased 3.9% (\$9,631) mainly due to postponing any bond issuance for the North Windham system from 2021-2022 to 2023.

Renewal & Replacement - Dollars put aside to fund capital projects. A contribution of \$42,249 will be made in 2023.

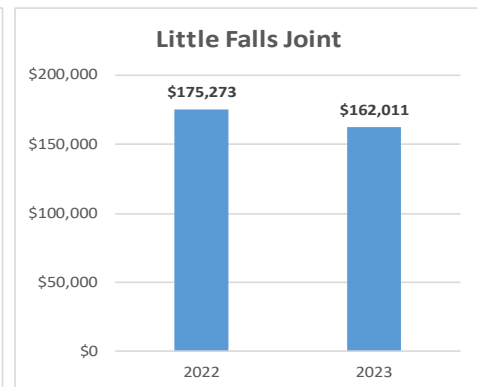
	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$410,916	\$259,206	\$518,412	\$515,808	-\$2,604	-0.5%
Interest Income	-164	3,598	1,101	1,090	-11	-1.0%
Other Income	<u>448</u>	<u>8</u>	<u>225</u>	<u>1,912</u>	<u>1,687</u>	<u>749.8%</u>
Total Revenue	411,200	262,812	519,738	518,810	-928	-0.2%
Salaries & Wages	48,659	14,375	41,540	39,513	-2,027	-4.9%
Employee Benefits	22,941	6,293	18,076	17,718	-358	-2.0%
Biosolids Disposal	11,558	6,334	12,714	11,763	-951	-7.5%
Chemicals	9,581	8,231	13,946	12,570	-1,376	-9.9%
Contracted Services	14,241	6,326	16,698	15,262	-1,436	-8.6%
Heat/Fuel Oil	3,288	1,876	3,772	4,611	839	22.2%
Insurance	1,019	713	919	1,393	474	51.6%
Materials & Supplies	4,163	5,935	9,707	8,736	-971	-10.0%
Other Expense	60	49	180	92	-88	-48.9%
Purchased Power	15,734	9,058	20,504	12,945	-7,559	-36.9%
Regulatory/Taxes	196	196	1,406	129	-1,277	-90.8%
Transportation	9,215	3,086	16,089	9,831	-6,258	-38.9%
Tele/Other Utilities	598	398	764	530	-234	-30.6%
SS - Administration	39,842	22,475	43,048	51,033	7,985	18.5%
SS - Engineering Services	8,582	6,010	16,442	21,721	5,279	32.1%
SS - Environmental Services	5,124	2,268	4,876	3,948	-928	-19.0%
SS - Wastewater Services	24,301	12,869	25,450	24,692	-758	-3.0%
SS - Water Services	<u>184</u>	<u>191</u>	<u>253</u>	<u>296</u>	<u>43</u>	<u>17.0%</u>
Operating Expense	219,286	106,683	246,384	236,783	-9,601	-3.9%
Debt Service & Lease Expense	141,317	118,751	249,409	239,778	-9,631	-3.9%
Renewal & Replacement - Direct	35,849	9,250	18,500	36,250	17,750	95.9%
Renewal & Replace - Indirect	<u>4,600</u>	<u>2,732</u>	<u>5,445</u>	<u>5,999</u>	<u>554</u>	<u>10.2%</u>
Total Expense	401,052	237,416	519,738	518,810	-928	-0.2%
Current Year Surplus (Deficit)	10,148	25,396	0	0		
Prior Year Surplus	<u>57,046</u>	<u>67,194</u>	<u>56,761</u>	<u>162,223</u>		
Accumulated Surplus	67,194	92,590	56,761	162,223		



- Overall costs up \$13.6k (4.8%)
 - Operating Expense up \$9.3k (6.8%)



- Overall Westbrook Joint up 26.9%
 - Windham's share down 2.1% (\$1.3k)
 - Windham's flow percentage down 1.0% (3.0% to 2.0%)



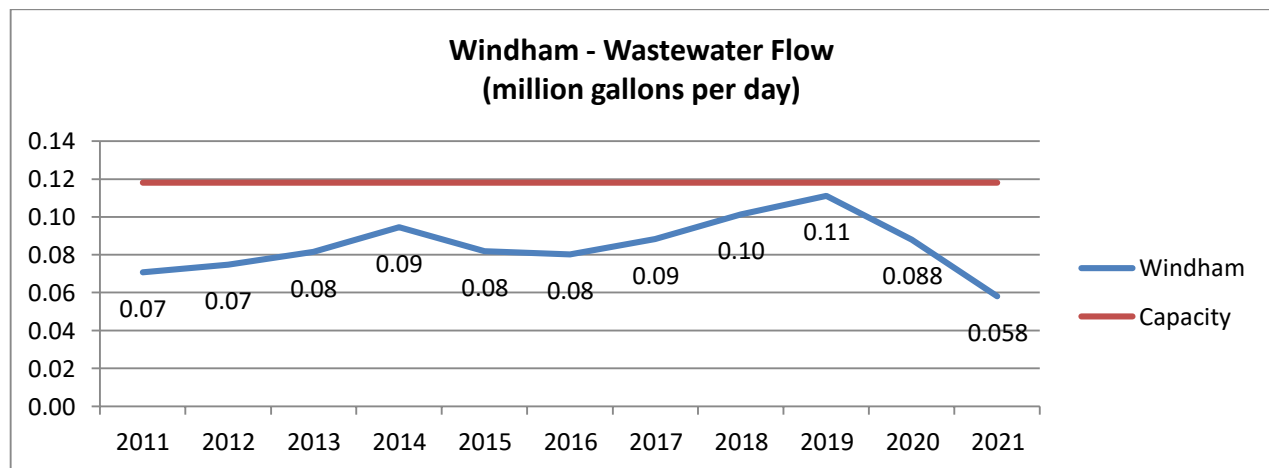
- Overall Little Falls Joint down 1.2%
 - Windham's share down 7.6% (\$13.3k)
 - Windham's flow percentage down 13.0% (73.0% to 60.0%)

Operation Summary Windham

Wastewater Treatment

Wastewater generated within the Town of Windham, including the Maine Correctional Center and the Little Falls area of Gorham, is conveyed to the Westbrook/Gorham/Windham Regional WWTF. The Town of Windham has reserved 2.6% of a design capacity of 4.54 million gallons a day, or 118,040 gallons. The table below shows the volume of flows to the Westbrook/Gorham/Windham Regional Wastewater Treatment Facility.

Area	2021 Windham Flow	Westbrook WWTF Flow	% Windham Flow
Windham	0.060 mgd	2.951 mgd	2.1%
WGWTF Capacity	Windham Capacity (2.6%)	% Capacity Used	Capacity Remaining
4,540,000 gal/day	0.118 mgd	0.51 %	0.058 mgd



Wastewater Conveyance – collectors, interceptors and pumping stations

Parameter	2022 Actual to Sept	2023 Projected
Preventive Work Orders	170	200
Corrective Work Orders	9	10
Wet wells cleaned	14	20
Debris removed (tons)	24.3	35
Dry Weather Overflows	0	0

Operation Summary (continued)

2022 Other Highlights

- The preliminary design of the North Windham wastewater system has been completed. DEP has indicated that an effluent dispersal system could be permitted. To construct the collection system and treatment plant, a Construction Management At Risk approach (CMAR) will be used. The CMAR team is being selected and work will begin shortly to develop the 60% design scope.
- The Depot St. Pump Station and related sewer installation was completed.
- The sewer work completed at the Correction Center has dramatically reduced wet weather I/I, as can be seen by the decrease in annual flow from the Windham system.
- Preventive maintenance work continues to be a main focus of system staff.
- Wet well and siphon cleaning were performed on a regular schedule.
- An effort to reclassify a section of the Presumpscot River was considered by the Maine State Legislature. The effort was paused while the potential impact on the allowable discharge from the treatment plant is evaluated alongside additional monitoring of water quality over the summer. These discussions are expected to continue.
- A biosolids management plan has been completed. This plan identified near, mid, and longer range options for biosolids management in the midst of some of the challenges brought about by the developing awareness of PFAS in Maine.
- An amended contract to reliably manage biosolids after this year's ban on land based biosolids management has been completed. In the face of significant uncertainty, this effort will provide service and price certainty.

2023 Work Plan

- Design of the North Windham wastewater system will continue with the selected CMAR team.
- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders.
- Construction of the aeration system at the treatment plant will continue and the plant team will be working to operate the facility through the project.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce.
- Wet wells are scheduled for cleaning on a quarterly basis unless experience dictates otherwise.
- The initial phases of the biosolids management plan's recommendations will be evaluated. The initial goal is to enhance the ability of PWD's facilities to more quickly and efficiently produce biosolids to accommodate more restrictive management options and schedules.
- The treatment plant permit will be renewed by Maine DEP.

Capital Summary

A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in the Capital Finance and Capital Expenditures sections.

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2023 CIP</u>	<u>Total</u>
Projects:			
SCADA - server replacement - 3127 (prorated)		\$ 2,990	\$ 2,990
WW Collection & Pumping			
Windham Only Pump Station R&R - 3138		\$ 20,000	\$ 20,000
Rte 202 Pump Station Generator Installation - 3229	\$ 70,000		\$ 70,000
Cottage Place Roof Replacement - 3284 (prorated)		\$ 3,900	\$ 3,900
WW Treatment			
<u>Westbrook Treatment Plant</u>			
Aeration & Clarifier Construction - 3023 (prorated)	\$ 104,000		\$ 104,000
Treatment Plant R&R - 3132 (prorated)		\$ 3,380	\$ 3,380
Access Rd & Parking Lot Resurfacing - 3190 (prorated)		\$ 390	\$ 390
Fire Monitoring System Upgrade - 3272 (prorated)		\$ 910	\$ 910
North Windham Treatment System - 3241	\$ 1,300,000	\$ 8,000,000	\$ 9,300,000
Total by CIP Year	\$ 1,474,000	\$ 8,031,570	\$ 9,505,570

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue 2023</u>	<u>Bond Issue > 2023</u>	<u>Funding Total</u>
Beginning Balance	\$ 361,300			
2023 Contribution	\$ 36,250			
Total R&R Balance Available	\$ 397,550			
Projects:				
SCADA & Technology	\$ 2,990			\$ 2,990
WW Collection & Pumping	\$ 23,900	\$ -	\$ 70,000	\$ 93,900
WW Treatment	\$ 4,680	\$ 104,000	\$ -	\$ 108,680
North Windham Treatment System	\$ -	\$ 5,950,000	\$ 3,350,000	\$ 9,300,000
Total	\$ 31,570	\$ 6,054,000	\$ 3,420,000	\$ 9,505,570
Ending Balance	\$ 365,980			

Note: The North Windham Treatment System will be phased in. The costs above includes only phase 1 costs through 12/31/23. The expected 2023 bond of \$5,950,000 is expected to receive ARPA-related principal forgiveness reducing the net bond issued of \$5,590,814. Contributions may be received From Cumberland County (ARRA \$1million) Federal Government (\$2 million) and Windham (ARRA \$1.7 million); if that happens in 2023 it will reduce the bonded amount above.

Prorated Projects: Costs of projects done on infrastructure used by multiple communities are 'prorated' between the municipalities based on relative design capacity.

Projections for Rate-Making Purposes

Multi-year projections are made for each of the wastewater funds’ assessment. The projections provide guidance to the wastewater municipalities to assist them in determining their wastewater sewer rates. A summary of the projection is provided on next page.

Major Assumptions:

Major assumptions incorporated in the projections are as follows:

- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan. The North Windham system bond is assumed to be 30-year bond. Other new debt assumed a 20-year life between 1% and 3.5% interest depending on funding source and year of financing. The Westbrook Regional Treatment System has \$5.2 million of capital work identified for the next five years.

Summary of Projection Impact:

Assessment is projected to increase to \$2,430,362 in 2027. The significant increase reflects the costs related to the new North Windham treatment plant and related infrastructure.

Reserve Fund Balances



Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

2021	2022	2023	2024	2025	2026	2027
34%	48%	46%	65%	46%	47%	50%

Debt Service Ratio – Target: Greater or Equal to 125%

2021	2022	2023	2024	2025	2026	2027
128%	110%	118%	108%	105%	104%	103%

Projections for Rate-Making Purposes (continued)**Operating Fund: Windham North and South Systems**

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Assessment Income	410,916	518,412	515,808	804,659	1,667,579	2,266,072	2,430,362
Interest Income	-164	1,101	1,090	1,090	1,090	1,090	1,090
Other Income	448	225	1,912	1,912	1,912	1,912	1,912
Total Revenues	411,200	519,738	518,810	807,661	1,670,581	2,269,074	2,433,364
Operating Expenses:							
Salaries & Wages	48,659	41,540	39,513	41,094	42,738	44,234	45,782
Employee Benefits	22,941	18,076	17,718	18,604	19,534	20,511	21,537
Biosolids Disposal	11,558	12,714	11,763	12,234	12,662	13,042	13,433
Chemicals	9,581	13,946	12,570	12,947	13,335	13,735	14,147
Contracted Services	14,241	16,698	15,262	15,720	16,192	16,678	17,178
Deferred Cost W/O Facilities	0	0	0	0	0	0	0
Heat/Fuel Oil	3,288	3,772	4,611	4,749	4,891	5,038	5,189
Insurance	1,019	919	1,393	1,435	1,478	1,522	1,568
Materials & Supplies	4,163	9,707	8,736	8,998	9,268	9,546	9,832
Other Expense	60	180	92	95	600,098	900,101	900,100
Purchased Power	15,734	20,504	12,945	14,240	14,810	15,254	15,712
Regulatory/Taxes	196	1,406	129	133	137	141	145
Tele/Other Utilities	598	764	530	546	562	579	596
Transportation	9,215	16,089	9,831	10,126	10,430	10,743	11,065
SS - Administration	39,842	43,048	51,033	53,074	55,197	57,267	59,415
SS - Engineering Services	8,582	16,442	21,721	22,579	23,471	24,345	25,252
SS - Environmental Services	5,124	4,876	3,948	4,106	4,270	4,430	4,596
SS - Wastewater Services	24,301	25,450	24,692	25,680	26,707	27,709	28,748
SS - Water Services	184	253	296	308	320	332	344
	219,286	246,384	236,783	246,668	856,100	1,165,207	1,174,639
Debt Service	141,317	249,409	239,778	521,048	774,536	1,063,922	1,218,780
Renewal & Replacement - Direct	35,849	18,500	36,250	35,849	35,849	35,849	35,849
Renewal & Replace - Indirect	4,600	5,445	5,999	4,096	4,096	4,096	4,096
Capital Finance Expense	181,766	273,354	282,027	560,993	814,481	1,103,867	1,258,725
Total Operating Expenses	401,052	519,738	518,810	807,661	1,670,581	2,269,074	2,433,364
Current Year Surplus(Deficit)	10,148	0	0	0	0	0	0

Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$193,000

	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
R&R Balance BOY	\$ 361,300	\$ 366,579	\$ 351,228	\$ 352,777	\$ 363,426
Contribution	\$ 36,849	\$ 35,849	\$ 35,849	\$ 35,849	\$ 35,849
Withdrawals	\$ (31,570)	\$ (51,200)	\$ (34,300)	\$ (25,200)	\$ (86,300)
R&R Balance EOY	\$ 366,579	\$ 351,228	\$ 352,777	\$ 363,426	\$ 312,975

Projections for Rate-Making Purposes (continued)**Operating Fund: South Windham Only**

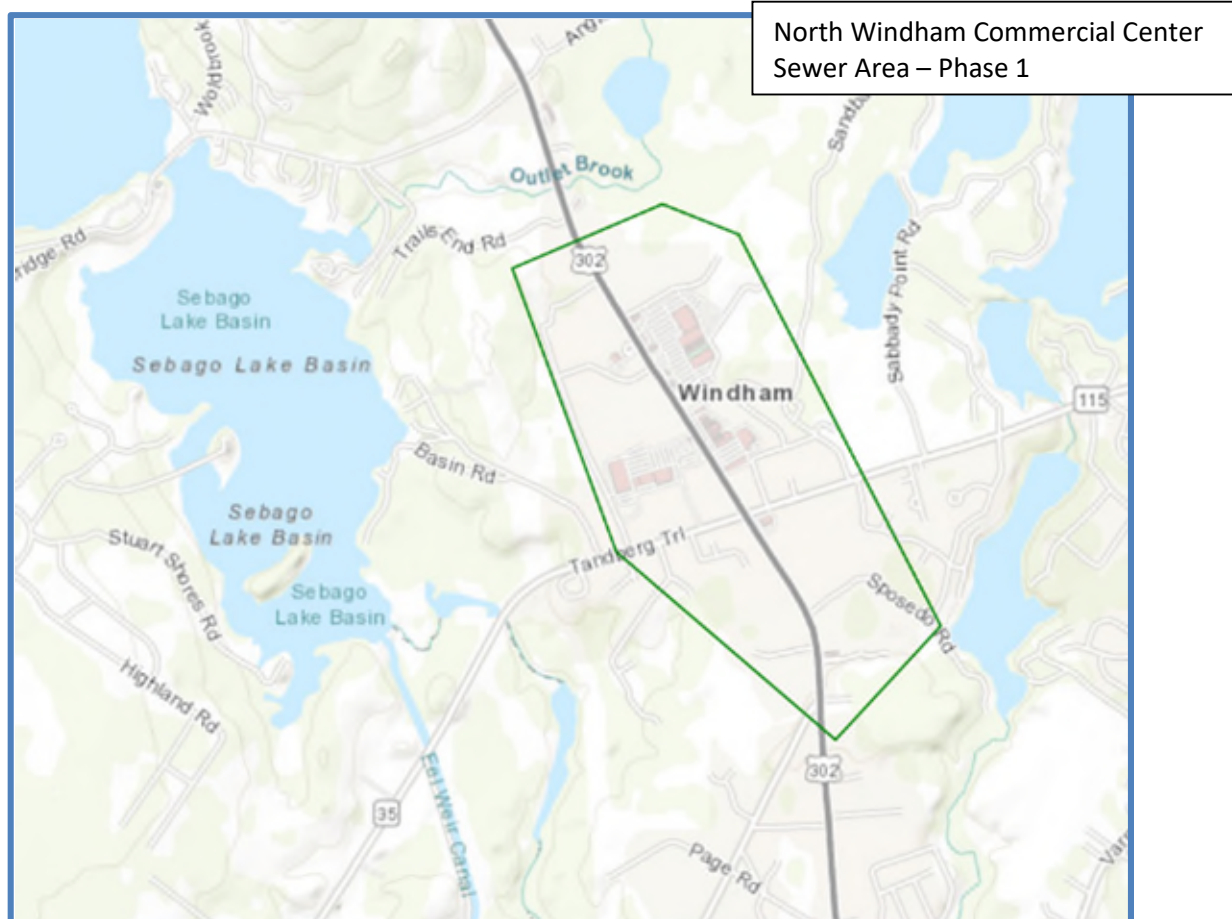
	<u>2021 Actual</u>	<u>2022 Budget</u>	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>
Revenues:							
Assessment Income	407,249	464,968	467,196	480,246	495,599	496,660	502,532
Interest Income	808	1,101	1,090	1,090	1,090	1,090	1,090
Other Income	448	225	1,912	1,912	1,912	1,912	1,912
Total Revenues	408,505	466,294	470,198	483,248	498,601	499,662	505,534
Operating Expenses:							
Salaries & Wages	48,659	41,540	39,513	41,094	42,738	44,234	45,782
Employee Benefits	22,941	18,076	17,718	18,604	19,534	20,511	21,537
Biosolids Disposal	11,558	12,714	11,763	12,234	12,662	13,042	13,433
Chemicals	9,581	13,946	12,570	12,947	13,335	13,735	14,147
Contracted Services	14,241	16,698	15,262	15,720	16,192	16,678	17,178
Heat/Fuel Oil	3,288	3,772	4,611	4,749	4,891	5,038	5,189
Insurance	1,019	919	1,393	1,435	1,478	1,522	1,568
Materials & Supplies	4,163	9,707	8,736	8,998	9,268	9,546	9,832
Other Expense	60	180	92	95	98	101	104
Purchased Power	15,734	20,504	12,945	14,240	14,810	15,254	15,712
Regulatory/Taxes	196	1,406	129	133	137	141	145
Tele/Other Utilities	598	764	530	546	562	579	596
Transportation	9,215	16,089	9,831	10,126	10,430	10,743	11,065
SS - Administration	39,842	43,048	51,033	53,074	55,197	57,267	59,415
SS - Engineering Services	8,582	16,442	21,721	22,579	23,471	24,345	25,252
SS - Environmental Services	5,124	4,876	3,948	4,106	4,270	4,430	4,596
SS - Wastewater Services	24,301	25,450	24,692	25,680	26,707	27,709	28,748
SS - Water Services	184	253	296	308	320	332	344
	219,286	246,384	236,783	246,668	256,100	265,207	274,643
Debt Service	141,317	195,965	191,166	196,635	202,556	194,510	190,946
Renewal & Replacement - Direct	35,849	18,500	36,250	35,849	35,849	35,849	35,849
Renewal & Replace - Indirect	4,600	5,445	5,999	4,096	4,096	4,096	4,096
Capital Finance Expense	181,766	219,910	233,415	236,580	242,501	234,455	230,891
Total Operating Expenses	401,052	466,294	470,198	483,248	498,601	499,662	505,534
Current Year Surplus(Deficit)	7,453	0	0	0	0	0	0

Town of Windham – Proposed New Treatment System

In recent years, the Town of Windham has redoubled its efforts to address wastewater treatment needs in the northern area of the Town. These efforts led to the development of a Comprehensive Wastewater Management Plan (CWWMP) published in May 2018. On May 26, 2020, the Town and PWD signed a Memorandum of Agreement to partner on the procurement of engineering services and construction of wastewater treatment facilities in North Windham to serve the “Phase 1 Area” which can be generally described as the commercial center along Route 302 north of River Rd and south of Chaffin Pond.

Per the Memorandum of Agreement, the Town has determined that a wastewater treatment system is needed in the North Windham Area to mitigate groundwater pollution and would allow for more sustainable growth opportunities (North Windham System).

Engineering Services procured Preliminary Design and estimates the total cost of the project to be \$41.9 million.



Projections for Rate-Making Purposes (continued)

Operating Fund: North Windham Only

The Town identified the North Windham area as an area needing public sewer. The public sewer project is estimated to cost \$49.1 million with source of funding as listed below:

<u>Sources of Funds:</u>	
PWD Reimbursement External Sources	
County ARPA	\$ 1,300,000
Federal Grant	\$ 2,000,000
Tow ARPA	\$ 1,700,000
Town/School SRF Fund	\$ 6,000,000
Total External Sources	\$ 11,000,000
MMBB Bond	\$ 38,100,000
Total Sources of Funds	\$ 49,100,000

Assuming the funding sources above, the estimated operation expenses and debt service on the short-term note and 30-year State Revolving Loan Bond are listed below.

	2021 Budget	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:								
Assessment Income	3,667	3,667	53,444	48,612	324,413	1,171,980	1,769,412	1,927,830
Interest Income	0	-972	0	0	0	0	0	0
Total Revenues	3,667	2,695	53,444	48,612	324,413	1,171,980	1,769,412	1,927,830
Operating Expenses:								
Other Expense	0		0	0	0	600,000	900,000	899,996
Debt Service	3,667		53,444	48,612	324,413	571,980	869,412	1,027,834
Renewal & Replacement - Direct	0		0	0	0	0	0	0
Renewal & Replace - Indirect	0		0	0	0	0	0	0
Capital Finance Expense	3,667	0	53,444	48,612	324,413	571,980	869,412	1,027,834
Total Operating Expenses	3,667	0	53,444	48,612	324,413	1,171,980	1,769,412	1,927,830
Current Year Surplus(Deficit)	0	2,695	0	0	0	0	0	0

Debt Service

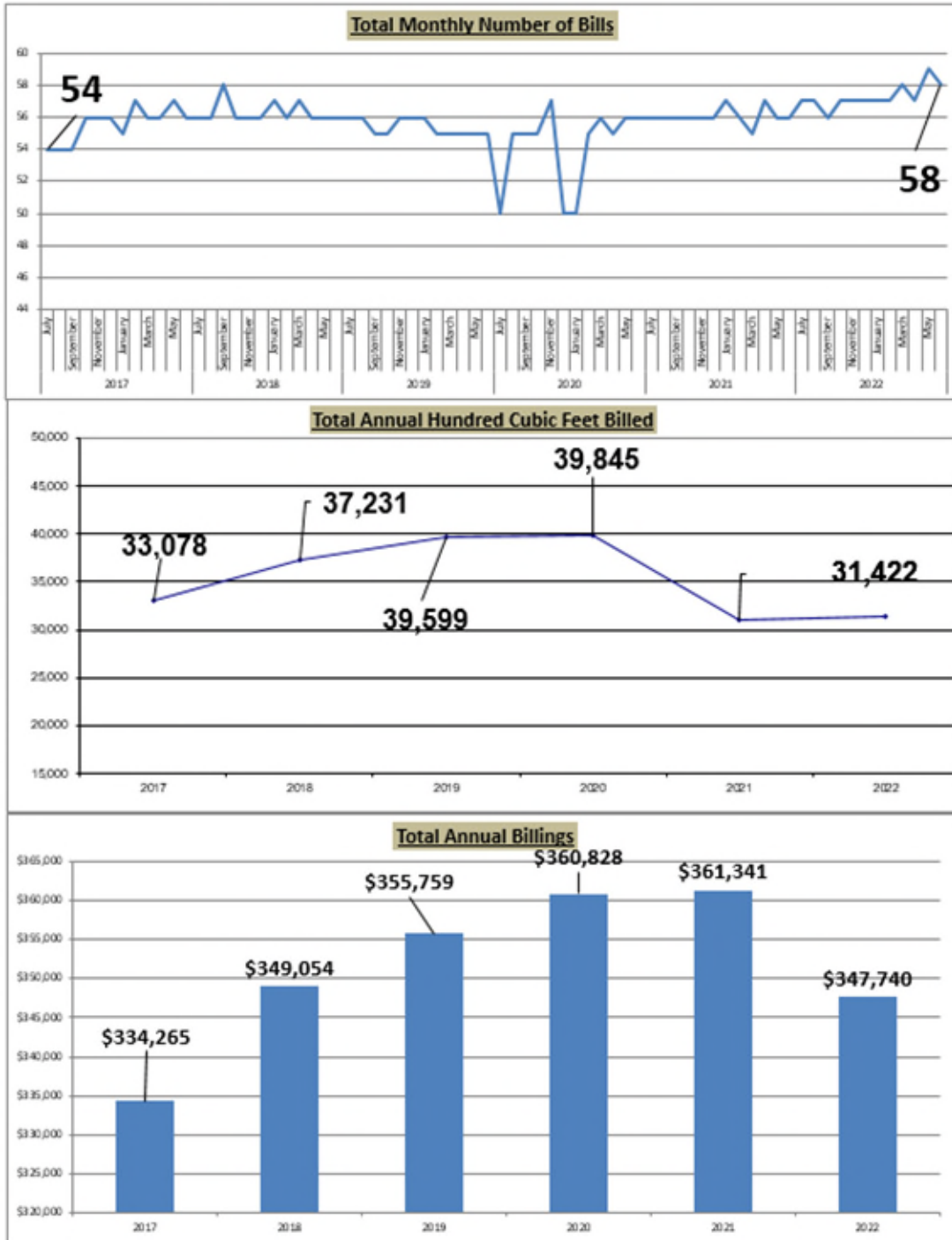
The State State Revolving Loan fund has committed to providing more than \$2.2M of principal forgiveness on the \$38.1M of 30-year bonds.

	2023	2024	2025	2026	2027	2028
SRF Bond						
Gross	\$ 5,950,000	\$ 4,425,000	\$ 7,250,000	\$ 3,425,000	\$ 11,400,000	\$ 5,650,000
Principal Forgiveness	\$ 361,800	\$ 255,000	\$ 421,000	\$ 198,000	\$ 658,000	\$ 326,000
SRF Bond Amount	\$ 5,588,200	\$ 4,170,000	\$ 6,829,000	\$ 3,227,000	\$ 10,742,000	\$ 5,324,000

Sewer Billing Statistics

The District provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District’s water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.

By Municipal Fiscal Year: Jul 1 to Jun 30



Falmouth Assessment and Scarborough and South Portland Contracted Services

Background

By contract, the district provides utility billing and collection services for Falmouth, Scarborough and South Portland. Wastewater services are provided in the towns of Falmouth and Scarborough by their towns' Sanitary District, both independent wastewater utilities, and in the city of South Portland by Water Resource Protection, a department of the City of South Portland. For Scarborough and South Portland, the district estimates the cost to provide the billing and payment collection service as documented in the annual budget and bills the municipalities the estimated cost. The amount is billed to the municipality in equal monthly payments. For Falmouth, in addition to the billing and payment collection service costs, the District will assess the town for debt service costs related to the bond that the District issued on behalf of Falmouth. The debt and the related assets will be part of the District's balance sheet but Falmouth will operate and maintain the assets.

2023 Summary

The District is proposing the same assessment as last year, \$314,112 in Falmouth. South Portland's and Scarborough's annual assessment both increased by 10.0%.

Falmouth:

	2021 Actual	2022 Jan- Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$314,112	\$157,056	\$314,112	\$314,112	\$0	0.0%
Interest Income	<u>-139</u>	<u>-933</u>	<u>300</u>	<u>1,188</u>	<u>888</u>	<u>296.0%</u>
Total Revenue	313,973	156,123	314,412	315,300	888	0.3%
Operating Expense	12,837	8,307	16,049	18,447	2,398	14.9%
Debt Service & Lease Expense	<u>289,687</u>	<u>138,965</u>	<u>293,138</u>	<u>289,586</u>	<u>-3,552</u>	<u>-1.2%</u>
Total Expense	302,524	147,272	309,187	308,033	-1,154	-0.4%
Current Year Surplus (Deficit)	11,449	8,851	5,225	7,267		
Prior Year Surplus	<u>20,837</u>	<u>32,286</u>	<u>35,256</u>	<u>37,780</u>		
Accumulated Surplus	32,286	41,137	40,481	45,047		

Scarborough:

	2021 Actual	2022 Jan- Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Contracted Billing Income	\$11,664	\$6,036	\$12,072	\$13,284	\$1,212	10.0%
Interest Income	<u>-7</u>	<u>-109</u>	<u>0</u>	<u>95</u>	<u>95</u>	<u>n/a</u>
Total Revenue	11,657	5,927	12,072	13,379	1,307	10.8%
Operating Expense	1,913	1,845	2,255	2,535	280	12.4%
Debt Service & Lease Expense	5,206	2,814	5,627	6,254	627	11.1%
Renewal & Replace - Indirect	<u>4,633</u>	<u>2,321</u>	<u>4,640</u>	<u>5,201</u>	<u>561</u>	<u>12.1%</u>
Total Expense	11,752	6,980	12,522	13,990	1,468	11.7%
Current Year Surplus (Deficit)	-95	-1,053	-450	-611		
Prior Year Surplus	<u>8,460</u>	<u>8,365</u>	<u>8,453</u>	<u>6,255</u>		
Accumulated Surplus	8,365	7,312	8,003	5,644		

South Portland:

	2021 Actual	2022 Jan- Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Contracted Billing Income	\$201,132	\$104,082	\$208,164	\$228,984	\$20,820	10.00%
Interest Income	<u>-160</u>	<u>-2,105</u>	<u>400</u>	<u>1,730</u>	<u>1,330</u>	<u>332.50%</u>
Total Revenue	200,972	101,977	208,564	230,714	22,150	10.62%
Operating Expense	126,465	74,018	141,888	154,794	12,906	9.10%
Debt Service & Lease Expense	39,826	21,363	50,879	46,861	-4,018	-7.90%
Renewal & Replace - Indirect	<u>33,208</u>	<u>16,749</u>	<u>33,480</u>	<u>33,760</u>	<u>280</u>	<u>0.84%</u>
Total Expense	199,499	112,130	226,247	235,415	9,168	4.05%
Current Year Surplus (Deficit)	1,473	-10,153	-17,683	-4,701		
Prior Year Surplus	<u>146,669</u>	<u>148,142</u>	<u>35,135</u>	<u>11,418</u>		
Accumulated Surplus	148,142	137,989	17,452	6,717		

Introduction

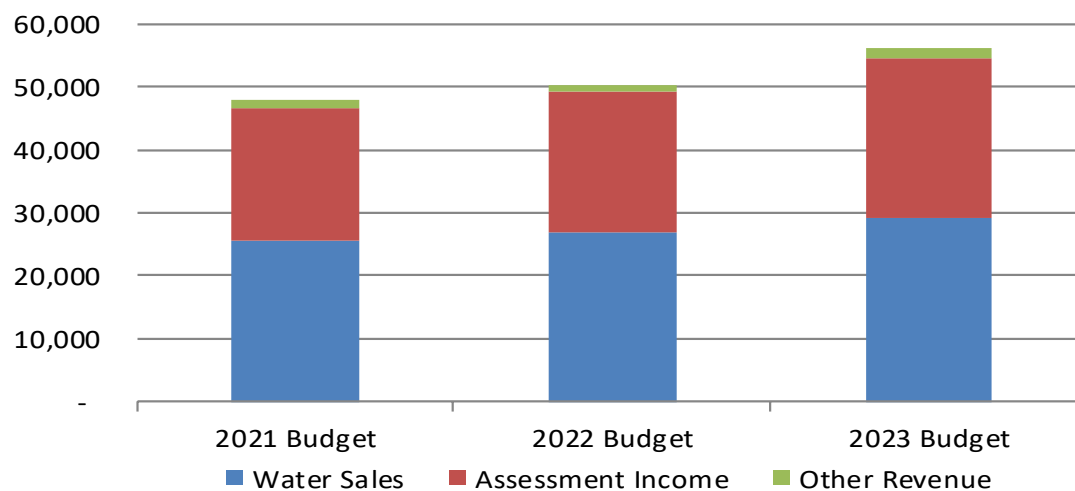
Revenue is obtained from two major sources: payments by individual customers for water services (Water Revenue, 51.8%) and payments from municipalities for wastewater services (Wastewater Assessments, 45.3%). Water revenues in 2023 are projected to increase 8.3% from the 2022 budget. The increase in revenues reflects the impact of a proposed 5.6% rate increase on January 1, 2023 and a 2.8% increase in assumed metered water usage. The Wastewater Assessments for Cape Elizabeth, Cumberland, Gorham, Westbrook, and Portland increased to cover estimated 2023 costs.

Contracted Billing Income (0.43% of budgeted revenue) is revenue paid by the City of South Portland and Town of Scarborough for wastewater billing services.

Other Water and Wastewater revenue (2.29% of budgeted revenue) is derived from other activities, such as interest income, cross connection fees, leased property, customer connection and activation fees, jobbing surcharge and septage haulers fees, which are further detailed in this section.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	\$-Diff.	%-Diff.
Water Sales	\$26,455,996	\$12,871,778	\$26,824,845	\$29,043,602	\$2,218,757	8.3%
Assessment Income	21,083,736	11,173,098	22,346,196	25,403,484	3,057,288	13.7%
Contracted Billing Income	212,796	110,118	220,236	242,268	22,032	10.0%
Interest Income	(27,737)	(397,457)	104,660	354,946	250,286	239.1%
Other Income	963,570	603,117	644,514	931,290	286,776	44.5%
<u>Lease Revenue</u>	<u>81,937</u>	<u>-</u>	<u>81,937</u>	<u>89,962</u>	<u>8,025</u>	<u>9.8%</u>
Total Revenues	\$48,770,298	\$24,360,654	\$50,222,388	\$56,065,552	\$5,843,164	11.6%

Total District Revenue
(\$,000)



Water Sales

Water sales consist of:

- **Metered Revenue** from residential, governmental, industrial and commercial customers. Customers are billed a monthly minimum based on meter size, which includes 1 hundred cubic feet (HCF) of water (748 gallons). For amounts greater than 1 HCF, customers pay based on a four-tier declining block. Member rates effective January 1, 2023 are expected to be :

Monthly Member Water Rates:		
From	To	Rate
1 HCF	30 HCF	\$2.72
30 HCF	100 HCF	\$2.51
100 HCF	500 HCF	\$2.21
Greater than 500 HCF		\$1.24

- **Public Fire Protection** revenue from charges to municipalities for hydrants. Eleven communities pay a monthly fee based on the number of the hydrants in the community and proportionate share of water system costs to ensure water is available to fight fires.
- **Private Fire Protection** revenue from charges to private users for hydrants and sprinklers. Customers are assessed a monthly fee based on the service line to the hydrant/sprinkler. The fee is based on proportionate share of water system costs to ensure water is available to fight fires.
- **Other Water Revenue** such as interest on delinquent customer balances and customer penalties.

The 2023 Budget of \$29,043,602 reflects an assumed rate of usage determined on subsequent pages with a proposed rate adjustment of 5.6%.

Water Sales rates are normally adjusted annually. PWD had a rate increase on March 1, 2022 of 3.7%. Prior to 2016, all water rate adjustments were subject to review and approval by the Maine Public Utilities Commission. Starting in 2016, the District's Board of Trustees can approve rate adjustments solely through their actions. The Board will continue to follow the same public input process before authorizing rate changes.

	2022		2022 Budget	2023 Budget	-\$-Diff.	% -Diff.
	2021 Actual	Jan-Jun				
Metered Revenue	\$23,667,109	\$11,408,536	\$23,879,387	\$25,907,750	2,028,363	8.5%
Public Fire Protection	1,511,988	771,932	1,557,358	1,644,768	87,410	5.6%
Private Fire Protection	1,215,749	630,633	1,268,100	1,359,084	90,984	7.2%
Other Water Revenue	61,150	60,677	120,000	132,000	12,000	10.0%
Total Water Sales	\$26,455,996	\$12,871,778	\$26,824,845	\$29,043,602	2,218,757	8.3%

Water Sales - Cost of Service Study

Every 10 years, a cost of service study is completed that compares the revenue generated by each meter revenue customer class – residential, commercial, industrial and government – as well as fire protection with the costs of providing services to those customers. The most common and widely used cost of service or cost allocation process is presented in the American Water Works Association’s manual of practice M1 – Principles of Water Rates, Fees, and Charges. The process consists of several steps to determine the cost of providing service to various classes of customers.

1. Costs are first assigned to various functions such as supply, treatment, pumping and distribution. The District’s accounting system readily provides this functional breakdown.
2. The functional costs are then allocated to various types of service provided by the water utility or cost components. The most common method is termed the “base-extra capacity method”. Under this method, the functional costs are allocated to the categories:
 - Base: costs that vary with the amount of water use, independent of peak demands
 - Extra Capacity: costs that are associated with meeting peak demand requirements
 - Customer: costs that are related to customer service and independent of water use. These are often subdivided into:
 - a. General or billing costs (meter reading, collection, etc.)
 - b. Meter and service costs (cost of meter or service line repair, maintenance and testing)
 - Direct Fire Protection: costs associated with public fire hydrants
3. Lastly, the costs that have been allocated to cost components are distributed to customer classes or groups based on the relative amount of use that each class has of the various cost components.

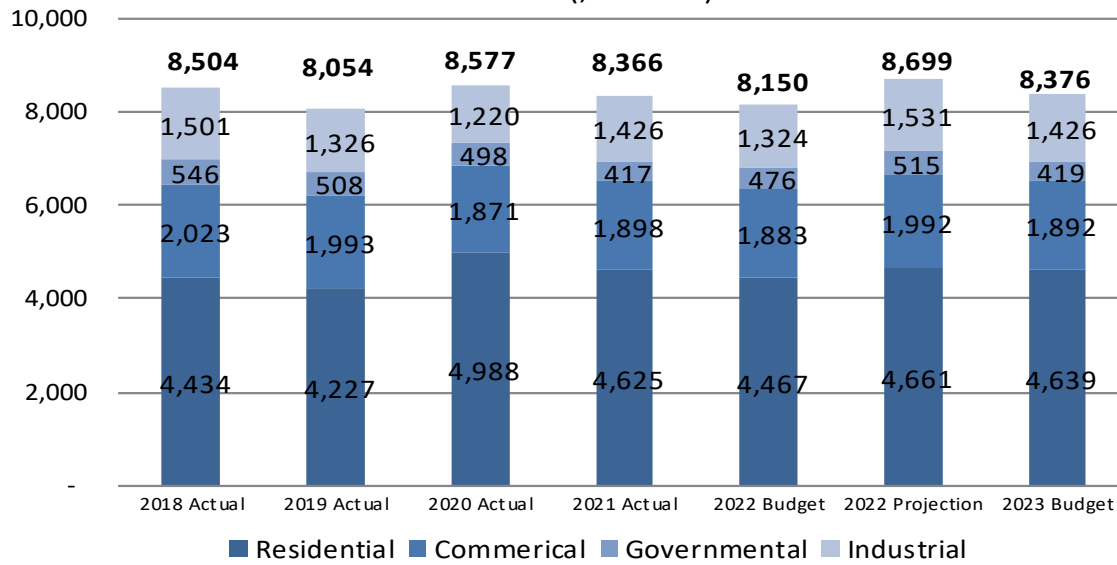
In general, we have followed the guidance in the AWWA’s M1 Manual to develop the cost of service analysis for the District.

The last study was conducted in 2016. The study indicated that industrial and commercial customers were not paying the full cost of service. Because the rate change needed to those customers would create rate shock and impact economic development, a policy was established to gradually increase the rates impacting those customers over subsequent rate adjustments. The Board confirmed continuing the practice done since 2007 of increasing those rates at a rate of 150% of the rate adjustment for residential customers.

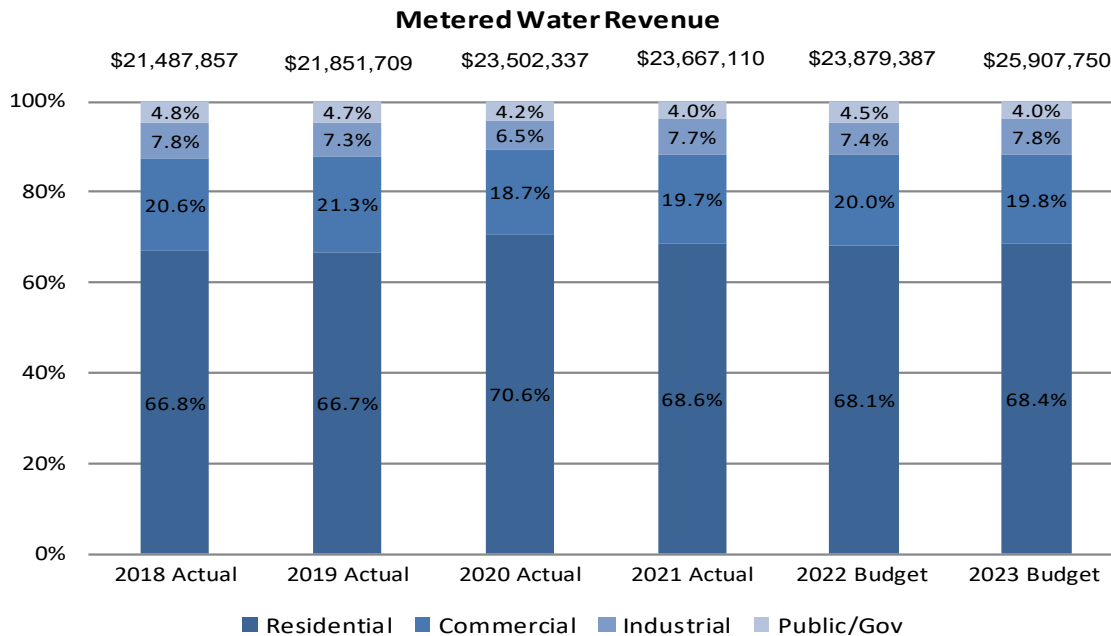
Water Sales – Metered Revenue

Metered water revenue has risen from \$21.5 million in 2018 to the 2023 budgeted amount of \$25.9 million (20.6% increase). The increase in revenue of the 2023 Budget was a result of a 5.6% rate increase and a 2.8% increase in assumed metered water usage. The District measures metered consumption by four customer classes: Residential, Commercial, Industrial, and Governmental/Public. The consumption patterns of each of these customer classes vary from one another and these variations have been taken into consideration in estimating the consumption used for the budget (see detailed discussion on subsequent pages).

Historical Consumption vs. 2023 Budget
(,000 HCF)



The ratio of each customer class as a percentage of all sales (shown below) has been fairly stable.

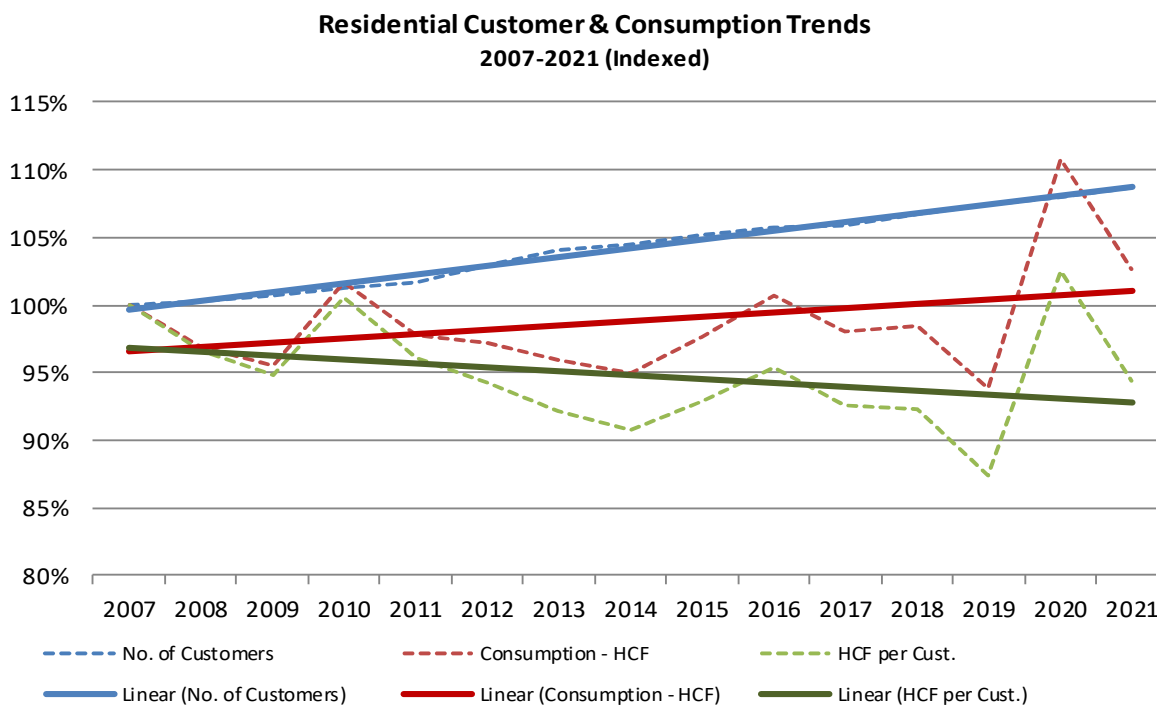


Water Sales – Metered Revenue - Consumption

Residential

Residential consumption makes up about 55% of total metered consumption and generates roughly 68% of the District's total metered water revenue. The two segments of residential consumption are monthly billed and seasonal customers. Monthly billed customers receive bills year round on a monthly basis. Seasonal customers receive a bill in the spring for the minimum consumption level and a bill in the fall for any excess usage above the minimum.

For monthly customers, consumption has been calculated by determining the core level of consumption, then estimating the amount of additional usage that largely occurs during the summer months. The monthly core level was reached by taking the average of the lowest three months of each year in the sample data and annualizing that value.

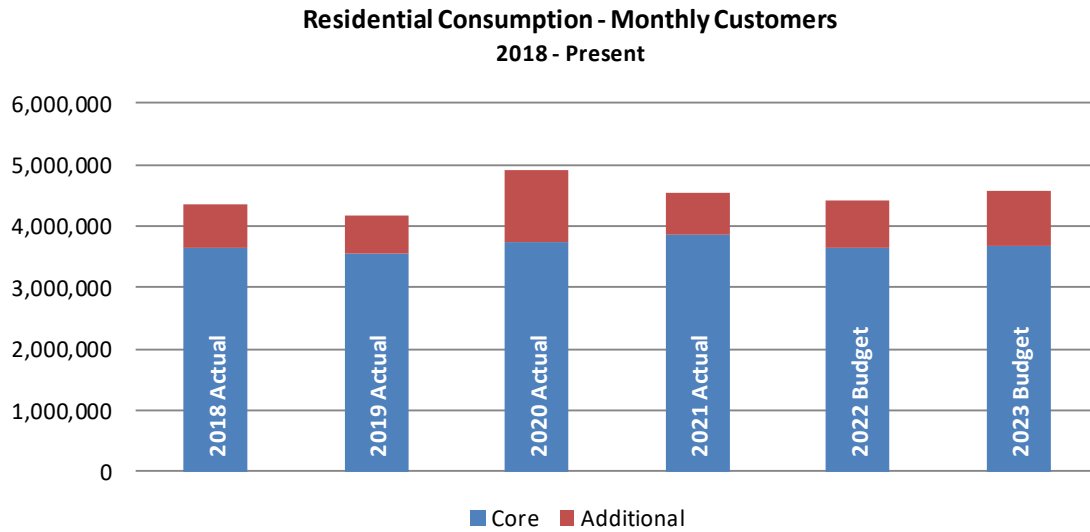


As shown above, overall consumption (red line) has been relatively flat over the last 10 years, even though the number of customers (blue) has been increasing. Therefore, the consumption per customer (green) has also been declining. These trends were taken into account when estimating the residential core usage for 2023.

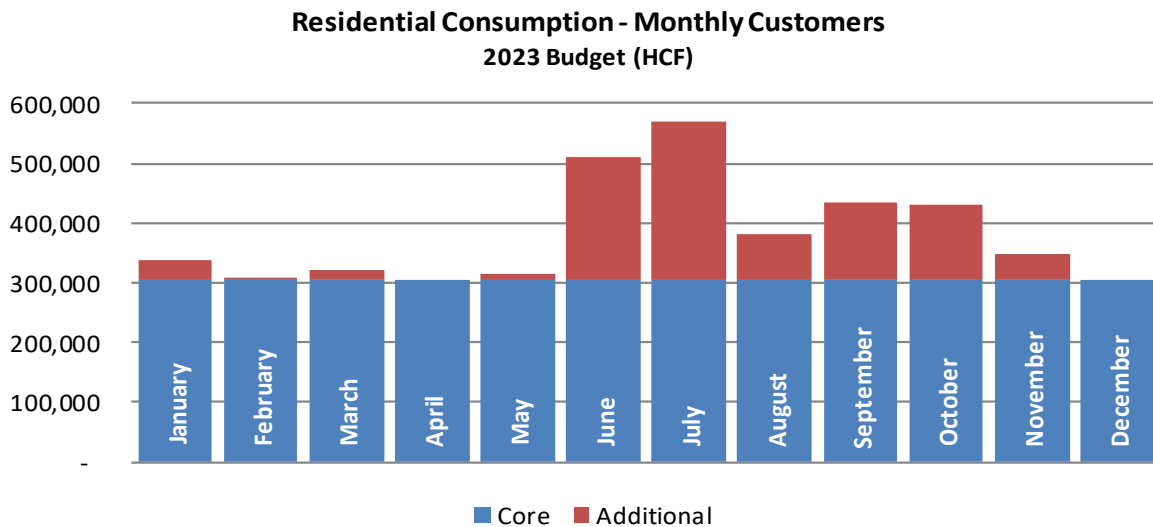
The additional usage was determined by averaging the percentage of additional consumption over the core in the sample years. For the 2023 budget, the core consumption was approximately 3.6 million HCF (hundred cubic feet) and the additional usage was 24% of the core. This falls in line with historical data.

Water Sales – Metered Revenue - Consumption

Residential (continued)



The monthly additional consumption was determined based on the average monthly consumption from a rolling three-year period ending December 2021. Approximately three-fourths of the additional consumption is used between the months of June through September.



Consumption by seasonal customers makes up only 1.64% of total residential consumption. Residential seasonal consumption for the budget was based on 2021 actual results and also taken into consideration the three-year average from 2019-2021 and is approximately 76,000 HCF for the year.

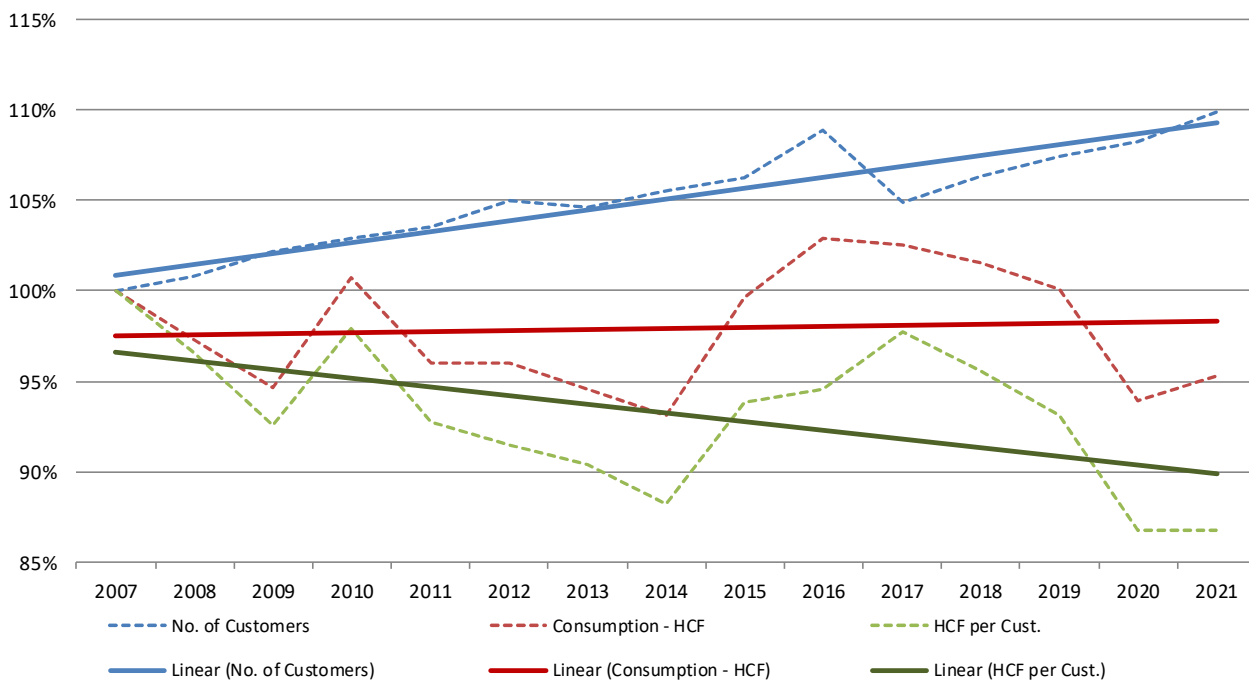
Water Sales – Metered Revenue - Consumption

Commercial

In estimating commercial usage, consumption was also split between monthly billed and seasonal customers, similar to the residential class.

In the same manner as residential consumption, monthly customer consumption has been calculated by determining the core level of consumption, then estimating the amount of additional usage. The monthly core level was reached by taking the average of the lowest three months of each year in the sample data and annualizing that value. The rate of increase in commercial customers is slower than residential, and the decrease in consumption per customer is less gradual than residential. The overall consumption took a dip in 2020 due to the pandemic and closings but bounced back in 2021 and 2022 is tracking as even higher so we used 2021 actual usage to be conservative in the estimate.

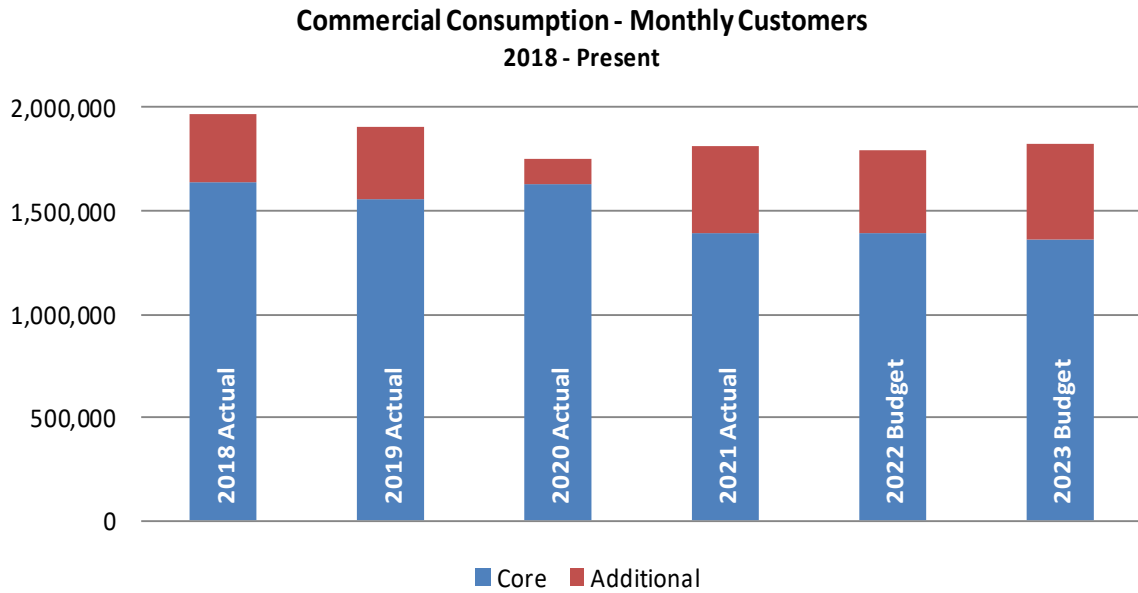
**Commercial Customer & Consumption Trends
2007-2021 (Indexed)**



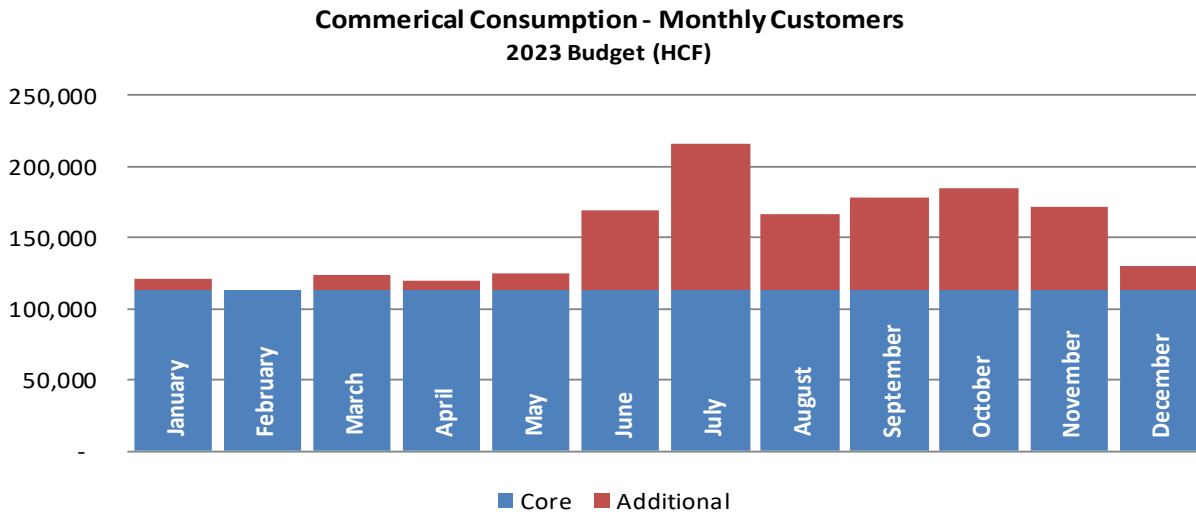
Additional usage was then determined by averaging the percentage of additional consumption over the core in the sample years. For the 2023 budget, the core consumption decreased slightly from last year by 2% to 1.36 million HCF. The additional usage budgeted for 2023 is 33.5% of the core.

Water Sales – Metered Revenue - Consumption

Commercial (continued)



The monthly additional consumption was determined based on the average monthly consumption from a rolling three-year period ending December 2021. Approximately two-thirds of the additional consumption is used between the months of June through September.



Consumption by seasonal customers makes up only 3.7% of total commercial consumption. Commercial seasonal consumption for the budget was based on 2021 actual results as well as the three-year period from 2019-2021 and is approximately 71,000 HCF for the year.

Water Sales – Metered Revenue - Consumption

Industrial

In 2021 approximately 87% of industrial usage has come from just five customers: Calpine, Texas Instruments, Sappi Fine Paper, ON Semiconductor, and B&G Foods but in late 2021 B&G Foods closed and was sold. The District makes an effort every year to contact these customers to get an estimate of their expected water needs for the coming year. Overall Industrial usage is budgeted at 1.4 million HCF for 2023.

Calpine

The Calpine power plant is the District's largest customer. Located in Westbrook, Calpine uses two combustion turbines routed to two heat recovery steam generators that provide steam to a turbine. This facility produces enough electric power to meet the needs of more than 500,000 homes throughout New England. The energy market can significantly impact production at the plant. In 2018 and 2019, Calpine had some substantial breaks in usage when the plant was offline due to lack of demand and to save on overhead costs. Calpine's usage is highly variable with no clear trend but we have taken into consideration actual usage in 2022 as of August in which they are projecting to be well above 2022 budget and 2021 actual. We plan to increase the usage by about 100,000 HCF from last years' budget to 547,000 HCF.

Texas Instruments

Texas Instruments is a company that designs and makes semiconductors that are sold to electronics designers and manufacturers globally. In 2011, the company bought National Semiconductor, a semiconductor manufacturer specializing in analog devices and subsystems that operates a wafer fabrication plant in South Portland. They have had steady usage in the last few years therefore we are keeping their usage budget the same 300,000 HCF.

Sappi Fine Paper

Sappi Fine Paper North America is the leading producer and supplier of coated fine paper, pulp and release paper in the United States. The company has two facilities in Westbrook, a mill and a technology center. The mill is primarily a production facility for specialty release papers and films. The technology center is equipped with two state-of-the-art pilot coaters that enable prototype development for both coated fine papers and specialty release paper. There was a downsizing in production by shutting a paper machine down in Westbrook which is showing in their usage in YTD August 2022. That in mind we reduced their assumed usage to 200,000 HCF from 300,000 for the 2023 budget.

ON Semiconductor (formerly Fairchild Semiconductor)

In September 2016, Fairchild Semiconductor was purchased by ON Semiconductor. The company still operates as a lead electronics component manufacturer, making tiny silicon chips used in a variety of industries, including cellular technology, home goods and automotive applications. ON operates a manufacturing facility in South Portland. They have been investing in the plant and expect production to remain the same for at least the next couple of years.

B&G Foods

B&G Foods and its subsidiaries manufacture, sell, and distribute a diversified portfolio of high-quality, branded shelf-stable foods across the United States, Canada and Puerto Rico and they own B&M Beans that operates a bean cannery in Portland. The plant was sold to a developer in late 2021 and therefore we have assumed zero usage for 2023.

Water Sales – Metered Revenue - Consumption

Public/Governmental

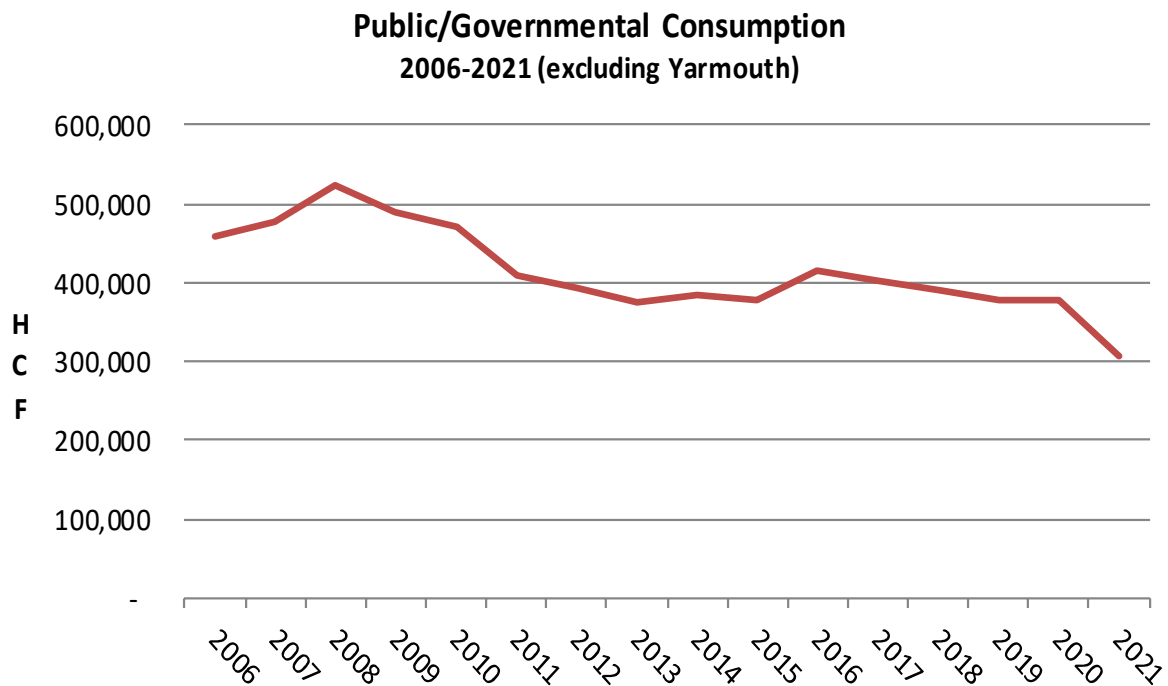
Yarmouth Water District

Approximately 27% of public/governmental consumption comes from usage by the Yarmouth Water District that provides water almost entirely to the Wyman Power Plant on Cousins Island. Wyman Power Plant is a spot producer of power for the Northeast and is only used during peak energy demand because, as an oil-fired generator, it has become obsolete.

Wyman ran consistently over the recent years because it supplements with natural gas fired units in New England, which generate roughly half the region's power and are much cheaper to operate. We are predicting that their usage will stay in line with last years, around 130,000 HCF.

Other Public/Governmental Customers

Public/Governmental consumption has been in decline since the economic downturn. Government entities have sought out ways to decrease expenditures including their water and sewer bill. As a result, it is not anticipated that usage will return. In 2023, we have predicted that the usage will continue to fall as it has in the past few years.



Water Sales – Metered Revenue – Rates

Water Rate Schedule

A 5.6% increase is proposed to be implemented effective 1/1/2023. Board of Trustees will review and approve any rate adjustment in November 2022.

Meter or Service Line Size	3/1/22 Member Rate	3/1/22 Non-member Rate	1/1/23 Proposed Member Rate	1/1/23 Proposed Non-member Rate
Private Fire Monthly Fee				
2	\$4.19	\$4.81	\$4.40	\$5.05
3	9.37	10.75	9.84	11.29
4	16.70	19.21	17.54	20.17
6	39.92	45.89	41.92	48.18
8	66.83	76.82	70.17	80.66
10	104.39	120.12	109.61	126.13
12	150.31	172.88	157.83	181.52
16	267.23	307.33	280.59	322.70
Minimum Monthly Charges				
5/8	\$10.37	\$11.55	\$10.87	\$12.51
3/4	12.22	13.59	12.81	14.72
1	15.86	17.67	16.63	19.14
1 1/2	28.17	31.36	29.54	33.96
2	41.23	45.16	44.23	50.85
3	74.82	81.95	80.26	92.27
4	112.62	123.39	120.81	138.92
6	217.59	238.42	233.42	268.42
8	343.54	376.45	368.53	423.82
10	497.42	545.06	533.61	613.66
12	658.47	721.50	706.37	812.30
Low income	2.59	2.99	2.72	3.14
Monthly Volume Charge				
First 100 Cf	minimum	minimum	minimum	minimum
Next 2,900 Cf	\$2.59	\$2.99	\$2.72	\$3.14
Next 7,000 Cf	2.34	2.70	2.51	2.90
Next 40,000 Cf	2.06	2.36	2.21	2.53
Over 50,000 Cf	1.16	1.34	1.24	1.44

Typical Customer Increases	Member	Current	Proposed 5.6%	\$	%
Residential (per month)	.62" meter, 7 HCF	\$25.91	\$27.19	\$1.28	4.94%
Commercial (per month)	.75" meter, 80 HCF	204.33	217.19	12.86	6.29%
Small Industrial (per month)	2" meter, 1,300 HCF	2,032.14	2,174.81	142.67	7.02%
Large Industrial (per month)	8" meter, 56,000 HCF	65,786.45	70,327.11	4,540.66	6.90%
Sprinkler (per year)	6" meter	479.04	503.04	24.00	5.01%
Public Fire (per year)		1,566,432	1,644,768	78,336	5.00%
Seasonal (per year)	.62" meter	251.52	264.10	12.58	5.00%

Water Sales – Metered Revenue - Rates

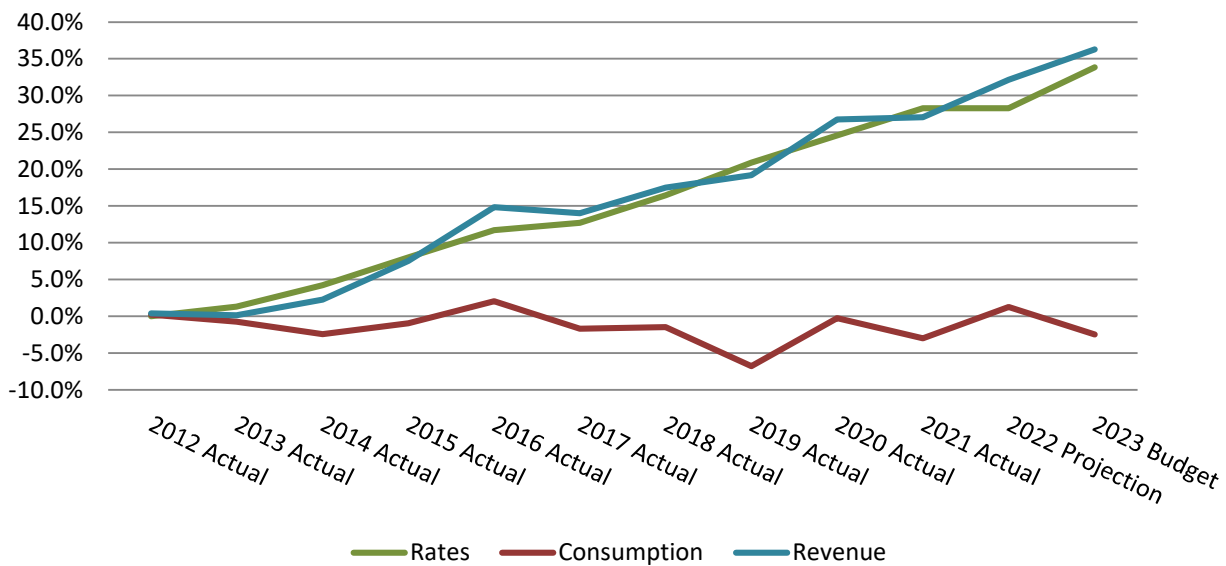
Water Rate Schedule (continue)

Water rates were unchanged from 2002 through 2006. Rate changes since that time were:

<u>Effective Date</u>	<u>Metered Rates</u>	<u>Public Fire Projection Rates</u>
01/01/07	3.5% increase	11.0% increase
01/01/08	3.8% increase	unchanged
01/01/09	7.0% increase	3.0% increase
05/01/10	3.6% increase	3.5% increase
05/01/11	2.0% increase	2.0% increase
05/01/13	1.3% increase	1.5% increase
05/01/14	2.9% increase	3.0% increase
05/01/15	3.8% increase	3.8% increase
05/01/16	3.7% increase	3.7% increase
05/01/17	1.0% increase	1.0% increase
05/01/18	3.8% increase	3.75% increase
05/01/19	4.4% increase	4.36% increase
12/01/20	3.4% increase	3.4% increase
03/01/22	3.7% increase	3.6% increase
01/01/23	5.6% increase	5.0% increase

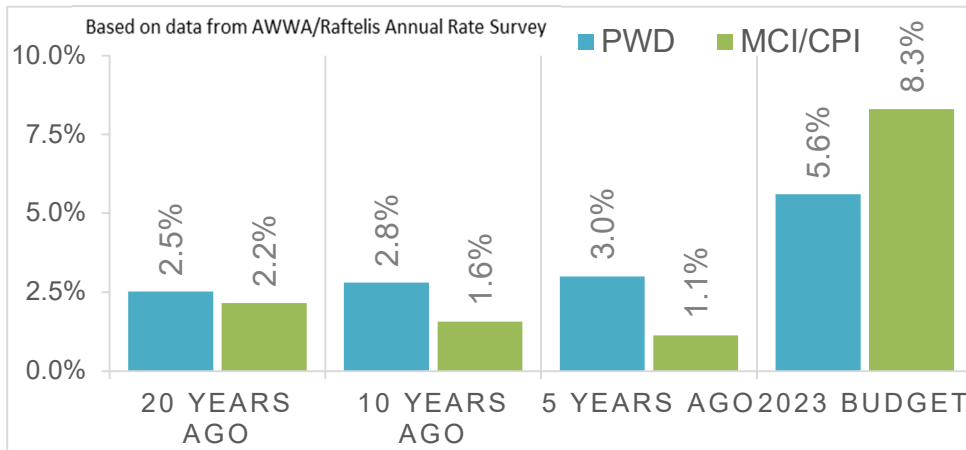
Changes in metered revenue are strongly correlated to changes in rates. There is also a relationship between metered revenue growth and changes in consumption. The graph below reflects this correlation. The revenue line runs closely to rates, while changes in its slope correspond to changes in consumption. The 4.5% increase in water revenue from 2022 Projection to 2023 Budget was a result of 5.6% increase in metered rates.

Cumulative Change in Metered Revenue
Metered Revenue vs. Revenue Drivers

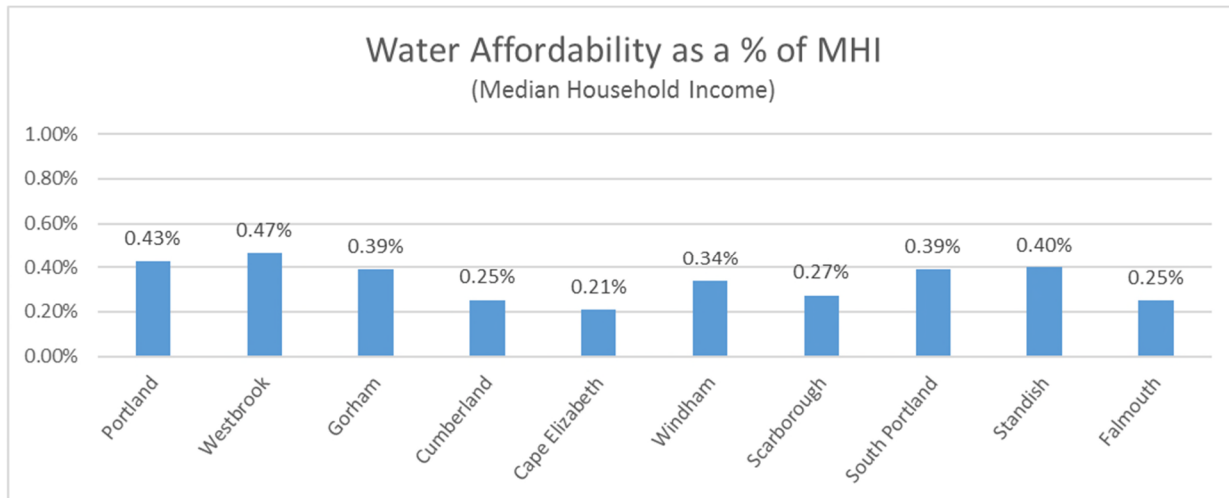


Water Sales – Rate Affordability Study

The graph below shows water rates at Portland Water District have been close to rate of inflation over the past 20 years and have been higher than inflation in the past 5 years as additional funding for infrastructure improvements has been made. The CPI (consumer price index) has shot up past year and the proposed budget comes in less primarily due to utilizing the capital reserve to fund capital expenditures.



With residential rates increasing, a study was conducted to understand the financial burden water rates are having on our customers. An industry benchmark compares a typical bill with the average usage for a month in a household of 4 to the median household income (MHI). From many studies and our purposes, a factor of 2% and under MHI is considered affordable. Table below is based on current rates.

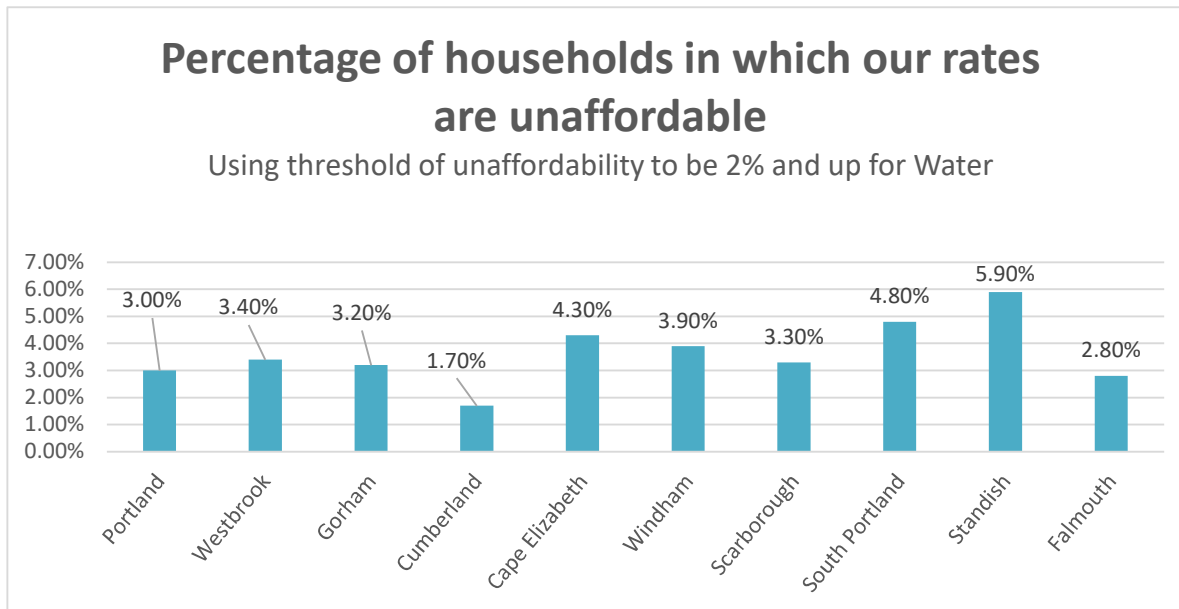


Water Sales – Rate Affordability Study (continued)

The table below indicates most Portland customer’s water bills are affordable (below 2% of MHI) with only customers in the lowest income and larger households reaching unaffordable levels (orange and red colors). Table below is based on current rates.

Water		Annual Bill as Percentage of Household Income by Household Size									
Household Income	Value	HCF	2	5	7	10	12	14	17	19	22
		Household Size	1	2	3	4	5	6	7	8	9
20th Percentile	\$ 17,100		0.91%	1.45%	1.82%	2.36%	2.73%	3.09%	3.64%	4.00%	4.54%
40th Percentile	\$ 37,200		0.42%	0.67%	0.84%	1.09%	1.25%	1.42%	1.67%	1.84%	2.09%
Median	\$ 48,300		0.32%	0.52%	0.64%	0.84%	0.97%	1.09%	1.29%	1.42%	1.61%
60th Percentile	\$ 61,000		0.25%	0.41%	0.51%	0.66%	0.76%	0.87%	1.02%	1.12%	1.27%
80th Percentile	\$ 99,400		0.16%	0.25%	0.31%	0.41%	0.47%	0.53%	0.63%	0.69%	0.78%

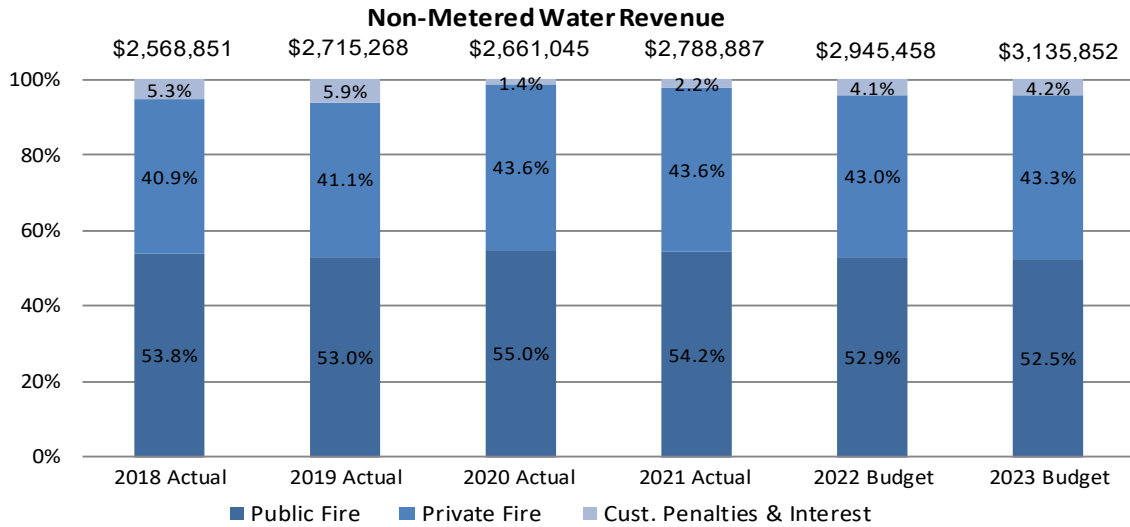
Using an alternative tool (Affordability Assessment Tool created by the University of North Carolina), an estimated number of households having unaffordable water bills was calculated. The tool uses information from the 2019 U.S. Census Bureau Website.



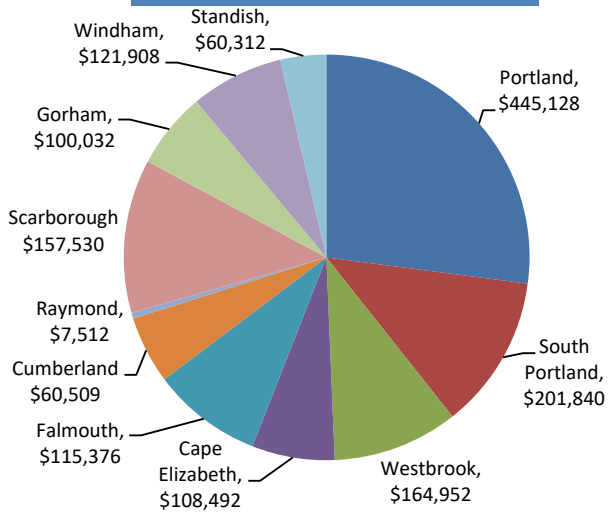
To assist low-income households, the District offers 2 different programs. Qualifying households are given a \$8 discount on each month’s bill. Customers can also participate in the ‘conservation program’ that provides and installs low flow devices to reduce the customer water consumption and ultimately their bill.

Water Sales – Non-Metered Revenue

Non-metered water revenue has risen from \$2.5 million in 2018 to the budgeted amount of \$3.1 million (29.5%) for 2023.



Public Fire Protection Revenue



Allocated based on number of hydrants and inch feet of mains in each municipality.

Private Fire Protection Revenue

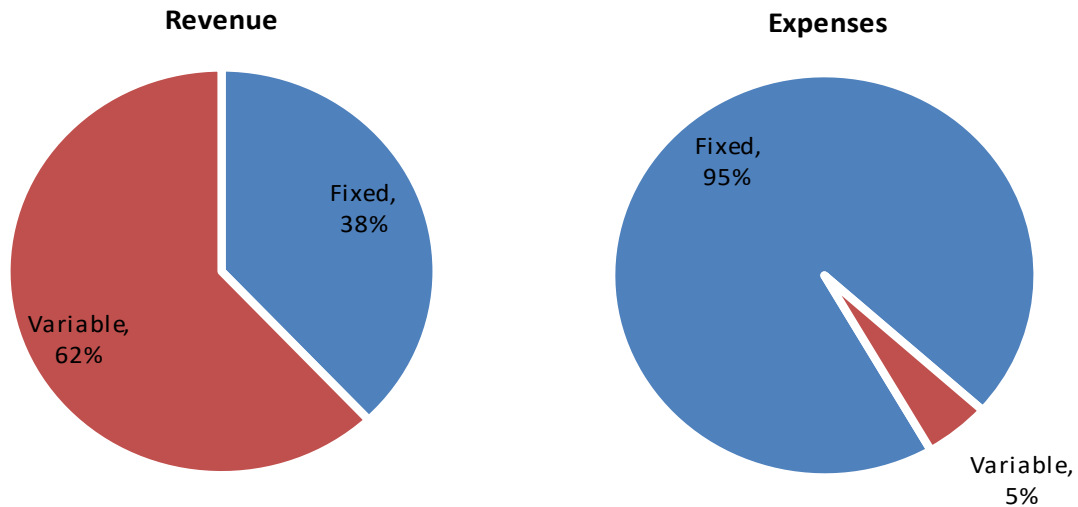
Service Line Size (inches)	Annual Fee	Number of Customers
2	\$ 52.80	361
3	\$ 118.08	0
4	\$ 210.48	255
6	\$ 503.04	1303
8	\$ 842.04	621
10	\$ 1,315.32	37
12	\$ 1,893.96	22
16	\$ 3,367.08	1

Allocated between service line sizes based on the relative demand on the water system.

Water Sales - Long-Term Considerations

Revenue & Expense: Fixed vs. Variable

As shown below, approximately 38% of the District's water revenue is fixed, generated from minimum charges on metered accounts and fire protection charges. The remaining 62% varies depending on consumption levels. In comparison, 95% of the District's expenses are fixed, largely infrastructure costs.



Slow Customer Growth

Population growth in the District's service area is lower than in other parts of the country and is not expected to increase much. Customers in 2021 total versus 2020 had been increased by an average of 0.78% due to Residential increasing by 692 and Commercial customers increased by 84 accounts.

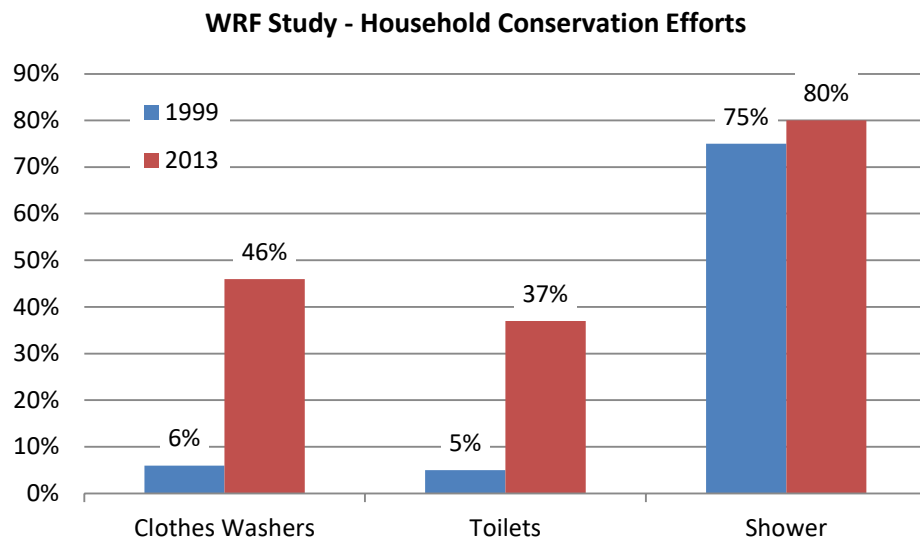
Cost of Service Gap

The last Cost of Service Study was completed in 2016. The study indicated that industrial/commercial customers generate less revenue than it costs to serve them. The Board requested the gap be closed over future rate adjustments by increasing revenue generated by industrial/commercial customers at higher increments. The proposed rate schedule will continue to have greater impact on larger customers by a factor of 150% compared to smaller ones.

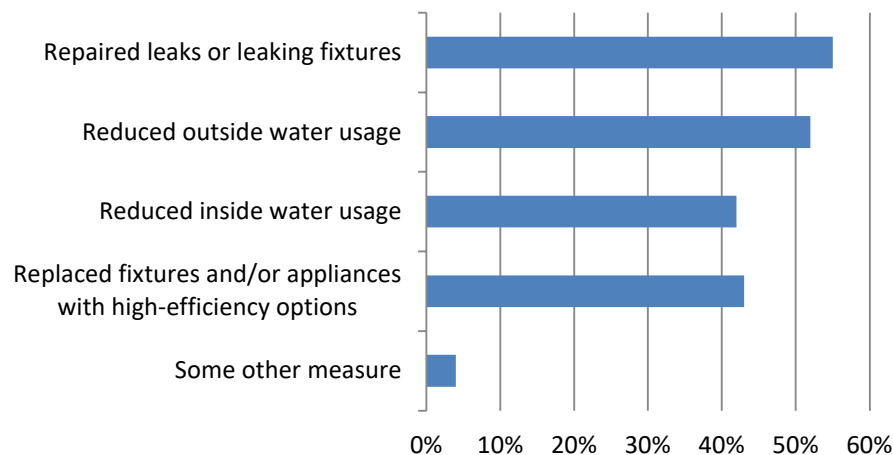
Water Sales - Long-Term Considerations (continued)

Decline in Consumption

There has been a nationwide trend in recent years toward lower consumption levels. This trend also appears in the District's consumption data. Some factors contributing to this decline are more efficient appliances and fixtures, increasing water/ sewer rates, and a decrease in average household size. A recent Water Resources Foundation Study found a significant increase in households using more water efficient fixtures and appliances.



On a survey the District's customers were asked, "In the past year, have you taken any of the following measures to reduce your water usage?" The graph below shows customers' responses to that question:



Wastewater Assessment & Contracted Billing Income

Wastewater Assessments are amounts payable by each municipality for wastewater services provided by the District. The assessments cover the operating and debt service costs of operating wastewater facilities maintained by the District. The assessments are billed in monthly installments. In 2023, the assessments for each municipality were increased excluding Falmouth and Windham (see table below).

Wastewater Assessments

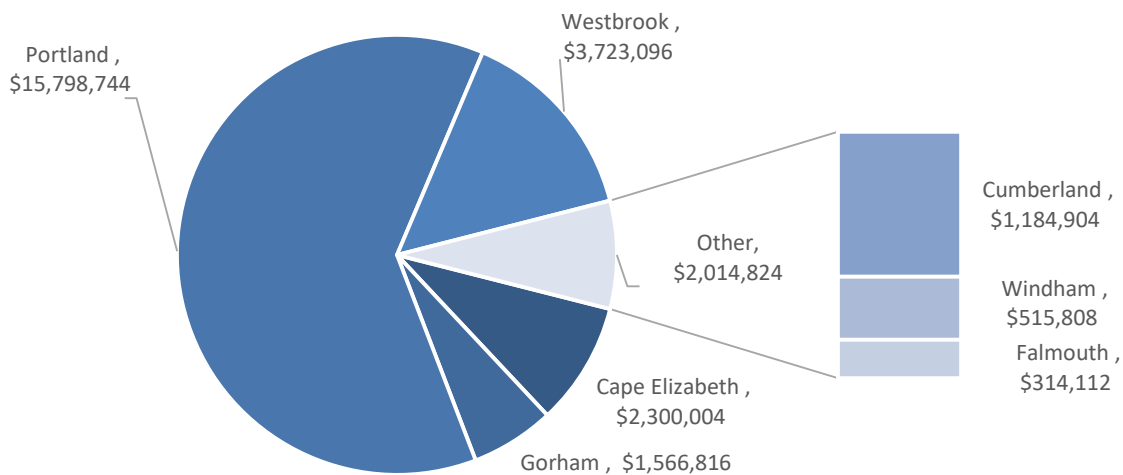
	2021 Actual	2022		2023 Budget	\$-Diff.	%Diff.
		Jan-Jun	2022 Budget			
Cape Elizabeth	1,835,412	1,030,806	2,061,612	2,300,004	238,392	11.6%
Cumberland	989,268	502,800	1,005,600	1,184,904	179,304	17.8%
Falmouth	314,112	157,056	314,112	314,112	-	0.0%
Gorham	1,188,840	656,550	1,313,100	1,566,816	253,716	19.3%
Portland	13,441,944	6,980,118	13,960,236	15,798,744	1,838,508	13.2%
Westbrook	2,903,244	1,586,562	3,173,124	3,723,096	549,972	17.3%
Windham	410,916	259,206	518,412	515,808	(2,604)	-0.5%
	\$21,083,736	\$11,173,098	\$22,346,196	\$25,403,484	\$ 3,057,288	13.7%

Contracted Billing Income is revenue paid by municipalities for wastewater billing services provided. Scarborough and South Portland operate and maintain their own wastewater collection and treatment systems. The District only provides billing-related services for those communities.

Contracted Billing Income

	2021 Actual	2022		2023 Budget	\$-Diff.	%Diff.
		Jan-Jun	2022 Budget			
Scarborough	11,664	6,036	12,072	13,284	1,212	10.0%
South Portland	201,132	104,082	208,164	228,984	20,820	10.0%
	\$212,796	\$110,118	\$220,236	\$242,268	\$ 22,032	10.0%

Wastewater Assessments (Dollars)



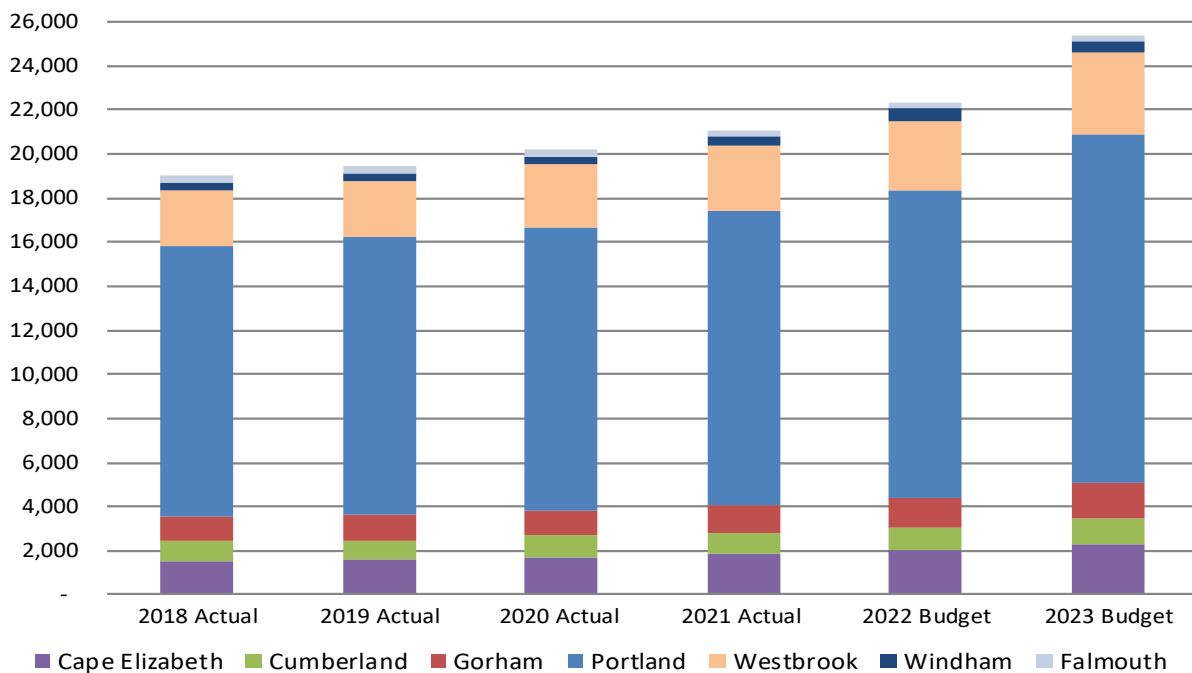
Wastewater Assessments Revenue Trend

Wastewater assessments rose from \$18.9 million in 2018 to a budgeted \$25.4 million in 2023 (an increase of 34%). While operating costs did increase over this time period, the majority of the increases were due to capital projects done to upgrade existing wastewater facilities.

Wastewater Assessments by Fund:

	Cape Eliz.	Cumberland	Gorham	Portland	Westbrook	Windham	Falmouth	Total
2018 Actual	1,539,840	905,364	1,106,148	12,248,424	2,533,176	360,528	310,056	19,003,536
2019 Actual	1,572,912	905,364	1,133,436	12,616,080	2,539,800	366,768	314,112	19,448,472
2020 Actual	1,705,380	965,292	1,160,676	12,863,340	2,820,768	389,004	314,112	20,218,572
2021 Actual	1,835,412	989,268	1,188,840	13,441,944	2,903,244	410,916	314,112	21,083,736
2022 Budget	2,061,612	1,005,600	1,313,100	13,960,236	3,173,124	518,412	314,112	22,346,196
2023 Budget	2,300,004	1,184,904	1,566,816	15,798,744	3,723,096	515,808	314,112	25,403,484

Assessments by Fund (2018-Present)
(\$,000)



Current Municipal Wastewater Rates

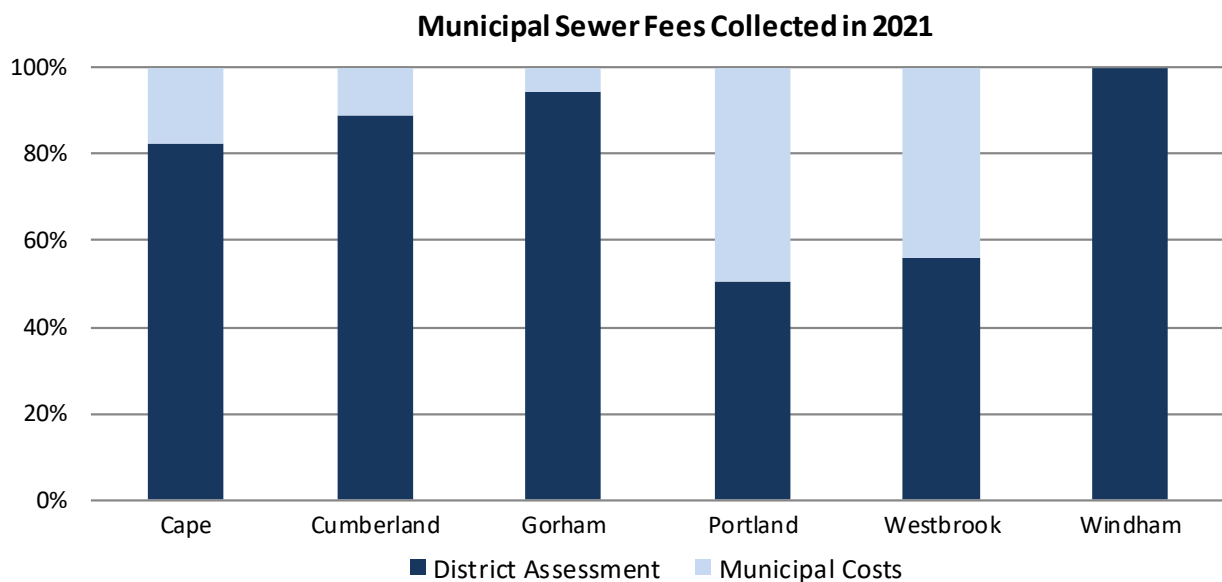
Wastewater rates are established by each municipality. The rates are designed to cover the municipal costs, including the District's annual assessment. The table below indicates the municipal sewer fees for municipalities for whom the District provides billing services. These fees are included on the monthly bill, which includes the District's water fees. Customers remit their payments for both water and sewer fees to the District. On a weekly basis, the sewer fees are then remitted to the municipalities. Once a month, the municipality pays 1/12th of the annual assessment to the District from these sewer fees.

Sewer Rates as of 10/1/2022

	Minimum HCF	Minimum Charge	Additional HCF
Portland	1	\$12.30	\$12.30
Cumberland	0	36.92	5.52
South Portland	1	6.14	6.14
Cape Elizabeth	1	50.99	5.85
Westbrook	1	12.73	7.73
Gorham	1	15.04	6.99
Windham	5	48.84	7.75

HCF= Hundred Cubic Feet (748 gallons)

The chart below indicates the percent of sewer fees collected in 2021 that the municipalities used to pay the District's assessment and their internal costs. In 2021, Windham's sewer fees were less than the District's assessment by \$39,273. The shortfall was covered by the town's prior year surplus or general fund appropriation.



Interest Income

The District's investment policy limits investments to US Government obligations, certificates of deposit that are fully insured or collateralized, and other similar issues with the goal of protecting the District's principal balances. The budgeted rate of return on investments was based on the current annual returns and cash balances as of March 2022. Rates of return have gradually come up this past year and we took that into account for 2023.

In 2008, the Windham fund purchased assets from the Westbrook fund. This purchase was funded by a loan between funds of \$264,733 and has an average interest rate of 4.395%. Westbrook will receive \$3,055 from that loan in 2023.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	\$-Diff.	%-Diff.
Water Fund	\$ (23,552)	\$ (274,709)	\$ 57,000	\$ 203,824	146,824	257.6%
Wastewater Operating Funds:						
Cape Elizabeth	(1,520)	(16,934)	2,303	13,842	11,539	501.0%
Cumberland	(591)	(9,517)	2,209	8,700	6,491	293.8%
Falmouth	(139)	(933)	300	1,188	888	296.0%
Gorham	278	2,110	4,202	6,060	1,858	44.2%
Portland	(5,050)	(82,792)	20,207	83,224	63,017	311.9%
Westbrook	3,168	(16,066)	16,938	35,193	18,255	107.8%
Windham	(164)	3,598	1,101	1,090	(11)	-1.0%
	(4,018)	(120,534)	47,260	149,297	102,037	215.9%
Contracted Billing:						
Scarborough	(7)	(109)	0	95	95	#DIV/0!
South Portland	(160)	(2,105)	400	1,730	1,330	332.5%
	(167)	(2,214)	400	1,825	1,425	356.3%
Total	\$ (27,737)	\$ (397,457)	\$ 104,660	\$ 354,946	\$ 250,286	239.1%

Other Income

Other revenues consist of fees charged for various other services including fees related to new water assets, new account setups, work done for outside parties and the acceptance of septage. The specific fees are outlined below:

Revenue Type	Revenue Description
Cross Connection Fees	Fees collected for work relating to the inspection of water backflow devices.
Customer Connection Fees	Application fees for new mains, services and meters.
Customer Activation Fees	Fees for new account activations.
Jobbing Revenue	Revenue for work performed by District employees that is billable to outside parties.
Septage Hauler Fees	Fees from outside septage haulers for the treatment of wastewater delivered to District wastewater treatment facilities.
Wastewater Misc. Income	Treatment services provided at the Westbrook Regional Wastewater Treatment Facility for Portland's Riverside area per inter-municipal agreement.

Water Fund:	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	\$-Diff.	%-Diff.
Cross Connection Fees	\$26,711	\$14,162	\$45,000	\$25,000	(\$20,000)	-44.4%
Customer Connection Fees	42,829	32,385	82,000	50,000	(32,000)	-39.0%
Customer Activation Fee	88,704	36,205	78,000	95,000	17,000	21.8%
Jobbing Surcharge	59,944	40,544	55,000	55,000	-	0.0%
Miscellaneous Income	142,652	147,123	165,076	227,119	62,043	37.6%
Total Water Division	\$360,840	\$270,419	\$425,076	\$452,119	\$27,043	6.4%

Wastewater Funds:	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	\$-Diff.	%-Diff.
Septage - Gorham	\$753	\$33	\$950	\$0	(\$950)	-100.0%
Septage - Portland	418,889	160,097	250,000	290,000	40,000	16.0%
Septage - Westbrook	4,867	214	7,500	-	(7,500)	-100.0%
Septage - Windham	174	8	225	0	(225)	-100.0%
Miscellaneous Income	259,984	172,346	42,700	279,133	236,433	553.7%
Total Wastewater Division	684,667	332,698	301,375	569,133	267,758	88.8%
Total Water & Wastewater	\$1,045,507	\$603,117	\$726,451	\$1,021,252	\$294,801	40.6%

Fund Balance

Operating Fund Balance is the accumulated excess of revenues over expenses on a budgetary basis (see Financial Policy section for differences between budgetary and generally accepted accounting principles). Watershed Protection Land funds was established from transfers from the Operating Fund Balances (Watershed Reserve) or net proceeds from land sales (Land Cash Reserve). Other Reserves consists of Water Capital Reserve for main renewal projects, Water Rate Stabilization to provide funds to mitigate future rate increases, Water Master Plan provides funding for upcoming infrastructure master plan and Portland Wastewater for Portland's share of expanding the treatment facility.

Many of the wastewater funds saw declines in 2022 due to higher than expected operating costs. No use of operating reserves are expected in 2023. The Land Cash Reserve decreases related to purchase of watershed land easements. Water Capital Reserve increase due to additional 1% of water revenue allocated to the fund. The Water Master Plan fund withdrawal is expected to pay for the first phase of the plan.

Water & Wastewater Fund Operating Surpluses (Goal 25.0%)

	Balance 01/01/22	Projected 2022	Budget 2023	Balance 12/31/23	Target Balance	Projection %
Water	\$6,824,529	\$992,459	-	\$7,816,988	\$7,289,055	26.8%
Cape Elizabeth	358,431	6,736	-	365,167	582,090	15.7%
Cumberland	161,939	(91,963)	-	69,976	299,435	5.8%
Gorham	245,925	(76,667)	-	169,258	395,184	10.7%
Portland	3,866,813	(461,553)	-	3,405,260	4,085,956	20.8%
Westbrook	615,838	(257,619)	-	358,219	959,286	9.3%
Windham	67,194	95,029	-	162,223	129,703	31.3%
	<u>\$12,140,669</u>	<u>\$206,422</u>	<u>-</u>	<u>\$12,347,091</u>	<u>\$13,740,709</u>	<u>22.5%</u>

Falmouth & Contracted Billing Operating Surpluses:

	Balance 01/01/22	Projected 2022	Budget 2023	Balance 12/31/23
Falmouth	\$32,286	\$5,494	\$7,267	\$45,047
Scarborough	8,364	(2,109)	(611)	5,644
So. Portland	148,142	(136,724)	(4,701)	6,717
	<u>\$188,792</u>	<u>(\$133,339)</u>	<u>\$1,955</u>	<u>\$57,408</u>

Combined Surpluses **\$12,329,461** **\$73,083** **\$1,955** **\$12,404,501**

Watershed Protection Land Funds (Goal 15.0%)

	Balance 01/01/22	Projected 2022	Budget 2023	Balance 12/31/23	Target Balance	Projection %
Watershed Reserve	\$1,393,454	\$0	\$11,400	\$1,404,854	\$4,023,727	5.2%
Land Cash Reserve	553,945	(113,545)	(29,543)	410,857		
	<u>\$1,947,399</u>	<u>(\$113,545)</u>	<u>(18,143)</u>	<u>\$1,815,711</u>	<u>\$4,023,727</u>	<u>6.8%</u>

Other Reserves:

	Balance 01/01/22	Projected 2022	Budget 2023	Balance 12/31/22
Water Capital Reserve	\$1,110,603	\$193,184	-\$456,675	\$847,112
Water Rate Stabilization	\$300,000	\$0	\$0	\$300,000
Water Master Plan	\$944,548	\$0	-\$944,548	\$0
Portland Wastewater	\$84,409	\$7,500	\$8,750	\$100,659

Fee Schedule for Non-Water Tariff Services

Proposed to be adopted by the Board of Trustees effective January 1, 2023. Red are changes.

	Description	Fee
A. Water		
1. Winter hydrant inspection	Inspection of private hydrants to verify the operability of hydrant during winter months	\$4 per month on monthly water bill. Cost covers the average cost to inspect hydrant.
2. Damage Hydrants	Repair of hydrants damaged by customers	Costs to repair including labor, benefit overhead, stock items with normal markup (25%), third-party expenses and \$7 finance department administrative fee
B. Wastewater		
1. Industrial pretreatment permit	Initial and periodic review of the customer premises to assure compliance with IPT regulations	\$300 for initial and every 3-year renewal.
2. Septage and Holding Tank Waste	Qualifying haulers may deliver septage, holding tank and other waste to PWD treatment facilities (adopted Board Order 22-038)	The fees for septage will increase from \$115/1000 gal to \$132/1000 gal. The fee for holding tank waste will increase from \$50/1000 gal to \$58/1000 gal. The administration fee will increase from \$52/1000 gal to \$60/1000 gal. The fee for other waste will be determined based on the relative strength of the waste compared to the most current rates for holding and septage
3. Submeter Fee - Monthly	Covers the operating and capital cost of the submeter program	\$2 per month at the request of Cumberland, Gorham, South Portland and Westbrook
4. Submeter Fees -Other	The cost to investigate why a submeter cannot be read after the initial installation of meter/Encoder Receiver Transmitter (ERT).	Sub meter verification fee \$19
5. Submeter Fees – Portland Only	Costs or replacing submeters for Portland residents.	Submeter Replacement ERT & Meter \$150 Submeter ERT Only Upgrade fee \$105 Fees are per City's request.
6. Sewer Manhole/Main Inspection Fees	Applicants installing sewer main infrastructure shall be responsible for the cost of inspection of all manholes installed as well as CCTV inspection of all new sewer mains to NASSCO Standards. (adopted Board Order 22-010 3/28/2022)	These fees are to be determined at the time of Main Extension Agreement development.
C. General		
1. Purchases from Stock Room	Qualified third-parties and employees may purchase items from the stockroom – see policy 7.15-02.	Inventory value plus a 50% mark up (See Policy 7.15-02).
2. Freedom of Information Request	Members of the Public requesting access to public records	Per state law (\$1 for first page, \$0.50 for each additional page, optional \$15/hour to compile data.) Payment in advance may be required.

Introduction

Operating Expenses are recorded to each department by expense category by fund and program. A summary of all expense categories is provided with an explanation of major assumptions and changes. Additionally, operating expenses for each department is provided. The District has five departments – Water Operations, Wastewater Operations, Environmental Services, Engineering Services and Administrative Services. For each department, the following information is provided:

- Description of Core Services
- Key Statistics
- Performance Benchmarks
- Past Accomplishments
- Current Year Projects and Initiatives
- Financial Summary in total and by sub-departments with a summary of each sub-department fund and program expenses

2023 Financial Summary by Category

	2022 Budget	2023 Budget	Diff \$	Diff %
Salaries & Wages	\$12,788,195	\$14,521,475	\$1,733,280	13.6%
Employee Benefits	5,669,276	6,612,066	\$942,790	16.6%
Biosolids Disposal	2,333,500	3,444,636	\$1,111,136	47.6%
Chemicals	1,296,355	1,974,650	\$678,295	52.3%
Contracted Services	4,744,771	5,308,612	\$563,841	11.9%
Heat/Fuel Oil	367,960	502,143	\$134,183	36.5%
Insurance	260,142	291,901	\$31,759	12.2%
Materials & Supplies	1,819,287	1,997,802	\$178,515	9.8%
Other Expense	708,958	723,479	\$14,521	2.0%
Purchased Power	2,086,722	2,101,222	\$14,500	0.7%
Regulatory/Taxes	560,236	329,406	-\$230,830	-41.2%
Tele/Other Utilities	433,662	453,184	\$19,522	4.5%
<u>Transportation</u>	<u>1,222,561</u>	<u>1,332,618</u>	<u>\$110,057</u>	<u>9.0%</u>
Dept Expense	34,291,625	39,593,194	5,301,569	15.5%
<u>Trans Offset</u>	<u>(841,512)</u>	<u>(966,072)</u>	<u>-\$124,560</u>	<u>14.8%</u>
Fund Expense	33,450,113	38,627,122	5,177,009	15.5%

2023 Financial Summary by Department

	Number of Employees	2022 Budget	Number of Employees	2023 Budget	Budget Diff \$	Budget Diff %
Water Services	56	\$9,449,420	56	\$10,578,947	\$1,129,527	12.0%
Wastewater Services	39	11,577,567	39	13,845,033	2,267,466	19.6%
Environmental Services	16	2,191,611	16	2,600,070	408,459	18.6%
Engineering Services	32	4,443,069	33	5,083,882	640,813	14.4%
Administration	44	6,331,553	44	7,188,767	857,214	13.5%
Non-Departmental	<u>0</u>	<u>298,405</u>	<u>0</u>	<u>296,495</u>	<u>(1,910)</u>	<u>-0.6%</u>
	187	34,291,625	188	39,593,194	5,301,569	15.5%

Departmental Expense by Category

Salaries/Wages:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
660111 - SALARIES/WAGES NON-UNION	4,849,206	2,628,264	5,068,321	5,874,272	805,951	15.9%
660112 - WAGES/OVERTIME NON-UNION	234	-	190	1,174	984	517.9%
660121 - WAGES/REGULAR UNION	6,307,947	3,027,582	6,640,600	7,293,757	653,157	9.8%
660122 - WAGES/OVERTIME UNION	551,643	271,659	555,838	664,671	108,833	19.6%
660123 - WAGES/DOUBLETIME UNION	76,734	47,532	80,952	104,695	23,743	29.3%
660124 - WAGES/STANDBY TIME UNION	190,504	93,028	215,033	239,366	24,333	11.3%
660126 - SHIFT DIFF - NIGHT	-	-	-	4,380	4,380	n/a
660131 - WAGES - REGULAR - TEMPS	63,998	23,056	200,261	228,960	28,699	14.3%
660132 - WAGES - OVERTIME - TEMPS	-	47	-	-	-	n/a
660136 - CONTRACTED - TEMP	52,134	38,246	-	83,200	83,200	n/a
66014 - VACATION ACCRUAL	83,122	-	-	-	-	n/a
660141 - TRUSTEES COMPENSATION	23,825	10,950	27,000	27,000	-	0.0%
66015 - SICKTIME ACCRUAL	37,854	-	-	-	-	n/a
Salaries & Wages Total	12,237,201	6,140,364	12,788,195	14,521,475	1,733,280	13.6%

Labor rates for all employees were assumed to be 12.2% higher than the rates used in the 2022 Budget. The Union contract for the 2021 to 2023 period came to a conclusion in fall 2022 with a 8% higher retroactive pay back to November 2021 and it was decided each November of the 2 year contract employees will receive a 4% raise.

Combined, the two regular labor accounts (660111 & 660121) increased \$1,459,108 (12.5%). Total hours increased 6,093 (1.4%) due to an addition of one position for 2,080 hours plus an increase in premium time (OT, DT, & SB) by 6%. The budgeted dollars for labor reflect work on operating (O&M) activities. Labor planned for capital projects is included as part of the Capital Improvement Plan (CIP) later in this document. Overall, the percentage of labor planned for CIP projects went from 3.0% of total labor in 2022 to 3.9% in 2023.

Budgeted hours for overtime/double-time increased by 1,421 (8.3%) while standby rose by 63 hours (0.9%) and temporary employee hours increased 14.6%. In the union contract negotiations, a new process for shift differentials was created for shift workers at the treatment facilities. The estimated cost for the 2023 Budget was \$4,380.

District’s overall regular (non-temporary) headcount increased by 1 to 188. An Project Engineer was added in the Engineering Services department to focus on the new North Windham Wastewater Facility project.

Positions	2022 Budget	2023 Budget	Change
Full Time	186	187	1
Part Time	1	1	0
Total	187	188	1

The Human Resources section has additional details.

Departmental Expense by Category (continued)

Employee Benefits:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
660401 - FICA - EMPLOYERS' SHARE	931,608	468,549	978,306	1,104,518	126,212	12.9%
660405 - SAFETY/WHY PROGRAM ITEMS	37,357	8,309	44,245	42,045	(2,200)	-5.0%
660408 - PROGRAMS ADMINISTRATION	16	-	-	-	-	n/a
660411 - MEALS ALLOWANCE	13,130	6,580	11,100	14,220	3,120	28.1%
660413 - PWD TRAINING PROGRAM	-	250	-	-	-	n/a
6604151 - FIELD UNIFORMS	1,257	1,200	1,200	1,200	-	0.0%
660418 - STIPENDS	10,800	9,200	11,400	10,200	(1,200)	-10.5%
660419 - EMPLOYEE BENEFITS-MISC OTH	200,867	5,714	34,297	32,000	(2,297)	-6.7%
660423 - JURY DUTY REIMBURSEMENT	-	(108)	-	-	-	n/a
660491 - FRINGE BENEFITS-REG/SAL	4,733,611	2,212,593	4,588,728	5,407,883	819,155	17.9%
Employee Benefits Total	5,928,646	2,712,287	5,669,276	6,612,066	942,790	16.6%

The amount noted is the operating funds' portion of employee benefit cost. As with labor, a small portion of benefit expense is charged to capital projects.

The largest item (Fringe Benefits - 660491) covers the District's portion of employee benefits, most notably health insurance and pension. This charge is applied as a percentage of regular labor (excluding overtime, double time, etc.) charges. In the 2023 Budget, the percentage was 41.07%, which is a increase from 2022's percentage of 39.19% mostly due to benefit costs related to a higher pension contribution and health insurance premiums increased by 2.7%.

The Human Resource section has additional details.

Biosolids Disposal:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
663571 - BIOSOLIDS DISPOSAL	\$2,275,184	\$1,132,548	\$2,333,500	\$3,444,636	\$1,111,136	47.6%
Biosolids Disposal Total	2,275,184	1,132,548	2,333,500	3,444,636	1,111,136	47.6%

The material remaining at the end of the wastewater treatment process is called biosolids. The cost of biosolids disposal is the volume disposed (wet tons) times the rate per ton:

Facility (wet tons)	2022	2023	Change	%	2022 % Solids	2023 % Solids
Portland (East End)	18,828	19,871	1,043	5.5%	21.0%	21.0%
Westbrook	4,238	4,142	(96)	-2.3%	21.0%	21.0%
Cape Elizabeth	215	200	(15)	-7.0%	21.0%	21.0%
Peaks Island	54	45	(9)	-16.7%	21.0%	21.0%
Total	23,335	24,258	923	4.0%		

The budget assumes a disposal rate of \$142/wet ton, that is a 42% increase over the 2022 Budget assumption of \$100. The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids.

Departmental Expense by Category (continued)

Contracted Services:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
662063 - COPIER MAINTENANCE/TONER	14,056	7,861	15,000	15,000	-	0.0%
6631 - ENGINEERING SERVICES	56,514	33,226	76,000	151,000	75,000	98.7%
6632 - ACCOUNTING SERVICES	34,500	38,500	39,000	39,000	-	0.0%
66331 - LEGAL - LABOR RELATIONS	41,846	55,696	68,000	68,000	-	0.0%
66333 - BOND COUNSEL	13,020	10,234	7,600	7,500	(100)	-1.3%
66339 - LEGAL - OTHER	47,895	-	20,000	34,500	14,500	72.5%
663521 - TRAFFIC CONTROL	147,183	74,219	148,800	152,800	4,000	2.7%
6635221 - PAVING - MINOR REPAIR	409,869	233,685	526,000	526,000	-	0.0%
663523 - SIDEWALK	3,710	30,846	18,500	18,500	-	0.0%
663524 - STREET OPENING	50,302	18,968	65,100	63,600	(1,500)	-2.3%
663525 - CONTRACTOR CONSTRUCTION	848,516	195,177	724,500	763,000	38,500	5.3%
663526 - INSPECTION SERVICES	3,355	1,028	-	-	-	n/a
663527 - EMERGENCY RESPONSE- FEMA	450	-	-	-	-	n/a
66353 - REPAIR SERVICES	223,551	96,318	126,900	206,400	79,500	62.6%
66354 - MAINTENANCE SERVICES	779,402	386,130	763,497	903,289	139,792	18.3%
663542 - LARGE METER TESTING	9,983	2,944	12,500	12,500	-	0.0%
663543 - CSO FLOW MONITORING	141,751	83,379	154,000	154,000	-	0.0%
663544 - MAINT SERVICES - CCTV	51,550	2,088	61,250	61,250	-	0.0%
663545 - RADIO SERVICING AND EQUIP	340	-	3,000	3,000	-	0.0%
663546 - MAINTENANCE - SNOW REMOVL	133,604	66,216	154,943	157,953	3,010	1.9%
663547 - WASTE SLUDGE TRANSPORT	40,085	18,667	34,200	42,500	8,300	24.3%
663551 - LAB ANALYSIS	66,372	7,123	37,835	41,285	3,450	9.1%
663553 - PHOTOGRAPHY SERVICES	800	-	600	1,500	900	150.0%
663561 - COMPUTER LICENSES	82,433	83,706	107,007	166,677	59,670	55.8%
663562 - COMPUTER MAINTENANCE	352,870	326,201	418,044	441,975	23,931	5.7%
663563 - COMPUTER CONSULTING/OTHER	20,186	10,841	30,600	30,600	-	0.0%
663572 - GRIT & SCREENS DISPOSAL	27,545	20,565	65,650	58,500	(7,150)	-10.9%
663573 - GREASE DISPOSAL	26,410	43,306	30,200	34,200	4,000	13.2%
663574 - DISPOSAL SERVICES	36,485	13,891	41,425	43,030	1,605	3.9%
6635801 - EMPLOYEE HEALTH SERVICES	8,273	4,983	10,000	10,000	-	0.0%
663581 - UTILITY BILLING PRINTING	71,941	58,103	72,000	103,600	31,600	43.9%
663582 - PAYMENT PROCESSING	157,212	61,632	167,800	125,700	(42,100)	-25.1%
663583 - RECEIVABLE COLLECTIONS	5,800	3,247	10,000	6,500	(3,500)	-35.0%
663584 - BANK SERVICE CHARGES	20,094	9,929	21,600	20,400	(1,200)	-5.6%
663585 - TREATMENT CONTRACT SERVIC	466,427	242,810	485,620	556,600	70,980	14.6%
6635851 - WW DEWATERING SERVICES	4,271	3,020	6,080	7,878	1,798	29.6%
6635852 - WW DEWATERING SRVS CREDIT	(4,271)	(3,020)	(3,600)	(4,300)	(700)	19.4%
663587 - COURIER SERVICES	22,047	9,028	23,200	22,070	(1,130)	-4.9%
663588 - EQUIPMENT MAINTENANCE	5,092	6,440	15,000	16,300	1,300	8.7%
663592 - RECRUITING SERVICES	2,947	207	6,000	6,000	-	0.0%
663594 - DIGSAFE	41,326	21,357	45,000	46,500	1,500	3.3%
663595 - OUTPLACEMENT SERVICES	-	4,593	500	500	-	0.0%
663598 - HR CONSULTANT SERVICES	12,534	3,740	15,000	15,000	-	0.0%
6635982 - TREE TRIMMING / REMOVAL	2,200	-	5,000	6,000	1,000	20.0%
6635984 - LANGUAGE INTERPRETATION	119	257	355	400	45	12.7%
6635985 - VEHICLE FLEET GPS SERVICE	21,560	10,780	25,000	26,000	1,000	4.0%
663599 - MISC OTHER SERVICES	40,806	23,059	39,465	66,465	27,000	68.4%
6636 - TECHNICAL SERVICES	24,752	9,063	50,600	79,440	28,840	57.0%
Contracted Services Total	4,567,713	2,330,043	4,744,771	5,308,612	563,841	11.9%

Departmental Expense by Category (continued)

Contracted Services, which had a budget increase of \$563,841 or 11.9%, covers a large variety of services provided by outside vendors. The budgeted expenditures for 2023 were \$5.3 million. Budget changes of note include:

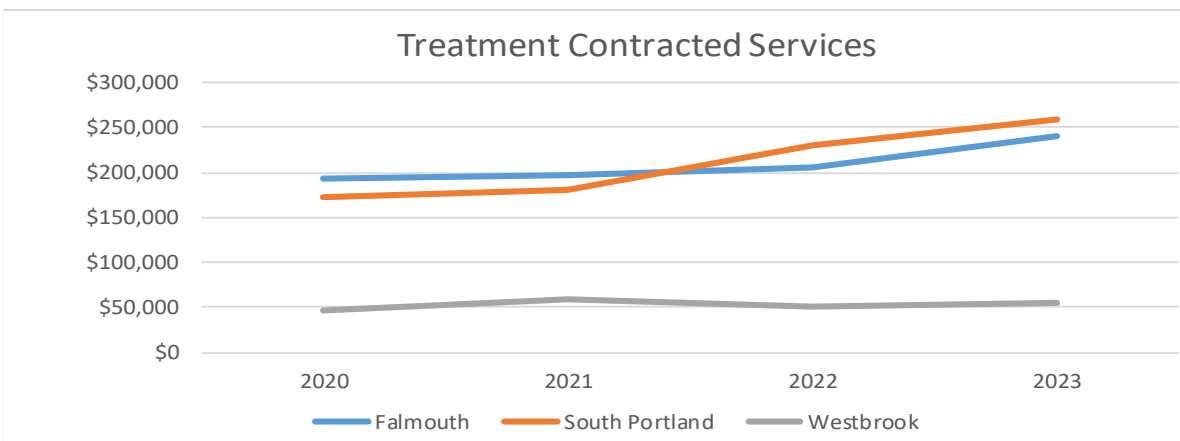
6631 -- Engineering Services (up \$75,000 or 98.7%) – This increase is due to the new EPA regulation around lead and copper in water systems and the assistance we foresee needing to assess our service lines.

66353 – Repair Services (up \$79,500 or 62.6%) – Repair services have been increased due to the wastewater treatment facilities performing many repairs in 2021 and 2022 and raising the budget to be more in line with actuals.

66354 – Maintenance Services (up \$139,792 or 18.3%) – Wastewater treatment facilities have increased their budgets for maintenance of the grounds and HVAC systems.

663561 – Computer Licenses (up \$59,670 or 55.8%) – The increase is solely due to renewing our Microsoft Office licensing for the next 3 years.

663585 - Treatment Contracted Services (up \$70,980 or 14.6%) – This item was budgeted for \$556,600 in 2023. South Portland and Falmouth treat the wastewater flows from Cape Elizabeth and Cumberland, respectively. The District is assessed and pays an annual fee to those communities for that service and Cape Elizabeth’s flows to South Portland increased. Portland also pays Westbrook for flows from the Riverside area. Costs for debt service related to the upgrades of the Mill Creek Wastewater Pump Station and related force main are reflected under the debt service totals for Cumberland and Falmouth.



Departmental Expense by Category (continued)

Heat/Fuel Oil:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
66161 - HEATING OIL	90,583	74,636	110,681	172,661	61,980	56.0%
661621 - PIPELINE DELIVERED PROPAN	131,367	132,373	138,973	166,212	27,239	19.6%
661622 - CONTAINER DELIVERED	91,852	69,319	90,756	116,220	25,464	28.1%
66166 - UNLEADED GAS	21,136	9,220	27,550	47,050	19,500	70.8%
Heat/Fuel Oil Total	334,938	285,548	367,960	502,143	134,183	36.5%

The first three accounts in this category (66161 to 661622) involve fuel used for facilities' heat or backup generators. Unleaded Gas (66166) is for District vehicles that fuel up at remote locations and for the boat used in the District's Sebago Lake monitoring efforts. Heating Oil and Propane Gas costs have increased as the per unit cost of both energy types markets rise.

	2022 Assumption		2023 Assumption		% Change	
	Units	Per Unit	Units	Per Unit	Units	Per Unit
Heating Oil:						
Water Treatment/Ozone Plant	32,650	\$2.29	30,846	\$3.80	-5.5%	65.9%
Westbrook WWTF	9,050	\$2.29	7,831	\$3.80	-13.5%	65.9%
Cape Elizabeth WWTF	3,000	\$2.29	3,200	\$3.80	6.7%	65.9%
Peaks Island WWTF	1,945	\$3.41	2,200	\$4.80	13.1%	40.8%
Water - Throttling Valve Building	<u>700</u>	<u>\$2.41</u>	<u>781</u>	<u>\$3.80</u>	<u>11.6%</u>	<u>57.7%</u>
	47,345	\$2.34	44,858	\$3.85	-5.3%	64.6%
Natural Gas:						
Portland (East End) WWTF	73,680	\$1.04	73,680	\$1.32	0.0%	26.6%
Dana Court WWPS (Westbrook)	2,813	\$1.12	3,059	\$1.32	8.7%	17.9%
Douglass Street	<u>50,000</u>	<u>\$1.12</u>	<u>45,534</u>	<u>\$1.32</u>	<u>-8.9%</u>	<u>17.9%</u>
	126,493	\$1.07	122,273	\$1.32	-3.3%	22.8%

Insurance:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
6656 - VEHICAL INSURANCE	36,628	12,775	44,353	28,745	(15,608)	-35.2%
6657 - GEN LIABILITY INSURANCE	61,191	37,711	62,092	84,850	22,758	36.7%
66592 - DAMAGES & CLAIMS-GOODWILL	(12,049)	2,040	5,500	6,000	500	9.1%
66593 - UMBRELLA INSURANCE COVER	10,101	3,777	12,046	8,497	(3,549)	-29.5%
66594 - PROFESSION/CRIME BONDING	31,808	21,183	31,118	47,664	16,546	53.2%
66599 - PROPERTY & BOILER INSUR	97,502	53,957	105,033	116,145	11,112	10.6%
Insurance Total	225,181	131,443	260,142	291,901	31,759	12.2%

Insurance costs include premiums paid on coverage for District property as well as small claims paid directly to outside parties. The district's asset values have grown in the last year, therefore we increased the insurance coverage in each category except vehicles, where we received competitive pricing from another provider.

Departmental Expense by Category (continued)

Materials & Supplies:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
6619 - ASSET PURCHASES	190,388	103,950	262,875	292,710	29,835	11.3%
662012 - CRUSHED GRAVEL	886	-	1,750	1,750	-	0.0%
662014 - CRUSHED STONE	606	253	500	750	250	50.0%
662015 - LOAM	450	-	-	-	-	n/a
662016 - SAND	-	-	3,820	-	(3,820)	-100.0%
662017 - SAND AND SALT	4,276	-	3,452	3,500	48	1.4%
662018 - BANKRUN GRAVEL	879	291	2,000	1,500	(500)	-25.0%
662019 - GRAVEL - TYPE A (DOT)	894	542	2,000	1,500	(500)	-25.0%
66202 - TOOLS	47,634	29,117	46,100	51,400	5,300	11.5%
66203 - VENDOR PURCHASED SUPPLIES	533,852	302,697	472,635	471,668	(967)	-0.2%
662041 - MATERIALS INVENTORY	237,279	165,588	250,680	249,130	(1,550)	-0.6%
662042 - SUPPLIES INVENTORY	139,182	60,009	100,725	110,000	9,275	9.2%
66204201 - INVENTORY - QPR	2,229	62	1,400	1,400	-	0.0%
66204202 - INVENTORY - BNKRUN GRAVEL	16,888	7,647	16,000	17,000	1,000	6.3%
66204203 - INVENTORY - CRUSHD GRAVEL	3,441	3,474	13,250	14,250	1,000	7.5%
66204204 - INVENTORY - CRUSHED STONE	4,458	1,627	2,250	2,250	-	0.0%
66204205 - INVENTORY - LOAM	1,629	522	1,250	1,250	-	0.0%
66204206 - INVENTORY - TYPE A GRAVEL	29,167	16,264	28,500	31,500	3,000	10.5%
662043 - TOOL INVENTORY	112,233	55,030	98,675	94,975	(3,700)	-3.7%
66204301 - INVENTORY - TONER	2,503	46	1,000	2,450	1,450	145.0%
66204302 - INVENTORY - PAPER	1,897	526	4,300	4,300	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	5,178	3,066	15,691	13,588	(2,103)	-13.4%
662044 - METER INVENTORY	(16,157)	(7,217)	5,750	5,750	-	0.0%
662046 - HYDRANT INVENTORY	32,831	24,420	61,000	59,750	(1,250)	-2.0%
662047 - GARAGE INVENTORY	15,416	7,265	16,550	15,600	(950)	-5.7%
66204701 - INVENTORY - UNLEADED GAS	112,145	71,738	120,669	186,415	65,746	54.5%
66204702 - INVENTORY - DIESEL	34,904	21,435	45,570	84,835	39,265	86.2%
66204703 - INVENTORY - TIRES	13,499	7,535	15,000	15,000	-	0.0%
66205 - CONSUMABLE SUPPLIES	90,206	52,914	92,600	97,550	4,950	5.3%
66206 - COMPUTER RELATED EQUIP	55,003	23,986	103,295	98,031	(5,264)	-5.1%
66207 - EQUIPMENT PARTS	41,546	67,046	30,000	67,000	37,000	123.3%
663564 - COMPUTER-RELATED EQUIP	-	-	-	1,000	1,000	n/a
Materials & Supplies Total	1,715,342	1,019,833	1,819,287	1,997,802	178,515	9.8%

This group is a wide array of items including vehicle fuel and parts, bulk materials such as gravel, water infrastructure items (mains, meters, hydrants, and fittings) and office supplies. These items are consumed during normal operations and are used for the repair and maintenance of District assets. The 2023 Budget increased \$178,515 or 9.8% because vehicle fuel price per unit rose 40% and 66% (see below) as well as asset purchases and equipment replacement parts for assets at the facilities.

The assumptions for vehicle fuel were:

Fuel Type	2022 Assumption		2023 Assumption		% Change	
	Units	Per Unit	Units	Per Unit	Units	Per Unit
Diesel	21,000	\$2.17	23,500	\$3.61	11.9%	66.4%
Unleaded Gas	<u>55,100</u>	\$2.19	<u>60,920</u>	\$3.06	<u>10.6%</u>	39.7%
	76,100		84,420		10.9%	

Departmental Expense by Category (continued)

Other Expense:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
66411 - INTERNAL RENTAL CHARGES	51,030	25,515	51,030	51,030	-	0.0%
6642 - EQUIPMENT RENT	(933)	4,024	20,740	21,300	560	2.7%
66601 - PUBLIC RELATIONS	2,557	772	7,950	7,950	-	0.0%
66609 - OTHER ADVERTISING	8,277	8,597	10,550	10,850	300	2.8%
6670 - BAD DEBT EXPENSE	50,000	-	-	-	-	n/a
667511 - TRAINING & CONFERNCES	1,480	-	-	-	-	n/a
6675111 - INSTATE TRAINING/CONF	92,543	30,661	111,585	114,400	2,815	2.5%
6675112 - OUT OF STATE TRAINING/CON	8,786	19,900	66,700	68,950	2,250	3.4%
667513 - DUES	86,014	39,377	94,518	93,753	(765)	-0.8%
667514 - PROFESSIONAL LICENSES	15,788	3,428	11,990	15,955	3,965	33.1%
667515 - PERIODICAL SUBSCRIPTIONS	4,966	2,980	7,555	7,825	270	3.6%
667517 - PLANT OPER LICENSE FEES	-	-	150	150	-	0.0%
667521 - POSTAGE - THIRD PARTY	194,534	108,323	209,453	225,000	15,547	7.4%
667522 - POSTAGE - INTERNAL	16,088	7,755	16,916	17,725	809	4.8%
667523 - POSTAGE - EXPRESS DELIVER	1,769	556	2,325	2,025	(300)	-12.9%
667531 - PRINTING COSTS	42,333	19,996	67,376	71,696	4,320	6.4%
667532 - PHOTOCOPYING COSTS	(1)	-	-	-	-	n/a
667533 - FORMS STOCK	1,627	-	1,200	1,600	400	33.3%
667552 - SAFETY TRAINING	246	55	5,350	6,350	1,000	18.7%
667553 - DOT SUBSTANCE ABUSE	2,008	1,249	3,000	3,000	-	0.0%
667555 - SAFETY EXPENSES	15,180	14,721	53,370	43,220	(10,150)	-19.0%
667556 - FREIGHT CHARGES (STOCK)	24	-	2,700	2,500	(200)	-7.4%
667561 - WATERSHED GRANTS/SUPPORT	28,981	17,750	42,200	48,300	6,100	14.5%
6675611 - GRANTS - PASS-THROUGH	10,862	-	-	-	-	n/a
667581 - ANNUAL LAND CONTRIB CAPE	-	4,000	-	-	-	n/a
667591 - UNIFORMS	1,471	1,367	2,300	2,300	-	0.0%
667592 - FOOD SUPPLIES	4,829	2,851	9,130	8,730	(400)	-4.4%
667593 - VENDOR INTEREST CHARGES	(4,066)	(4,759)	(4,500)	(4,500)	-	0.0%
667598 - GEN MANAGER CONTINGENCY	-	17,225	69,500	48,000	(21,500)	-30.9%
6675981 - GEN MNG - TRUSTEES	2,471	10,269	16,850	16,750	(100)	-0.6%
6675982 - GEN MNG - COMMUNITY	12,401	11,154	32,900	33,500	600	1.8%
667599 - OTHER MISCELLANEOUS	23,022	29,153	2,550	2,550	-	0.0%
6676 - EXPENSE OFFSET	(203,601)	(113,073)	(223,430)	(214,430)	9,000	-4.0%
6706 - AMORT OF U P ACQ ADJUSTS	17,000	8,500	17,000	17,000	-	0.0%
Other Expense Total	487,686	272,346	708,958	723,479	14,521	2.0%

Other expenses include postage (\$244,750 up \$16,056 or 7%) and training & conferences (\$183,350, up \$5,065 or 2.8%) are offset by lowering safety expenses (down \$10k) and the general manager contingency (down \$21.5k).

The Expense Offset (6676) contains expenses transferred to other departments or capital projects.

Departmental Expense by Category (continued)

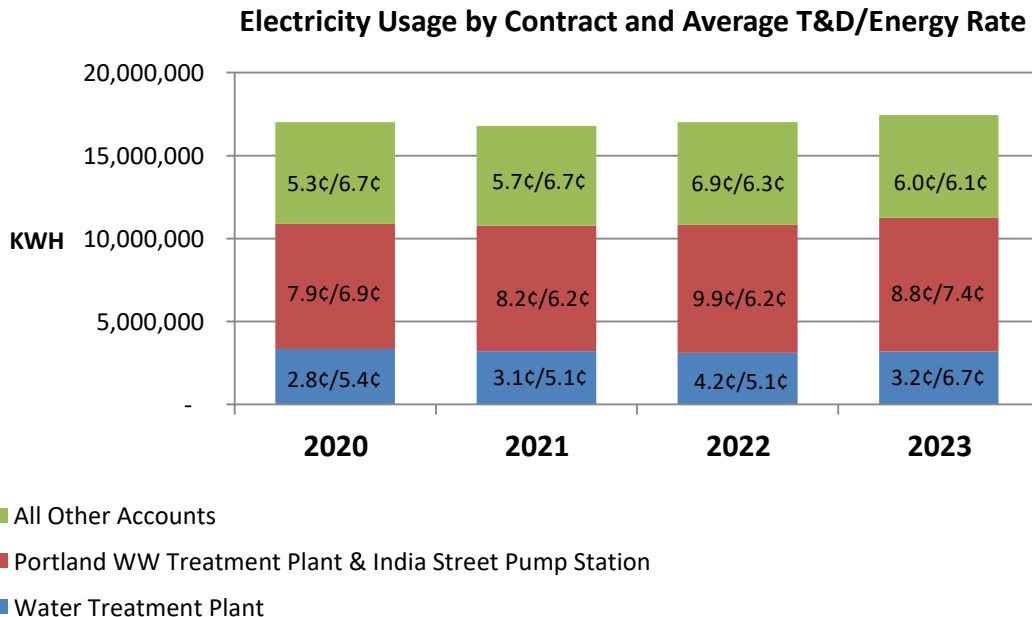
Purchased Power:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
66151 - POWER - LARGE ENERGY	686,665	327,309	634,605	803,539	168,934	26.6%
66152 - POWER - LARGE T&D	557,603	287,647	647,245	559,998	(87,247)	-13.5%
66153 - POWER - MEDIUM ENERGY	340,087	164,122	324,144	317,349	(6,795)	-2.1%
66154 - POWER - MEDIUM T&D	264,345	137,056	329,650	277,572	(52,078)	-15.8%
66155 - POWER - SMALL ENERGY	49,847	31,520	61,756	57,813	(3,943)	-6.4%
66156 - POWER - SMALL T&D	67,680	48,626	97,022	93,051	(3,971)	-4.1%
66158 - LOAD RESPONSE	(8,172)	(2,124)	(7,700)	(8,100)	(400)	5.2%
661510 - RENEW ENERGY EXPENSE	20,183	43,028	-	-	-	n/a
661511 - RENEW ENERGY FEES	661	-	-	-	-	n/a
Purchased Power Total	1,978,899	1,037,184	2,086,722	2,101,222	14,500	0.7%

Electricity is delivered through the Central Maine Power transmission & distribution (T&D) system. The average 2023 rate per kwh ranges from \$0.050 to \$0.098.

The District purchases its electricity from Constellation Energy through an energy aggregation group - Maine Power Option. Energy contracts with fixed rates are signed through the end of 2023 budget period.

The chart below shows the average rates for these 3 large accounts as well as the remaining 105 small and medium sized accounts.



Departmental Expense by Category (continued)

Regulatory/Taxes:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
667516 - PERMITS	38,572	11,701	31,481	35,361	3,880	12.3%
667518 - REGULATORY REQUIRED FEES	23,252	400	247,350	14,550	(232,800)	-94.1%
667519 - REGULATORY FINES	225	300	-	-	-	n/a
670821 - STANDISH REAL ESTATE TAX	51,962	26,387	54,700	55,200	500	0.9%
670822 - OTHER R/E TAX(NON-STANDI)	8,463	5,264	9,230	8,820	(410)	-4.4%
670823 - PUC ASSESSMENT	119,146	133,860	120,000	122,000	2,000	1.7%
670824 - ME DRINKING WTR PROGRAM	82,438	85,471	82,475	82,475	-	0.0%
670825 - PUC PUBLIC ADVOCATE	9,903	-	15,000	11,000	(4,000)	-26.7%
Regulatory/Taxes Total	333,961	263,383	560,236	329,406	(230,830)	-41.2%

The District pays real estate taxes to the Town of Standish (670821) & Towns of Windham and Gorham (670822). The District also pays annual assessments to the Maine Public Utility Commission (PUC) and the Maine Drinking Water Program. The PUC fee is based on each utility’s revenues and time spent on matters related to each industry sector. The regulatory required fees are significantly decreased (-94%) because last year we prepared for a regulation to pass that would charge extra fees to dispose of PFAS but in 2022 the bill was not passed, therefore this budget was not needed in 2023.

Telephone/Other Utilities:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
6609 - UTILITIES/SUPPLIES	419	-	-	-	-	n/a
66101 - WATER	97,752	65,500	98,795	98,383	(412)	-0.4%
66102 - WASTEWATER	90,754	37,143	96,812	96,117	(695)	-0.7%
66103 - STORMWATER CHARGES	34,975	16,716	35,285	38,756	3,471	9.8%
66111 - TELEPHONE LINES	34,652	17,068	26,062	31,370	5,308	20.4%
66112 - DATA LINES	141,843	87,293	135,398	145,214	9,816	7.2%
66113 - CELLULAR PHONES	52,344	15,923	41,060	43,144	2,084	5.1%
66114 - PAGERS	-	-	250	200	(50)	-20.0%
Tele/Other Utilities Total	452,739	239,643	433,662	453,184	19,522	4.5%

The category is up \$19,522 (4.5%) in 2023. A large part of the increase is associated with an increase in the cost of data lines to the main office at Douglass Street.

Transportation:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
66501 - TRANSPORTATION - INTERNAL	641,171	317,770	680,207	761,212	81,005	11.9%
665018 - TRANS - LAKE BOAT	-	3,750	7,500	7,500	-	0.0%
665019 - TRANS INTERNAL INACTIVE	462,689	249,235	466,406	498,716	32,310	6.9%
66502 - TRANSPORTATION - EXTERNAL	43,124	16,580	43,626	42,490	(1,136)	-2.6%
66503 - MILEAGE REIMBURSEMENT	9,584	5,068	24,772	22,650	(2,122)	-8.6%
66504 - MTA TRANS-PASS TOLL FEES	41	-	50	50	-	0.0%
Transportation Total	1,156,609	592,403	1,222,561	1,332,618	110,057	9.0%

A standard 40-hour week is charged for most vehicles. Transportation is charged when the vehicle is in use to Internal (66501) with the balance to Inactive (665019). Both went up in 2023 due to fuel prices discussed above. Transportation external (66502) involves ferries to go the islands and vehicles rented from outside vendors. Mileage Reimbursement (66503) is paid to employees who use their own vehicles when conducting District business.

Water Services – Purpose Statement

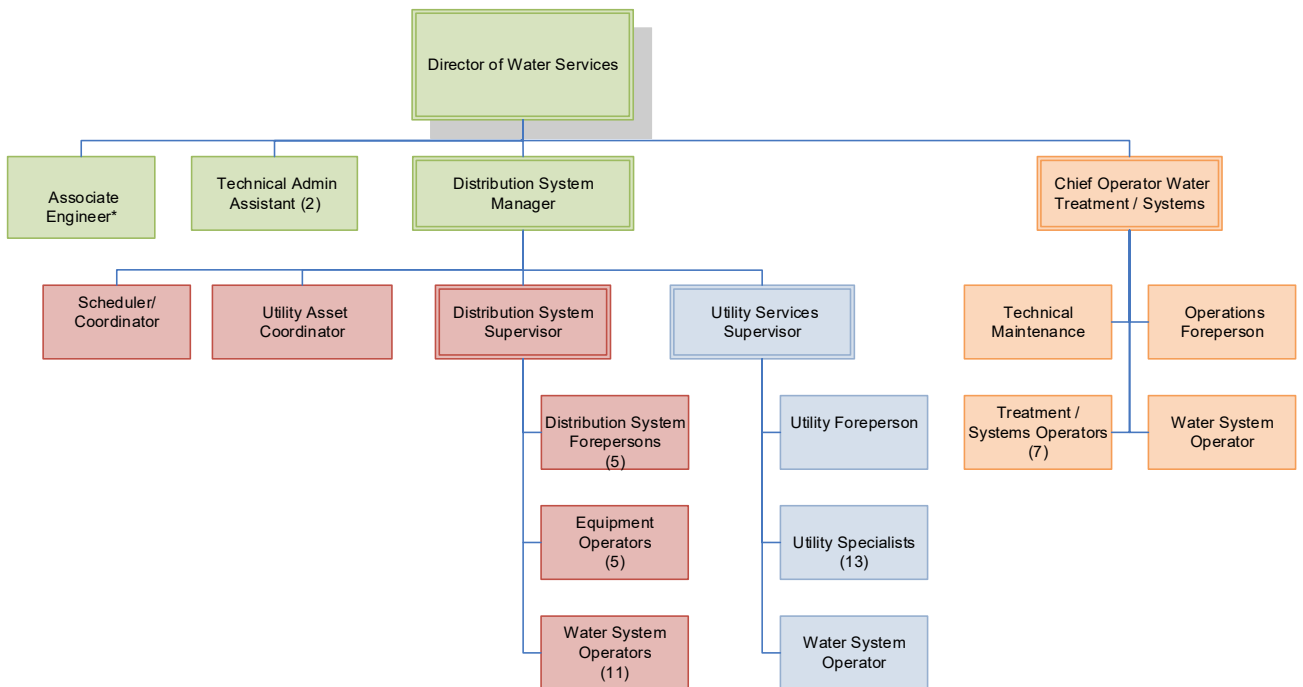
To operate and maintain water system infrastructure including the treatment, water storage and distribution systems.

Core Services

Water Operations is responsible for operating and maintaining the Sebago Lake and Steep Falls Well treatment and water distribution systems by providing the following services:

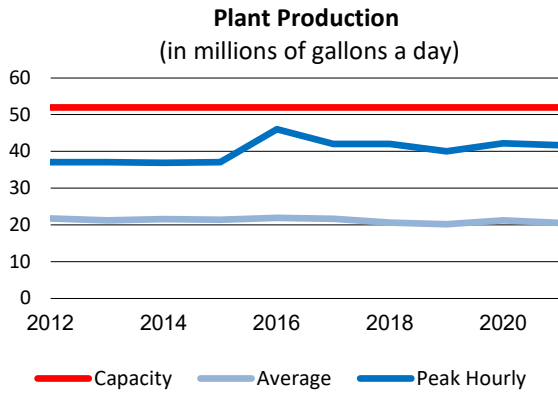
- Operation and maintenance of distribution system including emergency response, contractor inspection (Transmission/Distribution Group – A2; **red** in the organization chart).
- Operation and maintenance of the pumping, treatment, storage and chemical addition facilities (Treatment Group - A3; **orange** in organization chart).
- Field support services including customer meter and water quality inquiries, back-flow inspection, system flushing, hydrant inspection and contractor inspection (Utility Services Group – A6; **blue** in the organization chart).

Water Operations has a five-person group (Administration Group- A1; **green** in organization chart) that directs, oversees and provides administrative support.

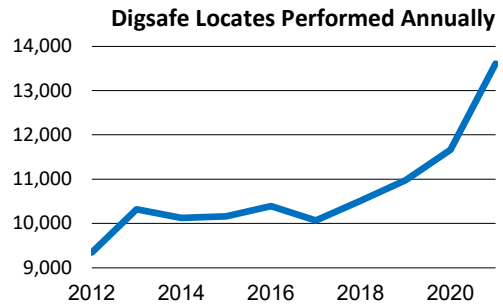
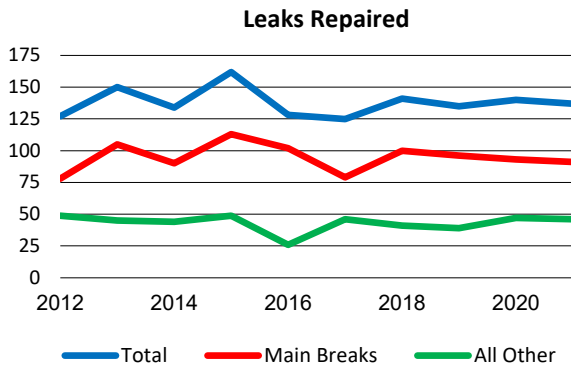


*Associate Engineer position is budgeted in A2 Water Distribution area.

Key Statistics



Water Supply	Surface – 99%
	Groundwater -1%
Water Treatment	Ozone, Ultraviolet, Chloramination, Corrosion Control, Fluoridation
Water Mains	1015.6 miles
Valves	12,203
Hydrants	5,212
Service Lines	57,460
Water Storage	10 (+2 non-active)
Booster Stations	6
Backflow Devices	4,952



- Leaks repaired each year vary by number/severity of leaks and is a significant budgetary variable.
- Digsafe locates include marking of water and wastewater infrastructure for others who are working near our assets.

Performance Benchmarks

	2021 Actual	2022 Projected	2023 Goal
Corporate Goal – Public Health			
Compliance of Water Regulations	100%	100%	100%
95% of Distribution System Chlorine Residuals	0.73 mg/l	0.50 mg/l	> 0.50 mg/l
Corporate Goal – Public Safety			
Meetings with Fire Depts.	0	1	2
Hydrant Outage Index	4.4	3.0	3.0
Corporate Goal – Reliability			
Leaks per 100 mile of main	9.3	10	< 10
Transmission valves exercised	419	425	425
Distribution valves exercised	120	50	100
Corporate Goal – Affordability			
Department Cost / million gal	\$1,190	\$1,200	\$1,392
Treatment Cost / million gal	\$324	\$335	\$400
Unaccounted for Water %	12.3%	12.5%	12.5%
Corporate Goal – Employees and Work Environment			
Employee Training Hours	110	80	80

Past Accomplishments

Water Field (A2 and A6)

- Operational staff continued to stay focused on maintenance initiatives and backlog work in 2022. Project work load remained focused on high priority commitments due to challenges with staffing shortages. Water Operations hired 9 new Water System Operators, 2 Equipment Operators, and 1 Distribution System Foreperson in 2022. Currently there are still 4 Water System Operator and 2 Equipment Operator positions vacant. Keeping up with operational commitments during this time has proven difficult due to staff turnover, lack of employee experience and licensing.
- State requirements to obtain a commercial driver's license saw some drastic cost and time increases in 2022. These licenses are required to operate PWDs fleet of dump trucks. To obtain a CDL B, which is required in the first 6 months for a water system operator is approximately \$6,420. To obtain a CDL A, which is required for an equipment operator the cost to PWD is \$10,043. The cost to get an employee licensed more than doubled. The added costs and time due to the state being backed up meant getting a new hire licensed can take well over 5-6 months. To try and help with recruiting more external candidates who already have a commercial license, a CDL bonus was implemented. A \$3,000 bonus went into effect to be paid out in increments during their first 5 months. Hiring someone who is already licensed and can drive immediately benefits operations greatly.
- High priority water main renewal project on Methodist Rd Westbrook. After a high number of failures in an area of unwrapped ductile iron pipe it was determined that a 1,600' section of pipe needed to be replaced on an emergency basis. The failures continued to impact customers in the area and cause significant damage to a roadway under moratorium. Material shortages and lack of contractor support made it challenging for operations but the replacement is underway and on schedule to be completed by mid-October.



Past Accomplishments (continued)

Water Field (A2 and A6 continued)

- Investments in HDPE equipment and training are paying off. PWD now has the ability to respond to emergency water main replacements or needs for temporary water without hesitation. Below are some instances in 2022 where PWD mobilized and used the equipment to our advantage.
- Crews relocated just over 500' of 2" seasonal water main on Cushing Island. Over the winter, prior to the installation of this seasonal infrastructure, PWD obtained the necessary easements and determined the location of where this seasonal main would end up.



Chushing Island – Trenching for new HDPE



Chushing Island New 2" HDPE installed

- I-95 widening is underway and will likely continue through next year. Our work was preemptive in 2021 to prepare for the widening. South Portland and Westbrook are completing their road reclamation projects. The Westbrook Cumberland Mills Rotary paving project and the Stevens Ave paving project were both the large milestone projects for valve box adjustments this season (2022). Portland CIP paving program more than half of the streets are postponed until next year along with MDOT paving projects on Forest Ave and State St. We are expecting a minimum 10% increase for valve box adjustment work and paving in 2023.
- 2022 Paving update - DOT projects began early in the year and municipal paving started up after July 1. YTD 202 valve boxes have been adjusted/replaced in phase 2 and 395 have gone through phase 1 but await finished paving.

Past Accomplishments (continued)

Water Field (A2 and A6 continued)

- Emerson St. in Portland required the replacement of 75' of 2" gvanized water main that fed one 8-unit property. A 2" HDPE temporary water main was installed to keep the property in service while the main was rerun and connected.
- Operations replaced 700' of seasonal main on Sanctuary Ln Scarborough which is a ROW along the boardwalk. Over the winter, the 4" feed valve failed and filled all of the old surface main which was cast iron, causing multiple breaks.



Fusing new 6" HDPE seasonal main



Sanctuary Ln., ROW Scarborough (boardwalk)

- The Utility Services department continues to see high volumes of work in 2022. The utility specialists spent a significant amount of time training and learning the new systems. There are more steps involved to close out work and to research any previous work. Navigating the new processes adds time to each job despite their level of proficiency continually improving. Operations is looking for other ways to improve efficiency.
 - Work Orders Completed – 18,424
 - Dig Safe Locates – YTD 9,812
 - Water Quality Inquiries – 130

Past Accomplishments (continued)

Water Plant/Systems (A3)

- Zero reportable accidents or lost time employee injuries.
- Met all Primary and Secondary water treatment regulations associated to the Surface Water Treatment Rules and the Long Term 2 Enhanced Surface Water Treatment Regulations.
- Continued to see improvement in distribution water quality, especially at longer residence TCR sample sites, as evident by PWD's ability to meet 5th and 10th percentile goals for chlorine residual.
- SLWTF electrical 5-year preventative maintenance and switchgear maintenance was completed in May 2022. The maintenance includes comprehensive testing all breakers, static trip devices and relays. The vendor identified deficiencies including a bad trip unit on the Central Maine Power feed breaker. All issues were corrected by repair or replacing the units. Furthermore, a spare breaker was purchased.



- Over the years operators have noted some irregular behavior from the Throttling Valve Facility's System valves. These valves control the flow out of the SLWTF and into the Distribution system. PWD consulted American Cone Valve to inspect the internals of both valves and the only deficiency noted was a bad bushing in valve #2. This was replaced and the consultant did not recommend other significant improvements. The outcome led to a better understanding of the system, a better maintained system, and PWD saving hundreds of thousands of dollars on unneeded equipment. As of late, T-Valve operation has not been an issue with no reports of erratic behavior.

2023 Projects and Initiatives

- Continuously improve and protect water quality in the Distribution System, using guidelines and action plans developed through the AWWA Partnership for Safe Water (PSW) for Distribution Systems.
- Continue to develop emergency pumper locations, to provide redundant pumping capability for each boosted-pressure zone.

Water Field (A2 and A6)

- Continue training on the vector equipment and increase efficiencies to support a reduction in backlog maintenance work.
- Extend Right-of-Way Maintenance Program into the more developed areas; initiate tracking of current conditions and make plans to repair significant deficiencies. Maintain areas that have already been cleared.



- Continue to replace 1-2 transmission valves >16" each year.
- Continue to target small diameter galvanized main renewals. These mains are on streets that are not part of any paving upgrades and prioritized by the number of leaks. Operations targets 1-3 a year.
- Target several sections of seasonal main to replace with HDPE on the islands and in Windham. Replacing several thousand feet of seasonal main will be dependant on materials as we have experienced shortages and long lead times for pipe.

2023 Projects and Initiatives (continued)

Water Plant/Systems (A3)

- Continued 100% compliance with all Primary and Secondary Water Treatment, including primary treatment with Ozone and UV light, pH and corrosion control, Lead and copper Rule, secondary disinfection with chloramines, and fluoridation.
- Water Storage Tank Cleaning and Inspections have proved to be a challenge over the last 2 and a half years. The pandemic and workforce shortages have led us off course. The Steel Tanks are on a 3 year maintenance cycle which should be completed in late 2022 or spring of 2023. Also, the concrete reservoirs are on a 5 year maintenance cycle and currently Rocky Hill Senior and West Falmouth Reservoir are in the queue to be addressed in fiscal year 2023. This will put the water storage maintenance schedule back on track in 2023.
- The SLWTF has one electrical service feedline from the transformer to feed SLWTF. The feedline is original to the SLWTF, which was built in 1994, and according to industry standard it has an expected life of approximately 30yrs. Plans are being developed to have a condition assessment of the feedline and determine what the best options. We have not had an issue with the feedline but two things are known; 1. It could be nearing its useful life and 2. the plant does not have redundancy if something were to happen to the feedline, other than standby generator.
- Work to reestablish Meetings with fire departments in PWD service areas. The emphasis will be on rapport building, training and how we can best serve each other.
- A3 has experienced change in the form of employee turnover and in the form of Computerized Maintenance Management System Software. While both of these present challenges, it is an opportunity to think about what we do and how we do it. Water Treatment plans to review EAM assets, prioritize scheduled work, review scheduled work allocation and review scheduled work frequency. Furthermore, projects will be integrated into EAM to streamline greater than annual maintenance. Onboarding & training of new employees will be integrated into EAM to assist with tracking and monitoring employees as they progress. EAM will be leveraged to track real-time asset performance, increase operational efficiency, improve asset reliability and uptime, centralize critical information, improve collaboration & communication, and get in-depth analysis.

Financial Overview

The Water Services Budget for 2023 has increased 12% for a total of \$1,129,527. The majority of the increases are in the areas of salaries, wages and benefits, along with increases in chemicals, fuel, insurance, and transportation.

A1 – The Water Administration area increased 10.7% that equals \$61,876 due to increases in salaries, wages, and employee benefits. There was a small reduction of \$3,425 in the materials and supplies area.

A2 – The Water Transmission & Distribution budget has an expected 9.7% increase totaling \$431,122. Roughly 2/3's of this increase is due to the increases to salaries and benefits. A large portion, \$55,000 of the increase is associated to contracted services such as traffic control, flagging and the need for police. Other services that we expect to increase are to small trench paving and valve box adjustments for municipal and DOT paving. We are anticipating a high volume of paving in 2023 by the state and municipalities. We also continue to see rising costs for materials and supplies. The budget reflects these added costs.

A3 - The A3 is requesting a budget increase of 16.4% or \$428,868. Water treatment chemicals and fuel oil account for the largest increases that amount to \$292,562.

<u>Product</u>	<u>% Increase</u>	<u>\$ Increase</u>
Sodium Hydroxide	76.1%	\$123,723
Zinc Orthophosphate	64.7%	\$51,556
Caustic Soda	37.6%	\$35,093
Fluoride	40.9%	\$18,436
Liquid Oxygen	12.5%	\$8,430
Ammonia	34.9%	\$8,324
Fuel Oil	45.5%	\$47,429

Salary and wages have increased 9.6% and employee benefits will increase 13.8%, with these line items pushing the budget up another \$124,383. Other changes include increases for contracted services and reductions in materials and supplies.

A6 – The Utility Services 2023 budget is expecting an increase of \$207,661 or 11.5%. A total of \$5,535 of the increase can be attributed to increased costs to asset purchases. The locating equipment used by the utility specialists are becoming obsolete and unsupported. Operations will be replacing 4 locators a year and they cost \$4,500 per unit. The remainder of the increase to the A6 budget is also salaries and benefits.

Water Services: Total**Financial Summary:**

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
A1 - Water Administration	\$555,356	\$252,426	\$576,826	\$638,702	61,876	10.7%
A2 - Wtr Transmission/Distrib	4,299,958	1,908,286	4,455,955	4,887,077	431,122	9.7%
A3 - Water Treatment	2,430,533	1,242,955	2,614,546	3,043,414	428,868	16.4%
A6 - Water Utility Services	1,639,244	825,941	1,802,093	2,009,754	207,661	11.5%
Grand Total	8,925,091	4,229,608	9,449,420	10,578,947	1,129,527	12.0%
Expense Type:						
Salaries & Wages	\$3,421,701	\$1,664,734	\$3,623,614	\$4,065,536	441,922	12.2%
Employee Benefits	1,529,153	688,258	1,490,069	1,717,021	226,952	15.2%
Chemicals	415,284	253,229	472,209	717,771	245,562	52.0%
Contracted Services	1,594,839	653,640	1,735,240	1,783,838	48,598	2.8%
Heat/Fuel Oil	87,082	68,609	104,283	151,712	47,429	45.5%
Insurance	27,929	15,022	29,946	33,800	3,854	12.9%
Materials & Supplies	583,117	269,779	673,584	678,259	4,675	0.7%
Other Expense	49,407	13,682	77,784	78,186	402	0.5%
Purchased Power	375,748	177,614	397,865	416,513	18,648	4.7%
Regulatory/Taxes	552	600	781	781	0	0.0%
Tele/Other Utilities	86,582	43,173	91,005	90,235	(770)	-0.8%
Transportation	753,697	381,268	753,040	845,295	92,255	12.3%
Grand Total	8,925,091	4,229,608	9,449,420	10,578,947	1,129,527	12.0%
Headcount:						
Full Time	56	56	56	56	0	0.0%
Part Time	0	0	0	0	0	n/a
Total	56	56	56	56	0	0.0%

Water Services: Total

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$
Salaries & Wages					
660111 - SALARIES/WAGES NON-UNION	\$588,237	\$323,724	\$626,599	\$695,111	\$68,512
660121 - WAGES/REGULAR UNION	2,286,971	1,070,482	2,359,681	2,628,974	269,293
660122 - WAGES/OVERTIME UNION	363,998	177,365	369,233	433,032	63,799
660123 - WAGES/DOUBLETIME UNION	43,403	28,052	50,005	59,350	9,345
660124 - WAGES/STANDBY TIME UNION	129,157	61,500	143,696	160,479	16,783
660126 - SHIFT DIFF - NIGHT	-	-	-	2,190	2,190
660131 - WAGES - REGULAR - TEMPS	18,021	3,611	74,400	86,400	12,000
66014 - VACATION ACCRUAL	(902)	-	-	-	-
66015 - SICKTIME ACCRUAL	(7,184)	-	-	-	-
Salaries & Wages Total	3,421,701	1,664,734	3,623,614	4,065,536	441,922
Employee Benefits					
660401 - FICA - EMPLOYERS' SHARE	260,428	127,966	277,212	311,008	33,796
660405 - SAFETY/WHY PROGRAM ITEMS	12,288	3,282	17,575	16,795	(780)
660411 - MEALS ALLOWANCE	12,650	6,350	10,450	13,570	3,120
660413 - PWD TRAINING PROGRAM	-	185	-	-	-
660418 - STIPENDS	3,800	3,100	4,300	3,800	(500)
660419 - EMPLOYEE BENEFITS-MISC OTH	19,382	1,673	10,200	6,700	(3,500)
660491 - FRINGE BENEFITS-REG/SAL	1,220,605	545,810	1,170,332	1,365,148	194,816
660423 - JURY DUTY REIMBURSEMENT	-	(108)	-	-	-
Employee Benefits Total	1,529,153	688,258	1,490,069	1,717,021	226,952
Chemicals					
66181 - AMMONIA	23,394	15,023	23,836	32,160	8,324
66182 - CAUSTIC SODA	73,934	43,819	93,385	128,478	35,093
66183 - FLUORINE COMPOUND	41,222	24,043	45,084	63,520	18,436
66184 - ZINC ORTHOPHOSPHATE	67,762	47,519	79,694	131,250	51,556
66185 - SODIUM HYPOCHLORITE	144,809	91,838	162,635	286,358	123,723
661892 - LIQUID OXYGEN (LOX)	64,163	30,397	67,575	76,005	8,430
661899 - OTHER CHEMICALS	-	590	-	-	-
Chemicals Total	415,284	253,229	472,209	717,771	245,562
Contracted Services					
6631 - ENGINEERING SERVICES	-	5,555	6,000	6,000	-
663521 - TRAFFIC CONTROL	147,183	74,087	148,000	152,000	4,000
6635221 - PAVING - MINOR REPAIR	404,845	233,685	526,000	526,000	-
663523 - SIDEWALK	3,710	30,846	18,500	18,500	-
663524 - STREET OPENING	50,302	18,968	65,100	63,600	(1,500)
663525 - CONTRACTOR CONSTRUCTION	688,778	189,525	667,500	706,000	38,500
663526 - INSPECTION SERVICES	50	324	-	-	-
663527 - EMERGENCY RESPONSE- FEMA	450	-	-	-	-
66353 - REPAIR SERVICES	75,127	15,316	17,000	20,500	3,500
66354 - MAINTENANCE SERVICES	116,353	22,419	158,775	158,675	(100)
663542 - LARGE METER TESTING	9,983	2,944	12,500	12,500	-
663546 - MAINTENANCE - SNOW REMOVL	52,486	26,238	60,135	58,110	(2,025)
663561 - COMPUTER LICENSES	25,318	26,117	28,180	30,603	2,423
663574 - DISPOSAL SERVICES	1,628	684	5,750	5,290	(460)
663587 - COURIER SERVICES	2,205	903	2,300	2,760	460
663588 - EQUIPMENT MAINTENANCE	5,092	4,079	13,500	14,800	1,300
663594 - DIGSAFE	1,500	-	-	1,500	1,500
6635982 - TREE TRIMMING / REMOVAL	2,200	-	5,000	6,000	1,000
663599 - MISC OTHER SERVICES	4,379	1,950	1,000	1,000	-
6636 - TECHNICAL SERVICES	3,250	-	-	-	-
Contracted Services Total	1,594,839	653,640	1,735,240	1,783,838	48,598

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Heat/Fuel Oil						
66161 - HEATING OIL	\$62,413	\$48,061	\$76,455	\$120,183	\$43,728	57.2%
661622 - CONTAINER DELIVERED	24,669	20,548	27,828	31,529	3,701	13.3%
Heat/Fuel Oil Total	87,082	68,609	104,283	151,712	47,429	45.5%
Insurance						
66599 - PROPERTY & BOILER INSUR	27,929	15,022	29,946	33,800	3,854	12.9%
Insurance Total	27,929	15,022	29,946	33,800	3,854	12.9%
Materials & Supplies						
6619 - ASSET PURCHASES	31,573	9,525	67,325	80,860	13,535	20.1%
662012 - CRUSHED GRAVEL	886	-	1,750	1,750	-	0.0%
662014 - CRUSHED STONE	606	253	500	750	250	50.0%
662015 - LOAM	450	-	-	-	-	n/a
662016 - SAND	-	-	3,820	-	(3,820)	-100.0%
662017 - SAND AND SALT	4,276	-	3,452	3,500	48	1.4%
662018 - BANKRUN GRAVEL	879	291	2,000	1,500	(500)	-25.0%
662019 - GRAVEL - TYPE A (DOT)	894	542	2,000	1,500	(500)	-25.0%
66202 - TOOLS	22,987	18,657	26,100	26,500	400	1.5%
66203 - VENDOR PURCHASED SUPPLIES	115,564	48,516	93,344	91,544	(1,800)	-1.9%
662041 - MATERIALS INVENTORY	173,777	77,480	191,130	191,480	350	0.2%
662042 - SUPPLIES INVENTORY	65,984	25,341	45,400	50,900	5,500	12.1%
66204201 - INVENTORY - QPR	1,024	62	1,400	1,400	-	0.0%
66204202 - INVENTORY - BNKRUN GRAVEL	16,888	7,647	16,000	17,000	1,000	6.3%
66204203 - INVENTORY - CRUSHD GRAVEL	3,441	3,474	13,250	14,250	1,000	7.5%
66204204 - INVENTORY - CRUSHED STONE	4,458	1,627	2,250	2,250	-	0.0%
66204205 - INVENTORY - LOAM	1,629	522	1,250	1,250	-	0.0%
66204206 - INVENTORY - TYPE A GRAVEL	29,167	16,264	28,500	31,500	3,000	10.5%
662043 - TOOL INVENTORY	75,247	30,221	68,050	64,200	(3,850)	-5.7%
66204301 - INVENTORY - TONER	89	-	-	-	-	n/a
66204303 - INVENTORY-COMPUTER EQUIP	1,219	137	850	1,100	250	29.4%
662044 - METER INVENTORY	(9,535)	(436)	5,750	5,750	-	0.0%
662046 - HYDRANT INVENTORY	32,048	26,009	61,000	59,750	(1,250)	-2.0%
662047 - GARAGE INVENTORY	3,539	1,534	3,900	3,750	(150)	-3.8%
66205 - CONSUMABLE SUPPLIES	1,507	835	6,250	4,550	(1,700)	-27.2%
66206 - COMPUTER RELATED EQUIP	4,520	1,278	28,313	21,225	(7,088)	-25.0%
Materials & Supplies Total	583,117	269,779	673,584	678,259	4,675	0.7%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Other Expense						
6642 - EQUIPMENT RENT	3,920	700	14,690	14,750	60	0.4%
6675111 - INSTATE TRAINING/CONF	51,420	17,739	46,485	49,000	2,515	5.4%
6675112 - OUT OF STATE TRAINING/CON	-	-	11,000	11,000	-	0.0%
667513 - DUES	1,000	1,000	1,950	1,150	(800)	-41.0%
667514 - PROFESSIONAL LICENSES	2,237	185	3,335	3,200	(135)	-4.0%
667515 - PERIODICAL SUBSCRIPTIONS	120	-	100	120	20	20.0%
667521 - POSTAGE - THIRD PARTY	2,615	24	4,378	3,725	(653)	-14.9%
667522 - POSTAGE - INTERNAL	120	1	250	250	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	141	-	200	200	-	0.0%
667531 - PRINTING COSTS	6,798	-	8,676	8,071	(605)	-7.0%
667555 - SAFETY EXPENSES	1,615	77	12,720	12,720	-	0.0%
667556 - FREIGHT CHARGES (STOCK)	24	-	-	-	-	n/a
667592 - FOOD SUPPLIES	1,708	654	460	460	-	0.0%
667599 - OTHER MISCELLANEOUS	4,149	6,532	-	-	-	n/a
6676 - EXPENSE OFFSET	(26,460)	(13,230)	(26,460)	(26,460)	-	0.0%
Other Expense Total	49,407	13,682	77,784	78,186	402	0.5%
Purchased Power						
66151 - POWER - LARGE ENERGY	176,481	71,926	158,671	210,622	51,951	32.7%
66152 - POWER - LARGE T&D	104,104	52,254	130,383	100,149	(30,234)	-23.2%
66153 - POWER - MEDIUM ENERGY	37,863	14,925	37,141	33,511	(3,630)	-9.8%
66154 - POWER - MEDIUM T&D	40,472	21,509	43,911	46,803	2,892	6.6%
66155 - POWER - SMALL ENERGY	10,055	7,273	13,335	12,177	(1,158)	-8.7%
66156 - POWER - SMALL T&D	14,663	11,586	21,924	20,851	(1,073)	-4.9%
66158 - LOAD RESPONSE	(7,890)	(1,859)	(7,500)	(7,600)	(100)	1.3%
Purchased Power Total	375,748	177,614	397,865	416,513	18,648	4.7%
Regulatory/Taxes						
667516 - PERMITS	100	600	781	781	-	0.0%
667518 - REGULATORY REQUIRED FEES	452	-	-	-	-	n/a
Regulatory/Taxes Total	552	600	781	781	-	0.0%
Tele/Other Utilities						
66101 - WATER	4,088	1,511	4,275	4,200	(75)	-1.8%
66102 - WASTEWATER	10,956	4,236	17,000	14,200	(2,800)	-16.5%
66103 - STORMWATER CHARGES	36	(1,008)	-	-	-	n/a
66111 - TELEPHONE LINES	5,453	2,581	4,920	4,920	-	0.0%
66112 - DATA LINES	49,215	31,744	50,890	50,940	50	0.1%
66113 - CELLULAR PHONES	16,834	4,109	13,920	15,975	2,055	14.8%
Tele/Other Utilities Total	86,582	43,173	91,005	90,235	(770)	-0.8%
Transportation						
66501 - TRANSPORTATION - INTERNAL	457,639	222,747	442,180	505,120	62,940	14.2%
665019 - TRANS INTERNAL INACTIVE	274,099	149,080	284,378	312,775	28,397	10.0%
66502 - TRANSPORTATION - EXTERNAL	20,073	8,601	22,550	23,250	700	3.1%
66503 - MILEAGE REIMBURSEMENT	1,886	840	3,932	4,150	218	5.5%
Transportation Total	753,697	381,268	753,040	845,295	92,255	12.3%
Grand Total	8,925,091	4,229,608	9,449,420	10,578,947	1,129,527	12.0%

Water Services: Water Administration (A1)**Financial Summary:**

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$365,624	\$169,236	\$383,568	\$422,806	\$39,238	10.2%
Employee Benefits	184,594	79,341	177,846	203,296	25,450	14.3%
Materials & Supplies	312	341	5,075	1,650	-3,425	-67.5%
Other Expense	1,681	2,269	7,095	6,980	-115	-1.6%
Tele/Other Utilities	3,145	1,234	2,910	3,720	810	27.8%
Transportation	0	5	332	250	-82	-24.7%
Grand Total	555,356	252,426	576,826	638,702	61,876	10.7%
Programs:						
96 - Pandemic Costs	-\$612	\$0	\$0	\$0	\$0	n/a
98 - Training	15,893	14,004	28,936	29,997	1,061	3.7%
99 - Administration	540,075	238,422	547,890	608,705	60,815	11.1%
Grand Total	555,356	252,426	576,826	638,702	61,876	10.7%
Funds:						
20 - Water General	\$555,356	\$252,426	\$576,826	\$638,702	\$61,876	10.7%
Grand Total	555,356	252,426	576,826	638,702	61,876	10.7%
Headcount:						
Full-Time	5	5	5	5	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	5	5	5	5	0	0.0%

Water Services: Water Transmission/Distribution (A2)

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	1,391,133	639,535	1,394,319	1,594,481	200,162	14.4%
Employee Benefits	599,471	248,946	557,128	653,532	96,404	17.3%
Contracted Services	1,339,014	545,975	1,456,050	1,490,350	34,300	2.4%
Materials & Supplies	371,010	181,012	436,622	452,950	16,328	3.7%
Other Expense	48,817	14,900	50,350	50,350	-	0.0%
Tele/Other Utilities	10,466	4,652	10,680	10,680	-	0.0%
Transportation	540,047	273,266	550,806	634,734	83,928	15.2%
Grand Total	4,299,958	1,908,286	4,455,955	4,887,077	431,122	9.7%
Programs:						
1 - Seasonal Mains	96,264	56,964	139,635	143,206	3,571	2.6%
10 - General Distribution	189,184	76,235	277,471	292,239	14,768	5.3%
11 - Mains & Valves Maint	1,589,513	805,907	1,631,707	1,796,872	165,165	10.1%
12 - Services Maintenance	647,716	261,333	690,374	764,217	73,843	10.7%
14 - Distribution Flushing	-	38	-	-	-	n/a
15 - Digsafe Locates	-	303	-	-	-	n/a
17 - Hydrant Maintenance	171,225	86,628	214,966	211,348	(3,618)	-1.7%
2 - Meter Reading	4,686	1,334	902	991	89	9.9%
20 - Meter Service	-	11,261	-	-	-	n/a
34 - Distribution Maintenance	360	-	-	-	-	n/a
4 - Paving (Mains)	521,671	98,315	453,887	504,519	50,632	11.2%
44 - WW Pumping	6,132	4,358	1,871	7,583	5,712	305.3%
45 - WW Treatment	-	-	1,387	879	(508)	-36.6%
90 - Vehicles	43,483	21,099	44,129	49,466	5,337	12.1%
91 - Snow Removal	7,934	366	34,091	30,022	(4,069)	-11.9%
92 - Bulk Materials Adjustment	-	-	2,500	2,500	-	0.0%
94 - Technology Teams	4	-	-	-	-	n/a
96 - Pandemic Costs	68	781	-	-	-	n/a
98 - Training	117,754	35,345	123,131	136,131	13,000	10.6%
99 - Administration	903,964	448,019	839,904	947,104	107,200	12.8%
Grand Total	4,299,958	1,908,286	4,455,955	4,887,077	431,122	9.7%
Funds:						
10 - General	51,417	32,726	78,220	79,488	1,268	1.6%
20 - Water General	4,010,610	1,760,840	4,164,905	4,541,872	376,967	9.1%
30 - Water Standish	19,909	9,103	6,767	14,833	8,066	119.2%
53 - WW Cumberland	102	4,358	1,572	4,992	3,420	217.6%
55 - WW Windham LF	1,930	-	-	-	-	n/a
57 - WW Portland	4,099	-	1,088	2,137	1,049	96.4%
62 - WW Westbrook	-	-	299	1,000	701	234.4%
64 - WW Joint Westbrook	-	-	299	333	34	11.4%
66 - WW Peaks Island	-	3	-	-	-	n/a
67 - WW North Windham	211,891	101,256	202,805	242,422	39,617	19.5%
Grand Total	4,299,958	1,908,286	4,455,955	4,887,077	431,122	9.7%
Headcount:						
Full-Time	24	24	24	24	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	24	24	24	24	0	0.0%

Water Services: Water Treatment (A3)**Financial Summary:**

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$760,355	\$388,105	\$809,729	\$887,820	\$78,091	9.6%
Employee Benefits	336,631	162,179	336,600	382,892	46,292	13.8%
Chemicals	415,284	253,229	472,209	717,771	245,562	52.0%
Contracted Services	234,921	98,856	253,190	261,688	8,498	3.4%
Heat/Fuel Oil	87,082	68,609	104,283	151,712	47,429	45.5%
Insurance	27,929	15,022	29,946	33,800	3,854	12.9%
Materials & Supplies	122,825	46,845	121,524	105,349	-16,175	-13.3%
Other Expense	-20,784	-9,566	-7,215	-7,440	-225	3.1%
Purchased Power	375,747	177,614	397,865	416,513	18,648	4.7%
Regulatory/Taxes	552	600	781	781	0	0.0%
Tele/Other Utilities	54,172	24,066	59,395	54,940	-4,455	-7.5%
Transportation	35,819	17,396	36,239	37,588	1,349	3.7%
Grand Total	2,430,533	1,242,955	2,614,546	3,043,414	428,868	16.4%
Programs:						
1 - Seasonal Mains	\$417	\$72	\$1,405	\$1,574	\$169	12.0%
11 - Mains & Valves Maint	1,406	96	2,131	2,378	247	11.6%
12 - Services Maintenance	10	0	730	983	253	34.7%
17 - Hydrant Maintenance	325	0	141	670	529	375.2%
18 - Water Treatment Maint	130,555	83,123	123,993	116,300	-7,693	-6.2%
2 - Meter Reading	0	0	141	158	17	12.1%
24 - Distribution Operations	313,595	133,554	342,853	344,383	1,530	0.4%
25 - Water Storage Maintenance	77,196	13,811	45,203	59,042	13,839	30.6%
28 - Monitoring	48	0	251	188	-63	-25.1%
34 - Distribution Maintenance	45,983	18,594	71,410	78,842	7,432	10.4%
45 - WW Treatment	0	0	98	108	10	10.2%
6 - Water Treatment	1,574,432	841,352	1,752,859	2,121,822	368,963	21.0%
94 - Technology Teams	0	0	3,759	841	-2,918	-77.6%
96 - Pandemic Costs	3,250	0	2,809	0	-2,809	-100.0%
98 - Training	30,381	29,606	55,400	46,625	-8,775	-15.8%
99 - Administration	252,935	122,747	211,363	269,500	58,137	27.5%
Grand Total	2,430,533	1,242,955	2,614,546	3,043,414	428,868	16.4%
Funds:						
20 - Water General	\$2,387,113	\$1,223,294	\$2,552,875	\$2,979,434	\$426,559	16.7%
30 - Water Standish	43,420	19,661	61,573	63,872	2,299	3.7%
57 - WW Portland	0	0	98	108	10	10.2%
Grand Total	2,430,533	1,242,955	2,614,546	3,043,414	428,868	16.4%
Headcount:						
Full-Time	11	11	11	11	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	11	11	11	11	0	0.0%

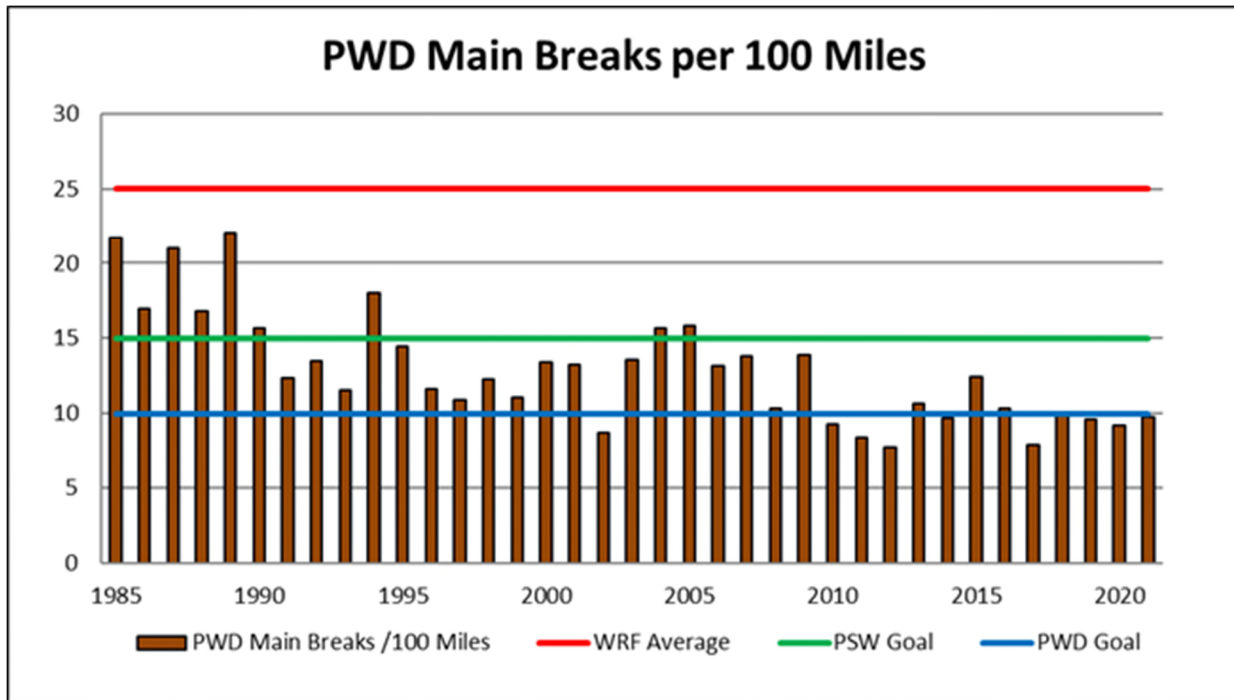
Water Services: Water Utility Services (A6)

Water Services

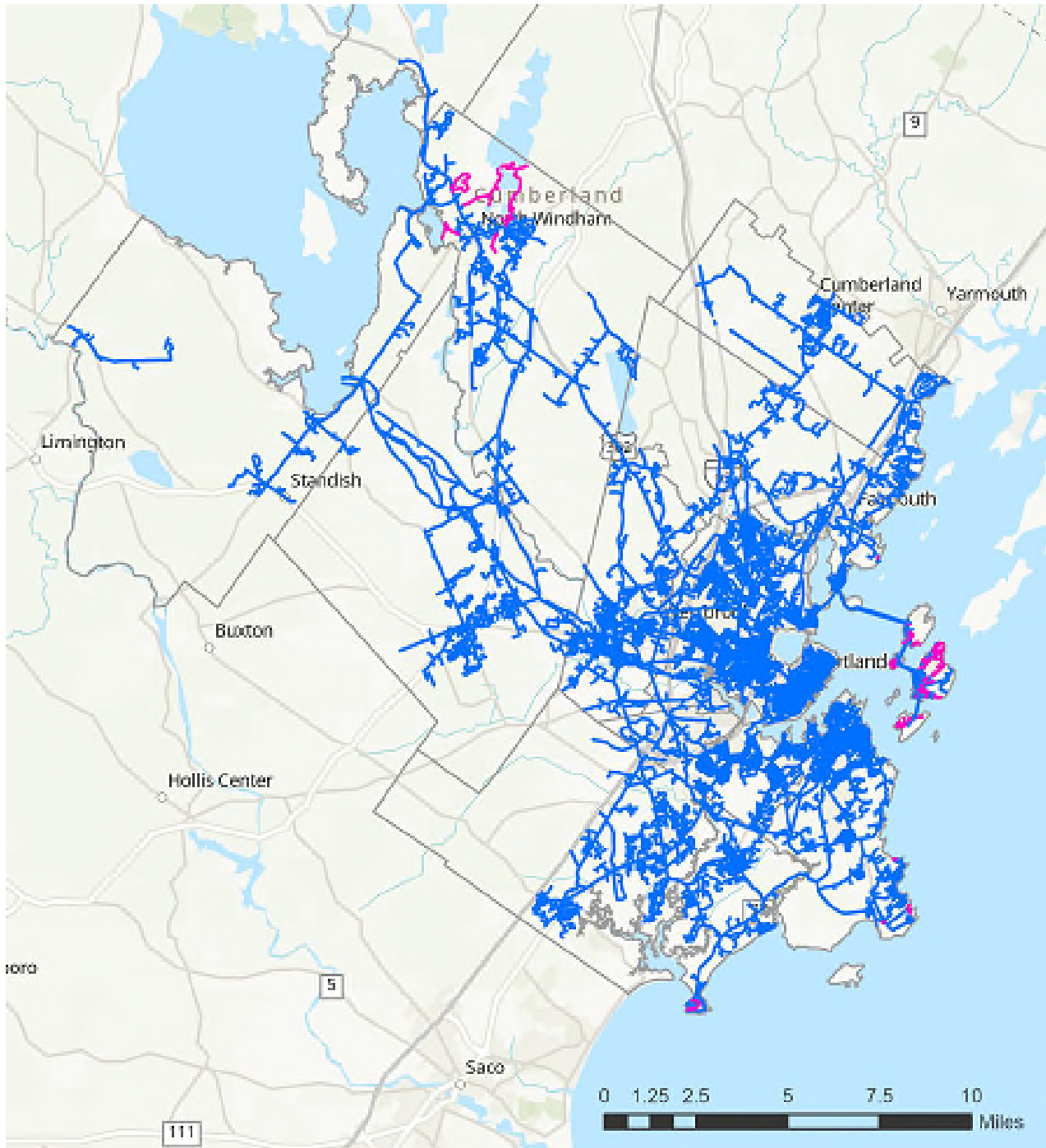
A key determinant of Water Services budget is the number of water main breaks. Main breaks occur for a number of reasons, including age, pressure surges, and cold weather. The long-term trend indicates a declining number of leaks partially due to the capital investments made in prior years by targeting the replacement of aging pipes.

The Water Research Foundation (WRF) states that the average number of main breaks in North America is 25 breaks per 100 miles of main per year. The Partnership for Safe Water (PSW), a group supported by US EPA and the American Water Works Association, among others, recommends a goal of less than 15 main breaks per 100 miles of main per year. The Portland Water District (PWD) strives to meet a service level goal of 10 main breaks per 100 miles of main per year.

The operating budget assumes the typical number of main breaks in a year. As the chart indicates, some years are significantly higher than average resulting in significantly higher expenses.



Water Services



Water Services operates and maintains two treatment systems – Seabago Lake and Steep Falls Well. Water is delivered through more than 1000 miles of mains (see map – blue lines are year round and pink are seasonal mains). The system has over 5200 hydrants, 57,000 service pipes and 10 tank/standpipes.

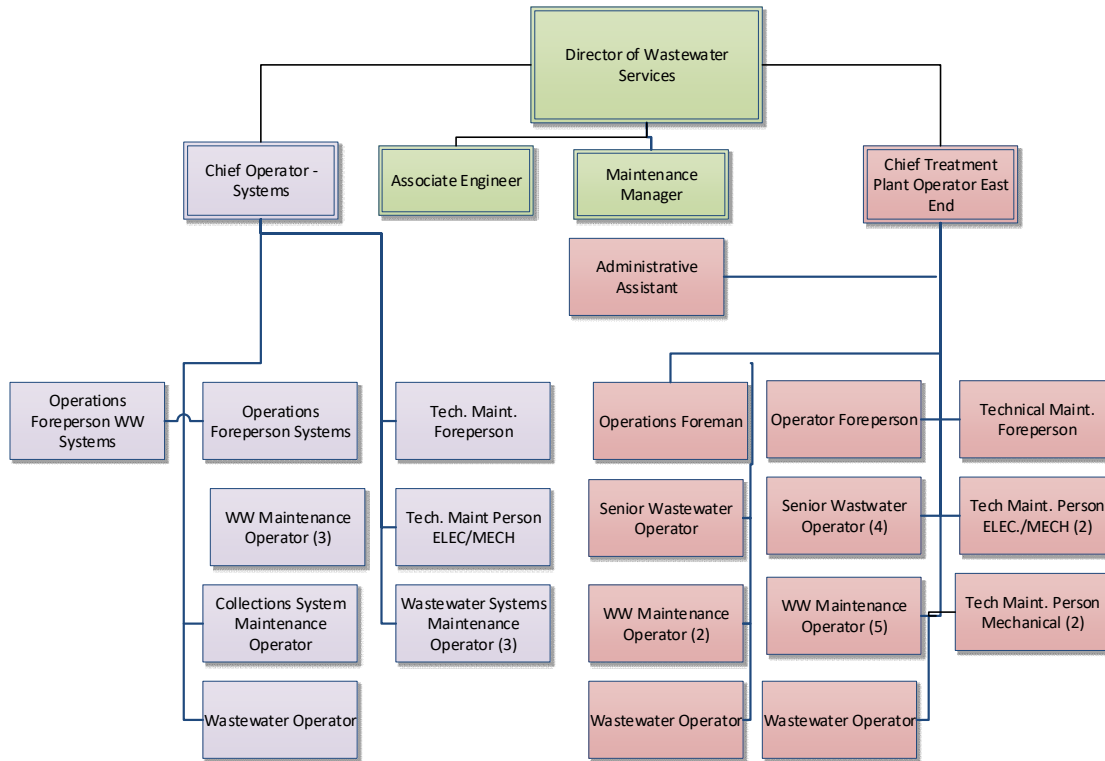
Wastewater Services – Purpose Statement

To provide effective high quality customer-oriented wastewater collection and treatment services in an efficient and responsive manner meeting Federal and State of Maine discharge standards to protect the surface and receiving waters of Casco Bay.

Core Services

The Portland Water District’s Wastewater Services Group is responsible for portions of the wastewater infrastructure in Cape Elizabeth, Cumberland, Gorham, Portland (including Peaks Island), Westbrook and Windham. Further, the Portland Water District owns and operates the Westbrook/Gorham/Windham Regional treatment plant, the Cape Elizabeth treatment plant, the Peaks Island treatment plant, and the East End treatment plant in Portland.

Administration for the Wastewater Services Group is comprised of the Director of Wastewater Services who oversees and provides administrative support to the operational units (Wastewater Administration – B1; green in organization chart). Operation and maintenance staff of 23 are directly responsible for the operation and maintenance of our four treatment plants (Treatment – B3; red in organization chart). Operators from each area are regularly involved in the operation of all four treatment facilities and several of our pump stations. Wastewater Systems staff of 13 people is responsible for the operation and maintenance of interceptors, force mains, pump stations, collectors, flow monitoring, and combined sewer regulators with the water operations groups (Systems – L9; purple in organization chart). The operator training program includes time in treatment, systems, and laboratory areas with specific support to assist operators to obtain required experience and license certifications.



Key Statistics

Wastewater Services Group Facts

- The Wastewater Services Group operates four wastewater treatment plants and provides sewer services to six communities. The East End treatment plant is the largest municipal treatment facility in Maine.
- Our Combined Sewer Overflow (CSO) monitoring efforts include a web-based system that allows for near real-time monitoring and alarming of over 90% of the total overflow sites for PWD and several member municipalities.

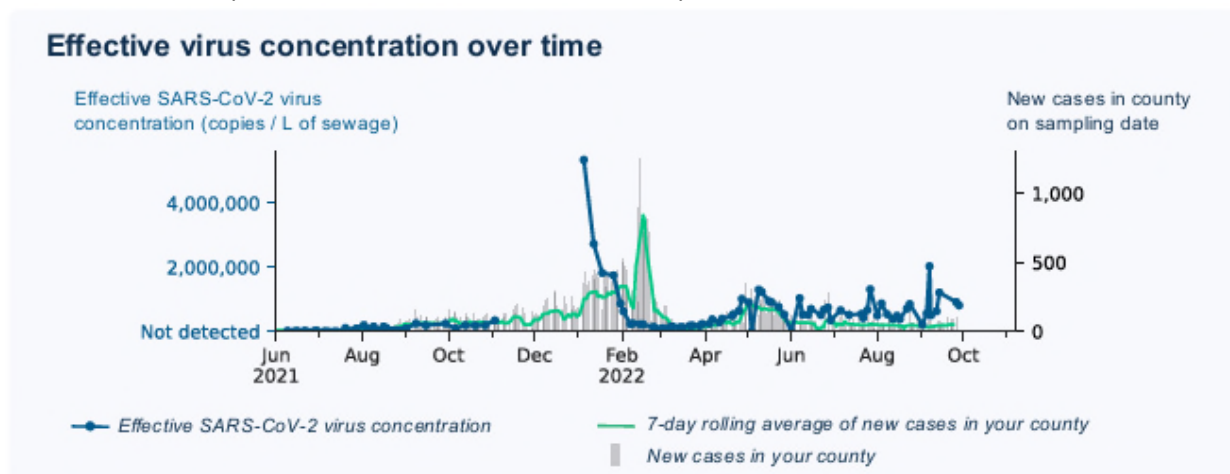
The East End Treatment plant maximizes flow to the treatment facility during wet weather events as a critical component of the City of Portland's CSO management efforts, treating about half of the total wet weather flow generated in the collection system. This effort reduces the overall CSO discharge in Portland by nearly 50% and is a vital part of the CSO control program.

- The Westbrook/Gorham/Windham Regional WWTF and Cape Elizabeth WWTF also maximize the amount of flow accepted during wet weather events. Accepting this additional flow provides treatment and decreases the amount of combined sewer and wet weather overflows in Westbrook and Cape Elizabeth.
- In 2022, PWD collaborated with the Town of Windham to complete a conceptual design of a new collection system, treatment plant, and groundwater dispersal system to serve the most intensively developed areas of the Rt. 302 corridor. This effort will continue with a design-build effort to accelerate the design and construction of the system in the next several years.
- The Wastewater Operator apprentice program has been in place for nearly a decade. This effort has helped address workforce management issues due to employee retirements. These positions work in each of our treatment plants and the wastewater systems and pumping group. This effort has been essential and very beneficial, as nearly the entire operations team has been replaced through retirements and changes in job assignments. Challenges associated with careful staffing efforts during the past couple of years (related to COVID-19) have decreased these opportunities. We hope to return to the planned rotation through treatment and system areas as part of this program over the next year.
- Beginning in 2016, nutrient optimization efforts at the East End WWTF have reduced nitrogen loadings to Casco Bay. Annual seasonal total nitrogen loadings have been reduced by 62% to 75% in past years. In 2022, initial results indicate a similar seasonal mass loading reduction has been realized through our adaptive management approach. Staff at the treatment plant have closely managed the disinfection system to improve operation of the disinfection system during nearly complete nitrification. Similar efforts at the Cape Elizabeth and Peaks Island plants have also reduced effluent nitrogen levels discharged to Casco Bay.

Permit renewals at these facilities will take place over the next year or more. While the Maine Department of Environmental Protection (DEP) has begun to develop both Casco Bay and Maine nitrogen criteria, the need for stringent nitrogen permit limits is not clear. PWD will negotiate with DEP and will engage with various stakeholders during this process. It is yet to be seen how the City of Portland's pending Integrated Planning Process will affect this, as further investment in nitrogen effort beyond those demonstrated by PWD are expected as part of the ongoing investment in water quality efforts that primarily focus on investment to reduce combined sewer overflows from the City's collection system.

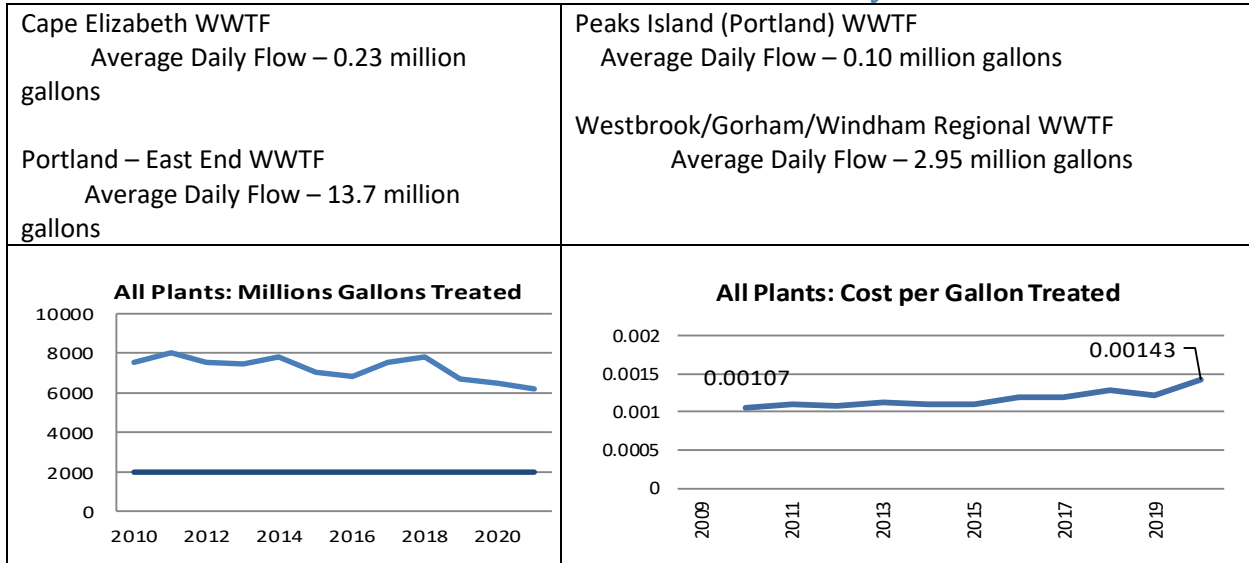
Wastewater Services Group Facts (continued)

- Wastewater Systems staff perform regular sampling support to the PWD Industrial Pretreatment Program that monitors industrial discharges to the collection system.
- In response to concerns related to a class of chemical referred to as PFAS, PWD’s wastewater operations have experienced significant operational challenges:
 - Legislative action in 2022 eliminated land application and composting as biosolids management options in Maine. While PWD has routinely land filled biosolids, the elimination of options that managed and estimated 60% of the biosolids in Maine have caused landfill capacity and operational challenges.
 - Cost related to biosolids management have increased by over 80% in the past three years.
 - In anticipation of these issues, PWD had completed a study to identify possible technologies to address biosolids management challenges in the face of PFAS challenges. This study has since served as the foundation for a more intensive Biosolids Master Plan that will identify immediate dewatering system improvement, mid-term capital recommendations, and a review of emerging technologies. The plan includes a roadmap that highlights specific decision points and related drives for the reduction of the volume of biosolids and possibly treatment of PFAS.
 - PWD will begin testing the influent and effluent at wastewater treatment plants in late 2022. This 10-month program is part of a state-wide effort required by 2022 legislative actions. While the trace presence of PFAS is expected, to address this problem effectively sources of PFAS need to be evaluated and removed from inputs to sewer and septic systems.
- PWD has been a leader in the effort of Wastewater Based Epidemiology, specifically, the testing of treatment plant influent for SARS-CoV-2 (the virus that causes COVID-19). In 2021 and 2022, PWD has engaged with fully funded efforts to provide samples for testing by national labs. The data is shared with the Maine Center for Disease Control (MECDC) and the public through the MECDC website. A plot of the data from June of 2021 to present is shown below:



- Efforts to manage odors from treatment plants and pump stations continue to reduce odors and the associated complaints. The addition of an odor control system at the Northeast Pump station and the 2016 aeration system improvements have been major factors in the reduction of odors from the plant.

Wastewater Treatment Facilities – 2021 Flow Summary



Performance Benchmarks

	2021 Actual	2022 Projected	2023 Goal
<u>Wastewater Systems</u>			
Corporate Goal - Environment			
Wet wells cleaned	150	150	>125
Feet of pipe cleaned*	15,250	18,000	>20,000
Feet of pipe televised*	41,050*	30,000	>30,000
Dry weather overflows	14	5	0
Corporate Goal - Reliability			
Corrective Maintenance tasks	152	110	<200
Corporate Goal - Affordability			
Preventive Work Orders	1,868	1,500	1,500
<u>Treatment Operations</u>			
Corporate Goal - Environment			
Total license excursions	28	20	0
Corporate Goal - Reliability			
Biosolids removed (wet tons)	24,610	24,000	24,000
% BOD removed	94	94	>85
% suspended solids removed	94	94	>85

*Note: PWD has completed a 10-year effort to inspect/CCTV the collection and interception system. These levels will decrease as the results of this program continues.

Past Accomplishments

- Flow monitoring of combined sewer overflow events:
 - PWD continuously monitors over 90% of all combined sewer overflows in Portland, Westbrook, and Cape Elizabeth. Alarms are generated when dry weather overflows occur and PWD responds immediately to address the issue. This program plays a significant role in the development and performance measurement of combined sewer overflow Long Term Control Plans in Portland, Westbrook, and Cape Elizabeth.
- Effluent Permits and East End Nutrient Optimization Efforts

All four treatment plant permits are up for renewal in 2022. It is expected that effluent limits related to nitrogen or phosphorus may be a topic of interest, either from DEP or various water quality stakeholders.

- The Cape Elizabeth Wastewater Treatment Facility permit was renewed in late 2016. The permit included a significant reduction in routine monitoring requirements due to the plant's historical performance relative to regulatory standards. Monitoring of effluent nitrogen is generally required from May through October. An assessment of the aeration system was completed and the design and construction of the related upgrades are expecting in the coming years. These efforts specifically looked at capital requirements related to nitrogen reduction.
- The East End Wastewater Treatment Facility permit was renewed in 2017. This effort included a number of stakeholders and the Department of Environmental Protection. The negotiated "nutrient optimization approach" for managing nitrogen includes effluent monitoring from May to October, operational efforts to reduce nitrogen (leveraging improvements made during the aeration system upgrade), and participation in the City of Portland's Integrated Planning efforts. The permit included a significant reduction in routine monitoring requirements due to the plant's historical performance relative to regulatory standards. Over the past five years, during May through September, a reduction in the historical levels of nitrogen in the treated effluent of 75% has been realized. All of this has been accomplished using the aeration system that was not specifically designed or intended to realize these reductions. While the bulk of credit rests with the operations team, the lack of full-fledged nitrogen reduction system and related redundancy severely limits the ability of the plant to guarantee that more stringent requirements could be met.
- The Peaks Island Wastewater Treatment Facility permit was renewed in 2017. The permit included a significant reduction in routine monitoring requirements due to the plant's historical performance relative to regulatory standards. Monitoring of effluent nitrogen was required from May through October. The facility is generally able to reduce the effluent total nitrogen. Increased demands for development on the island will strain the plant's ability to accept the increased future loadings without improvements to the facility. An evaluation of the treatment plant, specifically contemplating nitrogen capabilities of the plant has been completed.

Past Accomplishments (continued)

- Westbrook/Gorham/Windham Regional Treatment Facility upgrades
 - The dewatering system was replaced in 2018 with a new screw press. While it has taken some effort, operation of the system has been optimized and a goal of exceeding 21%TS (an increase of 5%TS from the previous dewatering system) has been established. Given the challenges related to PFAS, this system has served PWD well. The Biosolids Management Plan has recommended possible enhancements to the system to improve the ability to increase daily production and reliability.
 - Seasonal monitoring of phosphorus has been completed annually to develop baseline effluent levels. The Maine Department of Environmental Protection is expected to develop phosphorus water quality criteria that may be evaluated as part of future permit renewals. MEDEP has drafted phosphorus water quality criteria.
 - The aeration system and clarifiers are being upgraded. While disruptive to daily operation of the treatment plant, this upgrade is similar to the aeration system project at the East End Plant in 2016. Effluent quality and some ability to manage nutrients to some degree are anticipated. This effort will continue through 2023.
 - Following the MEDEP's Triennial Review of Water Quality Standards, a number of stakeholders petitioned the Maine Legislature to consider the re-classification of the Lower Presumpscot River from Class B to the higher classification of Class A. This in response to measure water quality parameters and an aspirational desire to reach Class A water quality criteria. Following a concern related to the possible impacts to the municipalities along the river, specifically related to economic development, the issue was paused. It is expected the effort will resume following additional water quality monitoring data is collected.

- Improvements to Pump Station reliability
 - PWD monitors all systems through a SCADA computer system. Treatment plants can be remotely operated from the East End Treatment Facility, the Westbrook/Gorham Regional Treatment Facility, or the Douglass St. Office during emergencies using the SCADA system. In 2020, treatment plant staff took over daily alarm monitoring and dispatch responsibilities as part of our pandemic response plan.
 - To improve the reliability of systems during power interruption, PWD requires generators at new pump stations and has installed an average of 3 generators per year at its existing pump stations. The majority of pump stations that require emergency generators have been upgraded or have had generators installed during construction as part of our new infrastructure standards. Bypass connections are also installed to allow the stations to be serviced by a portable pumping unit, if needed.
 - Staff completed an assessment of all pump stations in 2021. A summary report has been prepared for each community that PWD serves. These findings continue to guide the development and implementation of our long-range capital improvement program and help to communicate the work that has been completed to maintain proper system performance.

 - Lead by the Asset Management and Planning Department, design and construction of pump station and foremain upgrades have been completed. With the number of pump stations in PWD's service area, these efforts are nearly continuous.

- Wastewater Services Department changes
 - The Wastewater Operator apprentice program continues to train operators to assist with workforce management. Operators from this program have moved into higher-level positions within the Department.
 - Scheduling changes were made in early 2020. Senior Operators were assigned to days in an effort to increase the presence at our treatment plants during regular hours. Flexibility has increased along with training as a result. There has been an 80% increase in the number of completed work orders. While initially a pilot effort, the results have been largely positive and the change has been adopted. There will be minor changes periodically, driven largely by suggestions from the operations team.

2022 Projects and Initiatives

B1 – Administration

- We continue to monitor changing regulations related to phosphorus, nitrogen, and high flow management. With the renewal of permits at the treatment plants, we will monitor efforts that could affect the next series of permit renewals in 2022.
- The City of Portland has completed their draft Integrated Planning effort to prioritize water quality commitments. This effort will assess combined sewer, stormwater, and wastewater treatment obligations and prioritize the use of resources to address the various efforts with a goal of improving receiving water quality. The City is continuing with efforts in negotiating the final permit and long term control plan, which will inform future requirements for PWD.
- The Westbrook CSO Long Term Control Plan is currently be updated. This will include a review of work accomplished in the collection system over the past 5 years and the development of a monitoring program and work to continue the efforts to eliminate CSO flows.
- With continued changes brought about from staff transitions, an increased emphasis on recruiting, training, and developing the team within wastewater services will remain a focus of management with the support of the Employee Services Department.
- Staff has supported the effort to implement the new asset management system. Operations team members have begun to leverage the new system to perform more preventive work and to document completed work. The maintenance team is working to realize similar results.
- Biosolids management has become more of a challenge as contaminants of emerging concern and other solid waste policy issues strain Maine’s rather fragile waste management infrastructure. As noted previously, the Biosolids Management Plan that will be completed in 2022 will guide future decisions and projects.

B3, L9 – Operations

- Treatment Plant Operators continue to focus on effluent compliance including making process control adjustments to the operation of the treatment plant as needed, most recently in efforts to manage effluent nitrogen from the Cape Elizabeth, Peaks Island, and East End WWTFs. Plant operations are now routinely driven by the operations team as they work to realize established process control objectives. Daily communication supported by weekly reviews by all staff have enabled the successes to be sustained.
- The operations team continues to focus on implementing safe work practices throughout the workplace. Focus areas include confined space, lock-out tag-out programs, electrical safety, and the regular use of personal protective equipment by staff. Continued effort to emphasize safety continue and are supported by PWD’s Safety Specialist.

2022 Projects and Initiatives (continued)

Corporate Goal – Reliability

B1 – Administration

- Support increased reliance on the asset management system to coordinate and document departmental efforts. The transition has been completed and operations and maintenance teams continue to develop work practices related to preventive and corrective maintenance using the new system.

B3, L9 – Operations

- The Maintenance Manager (Planning and Scheduling) is helping to further refine the preventive maintenance program as the new Maintenance Management Computer system is implemented.
- Continue developing preventive maintenance practices that lead to or exceed a 75%/25% mix of preventive to corrective work order history. It is anticipated that the new asset management system will further enhance these efforts.
- Monitor pump system's ability to minimize pump station downtime. The installation of generators at key pump stations along with bypass pumping connections helps to minimize service interruptions.
- Continue the condition assessment program of combining line cleaning and CCTV inspection of 10% of each community's buried infrastructure. We completed assessment of our entire buried sewer infrastructure by the end of 2018. The results are being evaluated and staff will develop a monitoring plan over the next 2 years. The Associate Engineer will assist with this effort in the future.
- A comprehensive evaluation of the HVAC and electrical systems at each treatment plant began in 2016. This evaluation identified aging systems in need of refurbishment and replacement. The project included a review of energy management in the recommendation of future projects. The first projects from this assessment are currently under construction.

Corporate Goal – Affordability

B1 – Administration

- Improved reliance on established operating parameters, Standard Operating Procedures, and preventive maintenance continue to set performance goals to improve operating efficiency.

B3, L9 – Operations

- Manage departmental budgets with area supervisors that lead to cost savings measures, i.e. improved dewatered solids at the Westbrook/Gorham/Windham and East End WWTFs, station visits, chemical use, etc. Major budget items, including chemicals, power, biosolids, and others are monitored using the WIMS data management system to monitor and control operations and budgets. Staff will continue to develop clear operational goals for key process areas (dewatering, odor control, disinfection, aeration, etc.) and rely on process data to manage the processes.
- Continue to implement process control measures in the operation of wastewater treatment facilities. Operations Plans have been developed for each facility and on-line computer based Operations Manuals continue to be updated to serve as guidance for the Operations Team. Dewatering, disinfection, and pump station operation have been areas of significant focus.
- The Biosolids Management Plan will provide a metric based decision roadmap that will include projects intended to respond to or manage future biosolids management costs and increases.

2022 Projects and Initiatives (continued)

Corporate Goal – Environment

B1 – Administration

- Continue to monitor existing performance and developing regulations, including permit renewals, biosolids management challenges, and other legislative and regulatory efforts. PWD regularly participates in DEP sponsored workgroups to review proposed efforts.

B3, L9 – Operations

- Treatment and Systems teams work to have facilities operate in accordance with permit requirements. Effluent permit violations have decreased in recent years, with a goal of no violations from our treatment plants and systems.
- Through process control enhancements at the Peaks Island and Cape Elizabeth WWTFs, these plants are managing effluent nitrogen levels. With the upgraded aeration system and the requirement for a “nutrient optimization approach” at the East End, efforts to manage and monitor effluent nitrogen began in 2018. The Westbrook/Gorham/Windham Regional WWTF is undergoing a major aeration system upgrade which will improve plant performance, enhance wet weather performance, and possibly reduce effluent nitrogen discharges.
- Beginning in 2016, our goal became zero exceedances each year from all treatment plants along with no dry weather overflows from the collection and interception system. This goal continues to direct our operational and compliance efforts.
- The developing concern over a class of chemicals referred to as PFAS continues to challenge the management of biosolids generated through wastewater treatment statewide. Staff is engaged locally, regionally, and nationally in ongoing efforts to manage biosolids given the awareness of PFAS. The Biosolids Management Plan will help guide these efforts.

Corporate Goal – Employees and Work Environment

B1 – Administration

- Promote the District’s professional development program of a minimum 80 hours of training each year. Training across the Wastewater Services Department has increased.
- Operators are encouraged to obtain required licenses and to continue with advanced licenses for wastewater treatment and collections.

B3, L9 – Operations

- Provide support to employees through annual performance reviews and regular support.
- To ensure safety of our employees near chemical storage facilities and other identified areas, an investment in forced air personal respirator systems was made in 2019. This has enhanced our ability to safely handle chemicals, implement a painting and maintenance program in our facilities, and to work more safely around wastewater during the pandemic.
- Equipment lifts, confined space entry equipment, and personal protective equipment, and other related safety items are invested in to support the work of our employees.

Financial Overview

The Wastewater Services Group continues to operate with a goal of delivering effective services at reasonable costs to its member communities. However, costs related to treatment and biosolids management have increased significantly. Overall, the 2023 budget total includes an increase of \$2,267,466 to \$13,845,033. This is a 19.6% increase from the 2022 budget.

Salaries/Wages: Overall budgeted staffing have remained consistent. Maintenance support for all treatment plants continues to come from the central treatment maintenance group at the East End treatment plant with these efforts coordinated through our Maintenance Manager. The scheduling of employees at treatment plants has been adjusted to increase the presence at our facilities during normal working hours. Retirements and attrition have increased the number of open positions and management is regularly working to fill these roles. Overall, this category has increased by \$332,646 or 12.5%. These increases are due to market adjustments and the recent Collective Bargaining Agreement signed in 2022.

Biosolids Disposal: The total budget for the hauling and management of biosolids generated from the treatment of wastewater has increased from \$2,333,500 to \$3,444,636. This increase of \$1,111,136 represents a 47.6% increase on top of recent increases of nearly 30% per year. Legislative action related to per- and poly-fluoroalkyl substances (PFAS) has dramatically affected biosolids management costs. The budget for Percent Total Solids (%TS) at both Portland's East End Wastewater Treatment Facility and Westbrook Regional Treatment Facility is targeted at 21.0% again in 2023 with planned studies to improve system performance in the next few years.

Biosolids disposal costs related to a rescinded \$10/wt fee previously imposed by the Maine Legislature resulted in a significant decrease in regulatory related fees. Unfortunately, this decrease only partially offsets the dramatically increase biosolids management costs.

Chemicals: Generally, chemicals are used at each of our facilities to treat and disinfect the treated wastewater before being discharged to the environment, to aid in dewatering biosolids, and for odor control. Overall, the total budget for chemicals has increased by 52.7%, or \$431,533 to a 2023 budget total of \$1,249,779. These costs are market driven and largely indexed to inflationary costs.

Contracted Services: Contracted services include the costs of the Falmouth and South Portland treatment plants to treat flows conveyed by PWD from Cumberland and Northern Cape Elizabeth. Contracted Services also includes a maintenance agreement related to the CSO monitoring services. These entities are seeing similar challenges related to inflationary cost increases and biosolids management challenges. The budget amount increased by \$305,508, or 21%, to a total of \$1,758,613.

Heat/Fuel Oil: The East End treatment plant converted from fuel oil to natural gas in 2012. Fuel costs at PWD facilities and pump stations are increasing, again, largely driven by inflationary and market driven fuel cost increases. For 2023, the budget has increased by 33.7% or \$59,637 as the cost of energy is expected to increase.

Purchased Power: Through PWD's efforts to develop competitive energy contracts, this budget area has remained relatively stable. The power budget has been increased by only \$9,255 or 0.6% in the 2023 budget.

Wastewater Services: Total

Financial Summary:

Column 1	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
B1 - Wastewater Administration	\$408,746	\$215,900	\$413,535	\$461,839	\$48,304	11.7%
B3 - Wastewater Treatment	7,782,970	4,188,001	8,159,545	10,187,724	2,028,179	24.9%
L9 - Wastewater Systems	2,940,654	1,459,392	3,004,487	3,195,470	190,983	6.4%
Grand Total	11,132,370	5,863,293	11,577,567	13,845,033	2,267,466	19.6%
Expense Type:						
Salaries & Wages	\$2,487,707	\$1,246,316	\$2,651,925	\$2,984,571	\$332,646	12.5%
Employee Benefits	1,183,277	537,426	1,165,242	1,339,801	174,559	15.0%
Biosolids Disposal	2,275,184	1,132,548	2,333,500	3,444,636	1,111,136	47.6%
Chemicals	816,338	518,224	818,246	1,249,779	431,533	52.7%
Contracted Services	1,618,804	812,274	1,453,105	1,758,613	305,508	21.0%
Heat/Fuel Oil	170,831	146,153	177,177	236,814	59,637	33.7%
Insurance	60,256	32,718	65,250	70,959	5,709	8.7%
Materials & Supplies	484,668	354,822	475,340	521,102	45,762	9.6%
Other Expense	18,046	38,587	67,805	60,130	-7,675	-11.3%
Purchased Power	1,497,465	779,801	1,596,832	1,606,087	9,255	0.6%
Regulatory/Taxes	60,871	11,179	275,550	46,630	-228,920	-83.1%
Tele/Other Utilities	223,066	127,998	222,444	233,453	11,009	4.9%
Transportation	235,857	125,247	275,151	292,458	17,307	6.3%
Grand Total	11,132,370	5,863,293	11,577,567	13,845,033	2,267,466	19.6%
Headcount:						
Full Time	39	39	39	39	0	0.0%
Part Time	0	0	0	0	0	n/a
Total	39	39	39	39	0	0.0%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$425,092	\$226,918	\$437,964	\$486,161	\$48,197	11.0%
660121 - WAGES/REGULAR UNION	1,834,303	890,691	1,979,113	2,187,512	208,399	10.5%
660122 - WAGES/OVERTIME UNION	149,847	78,582	124,886	175,153	50,267	40.3%
660123 - WAGES/DOUBLETIME UNION	32,530	19,230	28,372	42,710	14,338	50.5%
660124 - WAGES/STANDBY TIME UNION	61,249	30,895	70,430	77,885	7,455	10.6%
660131 - WAGES - REGULAR - TEMPS	-	-	11,160	12,960	1,800	16.1%
66014 - VACATION ACCRUAL	(17,325)	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	2,011	-	-	-	-	n/a
660126 - SHIFT DIFF - NIGHT	-	-	-	2,190	2,190	n/a
Salaries & Wages Total	2,487,707	1,246,316	2,651,925	2,984,571	332,646	12.5%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	194,368	94,424	202,874	228,320	5,183	2.6%
660405 - SAFETY/WHY PROGRAM ITEMS	14,090	2,376	7,770	8,000	1,470	23.3%
660411 - MEALS ALLOWANCE	480	180	450	450	-	0.0%
660418 - STIPENDS	3,000	2,500	3,200	2,600	(90)	-100.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	11,802	554	3,697	2,400	(700)	-17.9%
660491 - FRINGE BENEFITS-REG/SAL	959,537	437,392	947,251	1,098,031	1,597	76.0%
Employee Benefits Total	1,183,277	537,426	1,165,242	1,339,801	174,559	15.0%
Biosolids Disposal						
663571 - BIOSOLIDS DISPOSAL	2,275,184	1,132,548	2,333,500	3,444,636	1,111,136	47.6%
Biosolids Disposal Total	2,275,184	1,132,548	2,333,500	3,444,636	1,111,136	47.6%
Chemicals						
661811 - SODIUM BICARBONATE	21,913	13,561	17,758	24,759	7,001	39.4%
661812 - SODIUM BISULFITE	105,248	53,280	157,216	184,537	27,321	17.4%
66182 - CAUSTIC SODA	8,790	3,548	6,240	9,665	3,425	54.9%
66185 - SODIUM HYPOCHLORITE	331,569	170,225	289,821	577,062	287,241	99.1%
66189 - POLYMER	343,207	271,456	335,073	441,618	106,545	31.8%
661899 - OTHER CHEMICALS	5,611	6,154	12,138	12,138	-	0.0%
Chemicals Total	816,338	518,224	818,246	1,249,779	431,533	52.7%
Contracted Services						
6631 - ENGINEERING SERVICES	32,093	23,758	65,000	65,000	-	0.0%
663521 - TRAFFIC CONTROL	-	132	800	800	-	0.0%
6635221 - PAVING - MINOR REPAIR	3,043	-	-	-	-	n/a
663525 - CONTRACTOR CONSTRUCTION	130,895	5,458	57,000	57,000	-	0.0%
66353 - REPAIR SERVICES	146,424	69,725	90,500	166,500	76,000	84.0%
66354 - MAINTENANCE SERVICES	398,232	222,370	289,906	424,458	134,552	46.4%
663543 - CSO FLOW MONITORING	141,751	83,379	154,000	154,000	-	0.0%
663544 - MAINT SERVICES - CCTV	51,550	2,088	61,250	61,250	-	0.0%
663546 - MAINTENANCE - SNOW REMOVL	52,247	25,583	58,808	62,843	4,035	6.9%
663547 - WASTE SLUDGE TRANSPORT	40,085	18,667	34,200	42,500	8,300	24.3%
663551 - LAB ANALYSIS	34,360	-	3,200	3,200	-	0.0%
663561 - COMPUTER LICENSES	40,516	41,154	41,366	49,224	7,858	19.0%
663562 - COMPUTER MAINTENANCE	565	420	-	-	-	n/a
663572 - GRIT & SCREENS DISPOSAL	27,545	20,565	65,650	58,500	(7,150)	-10.9%
663573 - GREASE DISPOSAL	26,410	43,306	30,200	34,200	4,000	13.2%
663574 - DISPOSAL SERVICES	21,144	8,230	8,525	13,440	4,915	57.7%
663585 - TREATMENT CONTRACT SERVIC	466,427	242,810	485,620	556,600	70,980	14.6%
6635851 - WW DEWATERING SERVICES	4,271	3,020	6,080	7,878	1,798	29.6%
6635852 - WW DEWATERING SRVS CRED	(4,271)	(3,020)	(3,600)	(4,300)	(700)	19.4%
663587 - COURIER SERVICES	4,409	1,806	4,600	5,520	920	20.0%
663588 - EQUIPMENT MAINTENANCE	-	2,361	-	-	-	n/a
663599 - MISC OTHER SERVICES	228	-	-	-	-	n/a
6636 - TECHNICAL SERVICES	880	462	-	-	-	n/a
Contracted Services Total	1,618,804	812,274	1,453,105	1,758,613	305,508	21.0%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Heat/Fuel Oil						
66161 - HEATING OIL	\$28,170	\$26,575	\$34,226	\$52,478	\$18,252	53.3%
661621 - PIPELINE DELIVERED PROPAN	81,529	76,724	82,973	106,107	23,134	27.9%
661622 - CONTAINER DELIVERED	61,132	42,854	59,428	77,679	18,251	30.7%
66166 - UNLEADED GAS	-	-	550	550	-	0.0%
Heat/Fuel Oil Total	170,831	146,153	177,177	236,814	59,637	33.7%
Insurance						
66599 - PROPERTY & BOILER INSUR	60,256	32,718	65,250	70,959	5,709	8.7%
Insurance Total	60,256	32,718	65,250	70,959	5,709	8.7%
Materials & Supplies						
6619 - ASSET PURCHASES	98,351	76,237	131,000	139,000	8,000	6.1%
66202 - TOOLS	15,493	7,713	10,700	15,200	4,500	42.1%
66203 - VENDOR PURCHASED SUPPLIES	198,424	119,383	183,341	177,414	(5,927)	-3.2%
662041 - MATERIALS INVENTORY	44,726	39,063	52,300	50,350	(1,950)	-3.7%
662042 - SUPPLIES INVENTORY	57,492	28,775	37,525	43,075	5,550	14.8%
66204201 - INVENTORY - QPR	59	-	-	-	-	n/a
662043 - TOOL INVENTORY	20,994	11,867	17,225	18,825	1,600	9.3%
66204303 - INVENTORY-COMPUTER EQUIP	1,268	-	500	500	-	0.0%
662046 - HYDRANT INVENTORY	-	-	-	-	-	n/a
662047 - GARAGE INVENTORY	2,076	2,545	2,225	2,325	100	4.5%
66205 - CONSUMABLE SUPPLIES	1,648	-	650	400	(250)	-38.5%
66206 - COMPUTER RELATED EQUIP	2,591	2,193	9,874	7,013	(2,861)	-29.0%
66207 - EQUIPMENT PARTS	41,546	67,046	30,000	67,000	37,000	123.3%
Materials & Supplies Total	484,668	354,822	475,340	521,102	45,762	9.6%
Other Expense						
6642 - EQUIPMENT RENT	(4,853)	1,690	2,250	2,750	500	22.2%
66609 - OTHER ADVERTISING	-	696	350	350	-	0.0%
6675111 - INSTATE TRAINING/CONF	13,845	5,812	24,300	24,300	-	0.0%
6675112 - OUT OF STATE TRAINING/CON	20	4,172	12,950	15,500	2,550	19.7%
667513 - DUES	11,491	11,707	12,800	12,300	(500)	-3.9%
667514 - PROFESSIONAL LICENSES	4,382	1,025	2,600	2,600	-	0.0%
667515 - PERIODICAL SUBSCRIPTIONS	415	295	450	450	-	0.0%
667517 - PLANT OPER LICENSE FEES	-	-	150	150	-	0.0%
667521 - POSTAGE - THIRD PARTY	47	-	75	75	-	0.0%
667522 - POSTAGE - INTERNAL	-	-	100	100	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	-	36	400	175	(225)	-56.3%
667533 - FORMS STOCK	-	-	400	750	350	87.5%
667552 - SAFETY TRAINING	-	-	1,600	1,600	-	0.0%
667555 - SAFETY EXPENSES	7,433	9,285	33,050	22,900	(10,150)	-30.7%
667581 - ANNUAL LAND CONTRIB CAPE	-	4,000	-	-	-	n/a
667592 - FOOD SUPPLIES	885	66	900	700	(200)	-22.2%
667599 - OTHER MISCELLANEOUS	7,471	12,088	-	-	-	n/a
6676 - EXPENSE OFFSET	(24,570)	(12,285)	(24,570)	(24,570)	-	0.0%
667511 - TRAINING & CONFERNCES	1,480	-	-	-	-	n/a
Other Expense Total	18,046	38,587	67,805	60,130	(7,675)	-11.3%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Purchased Power						
66151 - POWER - LARGE ENERGY	\$510,184	\$255,383	\$475,934	\$592,917	\$116,983	24.6%
66152 - POWER - LARGE T&D	453,499	235,393	516,862	459,849	(57,013)	-11.0%
66153 - POWER - MEDIUM ENERGY	248,645	128,923	240,605	235,727	(4,878)	-2.0%
66154 - POWER - MEDIUM T&D	198,115	103,326	249,211	207,827	(41,384)	-16.6%
66155 - POWER - SMALL ENERGY	37,221	22,435	44,565	42,408	(2,157)	-4.8%
66156 - POWER - SMALL T&D	50,083	34,605	69,855	67,859	(1,996)	-2.9%
66158 - LOAD RESPONSE	(282)	(265)	(200)	(500)	(300)	150.0%
Purchased Power Total	1,497,465	779,800	1,596,832	1,606,087	9,255	0.6%
Regulatory/Taxes						
667516 - PERMITS	37,846	10,479	28,200	32,080	3,880	13.8%
667518 - REGULATORY REQUIRED FEES	22,800	400	247,350	14,550	(232,800)	-94.1%
667519 - REGULATORY FINES	225	300	-	-	-	n/a
Regulatory/Taxes Total	60,871	11,179	275,550	46,630	(228,920)	-83.1%
Tele/Other Utilities						
66101 - WATER	88,994	62,271	89,175	88,818	(357)	-0.4%
66102 - WASTEWATER	72,466	30,298	72,312	74,417	2,105	2.9%
66103 - STORMWATER CHARGES	20,007	10,122	20,185	22,186	2,001	9.9%
66111 - TELEPHONE LINES	345	2,070	-	4,140	4,140	n/a
66112 - DATA LINES	34,023	20,703	34,392	36,132	1,740	5.1%
66113 - CELLULAR PHONES	7,231	2,534	6,180	7,560	1,380	22.3%
66114 - PAGERS	-	-	200	200	-	0.0%
Tele/Other Utilities Total	223,066	127,998	222,444	233,453	11,009	4.9%
Transportation						
66501 - TRANSPORTATION - INTERNAL	130,489	75,213	174,042	197,467	23,425	13.5%
665019 - TRANS INTERNAL INACTIVE	84,760	42,064	82,808	78,426	(4,382)	-5.3%
66502 - TRANSPORTATION - EXTERNAL	19,856	6,961	16,376	14,540	(1,836)	-11.2%
66503 - MILEAGE REIMBURSEMENT	752	1,009	1,925	2,025	100	5.2%
Transportation Total	235,857	125,247	275,151	292,458	17,307	6.3%
Grand Total	11,132,370	5,863,293	11,577,567	13,845,033	2,267,466	19.6%

Wastewater Services: Wastewater Administration (B1)

Financial Summary:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$250,401	\$136,500	\$263,225	\$292,448	\$29,223	11.1%
Employee Benefits	137,056	64,162	125,194	144,475	19,281	15.4%
Contracted Services	14	0	500	500	0	0.0%
Materials & Supplies	5,041	154	1,250	1,050	-200	-16.0%
Other Expense	14,175	14,146	21,250	21,250	0	0.0%
Tele/Other Utilities	2,059	733	1,416	1,416	0	0.0%
Transportation	0	205	700	700	0	0.0%
Grand Total	408,746	215,900	413,535	461,839	48,304	11.7%
Programs:						
98 - Training	\$5,679	\$10,484	\$23,864	\$25,727	\$1,863	7.8%
99 - Administration	403,067	205,416	389,671	436,112	46,441	11.9%
Grand Total	408,746	215,900	413,535	461,839	48,304	11.7%
Funds:						
10 - General	\$0	\$150	\$0	\$0	\$0	n/a
50 - Wastewater General	408,746	215,750	413,535	461,839	48,304	11.7%
Grand Total	408,746	215,900	413,535	461,839	48,304	11.7%
Headcount:						
Full-Time	3	3	3	3	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	3	3	3	3	0	0.0%

Wastewater Services: Wastewater Treatment Plants (B3)

Financial Summary:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$1,416,765	\$719,277	\$1,518,218	\$1,725,442	\$207,224	13.6%
Employee Benefits	661,379	300,896	656,411	753,826	97,415	14.8%
Biosolids Disposal	2,275,184	1,132,548	2,333,500	3,444,636	1,111,136	47.6%
Chemicals	810,728	512,070	806,108	1,237,641	431,533	53.5%
Contracted Services	804,260	456,820	789,247	1,040,088	250,841	31.8%
Heat/Fuel Oil	152,496	130,917	154,736	210,945	56,209	36.3%
Insurance	32,885	16,752	35,947	37,693	1,746	4.9%
Materials & Supplies	335,657	253,606	332,075	376,936	44,861	13.5%
Other Expense	-3,041	13,230	25,455	17,780	-7,675	-30.2%
Purchased Power	1,015,364	508,604	1,018,594	1,072,889	54,295	5.3%
Regulatory/Taxes	58,330	11,179	273,450	44,430	-229,020	-83.8%
Tele/Other Utilities	142,982	94,577	137,931	146,905	8,974	6.5%
Transportation	79,981	37,525	77,873	78,513	640	0.8%
Grand Total	7,782,970	4,188,001	8,159,545	10,187,724	2,028,179	24.9%
Programs:						
44 - WW Pumping	\$11,265	\$2,359	\$3,885	\$8,102	\$4,217	108.5%
45 - WW Treatment	7,224,489	3,938,463	7,646,622	9,585,845	1,939,223	25.4%
47 - Septage Pumping	316	0	0	0	0	n/a
98 - Training	111,549	60,880	103,027	123,568	20,541	19.9%
99 - Administration	435,351	186,299	406,011	470,209	64,198	15.8%
Grand Total	7,782,970	4,188,001	8,159,545	10,187,724	2,028,179	24.9%
Funds:						
20 - Water General	\$316	\$0	\$0	\$0	\$0	n/a
50 - Wastewater General	546,900	247,076	509,038	593,777	84,739	16.6%
51 - WW Cape Elizabeth	520,258	280,989	587,633	687,303	99,670	17.0%
57 - WW Portland	5,275,461	2,819,207	5,534,725	6,965,550	1,430,825	25.9%
62 - WW Westbrook	363	465	1,240	920	-320	-25.8%
64 - WW Joint Westbrook	1,228,541	720,460	1,263,358	1,639,576	376,218	29.8%
65 - WW Joint LF	465	68	0	0	0	n/a
66 - WW Peaks Island	210,666	119,736	263,551	300,598	37,047	14.1%
Grand Total	7,782,970	4,188,001	8,159,545	10,187,724	2,028,179	24.9%
Headcount:						
Full-Time	23	23	23	23	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	23	23	23	23	0	0.0%

Wastewater Services: Wastewater Systems (L9)

Financial Summary:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$820,541	\$390,540	\$870,482	\$966,681	\$96,199	11.1%
Employee Benefits	384,842	172,368	383,637	441,500	57,863	15.1%
Chemicals	5,611	6,154	12,138	12,138	0	0.0%
Contracted Services	814,531	355,453	663,358	718,025	54,667	8.2%
Heat/Fuel Oil	18,335	15,236	22,441	25,869	3,428	15.3%
Insurance	27,371	15,966	29,303	33,266	3,963	13.5%
Materials & Supplies	143,971	101,063	142,015	143,116	1,101	0.8%
Other Expense	6,912	11,212	21,100	21,100	0	0.0%
Purchased Power	482,100	271,196	578,238	533,198	-45,040	-7.8%
Regulatory/Taxes	2,540	0	2,100	2,200	100	4.8%
Tele/Other Utilities	78,025	32,687	83,097	85,132	2,035	2.4%
Transportation	155,875	87,517	196,578	213,245	16,667	8.5%
Grand Total	2,940,654	1,459,392	3,004,487	3,195,470	190,983	6.4%
Programs:						
41 - Pretreatment	\$23,195	\$6,337	\$37,781	\$37,103	-\$678	-1.8%
44 - WW Pumping	2,075,571	1,063,803	2,175,589	2,257,911	82,322	3.8%
45 - WW Treatment	229,340	111,098	241,402	284,500	43,098	17.9%
46 - Cso'S	0	513	0	0	0	n/a
90 - Vehicles	34,199	12,114	36,537	36,111	-426	-1.2%
95 - Douglass Street	22,297	14,327	21,138	25,502	4,364	20.6%
98 - Training	46,341	19,083	66,878	76,486	9,608	14.4%
99 - Administration	509,711	232,117	425,162	477,857	52,695	12.4%
Grand Total	2,940,654	1,459,392	3,004,487	3,195,470	190,983	6.4%
Funds:						
10 - General	\$40,471	\$20,350	\$31,513	\$36,677	\$5,164	16.4%
20 - Water General	1,215	1,686	5,014	4,694	-320	-6.4%
50 - Wastewater General	606,839	278,794	556,746	620,090	63,344	11.4%
51 - WW Cape Elizabeth	322,676	158,020	354,798	386,145	31,347	8.8%
53 - WW Cumberland	453,121	243,624	414,726	479,610	64,884	15.6%
55 - WW Windham LF	32,471	13,530	45,781	44,328	-1,453	-3.2%
57 - WW Portland	889,325	440,452	866,589	886,448	19,859	2.3%
61 - WW Gorham	250,790	97,710	207,064	226,090	19,026	9.2%
62 - WW Westbrook	127,446	90,478	193,748	183,717	-10,031	-5.2%
64 - WW Joint Westbrook	122,669	57,691	160,845	155,639	-5,206	-3.2%
65 - WW Joint LF	52,712	29,509	87,189	86,974	-215	-0.2%
66 - WW Peaks Island	40,919	27,548	80,474	85,058	4,584	5.7%
Grand Total	2,940,654	1,459,392	3,004,487	3,195,470	190,983	6.4%
Headcount:						
Full-Time	13	13	13	13	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	13	13	13	13	0	0.0%

Environmental Services



After 20 years on the water, we retired our Sebago Lake patrol boat after the 2021 season. In 2022, it was replaced with a 25' SafeBoat Coast Guard Defender series (shown above). This new boat provides a much more stable and safe platform for District employees to conduct water sampling, lake patrols, and to assist area First Responders in rough lake conditions.

Environmental Services – Purpose Statement

Environmental Services is organized to monitor and protect water quality from watershed to tap and wastewater from collection to discharge.

Core Services

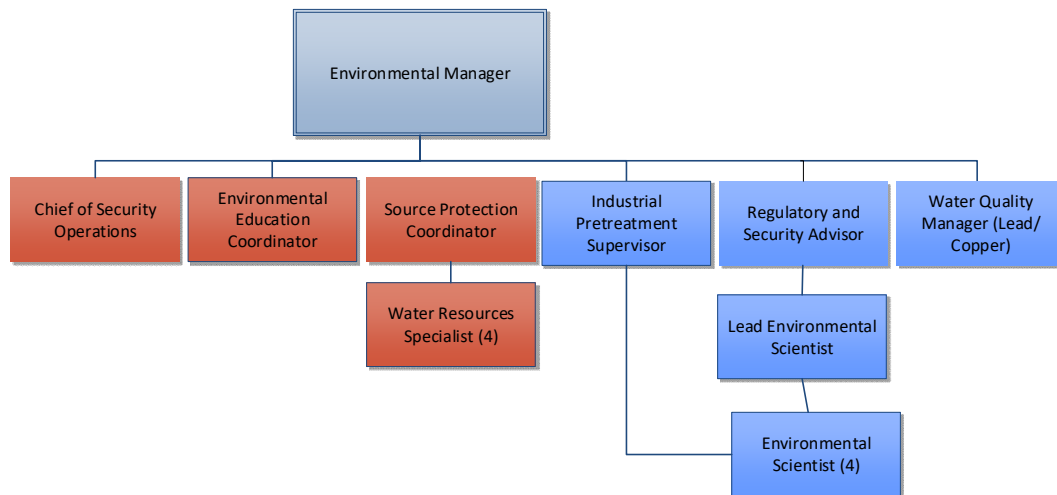
Environmental Services has six core areas of focus:

Water Resources Group (A5; red in the organization chart)

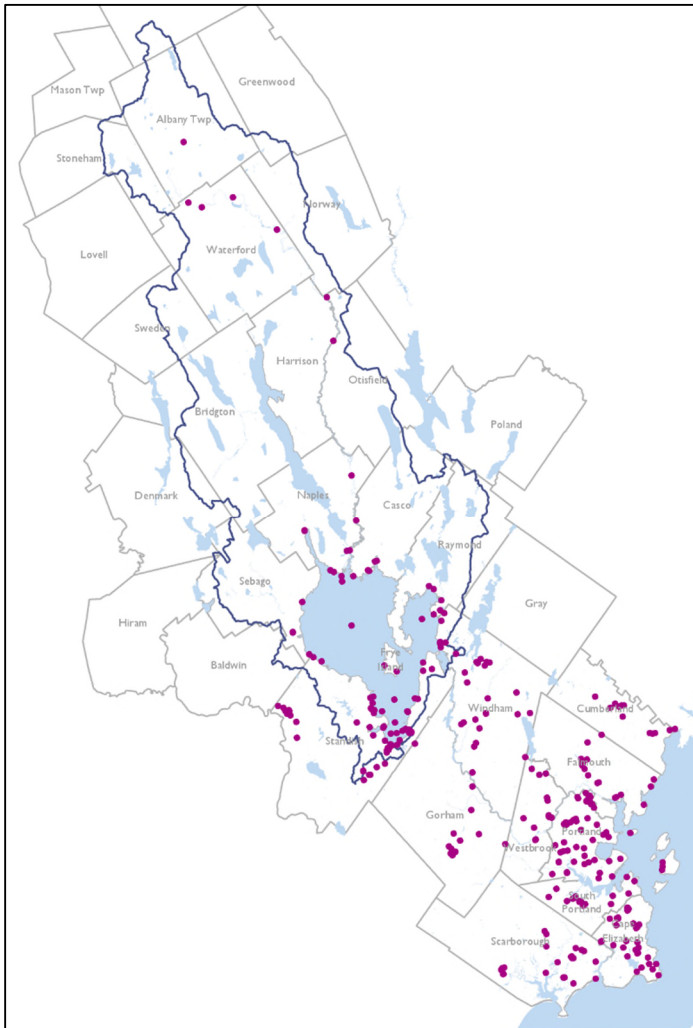
1. The Source Protection section monitors Sebago Lake and the watershed, inspects development projects in the watershed to minimize their impact, works with watershed partners to install pollution prevention and mitigation projects, and works with watershed land trusts to help landowners seeking to conserve their land in perpetuity.
2. The Environmental Education & Outreach section communicates water quality and environmental principles to children and adults throughout the watershed and service area with the goal of encouraging public stewardship of our water resources.
3. The Security section provides for the daily protection of Sebago Lake by patrolling Lower Bay and enforcing the rules of access to the Sebago Lake Land Reserve and also coordinates the District’s Preparedness and Emergency Response activities.

Laboratory Services Group (L6; blue in organization chart)

4. The Environmental Laboratories ensure the proper collection, analysis and reporting of water, wastewater and biosolids samples both for compliance purposes and to support the proper functioning of water and wastewater operations.
5. The Industrial Pretreatment Program (IPT) staff are responsible for permitting, monitoring and initiating enforcement actions for sewer customers who discharge significant quantities of non-domestic wastewater to the sewer collection system. The IPT programs are designed to ensure discharges from industrial users do not impact District operations or pollute the Presumpscot River or Casco Bay.
6. The Lead and Copper Program, new in 2022-23, is organized to comply with the new Lead and Copper Rule Revisions (LCRR) which require a 5+ year dedicated effort to identify and replace lead service line components if they exist.



Key Statistics



Watershed Monitoring Programs:	10
Annual Watershed Inspections:	400
Individuals reached through Education and Outreach programs:	> 13,000 annually
Land Reserve Visitors:	18,908
Land Reserve Violations Issued:	461
Annual Lower Bay Patrol Hours:	2100
Annual Lower Bay Violators Cited:	79
Accredited Laboratory Analytes:	71
Average Annual Number of customer Water Quality Inquiries:	220
IPT Industries Regulated:	42

A map illustrating all of the District’s drinking water quality sampling locations from watershed to tap.

Performance Benchmarks

Annual Program Metrics – Environmental Services	2021 Actual	2022 Projected	2023 Projected
% Verified - Water Quality Inquiries	28	25	25
Shore Land Zone Inspections	409	475	475
Watershed Properties Improved or Recommendations Made	28	23	25
Lower Bay Water Violations	62	35	100
Land Reserve Visitors	>30,000 est. *	>30,000 est. *	>30,000
Land Reserve Violations	97	500	250
Visitors per Land Reserve Violation	309	60	120
Accredited Laboratory Tests	68	71	71
Students Served by WaterWays Program	1000	1000	1000
Outreach Events and Presentations	22	12	25
Industrial Pretreatment Notices of Violation Issued	42	50	50

Environmental Services By the Numbers:

Source Protection since 2000:

- Completed more than **11,000** watershed inspections.
- Provided Lakescaping Reports to **568** watershed property owners.
- Financially supported water quality-related improvements on **266** properties.
- Awarded more than **\$311,307** in Lakescaping Grants which, when combined with matching funds, resulted in more than **\$1,395,273** in improvements to the shoreland zone of Sebago Lake.
- Maintained **10** ongoing lake and watershed monitoring programs.
- Reviewed plans for more than **178** large developments and, when necessary, provided planning board feedback in an effort to minimize the impact of these projects.
- Responded to **578** complaints, **315** of which prevented or mitigated environmental violations and/or pollution.
- Contributed more than **\$1,406,357** to assist in the conservation by area land trusts of **13,630** acres of land in the watershed.

Education and Outreach since 2000:

- Produced **35** Watershed News newsletters and **5** State of the Lake reports.
- Distributed more than **72,000** Sebago Lake maps and **19,000** “Images of Sebago Lake” calendars to watershed residents and visitors.
- Distributed more than **60,000** other types of brochures and fact sheets to watershed residents and visitors.
- Posted over **600** environmental services related messages on Facebook to an audience that began at **490** followers in 2013 and has increased to over **2,900** followers today.
- Sent **67** mass emails about source protection events, publications, and information to a recipient list that started in 2014 with **1,100** email addresses and has increased to over **3,700** today.
- Taught source protection principles to approximately **21,000** middle school-aged students through our HydroLogics and WaterWays in-school education programs.
- Provided environmental education to **tens of thousands** of additional children, teachers, and adults through tours, events, workshops, field trips, lessons, loaned resources, and programs.

Water Resources Security since 2005:

- Patrolled Lower Bay by boat and attended the Standish Boat Launch for approximately **25,000** hours combined.
- Patrolled the Sebago Lake Land Reserve by using an all-terrain vehicle (Extended Security patrol) for approximately **1,590** hours combined.
- Issued more than **2,294** warnings for violation of water contact regulations
- Recorded more than **234,358** day-use visits to the Sebago Lake Land Reserve.
- Issued more than **4,574** warnings for violation of Land Reserve Rules.
- Suspended privileges to visit Land Reserve of **42** individuals for aggravated or multiple Land Reserve Rule violations.

By the Numbers (continued)

Environmental Laboratories since 2000:

- Combined the water and wastewater laboratories into one functioning unit with shared resources, staff, and expertise.
- Consolidated to East End laboratory the daily wastewater analyses for the four wastewater treatment facilities in order to improve consistency and reduce duplication of quality control requirements.
- Modified laboratory procedures as needed to meet evolving EPA and state standards to maintain accreditation for water and wastewater analyses.
- Consistently analyzed performance testing samples properly to maintain accreditation. Presently accredited for **71** tests.
- Managed the customer water quality inquiry process to ensure prompt and consistent response by appropriate staff.
- Contributed to the protection of public health by participating in the Maine Healthy Beaches program.
- Supported water and wastewater operations by providing accurate and timely water and wastewater quality data.
- Provided training in water quality and environmental regulation to District staff in all departments.
- Introduced new Environmental Scientist 1 position to provide upward mobility and retention of good employees who might otherwise stagnate and leave the PWD.

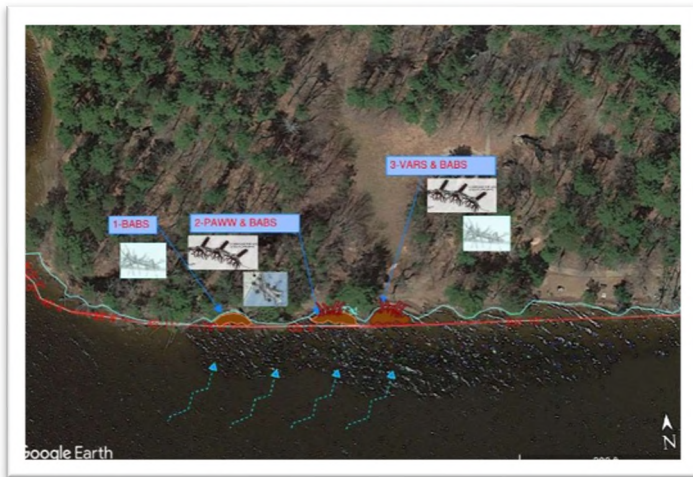
Industrial Pretreatment since 2010:

- Accomplished the adoption of local limits on Portland and Westbrook industrial dischargers each time facility permits were renewed.
- Created, implemented and updated Industrial Waste Surveys of the Portland, Westbrook-Gorham-Windham, Cape Elizabeth and Peaks Island systems to identify IPT industries.
- Managed all aspects of the Portland and Westbrook-Gorham IPT programs since 2018.
- Received 2015 Regional EPA Industrial Pretreatment Program Excellence Award.
- Implemented the new Dental Amalgam Rule by collecting one-time certification forms from more than **60** area dentists.
- Held two outreach events to connect to industrial pretreatment customers (one in Westbrook, one in Portland).
- Coordinated with **9** industrial users to solve chronic discharge issues by modifying and upgrading pretreatment or sampling.
- Created periodic e-newsletter on IPT topics. Three issues have been sent so far.

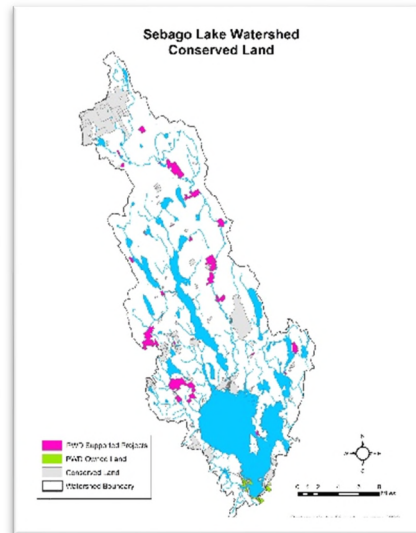
Budget Year 2022 Highlights:

- Finalized negotiations with the Natural Resources Conservation Service on a 5-year RCPP award and began using funds to accomplish natural resources goals in the Sebago Lake watershed and help fund the conservation of watershed forests.
- Continued implementation of the Sebago Lake Phase IV utilizing federal 319 grant funds to improve eroding sites around Sebago Lake, reducing the input of phosphorus and protecting water quality.
- Completed a forest management plan that will guide forestry operations and land management of the District's watershed protection lands surrounding our intakes in Sebago Lake.
- Continued implementation of a living shoreline approach to beach stabilization at the Sebago Lake State Park.
- Worked with the Town of Standish and the Maine Department of Environmental Protection on a vegetation management plan to maintain the view at the Standish Overlook on Route 35.
- Co-hosted the fourth annual Woodland Owner Appreciation Day providing a chance for watershed woodland owners to meet with natural resources professionals to help them meet with their forest management goals.
- Deployed and maintained the real-time water quality monitoring buoy in Lower Bay after pandemic-related dormancy.
- Represented the District on the Cumberland District Public Health Council.
- Provided laboratory support to the Maine Healthy Beach Program by testing East End beach for bacteria throughout the summer.
- Created and distributed one issue of the *Sebago In Depth* newsletter.
- Continued outreach in the Sebago Lake watershed by coordinating efforts with Sebago Clean Waters partner organizations.
- Expanded the partnership with Cumberland County Soil & Water Conservation District (CCSWCD) to deliver the District's WaterWays lessons in area schools.
- Partnered with Sebago Clean Waters to negotiate and sign the first Supplemental Agreement under the Regional Conservation Partnership Program award.
- Completed annual updates to the PWD Incident Management Plan and Water Emergency Response Plan.
- Renewed all expiring Industrial Pretreatment permits on time. In 2022, 7% of all IPT permits expired and were renewed.
- Completed an Industrial Waste Survey of Cape Elizabeth system businesses and continue to follow-up on those that might require regulation via the IPT Program.
- Issued permits to four new industrial users, all in the Portland program.
- Published two issues of IPT e-newsletter.
- Completed a project migrating drinking water compliance data submittal to the new Compliance Monitoring Data Portal (CMDP) as prescribed by the Maine Drinking Water Program
- Completed second full year of reporting biosolids metals utilizing the MeDEP required Electronic Data Deliverable (EDD) format.

2022 Environmental Services Highlights



Continued partnership with the Sebago Lake State Park to install a shoreline stabilization and beach aggradation project on one of the most prolific eroding beaches on Sebago Lake.



Finalized negotiations and began implementation of an \$8M RCPP award from the federal Natural Resources Conservation Service.



Completed a Forest Management Plan that will help guide forest management of nearly 2500 acres of District-owned watershed protection lands surrounding our intakes in Sebago Lake.



Co-hosted the fourth annual Woodland Owner Appreciation Day providing a chance for watershed woodland owners to meet with natural resources professionals to help meet their forest management goals.



Published two more issues of a periodic informational e-newsletter for IPT industries to aid them in regulatory compliance.



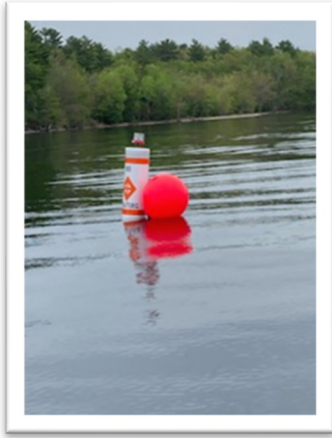
Continued to work with industrial users in significant non-compliance to upgrade pretreatment and infrastructure and to make process changes to address recent issues.



A sample floating sign platform was designed and placed at the apex of the 3,000' No Trespassing zone warning boaters of the restricted area near the District's raw water intakes.



Completed an Enterococcus bacteria monitoring project to position Wastewater Services for upcoming changes to discharge permits.



All 18 Lower Bay “No Boating” buoys were tethered to 32” bright red poli-balls. These poli-balls greatly enhance the visibility of the No Trespassing Zone which surround the District’s raw water intakes.



Distributed 300 rain barrels to continue the District’s long running rain barrel program.



Partnered with CCSWCD to deliver the District’s WaterWays lessons to students.



Created and distributed a new informational brochure for shorefront property owners.



Hired a Water Quality Program Manager to ensure the District’s full compliance with EPA’s LCRR.

2023 Projects and Initiatives

Source Protection

- Continue implementation of Sebago Lake Phase IV project, utilizing federal 319 grant funds to improve eroding sites around Sebago Lake, reducing the input of phosphorus and protecting water quality.
- Continue supporting the land conservation efforts of Sebago Clean Waters, including completing negotiations with NRCS and accomplishing RCPP deliverables including forest conservation.
- Work with the District’s forester to resume active management of District-owned watershed protection forests using the new Forest Management Plan to help guide operations and land management.
- Deploy and maintain the real-time water quality monitoring buoy in Lower Bay.
- Continue collaboration with the Town of Standish to influence successful management of the Rich Memorial Beach.
- Work with town Code Enforcement Officers to perform inspections of all property development in the shoreland zone of Sebago Lake.
- Provide technical assistance and grant funding for shoreland zone property owners, road associations and camps to improve storm water quality and mitigate soil erosion issues.
- Continue the 10 lake and watershed water quality monitoring programs, analyze the data, and produce and post useful water reports.
- Monitor planning board agendas, provide technical assistance, and track large-scale projects such as subdivision and commercial development within the Sebago Lake watershed.

Environmental Laboratories

- Maintain DHHS data quality requirements in each District laboratory for accreditation, ethics and data integrity.
- Continue training of new laboratory staff in regulatory requirements, chemical hygiene, and laboratory analytical techniques.
- Report on customer Water Quality Inquiries including those at dead end locations.
- Continue safety awareness and improvements through hazard analysis, Global Harmonized System secondary container labeling, chemical inventory procedures and coordinating District hazardous waste removal.
- Provide training to District staff to improve data quality and understanding of water quality issues.
- Represent the District at Cumberland County EMA and Cumberland District Public Health Council meetings.
- Provide compliance and operations support to Water Operations, Wastewater Operations, Industrial Pretreatment Programs, the Source Protection program, and Engineering Services.
- Participate in 2nd phase of Water Research Foundation Project 5156 – Occurrence of Legionella in Drinking Water Distribution Systems

Industrial Pretreatment

- Continue managing all aspects of the Westbrook-Gorham and Portland pretreatment programs.
- Renew all expiring Industrial Pretreatment permits.
- Continue collaboration efforts with the City of Portland on a general permit program for breweries and other alcoholic beverage producers.
- Continue active membership in the MEWEA Industrial Pretreatment Committee.

2023 Projects and Initiatives (cont'd)

- Provide periodic reports of IPT activity to the cities of Portland and Westbrook and the Town of Gorham.
- Continue periodic issues of the e-mail Industrial Pretreatment News to assist industries with compliance.
- Conduct an industrial waste survey (IWS) of the Peaks Island wastewater system.

District Security & Preparedness

- Patrol Lower Bay by boat during summer, ensuring compliance with body contact and trespassing restrictions.
- Patrol Sebago Lake Land Reserve year-round to ensure compliance with District land use policy.
- Implement recommendations of the Maine Forest Service to enhance efforts to mitigate fire risk.
- Provide field oversight of District logging operations and track documentation.
- Support local first responders as requested in response to Sebago Lake rescue incidents.
- Patrol Lower Bay during ice fishing season to minimize impact of activity on water quality.

Environmental Education and Outreach

- Implement the seventh year of WaterWays in watershed and service area schools through in-class lessons delivered by CCSWCD and loanable lesson kits maintained by PWD.
- If conditions permit, expand WaterWays into another school system by contracting with an educational organization.
- Continue to increase educational capacity through teacher grants and the creation and loaning of educational resources.
- Conduct outreach to towns and groups in the upper Sebago Lake watershed towns to increase forest conservation and awareness of Sebago Clean Waters.
- Work with Public Relations Manager and other departments to ensure environmental outreach efforts are consistent with company PR focus and department initiatives. Work to include more service area and wastewater initiatives.
- Collaborate with partners, coordinate events, and serve as a resource for watershed and service area schools and groups to teach source protection and water stewardship principles.
- Utilize technology and a variety of media to connect the public with PWD events and environmental stewardship messages.
- Recognize Drinking Water Week with District-sponsored initiatives for the public.
- Provide outreach materials to the public including maps, calendars, and brochures.
- Provide support to the Southern Maine Children's Water Festival if it is re-started after a Covid-related hiatus.

Lead & Copper Program

- Develop an LCRR action plan that establishes deadlines for the various compliance requirements of the Lead and Copper Rule Revisions (LCRR).
- Review lead service line data records and begin building the required inventory, possibly utilizing a consultant.
- Collaborate with several PWD departments to develop a data management plan for the LCRR inventory, including a public-facing interface.
- Prepare LCRR outreach materials for employees, customers, schools and childcare facilities.

2023 Grants to Watershed Partners			
2023 Proposed	Type	Recipient	Supports this Environmental Services Section
\$3,000	Water Education Grants	Educators in the service area and watershed	Environmental Education & Outreach
<i>Provides teaching resources to local teachers to support water education.</i>			
\$16,750	Lakescaping Grants	Watershed property owners, businesses	Source Protection
<i>Grants of up to \$1,000 are made to individual property owners and up to \$2,000 to businesses, associations, or municipalities for implementing erosion and sedimentation control BMPs based on our recommendations. A minimum 1:1 match is required.</i>			
\$1,000	Monitoring Equipment Support	Watershed Lake Associations	Source Protection
<i>Grants of up to \$500 to help fund the purchase of lake and tributary monitoring equipment for watershed lake associations to assist them in protecting lakes upstream of Sebago Lake.</i>			
\$1,250	Lake Protection Support	Maine Lakes Society	Source Protection
<i>A contribution of \$1,000 to Maine Lakes Society to support their operations and \$250 to support their annual conference. Their advocacy benefits all surface supplies including PWD.</i>			
\$1,250	Lake Protection Support	Lake Stewards of Maine	Source Protection
<i>A contribution of \$1,000 to Lake Stewards of Maine to support their operations and \$250 to support their annual conference. Their outreach raises awareness statewide to issues of lake protection, particularly invasive aquatic plants. They conduct training at PWD and for PWD employees on request.</i>			
\$15,000	Watershed Organization Support	Lakes Environmental Association	Environmental Education & Outreach, Source Protection
<i>LEA provides support for our upper watershed protection efforts. All lakes they work on ultimately flow to Sebago Lake. LEA monitors lake water quality and participates in the planning process in upper watershed towns to minimize development impact. LEA Staff provide technical assistance to lakefront landowners on BMPs for lake protection and compliance with shoreland zoning and the Natural Resources Protection Act. LEA also provides water-related education to area schools and operates the Lakes Science Center.</i>			
\$1,000	Watershed Organization Support	Raymond Waterways Protective Association	Environmental Education & Outreach, Source Protection
<i>RWPA works on invasive plant control, BMP installation, and does outreach via a newsletter. They work on 319 (erosion control) projects in the indirect watershed of Sebago Lake. They receive matching financial support from the town of Raymond as well as from grants and individual donors.</i>			
\$1,750	Land Trust Support	Loon Echo Land Trust	Source Protection
<i>The mission of Loon Echo Land Trust (LELT) is to conserve land in the towns of Denmark, Bridgton, Harrison, Naples, Casco, Sebago, and Raymond. LELT's service area encompasses 126,000 acres – nearly half - of the Sebago Lake watershed. As they make progress in pursuit of their mission, our water supply is better protected.</i>			

2023 Grants to Watershed Partners (Continued)			
2023 Proposed	Type	Recipient	Supports this Environmental Services Section
\$1,750	Land Trust Support	Western Foothills Land Trust	Source Protection
<i>The mission of the Western Foothills Land Trust (MFLT) is to conserve land in the towns of Otisfield, Norway, Bethel and Waterford, among others. WFLT's service area encompasses 54,000 acres – about 20% - of the Sebago Lake watershed. As they make progress in pursuit of their mission, our water supply is better protected.</i>			
\$1,750	Land Trust Support	Mahoosuc Land Trust	Source Protection
<i>The Mahoosuc Land Trust (MLT) is organized to conserve land in the towns of Norway, Waterford, and Albany township among others. Because the MLT service area is partly within the Sebago Lake watershed, helping them to conserve more lands will benefit the water supply.</i>			
\$500	Land Trust Support	Presumpscot Regional Land Trust	Source Protection
<i>The Presumpscot Regional Land Trust is organized to conserve land in the towns of Gorham, Gray, Standish, Westbrook, and Windham. As they work to conserve land in parts of the watershed towns of Windham and Standish, our water supply is better protected. They are also the stewards of the Sebago to the Sea Trail that passes through District property.</i>			
\$500	Maine Water Conference Support	U Maine Mitchell Center	Environmental Education & Outreach
<i>Our support mostly serves an outreach and public relations function, ensuring the District's name on promotional materials. The conference also provides an opportunity to attract Maine colleges and universities to conduct research on Sebago Lake.</i>			
\$800	Children's Water Festival	Southern Maine CWF Committee	Environmental Education & Outreach
<i>Our support serves an outreach purpose and also contributes to the educational goal of the event, which is raising student awareness of water and environmental issues.</i>			
\$2,000	Interpretive Signage	Upper Watershed Organizations	Environmental Education & Outreach
<i>Support for installing interpretative signage at trailheads to highlight the importance of forested lands and their connection to Sebago Lake.</i>			
\$48,300	Total Grant Support to Watershed Partners		

Industrial Pretreatment Programs

IPT programs were developed for the Portland and Westbrook sewer collection systems in order to shield the treatment works from industrial wastewater that may potentially disrupt proper treatment.



Barber Foods processes chicken entrees and appetizers from raw ingredients. Barber has two processing lines, each of which includes a vegetable oil fryer. They have operated since 1955, originally starting as a meat shop in Portland. The current facility has been permitted in the Portland IPT program since at least 2008.

The majority of the wastewater is generated by cleaning activities conducted in chicken production areas. Water is also used to clean the air scrubber unit, which helps prevent odors from escaping the plant. Barber’s wastewater is pretreated using screens (to remove solids) and a dissolved air flotation (DAF) system that effectively removes oil and grease prior to discharge to the sewer system. They discharge around 160,000 gallons of wastewater each day.

Barber uses over 63,000 HCF (19 million gallons) of water each year.

**Industrial Pretreatment Program
For the Year Ending December 31,2021**

	<u>Gorham</u>	<u>Portland</u>	<u>Westbrook</u>	<u>Windham</u>
<u>Revenue</u>	\$2,321	\$337,995	\$24,731	-
<u>Expense</u>				
Salaries	9,337	53,457	21,152	1,139
Benefits	4,722	26,924	10,642	577
Transportation	340	1,642	539	11
Lab Analysis	2,296	9,298	3,340	110
Other Expense	<u>640</u>	<u>2,599</u>	<u>1,128</u>	<u>92</u>
	17,335	93,920	36,801	1,929

2021 Net Income	(15,014)	244,075	(12,070)	1,929
2020 Net Income	(16,403)	206,722	(15,457)	(1,734)
2019 Net Income	(11,878)	279,020	(16,995)	(2,088)

Financial Overview:

A5: Water Resources

The 2023 A5 budget has an increase of 8.7 % over the 2022 budget.

- There is one fewer full-time position in A5. We removed the Environmental Educator position. The in-school education program (WaterWays) is being carried out partly by subcontracting with Cumberland County Soil and Water Conservation District and partly through an expansion of our loanable lesson resources for teachers.
- Increased fuel budget to \$30,000 from \$10,500 in 2022 both because the new boat has two motors that will use more fuel and because we expect the fuel cost will also be higher next year. We hope that costs will stabilize by next summer and we won't need this much money for fuel.
- Budgeted \$9,000 in A58420 tech maintenance for three floating 3000-foot floating raft signs to more clearly demarcate the No Trespassing zone.
- Increase the amount allocated for contracting with CCSWCD for education support. Total is now \$27,880 and they will be serving all of our WaterWays schools.
- Increased the amount budgeted for an education intern by \$6300 dollars. This increase reflects more hours and also a higher pay rate which is anticipated for all temporary (and permanent) positions next year. The increased hours will allow us to have adequate support for the Education and Outreach Coordinator for the entire school-year. This change is needed because we eliminated the Environmental Educator position.
- The budget for seasonal security staff is increased by \$7000 because of the expected increase in hourly pay rate to \$18.00 per hour.
- Increased by \$3000 the amount allocated for support to area land trusts and other watershed partners.
- Added \$3500 to the budget for propane to heat the Lake Office based on projected increased per-gallon cost.

L6: Environmental Laboratories

The 2023 L6 budget has an increase of 32% over the 2022 budget.

There is one additional full-time position in L6. In order to meet the requirements of the new Lead and Copper Rule Revisions, a new Lead and Copper Program was established and a position of Water Quality Program Manager was created to lead the effort. This position was assigned to the L6 budget as it will work closely with the lab staff. This cost of the additional position is partly offset by a reduction by one position in the A5 budget (see above).

- The LCRR Program was allocated \$184,755 for salary and fringes, program costs, travel, training, and, as needed, the cost of subcontracting for some of the service line inventory work.
- Based on permit cycle, fewer tests for Whole Effluent Toxicity will be required in 2023 so the allocation for laboratory analysis has been decreased accordingly.
- Increased the IPT lab analysis by \$1350 across three budget codes (L64157/L64162 and L64161) to account for anticipated increases in lab analysis costs and additional sites for sampling sites.

Conservation Land Acquired by Land Trusts with District Support				
Year	Projects	Acres	Amount of District Support	Total Value of Land Acquired in Fee or Easement
2008	1	350	\$5,000	\$100,000
2009	1	23	\$500	\$25,000
2010	1	60	\$10,000	\$1,500,000
2011	1	690	\$9,250	\$750,000
2012	2	116	\$6,900	\$297,000
2013	4	1,005	\$68,990	\$718,500
2014	4	1,301	\$346,443	\$2,410,000
2015	3	145	\$25,585	\$130,600
2017	3	124	\$19,220	\$175,000
2018	3	1,646	\$370,994	\$1,781,000
2019	2	47	\$17,190	\$143,000
2020	2	57	\$13,285	\$68,500
2021	1	7,700	\$497,000	\$3,800,000
2022	4	1,234	\$405,555*	\$2,275,000
Totals	32	14,498	\$1,795,912	\$14,173,600

*Support approved but projects not closed – final numbers subject to change

Environmental Services: Total

Financial Summary:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
A5 - Water Resources	\$1,070,504	\$493,449	\$1,261,212	\$1,371,016	\$109,804	8.7%
L6 - Water/WW Laboratory	899,247	462,701	930,399	1,229,054	298,655	32.1%
Grand Total	1,969,751	956,150	2,191,611	2,600,070	408,459	18.6%
Expense Type:						
Salaries & Wages	\$1,038,631	\$503,957	\$1,139,425	\$1,295,748	\$156,323	13.7%
Employee Benefits	501,629	224,166	510,399	603,126	92,727	18.2%
Chemicals	6,974	2,738	5,900	7,100	1,200	20.3%
Contracted Services	111,017	42,885	149,901	262,541	112,640	75.1%
Heat/Fuel Oil	14,722	7,649	14,000	37,012	23,012	164.4%
Insurance	2,677	2,585	2,761	3,212	451	16.3%
Materials & Supplies	110,427	65,189	118,972	128,260	9,288	7.8%
Other Expense	131,281	76,847	180,108	193,293	13,185	7.3%
Purchased Power	3,247	1,941	5,859	4,920	-939	-16.0%
Tele/Other Utilities	6,389	2,667	5,675	6,955	1,280	22.6%
Transportation	42,757	25,526	58,611	57,903	-708	-1.2%
Grand Total	1,969,751	956,150	2,191,611	2,600,070	408,459	18.6%
Headcount:						
Full Time	15	15	15	15	0	0.0%
Part Time	1	1	1	1	0	0.0%
Total	16	16	16	16	0	0.0%

Environmental Services: Total

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$447,154	\$234,263	\$467,663	\$613,964	\$146,301	31.3%
660121 - WAGES/REGULAR UNION	527,272	240,406	582,976	582,377	(599)	-0.1%
660122 - WAGES/OVERTIME UNION	16,629	7,855	25,154	21,503	(3,651)	-14.5%
660123 - WAGES/DOUBLETIME UNION	427	250	2,251	1,584	(667)	-29.6%
660131 - WAGES - REGULAR - TEMPS	45,977	19,445	61,381	76,320	14,939	24.3%
660132 - WAGES - OVERTIME- TEMPS	-	47	-	-	-	n/a
660136 - CONTRACTED - TEMP	5,310	1,691	-	-	-	n/a
66014 - VACATION ACCRUAL	(28)	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	(4,110)	-	-	-	-	n/a
Salaries & Wages Total	1,038,631	503,957	1,139,425	1,295,748	156,323	13.7%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	77,485	37,758	87,166	99,121	11,955	13.7%
660405 - SAFETY/WHY PROGRAM ITEMS	2,219	350	4,290	3,790	(500)	-11.7%
6604151 - FIELD UNIFORMS	1,257	1,200	1,200	1,200	-	0.0%
660418 - STIPENDS	1,700	1,400	1,600	1,600	-	0.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	8,553	-	4,400	6,100	1,700	38.6%
660491 - FRINGE BENEFITS-REG/SAL	410,415	183,458	411,743	491,315	79,572	19.3%
Employee Benefits Total	501,629	224,166	510,399	603,126	92,727	18.2%
Chemicals						
661899 - OTHER CHEMICALS	6,974	2,738	5,900	7,100	1,200	20.3%
Chemicals Total	6,974	2,738	5,900	7,100	1,200	20.3%
Contracted Services						
6631 - ENGINEERING SERVICES	-	-	-	75,000	75,000	n/a
66353 - REPAIR SERVICES	-	-	1,900	1,900	-	0.0%
66354 - MAINTENANCE SERVICES	46,986	21,370	48,116	48,956	840	1.7%
663546 - MAINTENANCE - SNOW REMOVL	7,400	2,833	11,000	12,000	1,000	9.1%
663551 - LAB ANALYSIS	32,012	7,123	34,635	38,085	3,450	10.0%
663553 - PHOTOGRAPHY SERVICES	800	-	600	1,500	900	150.0%
663561 - COMPUTER LICENSES	300	-	-	500	500	n/a
663562 - COMPUTER MAINTENANCE	1,399	-	-	-	-	n/a
663574 - DISPOSAL SERVICES	5,820	255	5,750	5,900	150	2.6%
663587 - COURIER SERVICES	2,205	903	2,300	2,760	460	20.0%
663599 - MISC OTHER SERVICES	1,473	1,800	-	1,500	1,500	n/a
6636 - TECHNICAL SERVICES	12,622	8,601	45,600	74,440	28,840	63.2%
Contracted Services Total	111,017	42,885	149,901	262,541	112,640	75.1%
Heat/Fuel Oil						
661622 - CONTAINER DELIVERED	6,050	5,918	3,500	7,012	3,512	100.3%
66166 - UNLEADED GAS	8,672	1,731	10,500	30,000	19,500	185.7%
Heat/Fuel Oil Total	14,722	7,649	14,000	37,012	23,012	164.4%
Insurance						
66599 - PROPERTY & BOILER INSUR	2,676	2,585	2,761	3,212	451	16.3%
Insurance Total	2,676	2,585	2,761	3,212	451	16.3%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Materials & Supplies						
6619 - ASSET PURCHASES	\$7,130	\$2,023	\$12,400	\$12,700	\$300	2.4%
66202 - TOOLS	1,176	68	2,000	2,200	200	10.0%
66203 - VENDOR PURCHASED SUPPLIES	10,893	9,178	11,850	14,250	2,400	20.3%
662042 - SUPPLIES INVENTORY	950	156	1,700	1,700	-	0.0%
662043 - TOOL INVENTORY	2,191	244	1,650	1,650	-	0.0%
66204302 - INVENTORY - PAPER	-	-	300	300	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	459	-	1,463	2,450	987	67.5%
662047 - GARAGE INVENTORY	5	-	100	100	-	0.0%
66205 - CONSUMABLE SUPPLIES	85,256	51,381	80,350	87,750	7,400	9.2%
66206 - COMPUTER RELATED EQUIP	2,367	2,139	7,159	4,160	(2,999)	-41.9%
663564 - COMPUTER-RELATED EQUIP	-	-	-	1,000	1,000	n/a
Materials & Supplies Total	110,427	65,189	118,972	128,260	9,288	7.8%
Other Expense						
66411 - INTERNAL RENTAL CHARGES	51,030	25,515	51,030	51,030	-	0.0%
6642 - EQUIPMENT RENT	-	-	300	300	-	0.0%
66601 - PUBLIC RELATIONS	1,019	-	4,700	4,700	-	0.0%
66609 - OTHER ADVERTISING	2,802	2,532	4,600	5,000	400	8.7%
6675111 - INSTATE TRAINING/CONF	2,472	1,316	5,300	4,300	(1,000)	-18.9%
6675112 - OUT OF STATE TRAINING/CON	195	-	6,650	5,450	(1,200)	-18.0%
667513 - DUES	18,132	17,282	21,603	21,788	185	0.9%
667514 - PROFESSIONAL LICENSES	5,031	420	1,275	5,175	3,900	305.9%
667515 - PERIODICAL SUBSCRIPTIONS	126	126	580	580	-	0.0%
667521 - POSTAGE - THIRD PARTY	1,735	674	3,900	4,100	200	5.1%
667522 - POSTAGE - INTERNAL	727	16	875	1,150	275	31.4%
667523 - POSTAGE - EXPRESS DELIVER	-	-	125	150	25	20.0%
667531 - PRINTING COSTS	17,095	7,407	30,600	34,700	4,100	13.4%
667555 - SAFETY EXPENSES	90	-	100	100	-	0.0%
667561 - WATERSHED GRANTS/SUPPORT	28,981	17,750	42,200	48,300	6,100	14.5%
667591 - UNIFORMS	1,471	1,367	2,300	2,300	-	0.0%
667592 - FOOD SUPPLIES	375	51	3,970	4,170	200	5.0%
667599 - OTHER MISCELLANEOUS	-	2,391	-	-	-	n/a
Other Expense Total	131,281	76,847	180,108	193,293	13,185	7.3%
Purchased Power						
66155 - POWER - SMALL ENERGY	1,534	823	2,508	2,132	(376)	-15.0%
66156 - POWER - SMALL T&D	1,713	1,118	3,351	2,788	(563)	-16.8%
Purchased Power Total	3,247	1,941	5,859	4,920	(939)	-16.0%
Tele/Other Utilities						
66101 - WATER	139	71	345	365	20	5.8%
66111 - TELEPHONE LINES	87	180	350	350	-	0.0%
66112 - DATA LINES	126	251	540	540	-	0.0%
66113 - CELLULAR PHONES	6,037	2,165	4,440	5,700	1,260	28.4%
Tele/Other Utilities Total	6,389	2,667	5,675	6,955	1,280	22.6%
Transportation						
66501 - TRANSPORTATION - INTERNAL	11,953	1,602	18,473	13,792	(4,681)	-25.3%
665019 - TRANS INTERNAL INACTIVE	26,419	17,832	20,588	26,821	6,233	30.3%
66503 - MILEAGE REIMBURSEMENT	4,385	2,342	12,050	9,790	(2,260)	-18.8%
665018 - TRANS - LAKE BOAT	-	3,750	7,500	7,500	-	0.0%
Transportation Total	42,757	25,526	58,611	57,903	(708)	-1.2%
Grand Total	1,969,750	956,150	2,191,611	2,600,070	408,459	18.6%

Environmental Services: Water Resources (A5)

Financial Summary:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$590,027	\$278,482	\$664,107	\$697,201	\$33,094	5.0%
Employee Benefits	279,776	120,645	293,140	315,373	22,233	7.6%
Contracted Services	59,707	15,621	92,386	115,446	23,060	25.0%
Heat/Fuel Oil	14,722	7,649	14,000	37,012	23,012	164.4%
Insurance	2,677	2,584	2,761	3,212	451	16.3%
Materials & Supplies	22,509	10,303	34,159	33,960	-199	-0.6%
Other Expense	54,865	30,854	97,995	106,945	8,950	9.1%
Purchased Power	3,247	1,941	5,859	4,920	-939	-16.0%
Tele/Other Utilities	4,984	2,007	4,895	5,095	200	4.1%
Transportation	37,990	23,363	51,910	51,852	-58	-0.1%
Grand Total	1,070,504	493,449	1,261,212	1,371,016	109,804	8.7%
Programs:						
28 - Monitoring	\$224,867	\$102,360	\$220,532	\$268,556	\$48,024	21.8%
29 - Watershed Grant	18,123	9,667	2,443	35,276	32,833	1344.0%
41 - Pretreatment	4,094	1,874	7,951	6,753	-1,198	-15.1%
56 - Tech Ops Support	63,088	20,152	79,804	82,326	2,522	3.2%
78 - Education	76,781	39,999	139,496	132,145	-7,351	-5.3%
82 - Lake Security - Land	149,562	73,929	148,019	176,154	28,135	19.0%
83 - Customer Outreach	117,825	45,073	199,262	177,145	-22,117	-11.1%
84 - Lake Security - Water	46,023	21,277	58,790	81,631	22,841	38.9%
96 - Pandemic Costs	3,250	0	0	0	0	n/a
98 - Training	21,289	7,813	40,447	36,944	-3,503	-8.7%
99 - Administration	345,602	171,305	364,468	374,086	9,618	2.6%
Grand Total	1,070,504	493,449	1,261,212	1,371,016	109,804	8.7%
Funds:						
10 - General	\$278,842	\$132,730	\$280,094	\$282,389	\$2,295	0.8%
20 - Water General	787,569	358,590	971,721	1,081,874	110,153	11.3%
50 - Wastewater General	2,995	1,583	6,867	4,221	-2,646	-38.5%
57 - WW Portland	1,098	546	1,807	1,688	-119	-6.6%
62 - WW Westbrook	0	0	723	844	121	16.7%
Grand Total	1,070,504	493,449	1,261,212	1,371,016	109,804	8.7%
Headcount:						
Full-Time	8	8	8	7	-1	-12.5%
Part-Time	1	1	1	1	0	0.0%
Total	9	9	9	8	-1	-11.1%

Environmental Services: Laboratory Service (L6)**Financial Summary:**

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$448,604	\$225,475	\$475,318	\$598,547	\$123,229	25.9%
Employee Benefits	221,852	103,522	217,259	287,753	70,494	32.4%
Chemicals	6,974	2,738	5,900	7,100	1,200	20.3%
Contracted Services	51,310	27,265	57,515	147,095	89,580	155.8%
Materials & Supplies	87,918	54,886	84,813	94,300	9,487	11.2%
Other Expense	76,417	45,993	82,113	86,348	4,235	5.2%
Tele/Other Utilities	1,405	660	780	1,860	1,080	138.5%
Transportation	4,767	2,162	6,701	6,051	-650	-9.7%
Grand Total	899,247	462,701	930,399	1,229,054	298,655	32.1%
Programs:						
32 - Lead/Copper Compliance	\$0	\$0	\$0	\$184,755	\$184,755	n/a
41 - Pretreatment	122,693	54,234	127,570	156,524	28,954	22.7%
56 - Tech Ops Support	112,634	152,253	98,578	103,011	4,433	4.5%
63 - Sample Analysis	321,556	76,161	368,813	358,172	-10,641	-2.9%
78 - Education	0	87	1,150	640	-510	-44.3%
98 - Training	23,540	23,190	30,721	37,398	6,677	21.7%
99 - Administration	318,824	156,776	303,567	388,554	84,987	28.0%
Grand Total	899,247	462,701	930,399	1,229,054	298,655	32.1%
Funds:						
10 - General	\$278,996	\$145,131	\$275,608	\$342,097	\$66,489	24.1%
20 - Water General	227,922	139,616	252,415	453,481	201,066	79.7%
50 - Wastewater General	284,711	130,032	286,664	305,489	18,825	6.6%
51 - WW Cape Elizabeth	1,395	661	4,634	2,985	-1,649	-35.6%
55 - WW Windham LF	654	433	393	447	54	13.7%
57 - WW Portland	63,802	25,217	69,824	80,259	10,435	14.9%
61 - WW Gorham	8,165	3,034	6,412	8,638	2,226	34.7%
62 - WW Westbrook	17,861	11,030	19,112	23,308	4,196	22.0%
64 - WW Joint Westbrook	13,981	7,002	13,347	10,215	-3,132	-23.5%
66 - WW Peaks Island	1,760	545	1,990	2,135	145	7.3%
Grand Total	899,247	462,701	930,399	1,229,054	298,655	32.1%
Headcount:						
Full-Time	7	7	7	8	1	14.3%
Part-Time	0	0	0	0	0	n/a
Total	7	7	7	8	1	14.3%

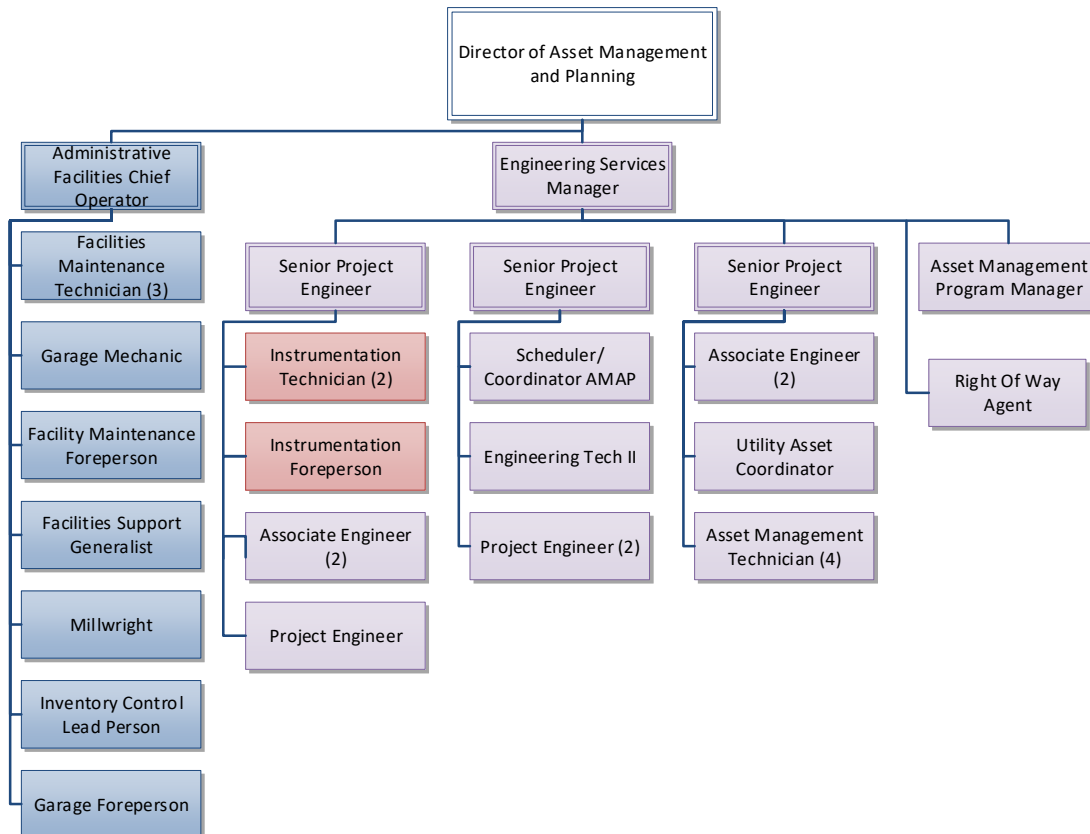
Engineering Services - Purpose Statement

To provide direct and supported design and construction of water, wastewater and administrative infrastructure and support an asset management approach to infrastructure acquisition and maintenance.

Core Services

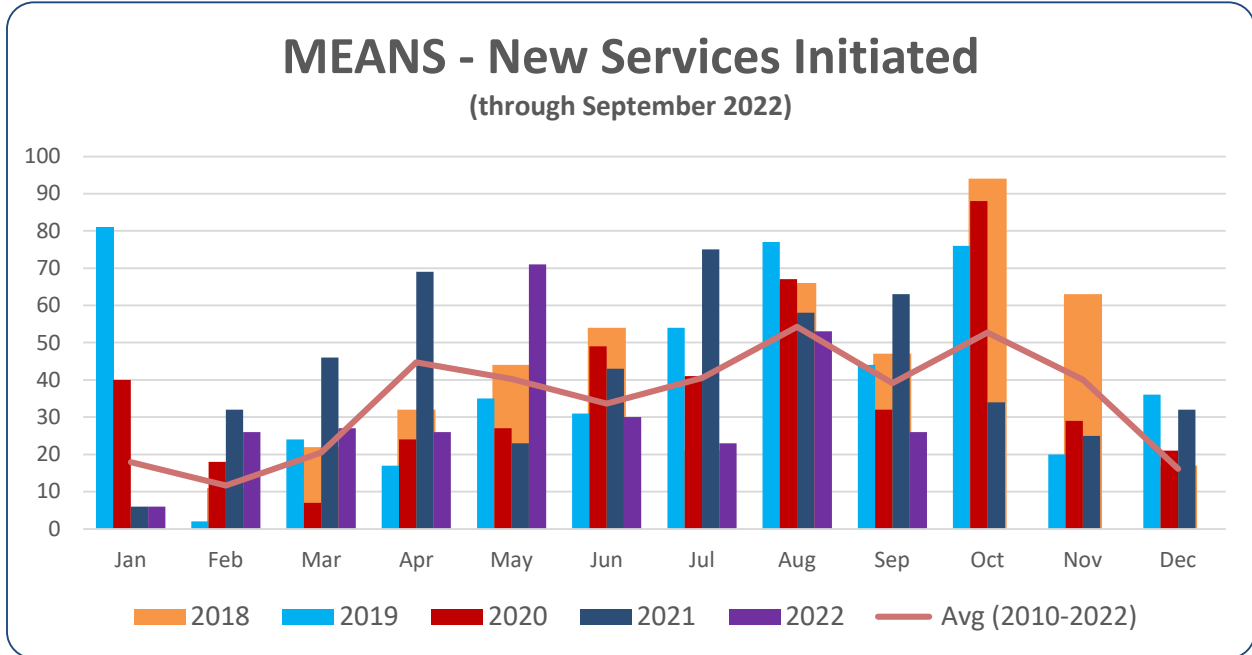
Engineering Services is responsible for providing engineering and maintenance services to internal and external customers. They are responsible for the following services:

- Manages planning and design of developer installed water and sewer infrastructure and coordination of existing District field and facilities assets. Supports long range planning, alternatives evaluation, and detailed design development of water main renewal programs as well as treatment and pumping facility projects. Provides construction oversight/recordkeeping for all infrastructure projects. (Asset Engineering Services Group-E2; purple in organization chart).
- Responsible for operation and maintenance of administrative facilities. Provides facility support services including garage, structural maintenance and stock room services (Facility Services Group-C1; blue in organization chart).
- Provides design, installation, maintenance and technical support of the Supervisory Control and Data Acquisition (SCADA) systems (SCADA Services Group-E7; red in organization chart).



Key Statistics

New Water Services



Assets in the Asset Information Management System (AIM)

Facilities	140
Facility Processes & Systems	1,333
Equipment/Components	12,040
Vehicles/Heavy Equipment	114
Water Service Association Assets (meters, backflows, etc.)	224,587
Water Field Assets	49,951
Sewer Field Assets	7,044
Total Assets	295,209

Performance Benchmarks

	2021 Actual	2022 Budget	2023 Budget
Corporate Goal – Reliability			
Leaks per 100 miles of main	9.3	<10	<10
Main Renewals, feet	28,530	20,000	19,700
Main Extensions, feet	26,700	24,000	26,000
Corporate Goal - Affordability			
New Water Services	506	450	450
Corporate Goal – Employees and Work Environment			
Employee Training Hours	70	80	80

Past Accomplishments

- Managed design/installation of 5.4 miles of water main renewals and 5 miles of extensions.
- Completion of Maiden Cove wastewater pump station upgrade in Cape Elizabeth.
- Procured for Engineering Services and Construction Manager at Risk (CMAR) services related to design and construction of wastewater collection and treatment infrastructure in North Windham.
- Managed construction of EEWTF medium voltage power distribution system to address resiliency and reliability issues.
- Managed design and land acquisition for the Windham water storage tank replacement project.
- Supported construction of the Westbrook Gorham Windham Regional WWTF aeration, clarifier and power upgrades.
- Continued rollout and development of the computerized maintenance management system (CMMS) software as part of Central Square Asset Management Project.
- Worked with water and wastewater operations and environmental services staff to improve asset data.

2023 Projects and Initiatives

Corporate Goals – Reliability and Affordability

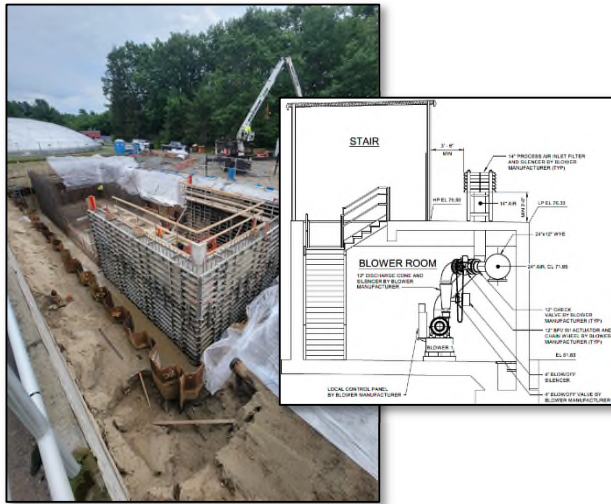
- Manage and support design and construction of new North Windham wastewater collection and treatment system using a Design/Build – CMAR structure.
- Manage and support vertical asset upgrade projects (WEWWTF aeration, clarifier and power upgrades, Windham Water Storage Tank, EEWTF Backup Power, etc.)
- Improve water main replacement programs and manage design and delivery of projects.
- Continue to lead and support implementation of Central Square EAM CMMS software.
- Continue to work with Operations, and Environmental Services to improve AIM data and configure CMMS.
- Manage facilities projects around District including Electrical, HVAC and roof upgrades.
- Provide core support of asset management and CMMS implementation.

Corporate Goal – Employees and Work Environment

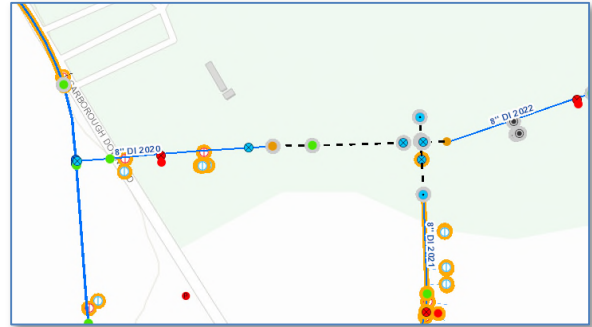
- Maintain an average of 80 hours of training per employee.
- Continue to support ongoing workplace safety management and training.

2022 Highlights

Managed WEWWTF aeration and secondary clarifier upgrade project.



Led conversion to new CMMS



Manage the construction of EEWTF Medium Voltage Power Distribution Upgrade



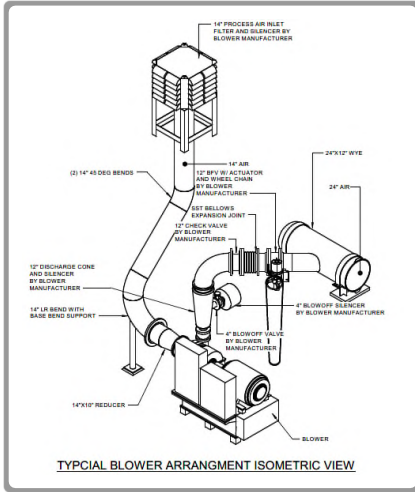
Managed and supported changeout of Douglass St Facility switchgear and generator



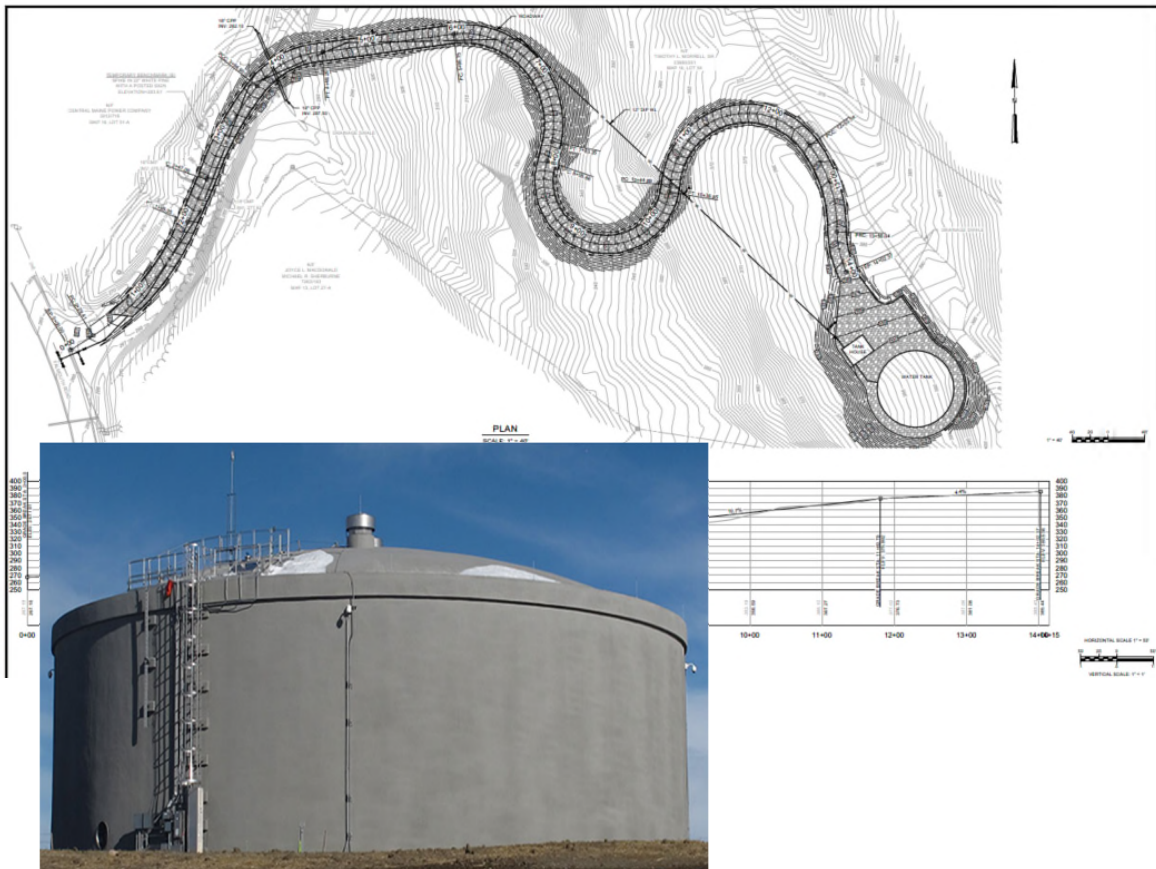
Managed and inspected more than 10 miles of water main renewals and extensions.



Completed the EEWWTF 3rd Floor HVAC grades.



Managed Windham Water Storage Replacement project



2023 Projects and Initiatives

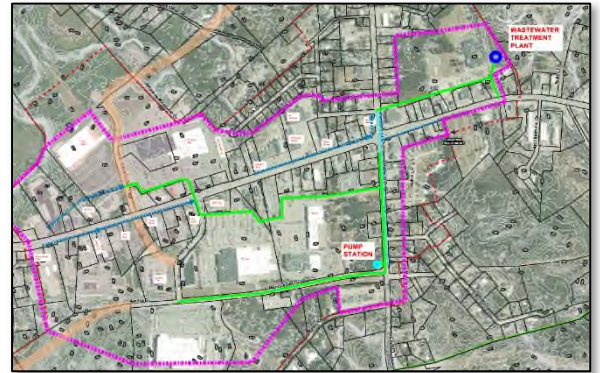
Lead program to prioritize, design and construct water main replacement program.



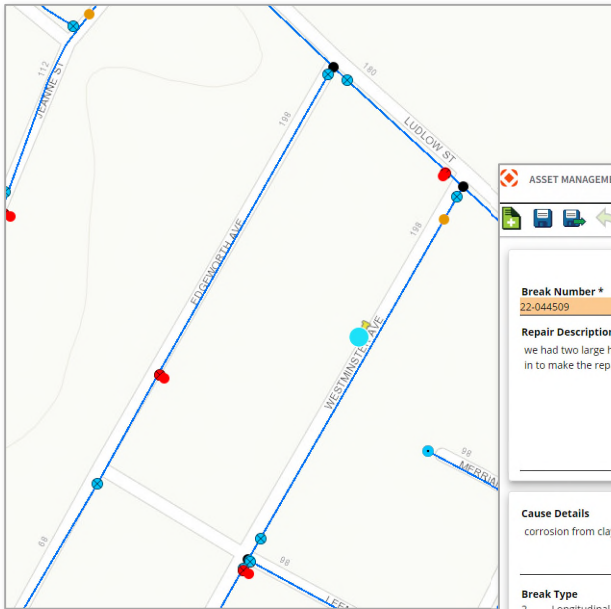
Douglass Street Facility – Complete the last phase of the Slate Roof.



North Windham’s Sewer - Completion of Collection, Treatment and Disposal design. Start of construction.



Continue to lead and support CMMS upgrade project.



ASSET MANAGEMENT			
General Leak Attributes			
Break Number *	Work Order #	Date Repaired	Time Repaired
22-044509	22-044509	8/30/2022	
Repair Description			
we had two large holes in the bottom of the water main. we had to gut out 6' - 6" of 6" DI pipe and a 6" GV that was leaded in to make the repair.			
Leak Details			
Cause Details			
corrosion from clay			
Break Type	Apparent Cause	Repair Type	
2 Longitudinal	20 Corrosion	2 Cut in New Pipe	
Water Use Info			
Est Water Loss	Frost Depth (ft)	Loss Number	
5000		2022.08.30-MB-00114	
CI2 Start	CI2 End	Shutdown Hours	Customers w/o Service
		2	12

Financial Overview

The Engineering Services 2023 budget request is \$5,083,882 which is \$640,813 or 14.4% higher than last year's budget. The department consists of 3 subgroups – Facility Services (C1), Asset Engineering (E2) and SCADA Services (E7).

C1 - Facility Services' budget increased by \$195,748 or 9.7%. In addition to Salary & Wage increases, the difference higher budgeted gas and diesel costs up 54.5% and 86.2% to \$188,415 and \$84,835 respectively.

E2 - Asset Engineering's budget increased by \$391,495 or 19.9%. Much of the increase is reflected in the Salary & Wage and Employee Benefits are (\$372,837) which includes an additional Project Engineer position to support the design and construction of the North Windham wastewater system.

E7 - SCADA Services' budget increased \$53,570 or 11.8% primarily attributed to Salary & Wage/Employee Benefit increases.

Engineering Services – Total

Financial Summary

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
C1 - Facilities Services	\$1,902,810	\$972,275	\$2,018,989	\$2,214,737	\$195,748	9.7%
E2 - Asset Engineering	2,097,479	1,065,465	1,969,661	2,361,156	391,495	19.9%
E7 - SCADA Services Group	331,383	253,648	454,419	507,989	53,570	11.8%
Grand Total	4,331,672	2,291,388	4,443,069	5,083,882	640,813	14.4%

Expense Type:						
Salaries & Wages	\$2,161,136	\$1,088,210	\$2,182,004	\$2,548,257	\$366,253	16.8%
Employee Benefits	1,056,813	513,378	1,016,019	1,188,653	172,634	17.0%
Contracted Services	409,892	249,586	458,461	455,820	-2,641	-0.6%
Heat/Fuel Oil	62,302	63,137	72,500	76,605	4,105	5.7%
Insurance	49,835	18,863	59,259	42,442	-16,817	-28.4%
Materials & Supplies	438,587	293,884	491,598	596,222	104,624	21.3%
Other Expense	-126,272	-71,206	-128,495	-114,395	14,100	-11.0%
Purchased Power	81,596	34,801	86,166	73,702	-12,464	-14.5%
Regulatory/Taxes	626	622	2,500	2,500	0	0.0%
Tele/Other Utilities	91,565	48,998	88,468	98,287	9,819	11.1%
Transportation	105,592	51,115	114,589	115,789	1,200	1.0%
Grand Total	4,331,672	2,291,388	4,443,069	5,083,882	640,813	14.4%

Headcount:						
Full Time	31	32	32	33	1	3.1%
Part Time	0	0	0	0	0	n/a
Total	31	32	32	33	1	3.1%

Engineering Services – Total

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$1,163,658	\$625,051	\$1,175,259	\$1,349,660	\$174,401	14.8%
660121 - WAGES/REGULAR UNION	903,187	456,169	947,339	1,047,209	99,870	10.5%
660122 - WAGES/OVERTIME UNION	5,737	3,202	12,295	13,172	877	7.1%
660123 - WAGES/DOUBLETIME UNION	-	-	324	734	410	126.5%
660124 - WAGES/STANDBY TIME UNION	97	633	907	1,002	95	10.5%
660131 - WAGES - REGULAR - TEMPS	-	-	45,880	53,280	7,400	16.1%
660136 - CONTRACTED - TEMP	28,659	3,155	-	83,200	83,200	n/a
66014 - VACATION ACCRUAL	41,623	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	18,175	-	-	-	-	n/a
Salaries & Wages Total	2,161,136	1,088,210	2,182,004	2,548,257	366,253	16.8%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	159,928	86,007	166,925	188,578	21,653	13.0%
660405 - SAFETY/WHY PROGRAM ITEMS	4,998	1,113	8,250	7,425	(825)	-10.0%
660411 - MEALS ALLOWANCE	-	50	100	100	-	0.0%
660413 - PWD TRAINING PROGRAM	-	65	-	-	-	n/a
660418 - STIPENDS	1,900	1,800	2,100	2,000	(100)	-4.8%
660419 - EMPLOYEE BENEFITS-MISC OTH	14,031	612	6,800	6,200	(600)	-8.8%
660491 - FRINGE BENEFITS-REG/SAL	875,956	423,731	831,844	984,350	152,506	18.3%
Employee Benefits Total	1,056,813	513,378	1,016,019	1,188,653	172,634	17.0%
Contracted Services						
6631 - ENGINEERING SERVICES	24,421	3,953	5,000	5,000	-	0.0%
6635221 - PAVING - MINOR REPAIR	1,980	-	-	-	-	n/a
663525 - CONTRACTOR CONSTRUCTION	28,843	194	-	-	-	n/a
663526 - INSPECTION SERVICES	3,305	704	-	-	-	n/a
66353 - REPAIR SERVICES	2,000	11,277	17,500	17,500	-	0.0%
66354 - MAINTENANCE SERVICES	217,831	119,971	266,700	271,200	4,500	1.7%
663546 - MAINTENANCE - SNOW REMOVL	21,472	11,562	25,000	25,000	-	0.0%
663561 - COMPUTER LICENSES	12,828	13,031	35,461	22,350	(13,111)	-37.0%
663562 - COMPUTER MAINTENANCE	50,076	54,160	45,000	54,000	9,000	20.0%
663563 - COMPUTER CONSULTING/OTHER	330	-	600	600	-	0.0%
663574 - DISPOSAL SERVICES	7,893	4,722	21,400	18,400	(3,000)	-14.0%
663587 - COURIER SERVICES	8,836	3,620	9,300	8,270	(1,030)	-11.1%
6635985 - VEHICLE FLEET GPS SERVICE	21,560	10,780	25,000	26,000	1,000	4.0%
663599 - MISC OTHER SERVICES	517	15,612	2,500	2,500	-	0.0%
6636 - TECHNICAL SERVICES	8,000	-	5,000	5,000	-	0.0%
Contracted Services Total	409,892	249,586	458,461	455,820	(2,641)	-0.6%
Heat/Fuel Oil						
661621 - PIPELINE DELIVERED PROPAN	49,838	55,649	56,000	60,105	4,105	7.3%
66166 - UNLEADED GAS	12,464	7,488	16,500	16,500	-	0.0%
Heat/Fuel Oil Total	62,302	63,137	72,500	76,605	4,105	5.7%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Insurance						
6656 - VEHICAL INSURANCE	\$36,629	\$12,776	\$44,353	\$28,745	(\$15,608)	-35.2%
66593 - UMBRELLA INSURANCE COVER	6,566	2,455	7,830	5,523	(2,307)	-29.5%
66599 - PROPERTY & BOILER INSUR	6,640	3,632	7,076	8,174	1,098	15.5%
Insurance Total	49,835	18,863	59,259	42,442	(16,817)	-28.4%
Materials & Supplies						
6619 - ASSET PURCHASES	14,873	9,752	45,800	45,800	-	0.0%
66202 - TOOLS	7,814	2,512	7,000	7,000	-	0.0%
66203 - VENDOR PURCHASED SUPPLIES	207,486	124,248	180,700	185,650	4,950	2.7%
662041 - MATERIALS INVENTORY	18,777	49,046	7,250	7,300	50	0.7%
662042 - SUPPLIES INVENTORY	12,770	4,625	13,000	11,325	(1,675)	-12.9%
66204201 - INVENTORY - QPR	1,145	-	-	-	-	n/a
662043 - TOOL INVENTORY	7,171	5,168	10,450	8,850	(1,600)	-15.3%
66204301 - INVENTORY - TONER	(9)	-	-	-	-	n/a
66204302 - INVENTORY - PAPER	198	39	-	-	-	n/a
66204303 - INVENTORY-COMPUTER EQUIP	162	2,879	1,700	1,700	-	0.0%
662044 - METER INVENTORY	(6,622)	(6,782)	-	-	-	n/a
662046 - HYDRANT INVENTORY	782	(1,589)	-	-	-	n/a
662047 - GARAGE INVENTORY	9,779	3,127	10,325	9,425	(900)	-8.7%
66204701 - INVENTORY - UNLEADED GAS	112,145	71,738	120,669	186,415	65,746	54.5%
66204702 - INVENTORY - DIESEL	34,904	21,435	45,570	84,835	39,265	86.2%
66204703 - INVENTORY - TIRES	13,499	7,534	15,000	15,000	-	0.0%
66205 - CONSUMABLE SUPPLIES	55	-	2,750	2,250	(500)	-18.2%
66206 - COMPUTER RELATED EQUIP	3,658	152	31,384	30,672	(712)	-2.3%
Materials & Supplies Total	438,587	293,884	491,598	596,222	104,624	21.3%
Other Expense						
6642 - EQUIPMENT RENT	-	-	3,500	3,500	-	0.0%
66609 - OTHER ADVERTISING	-	999	-	-	-	n/a
6675111 - INSTATE TRAINING/CONF	15,102	2,739	15,000	15,500	500	3.3%
6675112 - OUT OF STATE TRAINING/CON	3,575	7,383	9,100	14,000	4,900	53.8%
667513 - DUES	369	544	3,000	3,000	-	0.0%
667514 - PROFESSIONAL LICENSES	2,540	539	3,880	3,880	-	0.0%
667515 - PERIODICAL SUBSCRIPTIONS	-	-	800	800	-	0.0%
667522 - POSTAGE - INTERNAL	62	109	325	325	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	1,559	520	1,200	1,100	(100)	-8.3%
667552 - SAFETY TRAINING	-	-	750	750	-	0.0%
667555 - SAFETY EXPENSES	190	209	2,500	2,500	-	0.0%
667556 - FREIGHT CHARGES (STOCK)	-	-	2,700	2,500	(200)	-7.4%
667592 - FOOD SUPPLIES	-	-	100	100	-	0.0%
667599 - OTHER MISCELLANEOUS	2,902	3,220	1,050	1,050	-	0.0%
6675122 - OUT-OF-STATE CONFERENCES	-	90	-	-	-	n/a
6676 - EXPENSE OFFSET	(152,571)	(87,558)	(172,400)	(163,400)	9,000	-5.2%
Other Expense Total	(126,272)	(71,206)	(128,495)	(114,395)	14,100	-11.0%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Purchased Power						
66153 - POWER - MEDIUM ENERGY	\$53,580	\$20,274	\$46,398	\$48,111	\$1,713	3.7%
66154 - POWER - MEDIUM T&D	25,758	12,220	36,528	22,942	(13,586)	-37.2%
66155 - POWER - SMALL ENERGY	1,037	988	1,348	1,096	(252)	-18.7%
66156 - POWER - SMALL T&D	1,221	1,318	1,892	1,553	(339)	-17.9%
Purchased Power Total	81,596	34,800	86,166	73,702	(12,464)	-14.5%
Regulatory/Taxes						
667516 - PERMITS	626	622	2,500	2,500	-	0.0%
Regulatory/Taxes Total	626	622	2,500	2,500	-	0.0%
Tele/Other Utilities						
66101 - WATER	4,531	1,647	5,000	5,000	-	0.0%
66102 - WASTEWATER	7,331	2,608	7,500	7,500	-	0.0%
66103 - STORMWATER CHARGES	14,932	7,602	15,100	16,570	1,470	9.7%
66111 - TELEPHONE LINES	27,842	12,238	20,792	21,960	1,168	5.6%
66112 - DATA LINES	27,237	21,647	32,606	40,762	8,156	25.0%
66113 - CELLULAR PHONES	9,273	3,256	7,420	6,495	(925)	-12.5%
66114 - PAGERS	-	-	50	-	(50)	-100.0%
6609 - UTILITIES/SUPPLIES	419	-	-	-	-	n/a
Tele/Other Utilities Total	91,565	48,998	88,468	98,287	9,819	11.1%
Transportation						
66501 - TRANSPORTATION - INTERNAL	31,762	12,774	35,215	33,882	(1,333)	-3.8%
665019 - TRANS INTERNAL INACTIVE	70,557	37,414	72,624	75,307	2,683	3.7%
66502 - TRANSPORTATION - EXTERNAL	2,321	794	3,850	3,850	-	0.0%
66503 - MILEAGE REIMBURSEMENT	952	133	2,900	2,750	(150)	-5.2%
Transportation Total	105,592	51,115	114,589	115,789	1,200	1.0%
Grand Total	4,331,672	2,291,388	4,443,069	5,083,882	640,813	14.4%

Engineering Services - Facilities Services (C1)

Financial Summary

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$580,781	\$278,882	\$585,242	\$649,984	\$64,742	11.1%
Employee Benefits	276,581	130,349	270,227	311,168	40,941	15.2%
Contracted Services	318,483	162,000	369,900	371,370	1,470	0.4%
Heat/Fuel Oil	62,302	63,137	72,500	76,605	4,105	5.7%
Insurance	49,835	18,863	59,259	42,442	-16,817	-28.4%
Materials & Supplies	415,251	228,752	441,468	546,492	105,024	23.8%
Other Expense	-23,446	-13,431	-10,525	-11,325	-800	7.6%
Purchased Power	81,596	34,800	86,166	73,702	-12,464	-14.5%
Regulatory/Taxes	626	620	2,500	2,500	0	0.0%
Tele/Other Utilities	76,969	38,414	71,712	80,646	8,934	12.5%
Transportation	63,832	29,889	70,540	71,153	613	0.9%
Grand Total	1,902,810	972,275	2,018,989	2,214,737	195,748	9.7%
Programs:						
23 - Stockroom Operations	\$115,254	\$38,694	\$124,516	\$143,034	\$18,518	14.9%
24 - Distribution Operations	13,321	3,449	19,331	23,204	3,873	20.0%
30 - Maintenance	226,541	108,245	191,398	265,180	73,782	38.5%
55 - Prof Ops Support	82,586	39,791	78,526	99,252	20,726	26.4%
90 - Vehicles	609,023	334,253	655,056	776,653	121,597	18.6%
93 - Stockroom Scrap	11,495	21,249	0	0	0	n/a
95 - Douglass Street	622,343	328,748	701,592	688,686	-12,906	-1.8%
96 - Pandemic Costs	8,368	0	0	0	0	n/a
98 - Training	38,042	13,600	51,559	53,815	2,256	4.4%
99 - Administration	175,837	84,246	197,011	164,913	-32,098	-16.3%
Grand Total	1,902,810	972,275	2,018,989	2,214,737	195,748	9.7%
Funds:						
10 - General	\$1,453,613	\$760,342	\$1,605,218	\$1,684,067	\$78,849	4.9%
20 - Water General	320,070	160,131	288,063	369,788	81,725	28.4%
30 - Water Standish	416	292	3,126	2,900	-226	-7.2%
51 - WW Cape Elizabeth	25,280	14,284	24,375	26,207	1,832	7.5%
53 - WW Cumberland	9,150	3,265	9,845	10,058	213	2.2%
55 - WW Windham LF	469	167	1,613	500	-1,113	-69.0%
57 - WW Portland	50,351	18,489	51,319	65,451	14,132	27.5%
61 - WW Gorham	4,471	4,647	8,251	9,519	1,268	15.4%
62 - WW Westbrook	7,886	1,806	5,459	11,573	6,114	112.0%
64 - WW Joint Westbrook	18,989	6,883	14,609	19,169	4,560	31.2%
65 - WW Joint LF	283	225	1,615	1,542	-73	-4.5%
66 - WW Peaks Island	11,832	1,744	5,496	13,963	8,467	154.1%
Grand Total	1,902,810	972,275	2,018,989	2,214,737	195,748	9.7%
Headcount:						
Full-Time	10	10	10	10	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	10	10	10	10	0	0.0%

Engineering Services - Asset Engineering Services (E2)**Financial Summary**

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$1,401,454	\$691,424	\$1,348,531	\$1,611,914	\$263,383	19.5%
Employee Benefits	690,224	328,329	629,414	738,868	109,454	17.4%
Contracted Services	77,519	75,717	57,450	66,450	9,000	15.7%
Materials & Supplies	9,038	13,661	26,505	26,505	0	0.0%
Other Expense	-108,816	-57,850	-124,020	-114,020	10,000	-8.1%
Regulatory/Taxes	0	2	0	0	0	n/a
Tele/Other Utilities	10,466	5,396	11,986	11,986	0	0.0%
Transportation	17,594	8,786	19,795	19,453	-342	-1.7%
Grand Total	2,097,479	1,065,465	1,969,661	2,361,156	391,495	19.9%
Programs:						
29 - Watershed Grant	\$2,553	\$0	\$0	\$0	\$0	n/a
57 - Means Coordination	494,606	232,651	361,824	463,382	101,558	28.1%
59 - Land Matters	33,513	35,489	47,165	38,678	-8,487	-18.0%
79 - Amap Services	459,885	170,133	499,554	610,458	110,904	22.2%
81 - Instrumentation & Control	0	2,691	42,958	50,963	8,005	18.6%
94 - Technology Teams	278,927	140,092	318,652	416,093	97,441	30.6%
96 - Pandemic Costs	239	0	0	0	0	n/a
98 - Training	77,528	60,279	72,701	104,336	31,635	43.5%
99 - Administration	750,228	424,130	626,807	677,246	50,439	8.0%
Grand Total	2,097,479	1,065,465	1,969,661	2,361,156	391,495	19.9%
Funds:						
10 - General	\$1,024,642	\$679,009	\$904,376	\$1,074,569	\$170,193	18.8%
20 - Water General	863,876	296,265	754,263	960,663	206,400	27.4%
50 - Wastewater General	13,694	11,491	311,022	325,924	14,902	4.8%
51 - WW Cape Elizabeth	16,138	11,847	0	0	0	n/a
53 - WW Cumberland	3,590	0	0	0	0	n/a
55 - WW Windham LF	19,411	1,157	0	0	0	n/a
57 - WW Portland	114,799	49,402	0	0	0	n/a
61 - WW Gorham	114	0	0	0	0	n/a
62 - WW Westbrook	1,034	0	0	0	0	n/a
64 - WW Joint Westbrook	37,397	15,177	0	0	0	n/a
66 - WW Peaks Island	2,310	1,117	0	0	0	n/a
67 - WW North Windham	474	0	0	0	0	n/a
Grand Total	2,097,479	1,065,465	1,969,661	2,361,156	391,495	19.9%
Headcount:						
Full-Time	18	18	18	19	1	5.6%
Part-Time	0	0	0	0	0	#DIV/0!
Total	18	18	18	19	1	5.6%

Engineering Services - SCADA Services Group (E7)

Financial Summary

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$178,901	\$117,905	\$248,231	\$286,359	\$38,128	15.4%
Employee Benefits	90,008	54,700	116,378	138,617	22,239	19.1%
Contracted Services	13,890	11,868	31,111	18,000	-13,111	-42.1%
Materials & Supplies	14,299	51,471	23,625	23,225	-400	-1.7%
Other Expense	5,990	75	6,050	10,950	4,900	81.0%
Tele/Other Utilities	4,129	5,189	4,770	5,655	885	18.6%
Transportation	24,165	12,440	24,254	25,183	929	3.8%
Grand Total	331,382	253,648	454,419	507,989	53,570	11.8%
Programs:						
81 - Instrumentation & Control	\$192,240	\$147,689	\$258,918	\$293,779	\$34,861	13.5%
94 - Technology Teams	13,905	10,443	47,082	61,727	14,645	31.1%
96 - Pandemic Costs	0	0	3,759	0	-3,759	-100.0%
98 - Training	17,326	13,107	35,210	26,209	-9,001	-25.6%
99 - Administration	107,911	82,409	109,450	126,274	16,824	15.4%
Grand Total	331,382	253,648	454,419	507,989	53,570	11.8%
Funds:						
10 - General	\$139,142	\$105,959	\$191,642	\$214,110	\$22,468	11.7%
20 - Water General	58,672	31,937	92,471	103,771	11,300	12.2%
50 - Wastewater General	10,343	2,737	97,143	111,121	13,978	14.4%
51 - WW Cape Elizabeth	16,712	9,274	450	450	0	0.0%
53 - WW Cumberland	6,567	2,046	900	900	0	0.0%
55 - WW Windham LF	0	0	0	200	200	n/a
57 - WW Portland	74,659	75,398	66,004	75,387	9,383	14.2%
61 - WW Gorham	2,537	7,195	450	450	0	0.0%
62 - WW Westbrook	6,240	7,143	450	450	0	0.0%
64 - WW Joint Westbrook	11,116	7,669	4,259	500	-3,759	-88.3%
65 - WW Joint LF	956	1,142	0	0	0	n/a
66 - WW Peaks Island	4,438	3,148	550	550	0	0.0%
67 - WW North Windham	0	0	100	100	0	0.0%
Grand Total	331,382	253,648	454,419	507,989	53,570	11.8%
Headcount:						
Full-Time	3	4	4	4	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	3	4	4	4	0	0.0%

Administrative Services - Purpose Statement

To provide support services to internal and external customers.

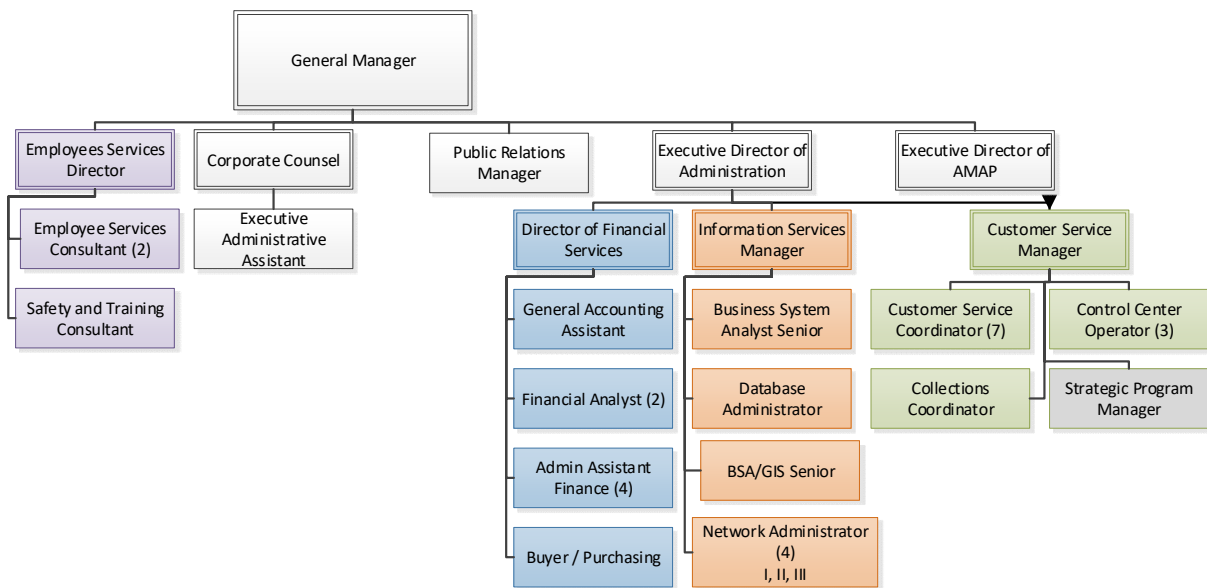
Core Services

Administrative Services provides support services to internal and external customers by providing the following services:

- External customer call center response and billing services (Customer Service Group- F1; green in the organization chart).
- Computer system and related technology support and maintenance services (Information Services Group – G1; orange in the organization chart).
- Financial transaction processing and information services (Financial Services Group – H1; blue in the organization chart).
- Employee development, benefits and management services (Employee Services Group – I1; purple in the organization chart).

The District has an six-person group (Executive Group – J1; white in the organization chart) that directs, oversees and provides administrative support for the District.

Changes in 2023: The Control Center reduced its business hours to 6:00 am to 4:30 pm resulting in one less Control Center Operator. Financial Services is processing bill payments in-house resulting in one additional Administrative Assistant position. The Strategic Program Manager now reports to the Executive Director of Administration (grey box) and replaces the Customer Service Program Manager position. The positions dollars were included in the Customer Service area costs.



Past Accomplishments and 2023 Projects and Initiatives

Customer Service

2022 Accomplishments:

- Service levels and rate changes: Continued focus on meeting both objectives while supporting new billing system in 2022.
- Contributed and supported the efforts and progress of the new Asset Management system.
- Developed an appropriate plan to transition customers to the billing system/bill while educating them on new functions that became available with the online Customer portal.
- Updated documentation and procedures for the new billing system processes, including updating the Terms & Conditions as needed.
- Worked with the Public Relations Manager to promote our low-income programs.
- Reviewed current collection processes to improve efficiencies with the new Cayenta billing system.
- Participated in New England Water Works' Customer Service Committee efforts to develop customer service related training.

2023 Projects and Initiatives:

Goal 5 - Affordability:

The District will balance the delivery of products and services with customers' ability to pay water and wastewater rates and charges.

Departmental Goal: Broaden our current collection activities to have more contact with our customers who are struggling with overdue balances.

Objective: Increasing outgoing calls so we reach out to all delinquent customers before we roll a truck to the location for shut.

Objective: Encouraging ratepayers participation in both local and federal assistance programs designed to assist with delinquencies.

Objective: Enhancing our contact options to include "chat" to reach more customers.

Objective: Opening up alternative methods for customers to "opt in" for notifications on delinquencies such as emailed notices.

Past Accomplishments and 2023 Projects and Initiatives

Customer Service

2023 Projects and Initiatives:

Goal 6 - Employees and Work Environment:

The District will have well trained and satisfied employees who will work in a safe and work environment conducive to productive work.

Department Goal: Continued training on the new systems within the department as well as participate in meetings with departments outside of CS regarding process and flow of information.

Objective: Including feedback from end users on process flow to enhance ease and functionality of the system.

Objective: Identifying areas where error trapping is needed to ensure consistent, accurate handling of data accounts.

Department Goal: Increase cross training with external departments to broaden knowledge.

Objective: Exposing newer hires in CS to field work. Giving them the opportunity will broaden their knowledge and enhance their interactions with customers

Past Accomplishments and 2022 Projects and Initiatives (continued)

Information Services

2022 Accomplishments

System Security

- Cyber Security Audit
- Cyber Security Training for End Users
- Cyber Security Standards Development
- Implementation of 2 factor
- Enhanced focus on software updates and patching - Monthly cyber security meetings
- Core data network upgrades - new additional firewalls

System upgrades:

- Phone system upgrade
- Spec, source, acquire and configure servers, firewalls and switchgear for an ICS network
- Additional off site data backup storage
- Deployment of Wi-Fi at EE,DS,WB,SL
- Deployment of 50 iPad with MDM
- Backup plan documentation
- Update disaster recovery documentation
- Deployment of a new user provisioning software
- Update 3 year IT Plan
- Create Information Services Service Catalog
- Upgrade WAN Backbone

Process Improvements:

- Continue to improve standards based on AWIA standards
- Develop a written procedure on internal incident response and incident review (hot wash)
- Allocate additional time for staff development and training
- Create an improved benchmark document
- Establish Service Level Agreements (SLA's)
- Laptops for training
- Migration away from Citrix to Laptops and PC's
- Implementation of new help desk ticketing system
- Backup plan documentation
- Update disaster recovery documentation
- Deployment of a new user provisioning software
- Update 3 year IT Plan
- Create Information Services Service Catalog
- EAM support and build out

Information Services (continued)

2023 Projects and Initiatives

Goal 4 - Reliability:

The District can be trusted to provide its products and services in a manner that meets all reasonable customer expectations.

Departmental Goal: Improve the reliability and security of the Administrative Network

Objectives: Maintain and Improve the District's information system security by:

- Conducting annual cybersecurity audit
- Providing cybersecurity training for end users
- Enhancing cybersecurity posture with the continued implementation of modern authentication
- Holding monthly cybersecurity group meetings
- Upgrading Core data network - new additional firewalls
- Spec, sourcing, acquiring and configuring servers, firewalls and switchgear for an ICS network

Objective: Use life cycle asset management principals to manage information services assets by:

- Continuing to improve standards based on AWIA standards
- Developing a written procedure on internal incident response and incident review (hot wash)

Upgrade of network cabling to the desktop at Douglass Street

- Updating 3 year IT Plan

Objective: Develop an appropriate back up site to adequately support the District's operation during a crisis by:

- Creating backup plan documentation
- Updating disaster recovery documentation

Goal 6 - Employees and Work Environment:

The District will have well trained and satisfied employees who will work in a safe and work environment conducive to productive work.

Departmental Goal/Objectives: Provide and maintain the technology that enhances productive work including:

- Providing Laptops for training
- Migrating away from Citrix to Laptops and PC's
- Upgrading the Phone system
- Deploying 50 iPad with Mobile Device Management
- Support and build out asset management

Information Services (continued)

2023 Projects and Initiatives (continued)

Key Statistics:

Device Maintained

Physical Servers	20
Virtual Servers	125
Laptops	90
PC's	15
Thin Clients	110
Firewall	10
Switches	30
Routers	7
Phone Switches	12
Desk Phones	180
Smart Phones	25
Printers/Scanner	20
Copiers	9
iPads	50
Total	699

Major Applications

AutoCAD	Microsoft Office
Callrex Call Recording	Microsoft Power BI
Cayenta CRM	Microsoft Remote Desktop Services
Citrix Presentation Server	Microsoft SharePoint
Central Square eFinance Plus	Microsoft Windows Server
Central Square EAM	Mitel IP Phone System
ESRI Arc Map	SAP Crystal Reports
Genetec Building Security	Scale Computing Hypervisor
Hach WIMS	SQL Databases (12)
Microsoft Exchange	VMware Hypervisor

Past Accomplishments and 2023 Projects and Initiatives (continued)

Financial Services

2022 Accomplishments

- Supported the Asset (EAM) and Billing (Cayenta) projects, updated department processes to accept billing, payroll, transportation and inventory data into the financial system. This included creating all the procedures and related reports for inventory (Stockroom) processing.
- Completed bringing in-house the processing of approximately 500-600 daily utility check payments that were previously done by an outside vendor.
- Received the annual certificates of excellence for both the annual financial statements and the budget from the Government Finance Officers association.
- Continued to upgrade financial information provided to the Board of Trustees and management through more visual/graphical presentations of financial data.
- Continued efforts on employee training with a particular focus on learning about other areas within the District.

2023 Projects and Initiatives

Goal 1 - Public Health:

The District will provide products and services that meet all federal, state and local quality standards.

Departmental Goal: Support the administration of the RCPP and the 319 Grant(s) relating to Watershed Protection.

Objective: Reviewing and submitting grant reimbursement requests as well as review compliance with the grant requirements

Goal 5 - Affordability:

The District will balance the delivery of products and services with customers' ability to pay water and wastewater rates and charges.

Departmental Goal: Support the financial processes with the District to ensure the appropriate and efficient use of resources as the accuracy of financial reporting and customer account activity.

Objectives:

- Refining the monthly report to the sewer municipalities to give them more detailed breakouts of the billings, payments and other activity on their receivables each month in the new Cayenta system.
- Reviewing the in-house processing of customer utility payment checks to the District and see if other/better alternative are available in the market.
- Looking for opportunities to receive consolidated electronic utility bill payments from large local businesses or governments with multiple utility accounts.
- Applying for and obtain the Government Finance Officers Association (GFOA) award for the annual financial statement and budget.
- Assuring vendors will be paid on a timely basis: 85% of invoices will be paid within 30 days and 95% of invoices will be paid within 60 days.

2023 Projects and Initiatives

Financial Services (continued)

Goal 5 - Affordability:

The District will balance the delivery of products and services with customers' ability to pay water and wastewater rates and charges.

Departmental Goal: Support the financial processes with the District to ensure the appropriate and efficient use of resources as the accuracy of financial reporting and customer account activity.

Objectives:

- Reviewing options for a fully electronic accounts payable invoice review and approval by District managers.
- Reviewing the job responsibilities of the Purchasing Agent position and move more administrative duties to the department Admins to allow more time for supply chain management and bid support to the organization.
- Reviewing the current Pronouncements from the Government Accounting Standards Board (GASB) to ensure full compliance with any new Statements when completing the 2022 Annual Comprehensive Financial Report.
- Completing a plan for the long-term future of the current financial software.

Past Accomplishments and 2023 Projects and Initiatives (continued)

Employee Services

2022 Accomplishments

COVID-19 Pandemic:

Since the outbreak of the Pandemic, the Employee Services Department has been the point of contact for reporting absences, monitoring those with symptoms, and following up with all of those placed in quarantine/isolation. As vaccines became available, we have diligently tracked this information and employee status. Most importantly, through absence management, we have been able to track and in many cases limit exposure at Portland Water District.

Compensation:

The non-union salary study was completed and implemented effective January 1, 2022. Our consultant provided recommendations for changes to positions in the broad band system by reviewing positions within the structure, and recommended new minimum, midpoint, and maximum ranges for each band. In addition, a median pay was determined for each position within the broad band structure, and this was used to determine where the salary for each position stood in relation to the market when determining pay adjustments.

We have successfully introduced two career ladders for SCADA technicians, and for the Environmental Scientist positions. The union has been agreeable each time, and this creates meaningful advancement within positions for union employees. We are currently working on a career ladder for the Water Systems Operator position, which has seen the most turnover in the past year.

Retirement Planning:

The deferred compensation plan was amended to include an annuity feature, called “Pension Builder”, so that participants in this plan may elect an option that will provide for an annuity at the time of retirement.

Student Outreach Program:

Due to the ongoing pandemic, plans for student outreach in 2021 continue to be on hold, but student outreach continues to be the focus with the NEWWA Waterworks Committee, which we participate in. We have been successful with contacting Westbrook Vocational School for the purpose of introducing PWD to graduates who already have obtained their CDL licenses.

Health Plan:

The District received a favorable renewal for January 1, 2023, and this assisted us in moving forward with health insurance changes under the newly ratified union contract. Effective January 1, 2023, we will be offering a choice of four health plans: the HMO and POS plans that have been offered in the past, the new HMO-HRA plan, which was piloted with non-union employees in 2022, and a new HMO \$2500 plan. We plan to provide communication early and often, both in writing and at departmental meetings. In addition to the wider plan offerings, the employee contribution formula has been changed as agreed upon in the new union contract.

Past Accomplishments and 2023 Projects and Initiatives (continued)

Employee Services (continued)

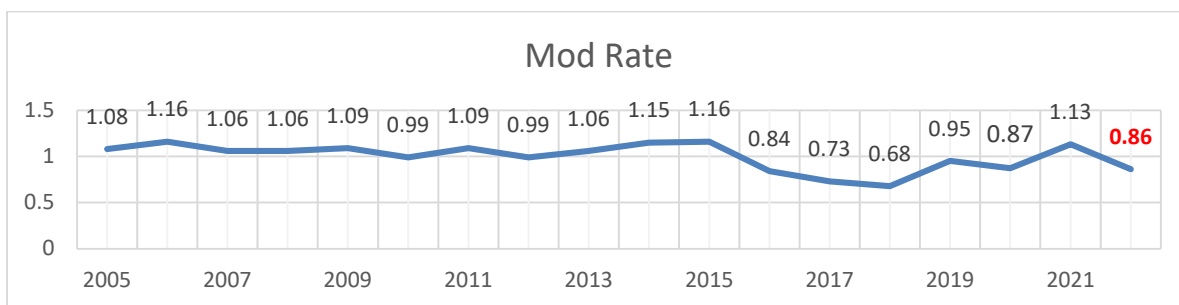
2022 Accomplishments (continued)

Union:

The new union contract has been ratified. Few grievances have been filed, all were resolved, and there are no pending arbitrations. The Union stewards suspended monthly meetings during contract negotiations, but will resume meeting on a monthly basis with the General Manager and the Director of Employee Services. These meetings have proved to be an excellent way to keep the lines of communication open.

Worker’s Compensation:

Effective January 1, 2023, the District’s mod rate will remain at 0.86. In summary: the District’s mod rate dropped to very low levels for five years in a row to the lowest level in over a decade in 2018. Effective January 1, 2016 it dropped to 0.84, saving approximately \$60,000 annually in premiums. Effective January 1, 2017 it dropped to 0.73, resulting in approximately another \$10,000 in annual premium reductions. Effective January 1, 2018, the mod rate again dropped to 0.68, saving approximately \$4,000 more in annual premiums. However, due to a few high cost workplace injuries, our mod rate increased to 0.95 effective January 1, 2019. This resulted in an increase of \$45,000 in annual premiums. The 2020 mod rate declined to 0.87 in 2020, but we had a serious injury that resulted in significant lost time, and affected our mod rate, which rose to 1.13 in 2021. In 2022, the mod rate dropped back down to .86 and will remain at .86 in 2023. We continue to vigilantly monitor workplace injuries, investigate all accidents, and examine the situations associated with these claims. The following is a recent history of the worker’s compensation experience mod rates for PWD:



Past Accomplishments and 2023 Projects and Initiatives (continued)

Employee Services (continued)

2022 Accomplishments (continued)

Safety:

With the COVID-19 pandemic continuing to challenge operations, safety training was completed in a decentralized way, which resulted in decreased reporting and tracking of this training. The following chart reflects the group training that occurred through September 2022.

Safety Training:

- Confined Space
- Fire Extinguisher
- CPR/First Aid/AED

The Safety Specialist works hard to create a culture of safety awareness. He follows through on all complaints made about PWD driving, as well as thorough accident investigation reports for work related injuries. The following is a list of some of the other areas that he has been working in:

- Submitted and received an MMA grant for fall protection at Douglass Street, and submitted one for fall protection at the East End treatment plant
- Indoor air quality assessment
- A noise study at the East End tunnel
- Gas detector maintenance
- Development of material handling/safe lifting procedures
- Hazard surveys
- Implementation of the MMA online University (safety training)
- Review of the eye wash stations for Westbrook/WWTF, Facilities Maintenance
- Lockout devices for unique equipment (gate valves, etc.)
- Folor lift operator certification (3 yr)
- Ergonomic evaluations for employees
- Fire evacuation drill at Douglass Street
- Job shadowing
- Safety committee meetings/engagement
- NEW on-site boot sales trailer
- PPE assessments
- Safety orientation for all new employees

Past Accomplishments and 2023 Projects and Initiatives (continued)

Employee Services (continued)

2023 Projects and Initiatives

Looking ahead to 2023

- Health Insurance education, both with departments and in written communication, so that employees understand their choices
- Automated Benefit Enrollment
- Revitalization of the quarterly supervisory workshops to include union contract issues; employee relations topics such as the importance of honest and timely feedback and evaluations and coaching for success; review of the hiring process, including legal interviewing and diversity, departmental orientations and safety topics such as proper labeling of chemicals, PPE maintenance, accessing the MMA e-learning platform, and fall protection.
- Evaluation and expansion of student outreach.
- Safety Goals for 2023 include: Vertical ladder/fall protection,
- Conducting PPE assessments aligned with job hazard assessments, and in response to employee feedback: investigate an upgrade in waterproof garments for field workers (including those in trench boxes) to do all we can to keep them dry, while still providing reflective gear.

Past Accomplishments and 2023 Projects and Initiatives (continued)

Executive Group

2022 Accomplishments

Corporate Counsel

- Monitored legislation at the state and the federal level, and prepared testimony for presentation to state legislators on bills of interest to PWD. Provided monthly reports to executive staff and the Board of Trustees on legislation and its effects on PWD. Participated in regular meetings of Maine Water Utilities Association Legislative Committee meetings as PWD's representative.
- Worked with staff on resolving IPT violations of a major industry in Portland and assisted staff in negotiating a consent agreement to resolve the violation.
- Worked on various real estate transactions related to development, and specifically assisted in resolving easement and other legal issues related to a the North Windham Wastewater Treatment Project and the Windham Water Storage Tank project.
- Managed the liability claims process, which consists of reviewing every claim filed against PWD, reviewing the facts of each claim, in conjunction with the District's insurer, determining whether the District is liable for the claim and reviewing denial letters.

Public Relations

- Produced publications, engaged in communications activities, and administered community relations programs: (Annual Water Quality Report, Comprehensive Financial Report, bill stuffers, water bottle filling station grants and scholarship programs, etc.)
- Continued to oversee and safeguard PWD's brand image through a strategic communication plan and comprehensive media relations program, integrated online presence, and active community relations program. Followed developments and regulations in regards to PFAS, Lead, and wastewater epidemiology testing and crafted and disseminated messaging as needed.
- Expanded delivery of consumer confidence report to all consumers with a postcard to rental households in our service area in addition to a bill stuffer, e-newsletter, social media, bill message, and website announcements.
- Continued to coordinate a wastewater documentary being produced by a local film crew.
- Safely revived tours of facilities by hosting four public tours of our East End Wastewater Treatment Facility to celebrate Clean Water Week and the anniversary of the Clean Water Act. Tours were conducted outside in accordance with current COVID recommendations.

Past Accomplishments and 2023 Projects and Initiatives (continued)

Executive Group (continued)

2023 Projects and Initiatives

Corporate Counsel

Continue to respond to initiatives of the departments and communities served related to water main and wastewater projects. Assist in the procurement of services related to large capital projects, and procuring real estate interests that will allow those projects to go forward. Monitor legislative developments in the State Legislature and Congress on areas of interest to PWD, including but not limited to labor issues and PFAS.

Public Relations

- Conduct a customer satisfaction survey as a means to continue to measure and understand consumer perceptions, concerns, and trends.
- Begin exploring various platform options and upgrades to the pwd.org web site.

Customer Outreach – Bill stuffers are regularly included in the monthly bill. Each year the District sends an Annual Water Quality Report to all customers.

Do your part to keep polluted stormwater out of our rivers, lakes, and Casco Bay!

Stormwater runoff is a major problem in Maine. As rainwater runs across pavement and rooftops, it picks up pollutants and carries them to our waterways. Rain barrels capture and collect stormwater before it becomes polluted so the water can be used for lawns, gardens, and indoor plants. They also help you conserve water, too.

Order your rain barrel TODAY!

We are pleased to provide rain barrels at a discounted price of \$68.58 (includes tax & handling). This is over 50% off the retail price!

Features:

- Repurposed 55-gallon, food-grade barrels (May have minor scratches and vary slightly in color)
- Barrel color is reddish brown
- Screening at the top keeps mosquitoes, insects, and debris out
- Removable lid for easy cleaning
- Solid brass threaded spigot for connecting to a hose
- Overflow hose directs water away from the foundation
- Multiple barrels can be joined for additional storage capacity

SCAN HERE for more information and to place your order today!

Portland Water District

Portland Water District

Annual Water Quality Report

IN THIS REPORT

- The Water Source
- Ensuring Water Quality: Water Purification and Disinfection
- Water Quality Analysis
- Health Notices
- Steep Falls Supplemental Information

One thing we have learned dealing with the ongoing pandemic and the uncertainty it brings to our daily lives, is that regular reminders of all we have to be grateful for are a must. One fact we can all be thankful for and count on, is a reliable source of quality drinking water flowing from the tap, day after day.

The Portland Water District continues to invest in our infrastructure, care for and protect our source, and ensure the water at the tap is clean, safe, and fresh. Rest assured, our commitment to delivering high quality drinking water, 24/7, never wavers.

I am pleased to share with you the latest report on your water quality.

Stay safe and healthy,
Carrie Lewis
General Manager

The Water Source

Your source of drinking water is Sebago Lake, Maine's deepest and second largest lake. The quality of water in Sebago Lake is among the highest of any lake in the United States. It is so clean, in fact, that it is exempt from the requirement to be filtered before it is disinfected. This is a designation that only about 50 of the 13,000 surface water suppliers in the country can claim.

Having a clean, unfiltered source means that your water:

- tastes better than most since filtration typically involves chemical addition which can impart a taste;
- is less expensive than most since a filtration plant could cost upwards of \$150 million; and
- is safer than most since keeping contaminants out of the water is more effective than trying to remove them from a polluted lake.

A Shared Responsibility

Sebago Lake is not just a drinking water supply. It is a treasured public resource that is used by so many for so much. PWD works with many committed partners to keep it clean. In 2021 alone, the District worked cooperatively with more than 100 organizations including municipalities, state and federal agencies, colleges and universities, lake associations, and land trusts to protect the lake.

Published May 2022
1/1/21 – 12/31/21
PWSID: ME 0091300 and ME 0091302

Financial Overview

The Administrative Services budget request is \$6,331,553, which is \$37,127 or 0.6% lower than last year. The number of employees in the area is 44, no change from the prior year.

Customer Service (F1) Group (\$1,811,067 request; \$120,721 or 7.1% higher)

- Salaries/Wages and Benefits: Increased by \$84,097, or 7.0%. One less employee – Control Center Operator. Offset by the impact of the assumed wage increases and higher pension costs. Strategic Program Manager position addition offset by the elimination of the Program Manager position
- Contracted Services: Increased by \$28,517, or 11.7% due to higher utility bill printing costs under the new contract.
- Other Expenses: Increased by \$11,109 or 5.4%. The post office is expected to increase its per item cost.

Information Service (G1) Group (\$1,436,200 request; \$208,167 or 17.0% higher)

- Salaries/Wages and Benefits: Increased by \$121,408, or 13.2%. No changes in the number of employees. The increase is due to the impact of assumed wage increases and higher pension costs.
- Contracted Services: Increased by \$71,809, or 27.8%. One-year of the annual Microsoft office productivity license is including in the 2023. It was erroneously not budgeted in 2022.

Financial Services (H1) Group (\$1,104,729 request; \$140,329 or 14.6% higher)

- Salaries/Wages and Benefits: increased by \$114,805, or 26.0%. One additional employee – Administrative Assistant added to process bill payments internally. Additionally, the increase is due to the impact of assumed wage increases and higher pension costs.
- Contracted Services: decreased by \$39,290 or 8.2%, reflects the elimination of paying a third-party to process bill payments.

Employee Service (I1) Group (\$666,559 request; \$69,626 or 11.7% higher)

- Salaries/Wages and Benefits: Increased by \$67,696, or 14.4%. No changes in the number of employees. The increase is due to the impact of assumed wage increases and higher pension costs.

Executive (J1) Group (\$2,170,323 request; \$318,371 or 17.2% higher)

- Salaries/Wages and Benefits: Increased by \$259,369, or 18.7%. Strategic Program Manager transferred to the Customer Service area, which was partially offset by the additional work for management position added. Otherwise, The increase is due to the impact of assumed wage increases and higher pension costs.
- Contracted Services: Increased by \$38,700 or 46.8%. The increase is due to the planned upgrade to the website and expected additional legal costs related to the upcoming state legislative session.
- Insurance: Increased by \$38,562, or 37.5%. Increased premiums for cyber security and property coverage. Cyber security increase is due to the general rise of such claims generally. Property increase is due to higher property value and replacement costs.
- Other Expenses: Decreased by \$18,775 or 7.4%. Cost related to new General Manager included in last year's budget.

Administrative Services - Total**Financial Summary:**

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
F1 - Customer Service	\$1,584,461	\$902,484	\$1,690,346	\$1,811,067	120,721	7.1%
G1 - Information Services	1,281,909	663,622	1,228,033	1,436,200	208,167	17.0%
H1 - Financial Services	982,636	512,860	964,400	1,104,729	140,329	14.6%
I1 - Employee Services	568,956	321,932	596,933	666,559	69,626	11.7%
J1 - BOT & Senior Management	1,781,752	882,775	1,851,841	2,170,212	318,371	17.2%
Grand Total	6,199,714	3,283,673	6,331,553	7,188,767	857,214	13.5%
Expense Type:						
Salaries & Wages	\$3,128,025	\$1,637,146	\$3,191,227	\$3,627,363	436,136	13.7%
Employee Benefits	1,657,774	749,058	1,487,547	1,763,465	275,918	18.5%
Contracted Services	829,683	567,065	948,064	1,047,800	99,736	10.5%
Insurance	84,485	62,256	102,926	141,488	38,562	37.5%
Materials & Supplies	98,542	36,159	59,793	73,959	14,166	23.7%
Other Expense	337,361	205,935	494,756	489,265	(5,491)	-1.1%
Tele/Other Utilities	45,136	16,807	26,070	24,254	(1,816)	-7.0%
Transportation	18,708	9,247	21,170	21,173	3	0.0%
Grand Total	6,199,714	3,283,673	6,331,553	7,188,767	857,214	13.5%
Headcount:						
Full Time	44	44	44	44	0	0.0%
Part Time	0	0	0	0	0	#DIV/0!
Total	44	44	44	44	0	0.0%

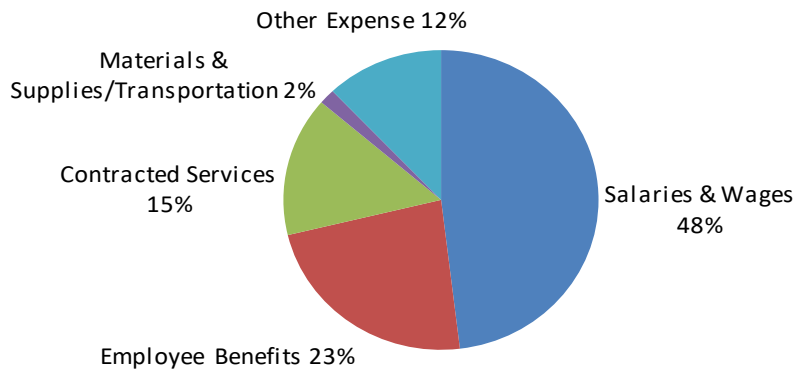
	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$2,225,065	\$1,218,308	\$2,360,836	\$2,729,376	\$368,540	15.6%
660112 - WAGES/OVERTIME NON-UNION	233	-	190	1,174	\$984	517.9%
660121 - WAGES/REGULAR UNION	756,215	369,834	771,491	847,685	\$76,194	9.9%
660122 - WAGES/OVERTIME UNION	15,432	4,655	24,270	21,811	(\$2,459)	-10.1%
660123 - WAGES/DOUBLETIME UNION	374	-	-	317	\$317	n/a
660131 - WAGES - REGULAR - TEMPS	-	-	7,440	-	(\$7,440)	-100.0%
660136 - CONTRACTED - TEMP	18,166	33,399	-	-	\$0	n/a
66014 - VACATION ACCRUAL	59,754	-	-	-	\$0	n/a
660141 - TRUSTEES COMPENSATION	23,825	10,950	27,000	27,000	\$0	0.0%
66015 - SICKTIME ACCRUAL	28,962	-	-	-	\$0	n/a
Salaries & Wages Total	3,128,026	1,637,146	3,191,227	3,627,363	436,136	13.7%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	239,397	122,393	244,129	277,491	33,362	13.7%
660405 - SAFETY/WHY PROGRAM ITEMS	3,763	1,188	6,360	6,035	(325)	-5.1%
660411 - MEALS ALLOWANCE	-	-	100	100	-	0.0%
660418 - STIPENDS	400	400	200	200	-	0.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	147,100	2,875	9,200	10,600	1,400	15.2%
660491 - FRINGE BENEFITS-REG/SAL	1,267,098	622,202	1,227,558	1,469,039	241,481	19.7%
660408 - PROGRAMS ADMINISTRATION	16	-	-	-	-	n/a
Employee Benefits Total	1,657,774	749,058	1,487,547	1,763,465	275,918	18.5%
Contracted Services						
662063 - COPIER MAINTENANCE/TONER	14,056	7,861	15,000	15,000	-	0.0%
6632 - ACCOUNTING SERVICES	34,500	38,500	39,000	39,000	-	0.0%
66331 - LEGAL - LABOR RELATIONS	41,846	55,656	68,000	68,000	-	0.0%
66333 - BOND COUNSEL	13,020	10,234	7,600	7,500	(100)	-1.3%
66339 - LEGAL - OTHER	47,895	-	20,000	34,500	14,500	72.5%
663545 - RADIO SERVICING AND EQUIP	340	-	3,000	3,000	-	0.0%
663561 - COMPUTER LICENSES	3,472	3,403	2,000	64,000	62,000	3100.0%
663562 - COMPUTER MAINTENANCE	300,830	271,622	373,044	387,975	14,931	4.0%
663563 - COMPUTER CONSULTING/OTHER	19,856	10,841	30,000	30,000	-	0.0%
6635801 - EMPLOYEE HEALTH SERVICES	8,273	4,983	10,000	10,000	-	0.0%
663581 - UTILITY BILLING PRINTING	71,941	58,103	72,000	103,600	31,600	43.9%
663582 - PAYMENT PROCESSING	157,212	61,632	167,800	125,700	(42,100)	-25.1%
663583 - RECEIVABLE COLLECTIONS	5,800	3,247	10,000	6,500	(3,500)	-35.0%
663584 - BANK SERVICE CHARGES	20,094	9,929	21,600	20,400	(1,200)	-5.6%
663587 - COURIER SERVICES	4,393	1,797	4,700	2,760	(1,940)	-41.3%
663588 - EQUIPMENT MAINTENANCE	-	-	1,500	1,500	-	0.0%
663592 - RECRUITING SERVICES	2,947	207	6,000	6,000	-	0.0%
663594 - DIGSAFE	39,825	21,357	45,000	45,000	-	0.0%
663595 - OUTPLACEMENT SERVICES	-	-	500	500	-	0.0%
663598 - HR CONSULTANT SERVICES	12,534	3,740	15,000	15,000	-	0.0%
6635984 - LANGUAGE INTERPRETATION	119	257	355	400	45	12.7%
663599 - MISC OTHER SERVICES	30,731	3,698	35,965	61,465	25,500	70.9%
Contracted Services Total	829,684	567,067	948,064	1,047,800	99,736	10.5%
Insurance						
6657 - GEN LIABILITY INSURANCE	61,191	37,711	62,092	84,850	22,758	36.7%
66592 - DAMAGES & CLAIMS-GOODWILL	(12,049)	2,040	5,500	6,000	500	9.1%
66593 - UMBRELLA INSURANCE COVER	3,536	1,322	4,216	2,974	(1,242)	-29.5%
66594 - PROFESSION/CRIME BONDING	31,808	21,183	31,118	47,664	16,546	53.2%
Insurance Total	129,514	44,284	95,231	102,926	7,695	8.1%

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Materials & Supplies						
6619 - ASSET PURCHASES	\$38,461	\$6,413	\$6,350	\$14,350	\$8,000	126.0%
66202 - TOOLS	164	168	300	500	200	66.7%
66203 - VENDOR PURCHASED SUPPLIES	1,486	1,371	3,400	2,810	(590)	-17.4%
662041 - MATERIALS INVENTORY	-	-	-	-	-	n/a
662042 - SUPPLIES INVENTORY	1,986	1,112	3,100	3,000	(100)	-3.2%
662043 - TOOL INVENTORY	6,630	7,531	1,300	1,450	150	11.5%
66204301 - INVENTORY - TONER	2,423	46	1,000	2,450	1,450	145.0%
66204302 - INVENTORY - PAPER	1,699	488	4,000	4,000	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	2,070	49	11,178	7,838	(3,340)	-29.9%
662047 - GARAGE INVENTORY	17	59	-	-	-	n/a
66205 - CONSUMABLE SUPPLIES	1,740	697	2,600	2,600	-	0.0%
66206 - COMPUTER RELATED EQUIP	41,866	18,224	26,565	34,961	8,396	31.6%
Materials & Supplies Total	98,542	36,158	59,793	73,959	14,166	23.7%
Other Expense						
6642 - EQUIPMENT RENT	-	1,634	-	-	-	n/a
66601 - PUBLIC RELATIONS	1,538	772	3,250	3,250	-	0.0%
66609 - OTHER ADVERTISING	5,475	4,370	5,600	5,500	(100)	-1.8%
6675111 - INSTA TE TRAINING/CONF	9,705	3,055	20,500	21,300	800	3.9%
6675112 - OUT OF STATE TRAINING/CON	4,996	8,255	27,000	23,000	(4,000)	-14.8%
667513 - DUES	55,023	8,844	55,165	55,515	350	0.6%
667514 - PROFESSIONAL LICENSES	1,598	1,259	900	1,100	200	22.2%
667515 - PERIODICAL SUBSCRIPTIONS	4,305	2,559	5,625	5,875	250	4.4%
667521 - POSTAGE - THIRD PARTY	190,137	107,624	201,100	217,100	16,000	8.0%
667522 - POSTAGE - INTERNAL	15,178	7,629	15,366	15,900	534	3.5%
667523 - POSTAGE - EXPRESS DELIVER	69	-	400	400	-	0.0%
667531 - PRINTING COSTS	18,440	12,590	28,100	28,925	825	2.9%
667532 - PHOTOCOPYING COSTS	(1)	-	-	-	-	n/a
667533 - FORMS STOCK	1,627	-	800	850	50	6.3%
667552 - SAFETY TRAINING	246	55	3,000	4,000	1,000	33.3%
667553 - DOT SUBSTANCE ABUSE	2,008	1,249	3,000	3,000	-	0.0%
667555 - SAFETY EXPENSES	5,851	5,149	5,000	5,000	-	0.0%
667592 - FOOD SUPPLIES	1,861	2,080	3,700	3,300	(400)	-10.8%
667593 - VENDOR INTEREST CHARGES	(4,066)	(4,759)	(4,500)	(4,500)	-	0.0%
667598 - GEN MANAGER CONTINGENCY	-	17,225	69,500	48,000	(21,500)	-30.9%
6675981 - GEN MNG - TRUSTEES	2,471	10,269	16,850	16,750	(100)	-0.6%
6675982 - GEN MNG - COMMUNITY	12,401	11,154	32,900	33,500	600	1.8%
667599 - OTHER MISCELLANEOUS	8,500	4,923	1,500	1,500	-	0.0%
Other Expense Total	337,362	205,936	494,756	489,265	(5,491)	-1.1%
Tele/Other Utilities						
66111 - TELEPHONE LINES	925	-	-	-	-	n/a
66112 - DATA LINES	31,242	12,948	16,970	16,840	(130)	-0.8%
66113 - CELLULAR PHONES	12,970	3,859	9,100	7,414	(1,686)	-18.5%
Tele/Other Utilities Total	45,137	16,807	26,070	24,254	(1,816)	-7.0%
Transportation						
66501 - TRANSPORTATION - INTERNAL	9,328	5,434	10,297	10,951	873	9.3%
665019 - TRANS INTERNAL INACTIVE	6,853	2,844	6,008	5,387	511	9.3%
66502 - TRANSPORTATION - EXTERNAL	874	224	850	850	-	0.0%
66503 - MILEAGE REIMBURSEMENT	1,611	745	3,965	3,935	(420)	-9.6%
66504 - MTA TRANS-PASS TOLL FEES	41	-	50	50	(50)	-50.0%
Transportation Total	18,707	9,247	21,170	21,173	3	0.0%
Grand Total	6,199,714	3,283,673	6,331,553	7,188,767	857,214	13.5%

Administrative Services: Customer Services (F1)

Financial Summary:

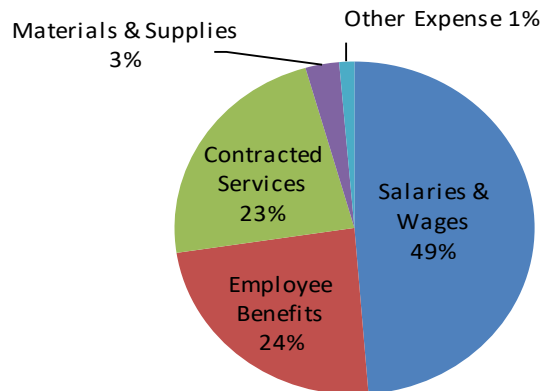
Expense Type:	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages	\$823,435	\$424,536	\$826,041	\$870,727	\$ 44,686	5.4%
Employee Benefits	393,411	182,149	379,923	419,334	39,411	10.4%
Contracted Services	155,742	174,877	244,483	273,000	28,517	11.7%
Materials & Supplies	8,244	2,928	16,693	12,038	(4,655)	-27.9%
Other Expense	181,222	107,199	204,041	215,150	11,109	5.4%
Tele/Other Utilities	5,410	2,331	1,860	3,480	1,620	87.1%
Transportation	16,997	8,464	17,305	17,338	33	0.2%
Grand Total	1,584,461	902,484	1,690,346	1,811,067	120,721	7.1%
Programs:						
17 - Hydrant Maintenance	\$2,349	\$0	\$0	\$0	\$0	n/a
74 - Control Center	225,051	121,079	201,694	179,632	(22,062)	-10.9%
76 - Collection	33,397	24,929	60,381	62,557	2,176	3.6%
77 - Billing	251,658	250,355	369,303	413,282	43,979	11.9%
80 - Meter Reading	74,797	40,654	77,426	69,217	(8,209)	-10.6%
98 - Training	48,446	20,213	171,563	128,498	(43,065)	-25.1%
99 - Administration	948,763	445,254	809,979	957,881	147,902	18.3%
Grand Total	1,584,461	902,484	1,690,346	1,811,067	120,721	7.1%
Funds:						
10 - General	\$1,548,424	\$877,208	\$1,629,965	\$1,748,510	\$ 118,545	7.3%
20 - Water General	23,994	15,801	19,765	17,368	(2,397)	-12.1%
30 - Water Standish	853	560	2,048	2,279	231	11.3%
51 - WW Cape Elizabeth	610	478	2,648	2,947	299	11.3%
53 - WW Cumberland	257	164	1,103	1,229	126	11.4%
54 - WW Falmouth	452	462	1,557	1,732	175	11.2%
57 - WW Portland	4,614	4,111	16,344	18,184	1,840	11.3%
59 - WW South Portland	2,366	1,442	7,440	8,277	837	11.3%
61 - WW Gorham	801	447	2,848	3,169	321	11.3%
62 - WW Westbrook	2,090	1,811	6,628	7,372	744	11.2%
Grand Total	1,584,461	902,484	1,690,346	1,811,067	120,721	7.1%
Headcount:						
Full-Time	14	14	14	13	-1	-7.1%
Part-Time	0	0	0	0	0	0.0%
Total	14	14	14	13	(1)	-7.1%



Administrative Services: Information Services (G1)

Financial Summary:

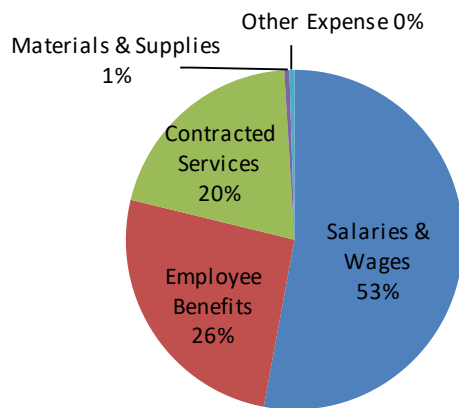
	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$625,728	\$326,851	\$626,551	\$700,274	73,723	11.8%
Employee Benefits	309,304	153,290	294,816	342,501	47,685	16.2%
Contracted Services	248,770	152,759	258,341	330,150	71,809	27.8%
Materials & Supplies	68,645	22,147	28,800	43,450	14,650	50.9%
Other Expense	4,546	4,474	10,525	10,825	300	2.9%
Tele/Other Utilities	24,724	3,909	8,000	8,000	0	0.0%
Transportation	192	192	1,000	1,000	0	0.0%
Grand Total	1,281,909	663,622	1,228,033	1,436,200	208,167	17.0%
Programs:						
98 - Training	30,862	12,953	44,385	49,055	2,042	4.8%
99 - Administration	1,251,047	650,669	1,183,648	1,387,145	24,657	2.1%
Grand Total	1,281,909	663,622	1,228,033	1,436,200	208,167	17.0%
Funds:						
10 - General	\$1,281,909	\$663,622	\$1,228,033	\$1,436,200	208,167	17.0%
Grand Total	1,281,909	663,622	1,228,033	1,436,200	208,167	17.0%
Headcount:						
Full-Time	8	8	8	8	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	8	8	8	8	0	0.0%



Administrative Services: Financial Services (H1)

Financial Summary:

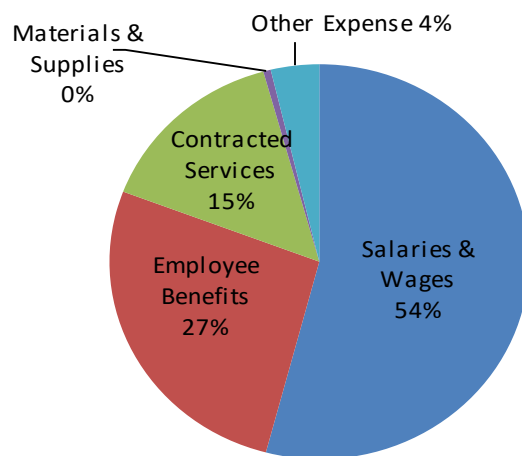
	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$484,382	\$245,873	\$469,757	\$584,562	114,805	24.4%
Employee Benefits	238,847	114,586	221,198	285,877	64,679	29.2%
Contracted Services	251,060	150,755	262,965	223,675	(39,290)	-14.9%
Materials & Supplies	3,922	2,466	5,050	5,310	260	5.1%
Other Expense	3,937	-820	5,145	5,020	(125)	-2.4%
Transportation	488	0	285	285	0	0.0%
Grand Total	982,636	512,860	964,400	1,104,729	140,329	14.6%
Programs:						
29 - Watershed Grant	\$0	\$4,042	\$4,696	\$8,502	3,806	81.0%
77 - Billing	208,644	76,061	206,730	238,868	32,138	15.5%
98 - Training	11,030	4,211	29,679	35,902	6,223	21.0%
99 - Administration	762,962	428,546	723,295	821,457	98,162	13.6%
Grand Total	982,636	512,860	964,400	1,104,729	140,329	14.6%
Funds:						
10 - General	\$897,448	\$464,838	\$875,364	\$1,000,915	125,551	14.3%
20 - Water General	\$85,188	\$48,022	\$89,036	\$103,814	14,778	16.6%
Grand Total	\$982,636	\$512,860	\$964,400	\$1,104,729	140,329	14.6%
Headcount:						
Full-Time	8	8	8	9	1	12.5%
Part-Time	0	0	0	0	0	0
Total	8	8	8	9	1	12.5%



Administrative Services: Employee Services (I1)

Financial Summary:

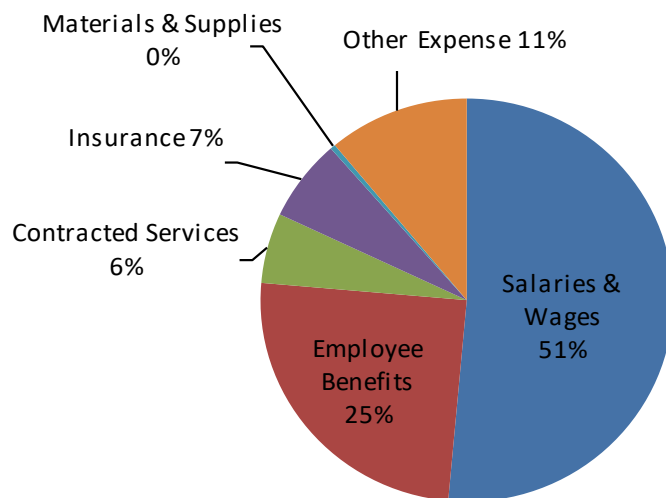
	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$319,846	\$164,383	\$319,036	\$360,527	41,491	13.0%
Employee Benefits	158,027	77,738	151,637	177,842	26,205	17.3%
Contracted Services	65,752	64,642	99,500	99,500	0	0.0%
Materials & Supplies	3,251	762	4,000	4,000	0	0.0%
Other Expense	18,515	12,611	20,000	22,000	2,000	10.0%
Tele/Other Utilities	3,259	1,792	2,410	2,340	(70)	-2.9%
Transportation	306	4	350	350	0	0.0%
Grand Total	568,956	321,932	596,933	666,559	69,626	11.7%
Programs:						
96 - Pandemic Costs	53	0	0	0	0	n/a
98 - Training	16,533	8,959	21,969	25,573	3,604	16.4%
99 - Administration	552,370	312,973	574,964	640,986	66,022	11.5%
Grand Total	568,956	321,932	596,933	666,559	69,626	11.7%
Funds:						
10 - General	\$568,956	\$321,932	\$596,933	\$666,559	69,626	11.7%
Grand Total	568,956	321,932	596,933	666,559	69,626	11.7%
Headcount:						
Full-Time	4	4	4	4	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	4	4	4	4	0	0.0%



Administrative Services: Executive (I1)

Financial Summary:

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$874,635	\$475,502	\$949,842	\$1,111,273	161,431	17.0%
Employee Benefits	558,185	221,294	439,973	537,911	97,938	22.3%
Contracted Services	108,358	24,033	82,775	121,475	38,700	46.8%
Insurance	84,485	62,256	102,926	141,488	38,562	37.5%
Materials & Supplies	14,480	7,856	5,250	9,161	3,911	74.5%
Other Expense	129,141	82,473	255,045	236,270	(18,775)	-7.4%
Tele/Other Utilities	11,744	8,775	13,800	10,434	(3,366)	-24.4%
Transportation	724	586	2,230	2,200	(30)	-1.3%
Grand Total	1,781,752	882,775	1,851,841	2,170,212	318,371	17.2%
Programs:						
5 - Public Relations	\$158,994	\$109,674	\$183,857	\$231,623	47,766	26.0%
29 - Watershed Grant	5,705	337	3,979	4,857	878	22.1%
98 - Training	45,647	24,027	75,472	74,465	(1,007)	-1.3%
99 - Administration	1,571,406	748,737	1,588,533	1,859,267	270,734	17.0%
Grand Total	1,781,752	882,775	1,851,841	2,170,212	318,371	17.2%
Funds:						
10 - General	\$1,732,977	\$881,570	\$1,792,062	\$2,108,855	316,793	17.7%
20 - Water General	48,221	696	59,779	61,357	1,578	2.6%
50 - Wastewater General	554	509	0	0	0	n/a
Grand Total	1,781,752	882,775	1,851,841	2,170,212	318,371	17.2%
Headcount:						
Full-Time	10	10	10	10	0	0.0%
Part-Time	0	0	0	0	0	0
Total	10	10	10	10	0	0.0%



Non-Departmental

Non-Departmental expenses are expenses that are not specifically assigned to a department. Other expenses include Public Utilities Commission’s assessment, real estate taxes assessed by the Town of Standish and Bad Debt write-off. The budget for Bad Debt Expense (6670) was reduced to zero as the reserve balance is adequate for anticipated losses.

	2021 Actual	2022 Jan-Jun	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Contracted Services						
663595 - OUTPLACEMENT SERVICES	\$ -	\$ 4,593	\$ -	\$ -	\$ -	n/a
663599 - MISC OTHER SERVICES	\$ 3,478	\$ -	\$ -	\$ -	-	n/a
Contracted Services Total	3,478	4,593	0	0	0	n/a
Other Expense						
6670 - BAD DEBT EXPENSE	\$ 50,000	\$ -	\$ -	\$ -	\$ -	n/a
6675611 - GRANTS - PASS-THROUGH	\$ 10,861	\$ -	\$ -	\$ -	\$ -	n/a
6706 - AMORT OF U P ACQ ADJUSTS	17,000	8,500	17,000	17,000	0	0.0%
Other Expense Total	77,861	8,500	17,000	17,000	0	0.0%
Purchased Power						
661510 - RENEW ENERGY EXPENSE	\$ 20,183	\$ 43,028	\$ -	\$ -	\$ -	n/a
661511 - RENEW ENERGY FEES	661	0	0	0	0	n/a
Purchased Power Total	20,844	43,028	0	0	0	n/a
Regulatory/Taxes						
670821 - STANDISH REAL ESTATE TAX	\$ 51,962	\$ 26,387	\$ 54,700	\$ 55,200	\$ 500	0.9%
670822 - OTHER R/E TAX(NON-STANDI)	8,463	5,263	9,230	8,820	(410)	-4.4%
670823 - PUC ASSESSMENT	119,146	133,860	120,000	122,000	2,000	1.7%
670824 - ME DRINKING WTR PROGRAM	82,438	85,471	82,475	82,475	0	0.0%
670825 - PUC PUBLIC ADVOCATE	9,903	0	15,000	11,000	(4,000)	-26.7%
Regulatory/Taxes Total	271,912	250,981	281,405	279,495	(1,910)	-0.7%
Grand Total	374,095	307,102	298,405	296,495	(1,910)	-0.6%

The District pays (670821 – Standish Real Estate Tax) real estate taxes. Real estate charges in other municipalities are paid using account 670822 – Other R/E Tax (Non-Standish).

The District also pays annual assessments to the Maine Public Utility Commission (PUC) and the Maine Drinking Water Program. The PUC assessment has two components: general assessment (670823 – PUC Assessment) and public advocacy (670825 – PUC Public Advocate). The PUC bases the general assessment on the utility’s size and the amount of time the Commission spends in each industry sector. The assessment from the Drinking Water Program (670824 – ME Drinking WTR Program) is based on population served.

Introduction

Total salaries, wages and benefits budget for 2023 is \$21,980,669. This is 15.0% higher than the 2022 budget.

Total Labor & Benefits (O&M and Capital):

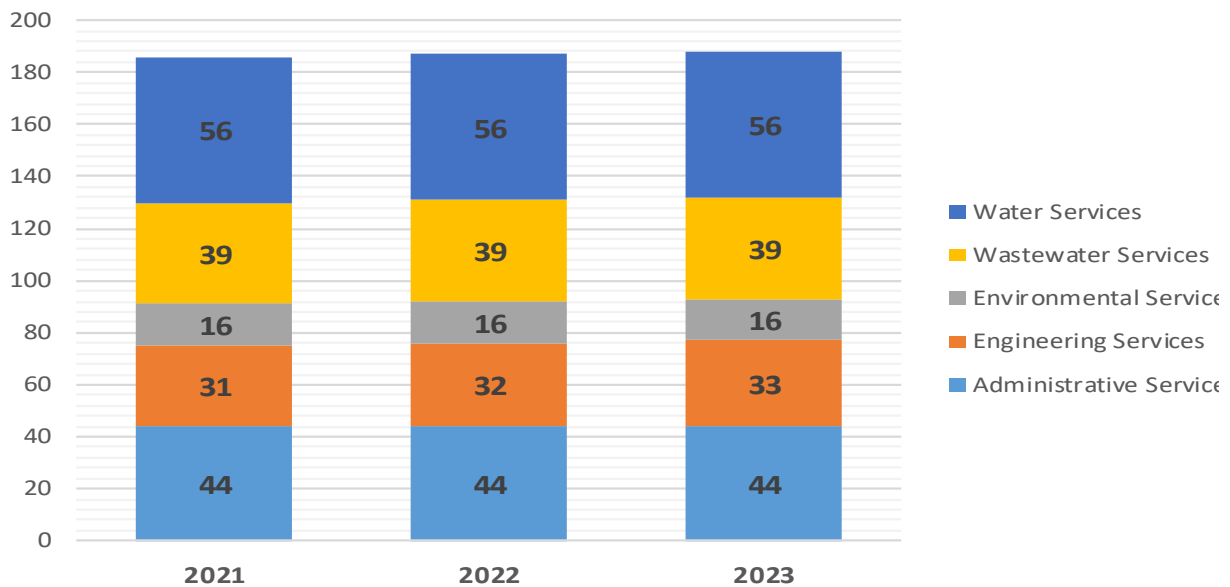
	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages	\$12,553,636	\$13,262,003	\$15,118,222	\$1,856,219	14.0%
Employee Benefits	5,986,982	5,857,819	6,862,447	\$1,004,628	17.2%
Actual	18,540,618	19,119,822	21,980,669	2,860,847	15.0%

Employees record their labor hours by specific water and wastewater operating funds and capital projects. Benefits are allocated based on the labor dollars to the funds. It is estimated staff will allocate \$847,128 in labor/benefits to capital projects in 2023; which is \$184,777 (27.9%) higher than the 2022 budget.

	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Operations & Maintenance	\$18,165,847	\$18,457,471	\$21,133,541	\$2,676,070	14.5%
Capital	374,771	662,351	847,128	184,777	27.9%
Actual	18,540,618	19,119,822	21,980,669	2,860,847	15.0%

Total Employee Positions:

Authorized positions were 188 in the 2023 Budget. This was an increase of one (1) from the 2022 Budget of 187 as Engineering Services added a position. The 2021 Budget was 186.



Salary Costs

The Budget for total labor costs will increase by 14% (\$1,856,219).

Labor rates for all employees were assumed to be 12.2% higher than the rates used in the 2022 Budget.

Overall hours budgeted increased 1.4% (6,093 hours) with the addition of one (1) position to the headcount, a 6.1% increase in premium hours (overtime, double time and standby) and additional Agency Temp position.

Operating labor will increase 13.6% while capital labor will increase 25.9%, as the percent of labor dedicated to capital increases from 3.0% to 3.9%.

Total Labor (O&M and Capital) by Type:

	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salary)	\$11,528,584	\$12,097,531	\$13,666,534	\$1,569,003	13.0%
Overtime	606,258	637,041	757,424	120,383	18.9%
Doubletime	82,333	85,137	111,358	26,221	30.8%
Standby	190,504	215,033	239,366	24,333	11.3%
Shift Differential	0	0	4,380	4,380	n/a
Premium Time/Standby	879,095	937,211	1,112,528	175,317	18.7%
Trustee Compensation	23,825	27,000	27,000	0	0.0%
District Employed Temps	69,998	200,261	228,960	28,699	14.3%
Agency Temps	52,134	0	83,200	83,200	n/a
Temporary Employees	122,132	200,261	312,160	111,899	55.9%
Total Labor Cost	12,553,636	13,262,003	15,118,222	1,856,219	14.0%

Total Labor Broken Out by O&M and Capital:

	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Operating Expense	\$12,237,201	\$12,788,195	\$14,521,475	\$1,733,280	13.6%
Capital Expenditures	316,435	473,808	596,747	122,939	25.9%
	12,553,636	13,262,003	15,118,222	1,856,219	14.0%
Operating Expense	97.5%	97.0%	96.1%		
Capital Expenditures	2.5%	3.0%	3.9%		
	100.0%	100.0%	100.0%		

Labor Hours/Average Pay Rates

Budgeted hours were up 6,093 hours or 1.4%. Regular hours were up 2,600 (0.7%) primarily due to an engineering position added for the North Windham Treatment project. Premium hours increased 6.1% while Temp Employees' hours were increased for a full time Agency Temp.

Total Labor (O&M and Capital) Hours by Type:

	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	368,138	387,660	390,260	2,600	0.7%
Overtime	15,321	15,621	16,755	1,134	7.3%
Doubletime	1,552	1,518	1,805	287	18.9%
<u>Standby</u>	<u>6,601</u>	<u>7,051</u>	<u>7,114</u>	<u>63</u>	<u>0.9%</u>
Premium Time/Standby	23,474	24,190	25,674	1,484	6.1%
District Employed Temps	4,171	12,920	12,720	(200)	-1.5%
<u>Agency Temps</u>	<u>2,607</u>	<u>-</u>	<u>2,080</u>	<u>2,080</u>	<u>n/a</u>
Temporary Employees	6,778	12,920	12,920	1,880	14.6%
	398,390	422,761	428,854	6,093	1.4%

Labor Rates by Type:

On average regular pay rates were increased 12.2%. Changes to overtime, double-time and standby varied from the average due to shifts in personnel budgeted to cover those hours. District Temporary Employee rates were increased to \$18.00 (16.1%).

	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	\$31.32	\$31.21	\$35.02	\$3.81	12.2%
Overtime	39.57	40.78	45.20	4.42	10.8%
Doubletime	50.95	56.08	61.69	5.61	10.0%
<u>Standby</u>	<u>27.90</u>	<u>30.05</u>	<u>33.65</u>	<u>3.60</u>	<u>12.0%</u>
Premium Time/Standby	35.23	38.74	38.74	0.00	0.0%
District Employed Temps	13.86	15.50	18.00	2.50	16.1%
<u>Agency Temps</u>	<u>20.00</u>	<u>n/a</u>	<u>40.00</u>	<u>n/a</u>	<u>n/a</u>
Temporary Employees	13.12	14.00	14.00	0.00	0.0%

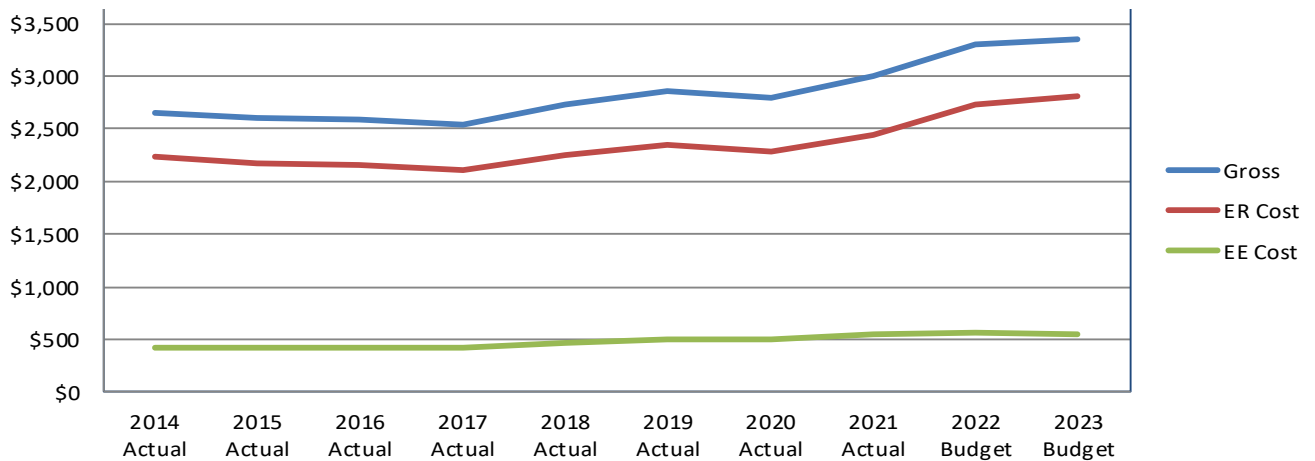
Employee Benefits

In order to qualify for benefits, employees must work more than 20/24 hours/week (non-union/union). Seasonal or temporary employees are monitored for eligibility as required under the Affordable Care Act (ACA), but in general do not qualify for benefits. Benefits are charged to departments as a percentage of the regular non-premium pay. In 2023, the benefits percentage (not including FICA) increased from 39.19% to 41.07% as overall benefit costs rose 18.4% and regular wages grew 13.0%.

Health Insurance

The 2023 Budget assumed a premium increase of 2.7%. The increase, along with shifts in employee usage, increased the gross cost (before employee contributions) by 1.7% or \$54,517. The 2023 Budget assumed that District’s percentage of gross costs would be fixed based between 82% and 92% HMO Health Reimbursement Arrangement (HRA) offering. Total employee contributions to health insurance in 2023 are budgeted to be \$543,716.

The number of employees opting out of health insurance increased from eight (8) in the 2022 Budget to nine (9) in 2023. Overall, the cost of the opt-out (payout) increased \$17,211 (65.3%) in the 2023 Budget.



The District makes health insurance coverage available to regular employees who work over 20 hours per week (24 hours per week for Union employees). The medical cost for part-time employees is prorated based on hours worked. Employees who are insured outside the District receive an amount equal to 40% of the premium cost for single employee coverage under the HMO plan. For the 2023 Budget that amount was \$93.07/week.

Year	Insured	Non-Insured	Total
2022	172	8	180
<u>2023</u>	<u>173</u>	<u>9</u>	<u>182</u>
Change	+1	+1	+2

Employee Benefits (continued)

Pension

Pension related expenses are \$2,143,459 in the 2023 Budget. The District offers employees a defined benefit plan and a deferred compensation plan.

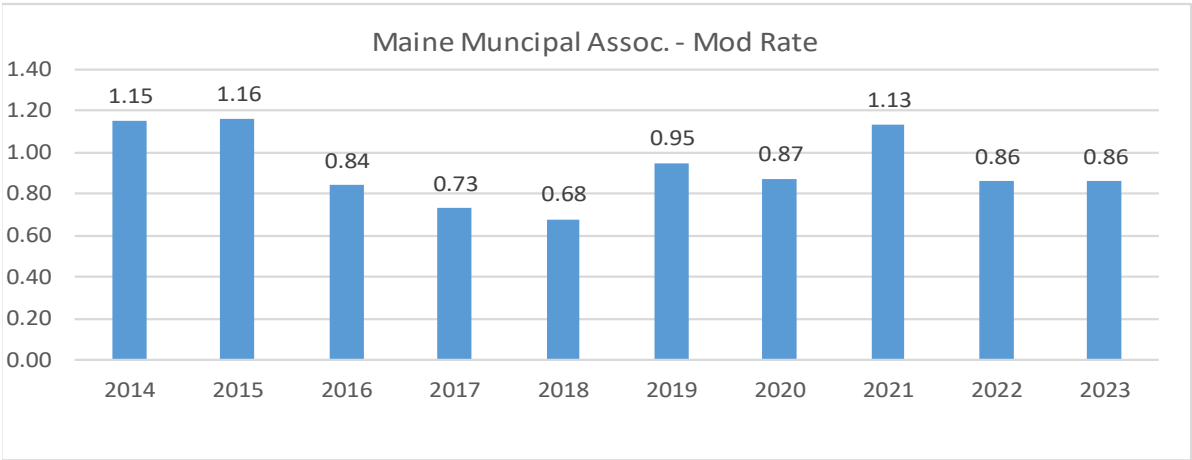
The defined benefit plan’s contributions in the 2023 Budget increased 118.3% (\$826,178) to \$1,524,809. This contribution is consistent with the Board adopted long-term funding policy and represents the amount calculated by the District’s actuary in 2022. The contribution increase is primarily due to a decrease in the value of plan assets due to changes in the market. The plan is solely funded by the District without any employee contributions.

In addition, the deferred compensation plan for Union employees hired prior to 2011, and Non-Union employees hired prior to 2012, fully matches employee contributions up to \$1,225 annually. The 2023 Budget is \$75,950, this is a \$9,800 (11.4%) reduction because of the termination of eligible employees.

New Union employees hired during or after 2011, and Non-Union employees hired during or after 2012, are enrolled in the deferred compensation plan only. The plan requires employees to contribute 3.0% of their base pay, which the District matches at a rate of 150%. Since Q2 2016, the District matches contributions up to 4.5% of their base pay, with employee contributions above 3% remaining voluntary. The expense for the match is budgeted at \$485,000 for 2023, an increase of \$20,800 (4.5%).

Workers Compensation

The District participates in the Maine Municipal Association’s workers’ compensation program. The premium assessed is based on amount of wages and a claim experience factor. The District’s mod rate of 0.86 in 2022 is expected to stay the same 2023. The 2023 Budget is \$170,500 with a deductible cost of \$9,000 resulting in a total budget of \$179,500.



Other Benefits

Other benefits, which include dental, uniforms, unemployment, long-term disability, life insurance and a contingency for higher benefit costs total \$433,385.

Employee Benefits (continued)

	2021 Actual	2022 Budget	2023 Budget	Budget Diff \$	Budget Diff %
Health Insurance:					
6604041 - HEALTH INSURANCE-EMPLOYEE	\$2,992,283	\$3,293,974	\$3,348,491	\$54,517	1.7%
66040419 - HEALTH INSUR - EE CONTRIB	-543,336	-566,908	-543,716	23,192	-4.1%
6604043 - MEDICAL INSURANCE PAYOUT	26,885	26,345	43,556	17,211	65.3%
6604044 - HEALTH INS - HRA DEDUCT	<u>0</u>	<u>0</u>	<u>7,938</u>	<u>7,938</u>	<u>n/a</u>
	2,475,832	2,753,411	2,856,269	102,858	3.7%
Pension:					
66040611 - PEN EXP - DEFINED BENEFIT	18,100	21,900	21,900	0	0.0%
66040612 - PEN EXP - DEFER COMP 457	24,828	25,000	25,000	0	0.0%
6604062 - PENSION CONTRIBUTION	1,424,313	698,631	1,524,809	826,178	118.3%
6604063 - DEF COMP 457 MATCH - NEW	408,094	465,000	485,800	20,800	4.5%
6604064 - DEF COMP 457 MATCH - OLD	83,377	85,750	75,950	-9,800	-11.4%
6604065 - PENSION LEGAL EXPENSE	<u>25,274</u>	<u>10,000</u>	<u>10,000</u>	<u>0</u>	<u>0.0%</u>
	1,983,986	1,306,281	2,143,459	837,178	64.1%
Workers Compensation:					
660409 - WORKERS' COMPENSATION	205,041	195,000	170,500	-24,500	-12.6%
6604091 - WORKES COMP DEDUCTABLE	<u>5,429</u>	<u>9,000</u>	<u>9,000</u>	<u>0</u>	<u>0.0%</u>
	210,470	204,000	179,500	-24,500	-12.0%
Other Benefits:					
66025 - BENEFITS CONTINGENCY	0	200,000	150,000	-50,000	-25.0%
660402 - LONG-TERM DISABILITY	30,723	32,000	35,000	3,000	9.4%
660403 - LIFE INSURANCE	21,132	25,000	28,000	3,000	12.0%
660407 - EDUCATION SUBSIDY	9,553	11,000	11,000	0	0.0%
660408 - PROGRAMS ADMINISTRATION	6,949	19,000	19,000	0	0.0%
660410 - UNEMPLOYMENT COMPENSATION	4,589	20,000	20,000	0	0.0%
660413 - PWD TRAINING PROGRAM	0	5,000	5,000	0	0.0%
6604151 - FIELD UNIFORMS	92,520	45,000	45,000	0	0.0%
6604152 - OFFICE CLOTHING	0	7,200	7,200	0	0.0%
660416 - DENTAL COVERAGE	57,429	65,000	65,000	0	0.0%
660417 - WELLNESS PROGRAM	139	2,500	2,500	0	0.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	7,907	34,900	34,900	0	0.0%
660422 - ACTUARY NON-PENSION	0	2,500	2,500	0	0.0%
663592 - RECRUITING SERVICES	2,000	7,000	7,000	0	0.0%
66595 - INDENTITY FRAUD INSURANCE	<u>1,142</u>	<u>1,234</u>	<u>1,285</u>	<u>51</u>	<u>4.1%</u>
	234,083	477,334	433,385	-43,949	-9.2%
Total Employee Benefits	4,904,371	4,741,026	5,612,613	871,587	18.4%
660401 - FICA - EMPLOYERS' SHARE	954,961	1,014,551	1,150,169	135,618	13.4%
Total Costs	5,859,332	5,755,577	6,762,782	1,007,205	17.5%
Total Regular Labor (Benefits Basis)	11,528,584	12,097,531	13,666,534	1,569,003	13.0%
Benefit Rate	42.54%	39.19%	41.07%	1.88%	4.8%
Total Rate (with FICA of 7.65%)	50.19%	46.84%	48.72%	1.88%	4.0%

Note: The total employee benefits expense above (\$6,762,782) does not include \$99,665 in employee benefits charged directly to departments. With these costs, the District's benefits cost is \$6,862,447.

Authorized Headcount

The overall headcount was increased one position to 188. The budget addition was an Project Engineer position added to Engineering Services. The position will focus on the development of the new North Windham Treatment facility.

One position included in A1 (Associate Engineer) was budgeted in A2.

	2021 Budget	2022 Budget	2023 Budget	Change
<u>Water Services</u>				
A1 - Water Administration	5	5	6	1
A2 - Wtr Transmission/Distrib	24	24	23	-1
A3 - Water Treatment	11	11	11	0
A6 - Water Utility Services	<u>16</u>	<u>16</u>	<u>16</u>	<u>0</u>
	56	56	56	0
<u>Wastewater Services</u>				
B1 - Wastewater Administration	3	3	3	0
B3 - Wastewater Treatment	23	23	23	0
L9 - Wastewater Systems	<u>13</u>	<u>13</u>	<u>13</u>	<u>0</u>
	39	39	39	0
<u>Environmental Services</u>				
A5 - Water Resources	9	9	8	-1
L6 - Water/WW Laboratory	<u>7</u>	<u>7</u>	<u>8</u>	<u>1</u>
	16	16	16	0
<u>Engineering Services</u>				
C1 - Facilities Services	10	10	10	0
E2 - Asset Engineering	18	18	19	1
E7 - SCADA Services Group	<u>3</u>	<u>4</u>	<u>4</u>	<u>0</u>
	31	32	33	1
<u>Administration</u>				
F1 - Customer Service	14	14	13	-1
G1 - Information Services	8	8	8	0
H1 - Financial Services	8	8	9	1
I1 - Employee Services	4	4	4	0
J1 - BOT & Senior Management	<u>10</u>	<u>10</u>	<u>10</u>	<u>0</u>
	44	44	44	0
	186	187	188	1

Non-Union Positions

The overall Non-Union headcount increased from 63 to 65 with the addition of a Project Engineer and Water Quality Manager positions. The table below shows the requested Non-Union positions by pay range. The pay ranges are effective 01/01/22. The Job Class Code (JCC) is in parentheses:

	22	23	Diff		22	23	Diff
Range 1 (\$49,000 to \$69,000)				Range 4 (\$74,000 to \$111,000)			
5010 - EXECUTIVE ADMIN ASST	1	1	0	5014 - RIGHT OF WAY AGENT	1	1	0
5028 - GENERAL ACCOUNTING ASST	<u>1</u>	<u>1</u>	<u>0</u>	5018 - SOURCE PROTECTION COORD	1	1	0
	2	2	0	9002 - WTR SVS PLNT/SYS CHIEF OP	1	1	0
Range 2 (\$58,000 to \$85,000)				Range 5 (\$80,000 to \$120,000)			
5003 - ES CONSLT-EMPLOY,COMP,BEN	1	1	0	9006 - CUSTOMER SERVICE MANAGER	1	1	0
5004 - ES CONSLT SAFETY/TRAINING	1	1	0	9008 - DIRECTOR OF FINANCE SERV	1	1	0
5005 - PURCHASING AGENT/BUYER	1	1	0	9010 - INFORMATION SRVS MANAGER	1	1	0
5017 - ENVIRONMENTAL EDUC COORD	1	1	0	9014 - DIST SYS MANAGER - WATER	1	1	0
5020 - FINANCIAL ANALYST	2	2	0	9020 - ENVIRONMENTAL SRV MANAGER	1	1	0
5023 - ASSOCIATE ENGINEER	4	4	0	9045 - SENIOR PROJECT ENGINEER	3	3	0
5032 - SCHEDULER/COORD AMAP	1	1	0	9047 - PROJECT MANAGER ADMIN	<u>1</u>	<u>1</u>	<u>0</u>
5033 - SCHEDULER/COORDINATOR OPS	1	1	0		9	9	0
5036 - ES CONSULTANT	1	1	0	Range 6 (\$102,000 to \$140,000)			
5037 - ASSOCIATE ENGINEER SCADA	1	1	0	9007 - DIRECTOR OF EMPLOYEE SRVS	1	1	0
9503 - NETWORK ADMIN 1	<u>1</u>	<u>1</u>	<u>0</u>	9011 - DIRECTOR OF OPR SRVS	2	2	0
	15	15	0	9031- ENG/ASSET MGMT SRV MNGR	<u>1</u>	<u>1</u>	<u>0</u>
Range 3 (\$68,000 to \$99,000)				Range 7 (\$122,000 to \$165,000)			
1069 - CHIEF OF SECURITY OPER	1	1	0	9004 - EXEC DIRECTOR OF ADMIN	1	1	0
5011 - TRANSM DIST SUPERVISOR	1	1	0	9005 - EXEC DIRECTOR OF AMAP	1	1	0
5019 - FACILITIES MANAGER	1	1	0	9035 - CORPORATE COUNSEL	<u>1</u>	<u>1</u>	<u>0</u>
5035 - IND PRETRTMNT PROGRM SUPR	1	1	0		3	3	0
9023 - UTILITY SPECIALIST SUPRV	1	1	0	Range 8 (\$154,000 to \$210,000)			
9044 - NETWORK ADMIN II	2	2	0	9018 - GENERAL MANAGER	1	1	0
9049 - ASSET MGMT PROGRAM MGR	1	1	0	Workforce Management			
9504 - BUS SYSTEM ANALYST SENIOR	1	1	0	9600 - WORKFORCE MANAGEMENT	3	4	1
9505 - BUS SYS ANALYST GIS SR	1	1	0				
9506 - WATER QUALITY CONTL MMG	<u>0</u>	<u>1</u>	<u>1</u>				
	11	12	1				
					63	65	2

Union Positions

For the 2023 Budget, the Union headcount was reduced from 124 to 123:

- Water Resources eliminated an Educational Educator and Customer Service eliminated at CS Coordinator – Control Center.
- Financial Services added an Admin Assistant Finance II position.
- Instrumentation added two (2) SCADA Technician II positions while eliminating two (2) others (SCADA Technician I and SCADA III)
- Laboratory group added two (2) Environmental Scientist I positions while eliminating two (2) others (Laboratory Assistant II and Environmental Scientist)

The rates shown are effective November 2022 to October 2023.

<u>Paygrade - E (\$23.59/\$24.82)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>	<u>Paygrade - J (\$31.61/\$33.27)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>
1083 - ADMINISTRATIVE ASST WW	1	1	0	1021- WATER RESOURCE SPEC	4	4	0
1092 - LABORATORY ASSISTANT II	1	0	-1	1022 - ENVIRONMENTAL SCIENTIST	3	2	-1
1094 - ADMIN ASST FINANCE II	3	4	1	1070 - TECH MAINT PERSON SLWTF	1	1	0
	5	5	0	1073 - TECH MAINT MECH/ELEC	3	3	0
				1096 - TECH MAINT PERS MECH	2	2	0
				1097 - SCADA TECHNICIAN II	0	2	2
					13	14	1
<u>Paygrade - F (\$24.98/\$26.29)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>	<u>Paygrade - K (\$33.43/\$35.18)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>
1005 - WATER SYSTEM OPERATOR	13	13	0	1053 - OPERATIONS FOREPERSON	3	3	0
1006 - WASTEWATER OPERATOR	2	2	0	1090 - OPERATIONS FOREP, SYS	1	1	0
1008 - CUST SER COORD CTRL CTR	4	3	-1	1093 - OPS FOREMAN, WW SYSTEM	1	1	0
1086 - FACILITY MAINT TECHNICIAN	3	3	0	1095 - UTILITIES SPEC FOREPERS	1	1	0
1091 - FACILITY SUPP GENERALIST	1	1	0	1098 - SCADA TECHNICIAN III	1	0	-1
1522 - TECHNICAL ADMIN ASST	2	2	0	1528 - GARAGE FOREPERSON	1	1	0
	25	24	-1	1557 - DIST SYSTEM FOREPERSON	5	5	0
				1565 - FACILITY MAINT FOREPERS	1	1	0
				1573 - ENV SCIENTIST LEAD	1	1	0
					15	14	-1
<u>Paygrade - G (\$26.49/\$27.88)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>	<u>Paygrade - L (\$35.5/\$37.37)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>
1023 - EQUIP OPERATOR I	5	5	0	1537 - SCADA TECH FOREPERSON	1	1	0
1028 - COLLECTIONS COORD	1	1	0	1569 - TECH MAINT FOREPERSON	2	2	0
1029 - FLEET MAINTENANCE TECH	1	1	0		3	3	0
1049 - MILLWRIGHT I	1	1	0		1135	1135	-1
1059 - WW MAINTENANCE OPER	11	11	0				
1099 - ENVIRONM SCIENTIST I	0	2	2				
5029 - ENVIRONM EDUCATOR	1	0	-1				
	20	21	1				
<u>Paygrade - H (\$28.11/\$29.58)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>				
1017 - CUST SERV COORDINATOR	7	7	0				
1020 - ENGINEERING TECHNICIAN	1	1	0				
1564 - INV CONTROL LEADPERS	1	1	0				
1575 - ASSET MGMT TECHNICIAN	4	4	0				
1576 - COLLECT SYS MAINT OPER	1	1	0				
	14	14	0				
<u>Paygrade - I (\$29.76/\$31.32)</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>				
1038 - SCADA TECHNICIAN I	1	0	-1				
1051 - WTR TREAT PLANT SYS OPER	7	7	0				
1055 - SR WW PLANT OPERATOR	5	5	0				
1082 - WW SYSTEM MAINT/OPER	3	3	0				
1085 - UTILITY SPECIALIST	13	13	0				
	29	28	-1				

Temporary & Non-Benefit Employees

Temporary and non-benefit employees supplement regular employees particularly during the busy times of year. These positions are not benefit eligible, but the hours for benefit eligibility are monitored carefully as is required under the Affordable Care Act. All other positions are classified as “seasonal” employees who also are not offered benefits, but do have their hours tracked to monitor for benefits eligibility. The position totals are listed as full time equivalents (FTE’s). Temporary employees hired via outside agencies are also included below.

Water Operations	2021	2022	2023	Change 22 to 23
A1 - Water Administration	0.35	0.35	0.35	0.00
A2 - Transmission/Distribution	0.00	0.00	0.00	0.00
A3 - Water Treatment	0.00	0.00	0.00	0.00
A6 - Utility Services	<u>1.96</u>	<u>1.96</u>	<u>2.09</u>	<u>0.13</u>
	2.31	2.31	2.44	0.13
<u>Wastewater Operations</u>				
B1 - Wastewater Administration	0.00	0.00	0.00	0.00
B3 - Portland/Cape/Peaks WWTP's	0.18	0.18	0.18	0.00
L9 - Water / WW Systems	<u>0.17</u>	<u>0.17</u>	<u>0.17</u>	<u>0.00</u>
	0.35	0.35	0.35	0.00
<u>Environmental Services</u>				
A5 - Environmental Services	1.90	1.90	1.90	0.00
L6 - Water / WW Laboratory	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	1.90	1.90	1.90	0.00
<u>Engineering Services</u>				
C1 - Facility Services Administration	0.50	0.50	0.50	0.00
E2 - Planning & Design	0.92	0.92	1.92	1.00
E3 - New Mains & Construction	0.00	0.00	0.00	0.00
E7 - SCADA Services Group	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	1.42	1.42	2.42	1.00
<u>Administration Department</u>				
F1 - Customer Service	0.23	0.23	0.00	(0.23)
G1 - Information Services	0.00	0.00	0.00	0.00
H1 - Financial Services	0.00	0.00	0.00	0.00
I1 - Employee Services	0.00	0.00	0.00	0.00
J1 - Executive Office	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	0.23	0.23	0.00	(0.23)
	6.21	6.21	7.12	0.90

Temporary & Non-Benefit Employees (continued)

Temporary Positions Detail:

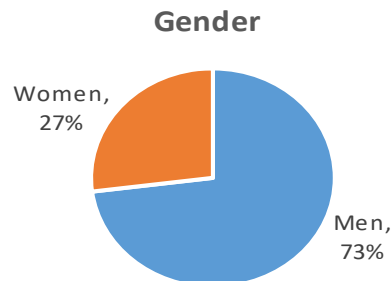
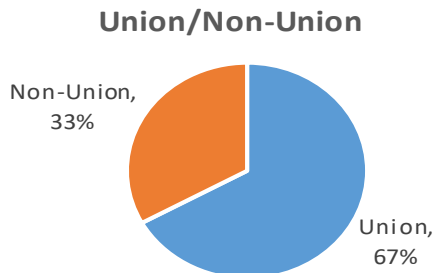
District Paid (Accounts 660131 & 660136):

Org	Job Class	ACA Type	#EE	Hrs/Wk	# Wks	Hours
A1	Water Operations Intern	U	1.5	40	12	720
A5	Lake Security	V	6	12	20	1,440
	Lake Security	V	2	18	25	900
	Lake Security	V	1	10	46	460
	Environmental Educator	T	1	20	40	800
	Watershed Protection Specialist	S	1	40	16	640
A6	Water Operation Temp	S	4	40	25.5	4,080
B3/L9	Wastewater Operations Intern	U	1.5	40	12	720
C1	Facility Maintenance Technician	T	1	20	52	1,040
E2	Engineering Intern	U	4	40	12	1,920
	Agency Temp	n/a	1	40	52	2,080
F1	Customer Service Temp	U	1	40	12	480
			25			

Affordable Care Act (ACA) Types:

- S – Seasonal (cannot work more than 26 weeks)
- T – Temp EE (cannot exceed 30 hours in a single week)
- U – Under 90 Days (maximum of 12 weeks)
- V – Variable (average hours cannot exceed 30 hours/week)

Headcount - All Regular Employees

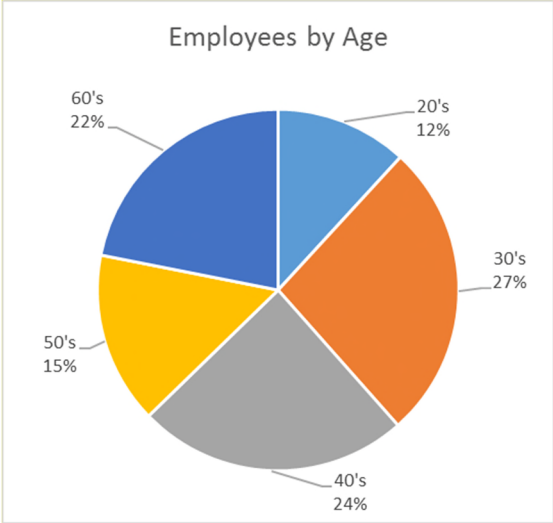


Work Force Management

In 2023, three (3) employees will reach age 65, the normal retirement age. That would bring the total of current employees, at or above 65, to 12.

Generally speaking, the Administration Department is well positioned with existing personnel.

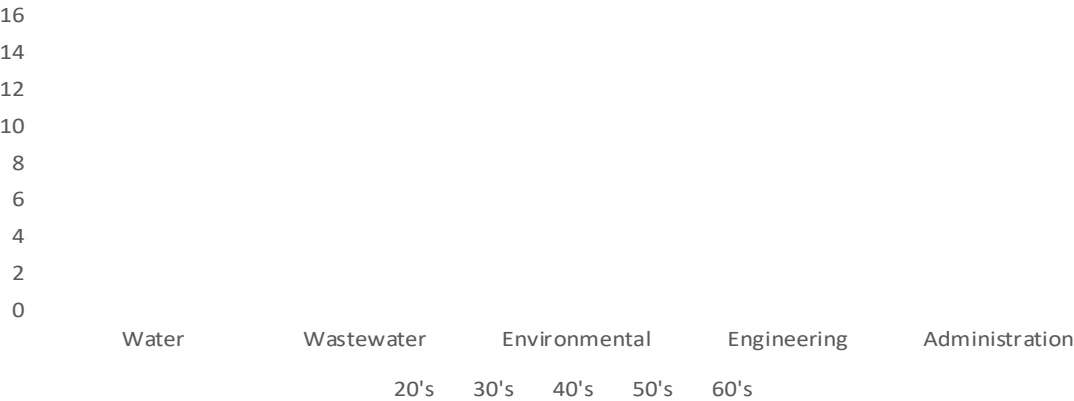
Management has been proactively managing the challenges of baby boomer retirements and the development of promoted personnel and unseasoned new hires.



The Wastewater Department has implemented an Apprentice Program to help educate new hires to the breadth of knowledge needed to operate our facilities, as well as to get exposure to other areas of PWD operations. Documentation, such as procedures for operating the rotary press, has further supported knowledge transfer.

The Water Department’s apprentice program has been satisfying its labor needs. It has served to launch capable Water System Operators into the more advanced Utility System and Water Treatment System Operator roles. The next challenge is preparing employees for the highest technical roles, and foreperson or supervisory role.

Age by Department



Average Length of Service

<u>Water</u>	<u>Wastewater</u>	<u>Environment</u>	<u>Engineering</u>	<u>Adminstration</u>	<u>Grand Total</u>
11.3	11.3	17.6	15.2	12.5	12.8

Work Force Management (continued)

Employee Development

The District actively promotes skill development by encouraging participation in local, regional and national organizations, and on the job training. Also, a goal of an average of 80 hours of training per employee per year has been established.

Managing Today

To address work force management issues, the District requires all employees' performance be evaluated yearly with an action plan to assist with continuous development. Pay adjustments for non-union employees are based on performance. The non-union market survey was conducted in 2021 with results implemented January 2022.

Travel Budget

The Board of Trustees approves an annual budget for out-of-state and overnight business travel. The General Manager specifically approves these travel requests. The total costs may not exceed the District's total budget without the Board's authorization.

Department	2022 Budget	2023 Budget	Change
Water Services	\$11,000	\$11,000	\$0
Wastewater Services	12,950	15,500	2,550
Environmental Services	6,650	5,450	-1,200
Engineering Services	9,100	14,000	4,900
Administration	<u>27,000</u>	<u>23,000</u>	<u>-4,000</u>
	\$66,700	\$68,950	\$2,250

Training Budget

Employee development is comprised of the annual budget for all in-state and out-of-state training events. Employee development costs include the travel budget listed above.

Department	2022 Budget	2023 Budget	Change
Water Services	\$304,065	\$320,874	\$16,809
Wastewater Services	193,769	225,781	32,012
Environmental Services	71,168	74,342	3,174
Engineering Services	159,470	184,360	24,890
Administration	<u>343,068</u>	<u>313,493</u>	<u>-29,575</u>
	\$1,071,540	\$1,118,850	\$47,310
Operating Expense Budget	\$33,450,113	\$38,627,122	
Percentage of O&M Budget	3.2%	2.9%	

Work Force Management (continued)

Environment and Tools

Organizational development and improvement is an on-going process. Management continues to evaluate areas that require additional focus as business needs and demands evolve, and as laws or rules governing our practices change. Many of these focus areas require cross-functional involvement including alignment to ensure understanding, practical and consistent application and communication of changes.

Management continues to utilize department monthly meetings to keep employees up to date on Board activities and decisions, significant capital improvement projects, business challenges and changes, and updates of organizational practices and policies.

SharePoint will continue to evolve in 2023 as our forum of daily information sharing, and document management across PWD. Developing and implementing a common methodology for cataloging documents to improve knowledge retrieval/sharing, and reducing document redundancy are significant areas of growth this year, ultimately involving every employee.

An organization's total compensation package is a key factor in establishing our competitive posture in the employment market, and employee satisfaction. A detail market review of the non-union salaries was completed in 2021 and implemented in 2022. As with most organizations, we continue to monitor our health care plan and explore ways to promote employees to live a healthy life style.

PORTLAND WATER DISTRICT PROFESSIONAL REPRESENTATION IN 2022

Employees participate in the following associations.

American Chemical Society

Member

National Association of Clean Water Agencies

PFAS Working Group

Association of Metropolitan Water Agencies

Board of Directors

New England Water Environment Association

CSO/Wet Weather Committee
Government Affairs Committee
Laboratory Committee
Laboratory Certification Subcommittee
Laboratory Practices Committee
Operations Challenge Committee
Workforce Development

Casco Bay Estuary Partnership

Management Committee

City of Portland Integrated Plan

Steering Committee

Cumberland District Public Health Council

Executive Committee

New England Water Works Association

Board of Directors
Customer Service Committee
Finance Management Committee
Diversity Committee
Publication Committee
Emergency Preparedness Committee
NEWWA Water WORKS Committee for
Student Outreach

Health Care Coalition of Southern Maine

Steering Committee

International Right-of-Way Association

Member

Maine Association of Site Evaluators

Licensed Site Evaluator

Sebago Clean Waters

Communications Committee
Equity, Diversity and Inclusion Team
Executive Committee
Governance and Steering Committees

Maine Criminal Justice Academy

Active Member

Maine GIS User Group

Board of Directors

Southern Maine Regional Water Council

Board of Directors

Maine Public Relations Council

Treasurer

Utilities United Against Scams

Committee

Maine Water Environment Association

Government Affairs Committee
Laboratory Certification
Laboratory Practice Committee
Operation Challenge
Pretreatment Committee

Water Research Foundation

Board of Directors

Water Environment Federation

Government Affairs

Maine Water Utilities Association

Utilities Finance Officer Group

Employee Recognition

Carrie Lewis Recognized with National AMWA President’s Award

The AMWA President’s Award is presented to individuals who have made outstanding contributions to the improvement of water supply management. Eligibility for this award is limited to individuals currently or formerly representing AMWA member agencies and recognizes their efforts and dedication in the field of drinking water supply.



General Manager’s Award

By Carrie Lewis



In 2021 we presented 24 inspire awards to employees. These are peer-nominated awards given to co-workers that have inspired us by going the extra mile on the job. At year-end, the General Manager reviews all the Inspire Awards and chooses one employee to be recognized further. This year, the award was presented to Helen Newman in AMaP. I have heard nothing but praise for her work since she was hired at PWD.

Helen received the Inspire Award in September for her involvement with the Baxter Blvd force main issue and restoration, and I chose her for further recognition with the General Manager’s Award. Her inspire nomination explained “she puts 100% into every assignment” and “the crews love working with her because she is very hands on.” She is supportive and has excellent follow through. Even though she manages a heavy work load, she is always available to take time to review and explain projects.

Based on her nomination and my observations, Helen was presented the General Manager’s Award in recognition of her leadership, teamwork, and work ethic. Thank you Helen.



2021 Service Awards

5 YEARS

- Carina Brown, AMaP-Environment
- Greg Pellerin, AMaP-Engineering
- Robert Bartels, AMaP-Engineering
- Deena Dwyer, Admin – Customer Service
- Brandon O’Keeffe, WW - Treatment
- Demetrius Edwards, Water – Utility

10 YEARS

- Wayne Dunphe, WW - Treatment
- Matthew Waite, Water –Treatment
- Evan Haines, Water - Utility
- Jared Knight, Admin – IS
- Ryan Staples, WW – Treatment
- Matthew Patterson, WW – Treatment
- Jason Weatherby, Admin – IS

15 YEARS

- Rebekah Sirois, AMaP - Environment
- Kathryn Rodriguez, AMaP – Engineering
- Mary Taylor, WW – Admin
- Laurel Jackson, AMaP – Engineering
- Donna Katsiaticas, SMT

20 YEARS

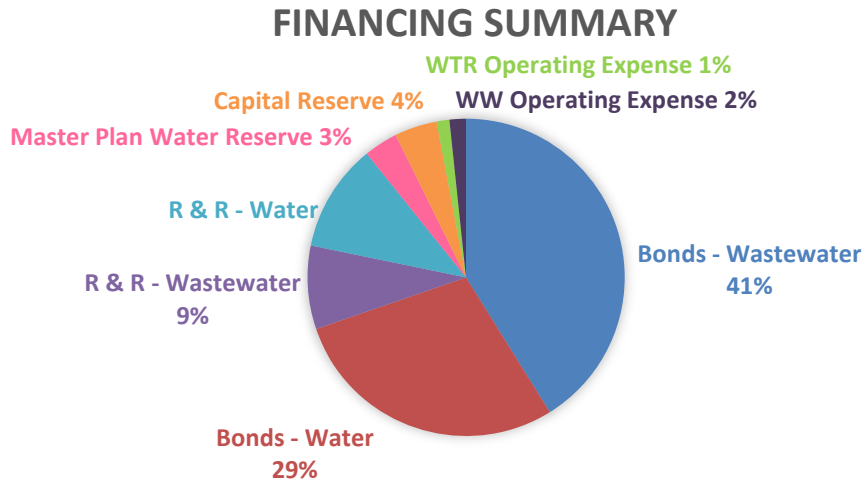
- Scott Firmin, SMT – Wastewater
- Gordie Johnson, AMaP - Engineering
- Michael Espeaignette, WW – Systems
- Edward Chouinard, Water – Treatment

35 YEARS

- Jeffrey McGill, AMaP - Engineering

Introduction

Capital expenditures are financed either from withdrawals from the Renewal and Replacement fund (R&R fund) established for each enterprise fund or through the issuance of a bond. In some instances, they may be funded through Operating Expense or other reserves. The financing option for each project is noted when the Board authorizes the project. A summary of the planned 2023 capital financing options (source of funds) are noted in the chart below. The funds will be used to fund \$11.23 million in water projects and \$11.86 million in wastewater projects.



Annual Fund Operating Budget

The annual budget includes the impact of issuing \$28.75 million of debt and \$4.22 million in contributions to the renewal and replacement funds. The projects financed have minimal impact to the operating expense budget, except the debt service impact. Most of the projects address aging assets so related maintenance costs of those assets will be lower.

Transportation renewal & replacement contributions are allocated to funds and departments through an hourly rate and are included in the transportation - internal line item.

	2022 Budget	2023 Budget	\$ Change
Debt Service Principal, Interest & Related Expense	11,492,458	12,376,460	\$884,002
Debt Service - Allocated	570,560	550,727	(19,833)
Lease Expenses	15,629	16,711	1,082
Debt Service - Watershed Protection	33,453	33,143	(310)
Annual Debt Service	12,112,100	12,977,041	864,941
Renewal & Replacement - Water - General	2,000,000	1,250,000	(750,000)
Renewal & Replacement - Wastewater	1,446,500	1,499,250	52,750
Renewal & Replacement - Multi-Fund Assets	1,050,000	1,075,000	25,000
Renewal & Replacement - Funds	4,496,500	3,824,250	(672,250)
Renewal and Replacement - Transportation	400,000	400,000	-
Annual Renewal and Replacement Contributions	4,896,500	4,224,250	(672,250)
Total Capital / Finance	17,008,600	17,201,291	192,691

Bond Financing

Overview

The District typically finances larger capital projects by issuing revenue bonds for a term of the asset's useful life or 20 years, whichever is shorter. Since most of the District's assets have a useful life in excess of 20 years, the typical bond term is 20 years. A financial analysis is conducted before issuing the bond to determine the optimal bond term. The District's charter authorizes the District, through its trustees and without vote of its inhabitants, to issue bonds to pay for the costs of capital outlays incurred in connection with acquiring, renovating or constructing water and wastewater assets.

Water bonds are secured by the revenues of customers' water rates and charges. In the event of a bond payment default, the District has the power to assess its member municipalities to provide funds to cure the default. Such assessments would be allocated based upon the municipalities' respective state valuation.

Wastewater bonds are secured by the District's sewer assessment revenue. In the event of a bond payment default, the municipalities served would be responsible for the debt service related to assets serving that municipality. The annual sewer assessment once certified to the municipality by the District is an obligation of the municipality on *parity* with the municipality's general obligation debt and entitled to the full faith and credit of the municipality.

Water Capital Reserve Bond

The 2023 Budget includes issuing a \$2 million, **10-Year** bond to finance the replacement of aging water mains. In 2013, a law (35-A M.R.S. §§ 6107-A) was enacted allowing utilities to create a capital reserve to pay for infrastructure improvements, including debt service costs, and allows the reserve to be funded by designating a portion of the utility's revenue. The 2023 budget assumes that 1% of the proposed January 1, 2023 5.6% average rate adjustment will be used to fund the reserve and will pay for the debt service of the proposed \$2 million bond. The tentative plan is to issue a \$2 million bond each of the 10 years starting in 2014, which will be funded by raising water rates an additional 1% each year.

Bond Options

The District issues bonds either directly to the market or through the Maine Municipal Bond Bank (MMBB). For larger projects, typically greater than \$10 million, the District considers issuing directly to the market. For smaller projects, the most cost effective option is to issue through MMBB.

MMBB has three different programs – General Bond, Drinking Water SRF (State Revolving Fund) and Clean Water SRF programs. General Bond issues are done twice a year at tax-exempt market rates. The SRF programs have a more flexible closing date and typically result in an interest rate 2% less than market. For qualifying projects, part of the principal may be forgiven. Projects financed through the SRF are competitively awarded by the State of Maine's Department of Human Services (water projects) or Department of Environmental Protection (wastewater projects). Those projects need to comply with certain procurement standards.

Bond Financing (continued)

The current water bond ratings by Moody's and Standard & Poor's ratings are Aa3 and AA, respectively. Moody's bond ratings range from AAA (highest quality) to C (lowest quality) and apply a number qualifier (1-high, 2-mid and 3-low) for each letter range. Standard & Poor's top four bond ratings (AAA, AA, A and BBB) generally are regarded as eligible for bank investment (AAA is highest rating). The latest rating for both was in July 2022. Moody's noted the District's deregulation from the Maine Public Utilities Commission. Additionally, the District's sizable and wealthy service area, as well as its strong liquidity and sound debt service coverage supported by annual rate increases were factors. In addition to the items Moody noted, S&P noted the District's sound system operations with virtually unlimited water supply and good financial flexibility due to the affordability of the water rates. Moody's noted weak legal security as a challenge. The weak legal security references that the District has to be in default before evoking the municipalities' 'double barrel' general taxes cure. Staff will be presenting a provision to be added to the District's charter to strengthen this next time a charter change is being considered.

Maine Municipal Bond Bank

The Maine Municipal Bond Bank was created in 1972 by the Maine State Legislature. The agency has an immense history of providing Maine's cities, towns, school systems, water and sewer districts, and other governmental entities access to low cost capital funds through the sale of its highly rated tax-exempt bonds. Established as an independent agency, the Bond Bank is administered by a board of commissioners appointed by the Governor. The Bond Bank works closely with its municipal clientele to provide unique, cost effective and competitive financing programs.

GENERAL RESOLUTION PROGRAM

For municipalities, schools districts, water districts, sewer districts and other local governments requesting loan financing through the General Resolution program. Under this tax-exempt bond financing program, the proposed debt will be paid from a General Resolution pledge of the municipality or municipalities. [Click here to learn more about the approval and financing process of this program.](#)

CLEAN WATER SRF PROGRAM

Created in 1987 by the Clean Water Act, the Maine Municipal Bond Bank serves as financial manager of the Clean Water State Revolving Loan Fund in cooperation with the Maine Department of Environmental Protection. [Click here to learn more about the approval and financing process of this program.](#)

DRINKING WATER SRF PROGRAM

Created by the Safe Drinking Water Act of 1996, the Maine Municipal Bond Bank serves as the financial manager of the Drinking Water State Revolving Loan Fund in cooperation with the Maine Department of Human Services. [Click here to learn more about the approval and financing of this program.](#)

Bond Financing (continued)

Bond Limits

The District has no legal limits of debt. A board-approved policy establishes a target maximum level of debt service to 35% of total fund budget and minimum debt service ratio of 1.25. The table indicates the status and projected status. The projected status is based on the projection included at the end of the Revenue section and includes bond financed capital projects as noted in the 5-year capital plan in the Capital Expenditures section.

The \$12M Westbrook Regional Wastewater Treatment plant scheduled for completion in 2023 causes Gorham, Westbrook and Windham ratios not to meet all the benchmark ratio. Additionally the Windham's ratio is impacted by the proposed new North Windham treatment plant starting in 2024 and a Depot Street pump station upgrade in 2021.

Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

Funds	2021	2022	2023	2024	2025	2026	2027
Water	24%	26%	25%	27%	29%	30%	30%
Wastewater							
Cape Elizabeth	16%	18%	19%	20%	24%	23%	25%
Cumberland	30%	29%	24%	24%	33%	32%	31%
Gorham	31%	35%	33%	35%	34%	33%	32%
Portland	20%	18%	17%	16%	19%	24%	24%
Westbrook	21%	24%	24%	27%	25%	23%	22%
Windham	34%	48%	46%	65%	46%	47%	50%

Debt Service Ratio – Target: Greater or Equal to 1.25

Funds	2021	2022	2023	2024	2025	2026	2027
Water	1.41	1.41	1.33	1.34	1.35	1.38	1.39
Wastewater							
Cape Elizabeth	1.51	1.46	1.43	1.37	1.30	1.30	1.27
Cumberland	1.28	1.29	1.62	1.61	1.39	1.40	1.40
Gorham	1.32	1.21	1.24	1.21	1.21	1.22	1.22
Portland	1.33	1.47	1.44	1.43	1.26	1.17	1.22
Westbrook	1.52	1.28	1.24	1.11	1.18	1.20	1.20
Windham	1.28	1.10	1.18	1.09	1.05	1.04	1.03

Water & Wastewater Funds Debt Service

Long-Term Debt Principal & Interest

The District has \$9,998,577 and \$2,735,869 of principal and interest payments in 2023. Of the total, \$9,484,373 and \$2,639,243 of principal and interest, respectively, are expensed to the individual funds. A portion of the debt service related to Meters is allocated to water and wastewater funds based on relative benefit received by each fund. Meters have principal of \$442,313 and interest of \$88,631. The ABC project allocation is based on the methods of financing that were most advantageous for each particular fund. Principal for the ABC project is \$29,000 and interest is \$2,610. Lease expense, which is based on the present value of future lease payments, was budgeted for \$16,711 in 2023. Principal and interest related to Watershed Protection debt service total \$31,565.

Administrative Fees

Maine Municipal Bond Bank (MMBB) bonds issued under the Drinking Water State Revolving Fund (DWSRF) for Water and the Clean Water State Revolving Fund (CWSRF) for Wastewater assess an administrative fee of 5% of each year's principal and coupon interest payments. Maine Municipal Bond Bank Non-SRF bonds do not assess any administrative fees. Water and Wastewater bonds issued as stand-alone bonds directly to the market also do not assess administrative fees. Total fees in 2023 are budgeted at \$257,007.

Debt Issuance Expense

The Water and Wastewater funds incur costs for issuance of the permanent financing. Prior to 2014 governments were allowed to carry the cost of these issuances on their balance sheets and write off the expense over the life of the debt. A change in accounting rules now requires that all issuance costs be recognized in the year of debt issuance. That cost in 2023 is estimated to be \$108,500.

Premiums & Deferred Outflow

The District has received premiums on bonds issued directly to the market. These premiums are recognized over the life of the bonds as a reduction in interest expense. In addition, a bond refunding was done in 2016 that resulted in a deferred outflow being added to the District's balance sheet. That outflow is being amortized over the remaining life of those bonds as an addition to interest expense. The net impact of these items on the 2023 Budget is a reduction of debt service expense of \$432,219.

Contracted Debt Service & Notes

Cumberland Wastewater Fund contracts with the Town of Falmouth for the use of treatment and wastewater pump stations. Contracted Debt Service expense are payments made by Cumberland to reimburse Falmouth for debt issued to support the services provided, that cost in 2023 is \$279,617.

Windham Wastewater Fund has two notes: intra-fund note payable between Windham and Westbrook and bond anticipation financing for the construction of the new North Windham Wastewater Treatment system. The intra-fund note payable is for Windham's portion of a one-time buy-in to the regional treatment facility. The original note of \$264,733 was issued on 4/1/08 at 4.395% interest with annual principal and interest payments. The 2023 principal (\$13,240) and interest expense (\$3,055) totaling \$16,295 are budgeted for 2023. The anticipation note is expected to have interest expense of \$26,635 for 2023. This note is expected to be paid off with a bond issue in late 2023.

Water & Wastewater Funds Debt Service (continued)

Summary of Debt Service

	Principal	Interest	MMBB & DEP Admin Fees	Debt Issuance Expense	Premiums, Deferred Outflow	Contracted & Notes	Debt Service Total
Direct Charges							
Water Fund:							
Water General Assets	3,773,671	1,345,160	59,265	65,000	(407,111)	-	4,835,985
Water Capital Reserve	1,724,968	496,544	-	20,000	-	-	2,241,512
Sub-Total Water	5,498,639	1,841,704	59,265	85,000	(407,111)	-	7,077,497
Wastewater:							
Cape Elizabeth	306,500	80,372	13,446	5,000	-	-	405,318
Cumberland	6,250	348	330	-	-	279,617	286,545
Falmouth	238,000	33,447	13,576	-	-	-	285,023
Gorham	427,498	62,438	21,612	1,694	-	-	513,242
Portland	2,138,941	441,916	106,388	5,000	(11,700)	-	2,680,545
Westbrook	725,316	140,599	33,746	3,663	-	(13,240)	890,084
Windham - South	143,229	24,442	5,485	143	-	16,295	189,594
Windham - North	-	13,977	-	8,000	-	26,635	48,612
Sub-Total Wastewater	3,985,734	797,539	194,583	23,500	(11,700)	309,307	5,298,963
Total Direct	9,484,373	2,639,243	253,848	108,500	(418,811)	309,307	12,376,460
Meters and ABC project							
Water Fund	267,904	54,180	-	-	(7,851)	-	314,233
Wastewater:							
Cape Elizabeth	18,607	2,808	412	-	(382)	-	21,445
Cumberland	5,911	1,150	-	-	(198)	-	6,863
Falmouth	3,987	359	217	-	-	-	4,563
Gorham	9,001	1,761	-	-	(296)	-	10,466
Portland	97,154	17,805	721	-	(2,655)	-	113,025
Westbrook	21,826	4,314	-	-	(694)	-	25,446
Windham - South	1,357	203	34	-	(22)	-	1,572
Sub-Total Wastewater	157,843	28,400	1,384	-	(4,247)	-	183,380
Contracted Services:							
Scarborough	5,331	1,078	-	-	(156)	-	6,253
South Portland	40,235	7,583	197	-	(1,154)	-	46,861
Sub-Total Contracted	45,566	8,661	197	-	(1,310)	-	53,114
Total Allocated	471,313	91,241	1,581	-	(13,408)	-	550,727
Leases							
Water Fund	9,888	657	-	-	-	-	10,545
Cape Elizabeth WW	3,503	2,663	-	-	-	-	6,166
Total Leases	13,391	3,320	-	-	-	-	16,711
Total Water/WW Funds	9,969,077	2,733,804	255,429	108,500	(432,219)	309,307	12,943,898
Watershed Protection	29,500	2,065	1,578	-	-	-	33,143
Total Debt Service	9,998,577	2,735,869	257,007	108,500	(432,219)	309,307	12,977,041

Debt Service Summary

The debt service expense for each fund consists of five parts:

Direct Debt Service – These charges are related to assets belonging to the specific fund such as treatment plants, pump stations, mains, etc.

Meter (Allocated) Debt Service – Meters are an asset of the Water fund but are used to calculate both water and wastewater bills. The debt related to meters is allocated to each fund based on number and size of the meters in each municipality.

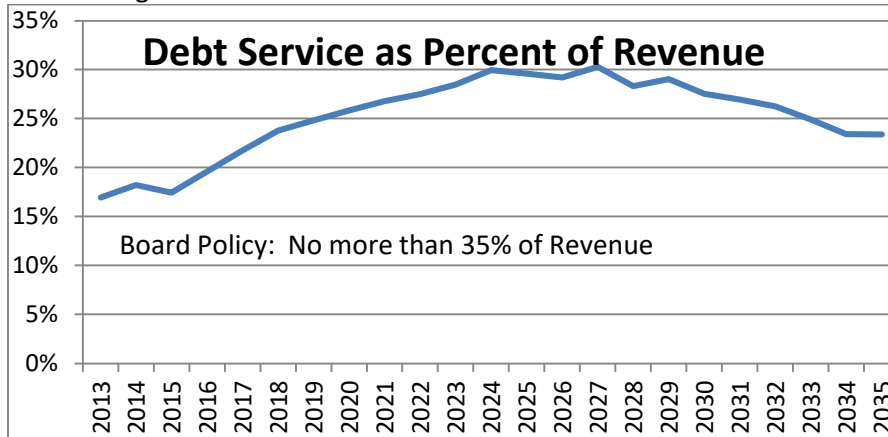
ABC project (Allocated) Debt Service – The District purchased a new computer system, Cayenta and Central Square Asset Management, which handles billing, work orders, time entry and asset management. Each fund is paying its respective share of the system costs. Each fund paid for their share in varying manners including issuing the bond. The bond's debt service is allocated based on the participating fund share of the bond.

Lease Expense – This recognizes the costs of leased property/equipment under GASB 87. Under this rule, the District calculates present value of the future lease payments and recognizes each year's portion of the cost, including interest.

	Direct	Meters (Alloc)	ABC (Alloc)	Lease Expense	Total
Water Fund	7,077,497	314,233	-	10,545	7,402,275
Wastewater:					
Cape Elizabeth	405,318	12,806	8,639	6,166	432,929
Cumberland	286,545	6,863	-	-	293,408
Falmouth	285,023	-	4,563	-	289,586
Gorham	513,242	10,466	-	-	523,708
Portland	2,680,545	97,901	15,124	-	2,793,570
Westbrook	890,084	25,446	-	-	915,530
Windham (North & South)	238,206	840	732	-	239,778
Sub-Total Wastewater	5,298,963	154,322	29,058	6,166	5,488,509
Contracted Services:					
Scarborough	-	6,253	-	-	6,253
South Portland	-	42,728	4,133	-	46,861
Sub-Total Contracted	-	48,981	4,133	-	53,114
Total Water/WW Funds	12,376,460	517,536	33,191	16,711	12,943,898
Watershed Protection	33,143	-	-	-	33,143
Total Debt Service	12,409,603	517,536	33,191	16,711	12,977,041

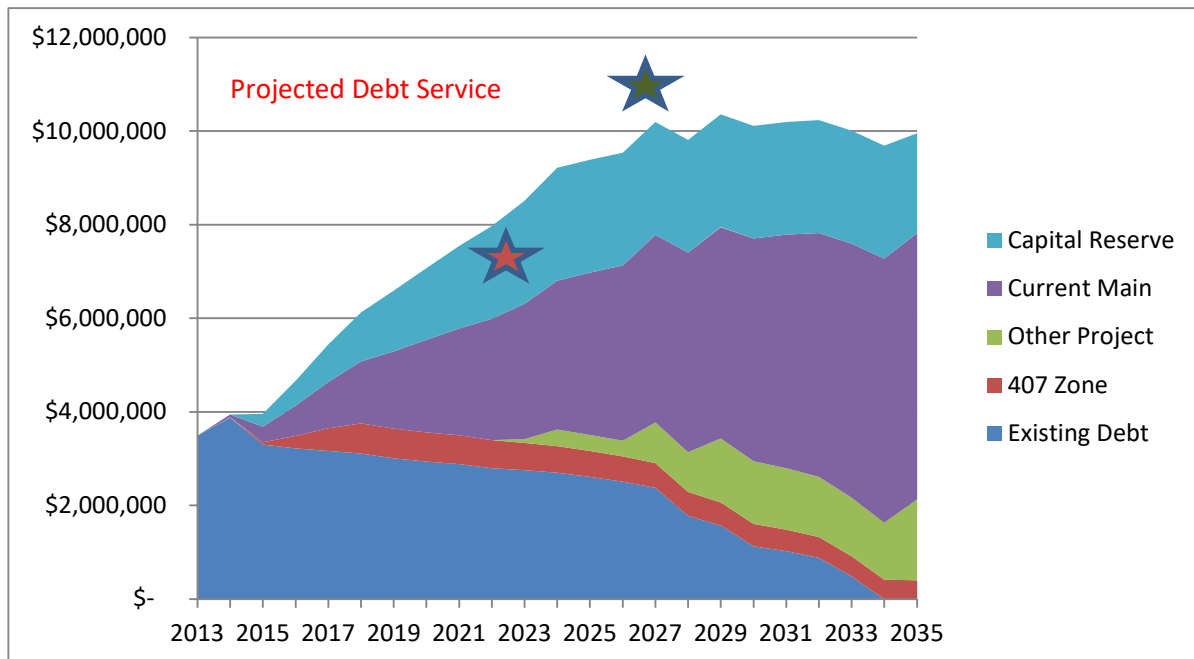
Long-Term Water Fund Target

The long-term water fund target was established in 2013. The projected 2023-2027 ratio is at or below the established target.



Projected Water Debt

The Water Fund has significant future bond financing needs including completing the 407 zone system upgrades and main renewals. In 2011, the Board adopted the policy to double the investment in main renewal by incrementally increasing the amount spent by \$500,000 until reaching an annual level of \$4 million in 2016. Starting in 2014, an additional annual investment of \$2 million was bonded to pay for main renewal and funded through the capital reserve. Other major projects include the installation of a new meter reading system and transmission line projects.



- ★ The 2023 Budget requests \$7.4 million of debt service, below the long-term plan
- ★ The updated multi-year projection is for \$11.2 million in 2027, \$1.0 above 2027 target. The 2023 multi-year plan recommends higher level of main renewal investments (up to \$11 million from the planned \$7M) and the impact of the higher than expected Windham Tank project.

Water Funds Long-Term Debt

Long-Term Debt Detail:

The table below is a list of all outstanding water fund bonds. A significant amount of debt will be paid off in the current year and will mitigate the debt service of the new bonds scheduled to be issued.

2022 bond issues may appear in the proposed section if the target issue date is after the publication date of 2023 budget.

<u>IssueDate</u>	<u>BondID</u>	<u>Purpose</u>	<u>Maturity</u>	<u>Range of Interest</u>	<u>Original Issue Principal</u>	<u>Yr End 2022 Balance</u>	<u>2023 Principal</u>	<u>Yr End 2023 Balance</u>	<u>2023 Interest Exp</u>	<u>MMBB/DEP Admin Fee</u>	<u>Issue Cost</u>	<u>PUC Docket#</u>
Existing Debt Water General LTD												
10/27/2005	WTR05-02	General Assets	2025	4.9000% - 5.0000%	\$900,000	\$135,000	\$45,000	\$90,000	\$2,978			2005-488
10/26/2006	WTR06-01	General Assets	2026	3.0000% - 3.0000%	\$1,500,000	\$300,000	\$75,000	\$225,000	\$5,366			2006-510
10/30/2008	WTR08-01	General Assets	2028	5.5750% - 5.5750%	\$1,500,000	\$450,000	\$75,000	\$375,000	\$21,128			2008-360
04/01/2009	WTR09-01	General Assets (407 Zone)	2028	1.0500% - 1.0500%	\$1,598,500	\$479,550	\$79,925	\$399,625	\$4,895	\$4,248		2008-360 AMENDED
08/28/2009	WTR09-04	General Assets (ARRA)	2029	0.0000% - 0.0000%	\$2,991,066	\$1,046,873	\$149,553	\$897,320	\$0	\$7,478		2009-128
08/28/2009	WTR09-05	General Assets (ARRA)	2029	0.0000% - 0.0000%	\$163,953	\$57,384	\$8,198	\$49,186	\$0	\$410		2009-128
05/27/2010	WTR10-02	General Assets (RZEDB)	2030	5.1730% - 5.7460%	\$400,000	\$200,000	\$25,000	\$175,000	\$6,036			2010-62
11/01/2010	WTR10-03	General Assets (DWSRF)	2030	1.0000% - 1.0000%	\$902,500	\$361,000	\$45,125	\$315,875	\$3,535	\$2,437		2010-62
10/27/2011	WTR11-01	General Assets	2031	0.5000% - 5.5000%	\$2,300,000	\$1,035,000	\$115,000	\$920,000	\$26,420			2011-266
05/01/2012	WTR12-03	Ozone UV Design & Forest Ave (DWSRF)	2032	1.0000% - 1.0000%	\$1,130,000	\$565,000	\$56,500	\$508,500	\$5,273	\$3,093		2011-266
10/25/2012	WTR12-01	General Assets	2032	2.6100% - 3.7060%	\$2,000,000	\$1,000,000	\$100,000	\$900,000	\$31,743			2012-357
05/01/2013	WTR13-01	Ozone-UV Construction Phase 1 (DWSRF)	2032	1.0000% - 1.0000%	\$2,850,000	\$1,500,000	\$150,000	\$1,350,000	\$14,750	\$8,250		2011-266
05/23/2013	WTR13-04	General Assets	2033	2.3800% - 3.7000%	\$1,428,000	\$785,400	\$71,400	\$714,000	\$25,300			2013-00167
11/04/2013	WTR13-06	Ozone-UV Construction Phase 2	2034	3.0000% - 4.2500%	\$8,000,000	\$4,800,000	\$400,000	\$4,400,000	\$192,000			2011-266
11/15/2013	WTR13-05	General Assets (DWSRF)	2033	1.0700% - 1.0700%	\$1,072,000	\$589,600	\$53,600	\$536,000	\$6,213	\$2,995		2013-00167
06/30/2014	WTR14-01	General Assets	2034	3.0000% - 3.5000%	\$2,541,000	\$1,500,000	\$125,000	\$1,375,000	\$33,172			2014-00093
05/14/2015	WTR15-01	General Assets (DWSRF) Scott Dyer Rd	2034	0.1500% - 0.1500%	\$459,000	\$277,049	\$22,897	\$254,152	\$404	\$1,166		2014-38
06/25/2015	WTR15-04	General Assets - Water Main Renewal	2035	3.0000% - 3.2500%	\$3,230,000	\$2,080,000	\$160,000	\$1,920,000	\$63,600			2015-00051
06/25/2015	WTR15-05	General Assets - Ozone Destruct	2035	3.0000% - 3.2500%	\$500,000	\$325,000	\$25,000	\$300,000	\$9,938			2015-00051
12/04/2015	WTR15-06	Water Main Renewal - Gray Road	2035	1.0000% - 1.0000%	\$270,000	\$175,500	\$13,500	\$162,000	\$1,721	\$763		2015-00051
06/20/2016	WT16-04	General Assets - Water Main Renewal	2036	3.0000% - 4.0000%	\$385,000	\$265,000	\$20,000	\$245,000	\$9,067			
06/20/2016	WT16-06	407 Zone Design	2036	3.0000% - 4.0000%	\$1,830,000	\$1,260,000	\$90,000	\$1,170,000	\$43,500			
06/20/2016	WTR16-09	General Assets 2007 Refi	2027	3.0000% - 4.0000%	\$3,034,938	\$1,347,500	\$327,688	\$1,019,813	\$44,886			
09/28/2016	WTR16-10	General Assets - Thorton Heights Phase 3	2036	1.0000% - 1.0000%	\$1,128,979	\$835,165	\$55,873	\$779,292	\$8,119	\$3,211		
09/28/2016	WTR16-11	General Assets Westbrook St DWSRF	2036	1.0000% - 1.0000%	\$566,362	\$408,123	\$27,304	\$380,819	\$3,922	\$1,562		
07/18/2017	WTR17-05	General Assets - Water Main Renewal	2037	3.0000% - 4.0000%	\$3,725,000	\$2,787,500	\$187,500	\$2,600,000	\$88,750			
03/02/2018	WTR18-01	Ward's Hill PS (407 Zone Improvement) SRF	2037	1.0000% - 1.0000%	\$1,900,000	\$1,496,055	\$99,737	\$1,396,318	\$14,794	\$5,735		
08/01/2018	WTR18-04	Asset, Billing, Customer Relations System	2028	5.0000% - 5.0000%	\$1,000,000	\$600,000	\$100,000	\$500,000	\$29,167			
08/01/2018	WTR18-05	General Assets - Water Main Renewal	2038	3.0000% - 5.0000%	\$900,000	\$720,000	\$45,000	\$675,000	\$27,188			
11/30/2018	WTR18-08	Pleasantdale/Broadway Main Renewal SRF	2038	1.0000% - 1.0000%	\$3,000,000	\$2,400,000	\$150,000	\$2,250,000	\$23,750	\$8,700		
08/01/2019	WTR19-02	General Assets - Water Main Renewal	2039	2.0000% - 5.0000%	\$4,500,000	\$3,825,000	\$225,000	\$3,600,000	\$137,625			
07/30/2020	WTR20-03	General Assets - Water Main Renewals	2040	2.0000% - 5.0000%	\$1,745,000	\$1,571,000	\$87,000	\$1,484,000	\$51,575			
11/01/2020	WTR20-07	Preble St, PO water main relocation SRF	2040	1.0000% - 1.0000%	\$220,000	\$198,000	\$11,000	\$187,000	\$1,907	\$646		
07/29/2021	WTR21-04	General Assets - Water Main Renewal	2041	2.0000% - 5.0000%	\$3,479,157	\$3,304,689	\$174,468	\$3,130,221	\$111,705			
07/29/2021	WTR21-06	407 Zone North Transmission (Depot St, WI)	2041	2.0000% - 5.0000%	\$1,152,535	\$1,091,471	\$61,064	\$1,030,407	\$37,140			
12/22/2021	WTR21-09	Mackworth/Ocean Main Renewal SRF	2041	1.0000% - 1.0000%	\$2,100,000	\$1,995,000	\$105,000	\$1,890,000	\$19,775	\$6,248		
12/22/2021	WTR21-10	Crooked River Conservation Easement SRF	2041	1.0000% - 1.0000%	\$480,000	\$456,000	\$24,000	\$432,000	\$4,520	\$1,428		
08/01/2022	WTR22-04	General Assets - Water Main Renewal	2042	4.0000% - 5.0000%	\$3,500,000	\$3,500,000	\$175,000	\$3,325,000	\$182,292			
Total Existing Debt Water General LTD						\$45,722,858	\$3,761,331	\$41,961,527	\$1,294,153	\$58,370		

Water Funds Long-Term Debt (continued)

Long-Term Debt Detail: (continued)

The table below is a list of all outstanding water fund bonds. A significant amount of debt will be paid off in the current year and will mitigate the debt service of the new bonds scheduled to be issued.

2022 bond issues may appear in the proposed section if the target issue date is after the publication date of 2023 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2022 Balance	2023 Principal	Yr End 2023 Balance	2023 Interest Exp	MMBB/DEP Admin Fee	Issue Cost	PUC Docket#
Proposed Water General LTD												
11/01/2022	WT_Ed Mills_1	Edward Mills Easement	2042	2.2500% - 2.2500%	\$246,800	\$246,800	\$12,340	\$234,460	\$5,507	\$895		
11/01/2023	WT_Main2023	Water Mains 2023	2043	4.2500% - 4.2500%	\$4,000,000	\$0	\$0	\$4,000,000	\$28,333		\$40,000	
11/01/2023	WT_Tank_1	Windham Tank/Main	2043	4.2500% - 4.2500%	\$2,000,000	\$0	\$0	\$2,000,000	\$14,167		\$15,000	
11/01/2023	WT_Wat Prot_1	Water Protection Easement	2043	2.2500% - 2.2500%	\$800,000	\$0	\$0	\$800,000	\$3,000		\$10,000	
Total Proposed Debt Water General LTD						\$246,800	\$12,340	\$7,034,460	\$51,007	\$895	\$65,000	
Total Existing and Proposed Debt Water General LTD						\$45,969,658	\$3,773,671	\$48,995,987	\$1,345,160	\$59,264	\$65,000	
Existing Debt Water Capital Reserv												
06/30/2014	WTR14-02	Water Assets - Capital Reserve	2024	3.0000% - 3.0000%	\$2,000,000	\$400,000	\$200,000	\$200,000	\$26,109			2014-00093
06/25/2015	WTR15-03	Water Assets - Capital Reserve	2025	3.0000% - 3.0000%	\$2,000,000	\$600,000	\$200,000	\$400,000	\$17,000			2015-00051
06/20/2016	WT16-05	Water Assets - Capital Reserve	2026	3.0000% - 4.0000%	\$1,830,000	\$720,000	\$180,000	\$540,000	\$24,000			
07/18/2017	WTR17-06	Water Assets - Capital Reserve	2027	3.0000% - 4.0000%	\$1,875,000	\$937,500	\$187,500	\$750,000	\$30,938			
08/01/2018	WTR18-06	Water Assets - Capital Reserve	2028	5.0000% - 5.0000%	\$2,000,000	\$1,200,000	\$200,000	\$1,000,000	\$58,333			
08/01/2019	WTR19-03	Water Assets - Capital Reserve	2029	2.0000% - 5.0000%	\$2,000,000	\$1,400,000	\$200,000	\$1,200,000	\$62,333			
07/30/2020	WTR20-04	Water Assets - Capital Reserve	2030	5.0000% - 5.0000%	\$1,830,000	\$1,464,000	\$183,000	\$1,281,000	\$71,675			
07/29/2021	WTR21-05	Water Assets - Capital Reserve	2031	5.0000% - 5.0000%	\$1,743,308	\$1,568,840	\$174,468	\$1,394,372	\$76,988			
08/01/2022	WTR22-05	Water Assets - Capital Reserve	2032	5.0000% - 5.0000%	\$2,000,000	\$2,000,000	\$200,000	\$1,800,000	\$115,000			
Total Existing Debt Water Capital Reserve						\$10,290,340	\$1,724,968	\$8,565,372	\$482,377			
Proposed Water Capital Reserve												
11/01/2023	WT_Mains 2023 CR_1	Mains 2023 CR	2033	4.2500% - 4.2500%	\$2,000,000	\$0	\$0	\$2,000,000	\$14,167		\$20,000	
Total Proposed Debt Water Capital Reserve						\$0	\$0	\$2,000,000	\$14,167	\$0	\$20,000	
Total Existing and Proposed Debt Water Capital Reserve						\$10,290,340	\$1,724,968	\$10,565,372	\$496,543	\$0	\$20,000	
Existing Debt Meters Allocated												
05/28/2009	WTR09-02	Meters	2029	2.0800% - 5.5800%	\$4,519,800	\$1,581,930	\$225,990	\$1,355,940	\$57,924			2006-403
05/28/2009	WTR09-03	Sub-Meters	2029	2.0800% - 5.5800%	\$180,200	\$63,070	\$9,010	\$54,060	\$2,309			2006-403
06/20/2016	WTR16-07	Meters 2007 Refi	2027	3.0000% - 4.0000%	\$1,734,250	\$770,000	\$187,250	\$582,750	\$25,649			
06/20/2016	WTR16-08	Submeters 2007 Refi	2027	3.0000% - 4.0000%	\$185,813	\$82,500	\$20,063	\$62,438	\$2,748			
Total Existing Debt Meters Allocated						\$2,497,500	\$442,313	\$2,055,188	\$88,630			
Existing Debt Transportation Alloc												
01/31/2020	WTR20-01	Tiger Hill Conservation Easement SRF	2029	1.0000% - 1.0000%	\$295,000	\$206,500	\$29,500	\$177,000	\$2,040	\$1,578		
Total Existing Debt Transportation Allocate						\$206,500	\$29,500	\$177,000	\$2,040	\$1,578		
Total Existing and Proposed Water Debt						\$58,963,998	\$5,970,452	\$62,243,546	\$1,935,561	\$60,843	\$87,500	

Wastewater Funds Long-Term Debt

Long-Term Debt Detail:

The tables below contain a list of all outstanding debt for Cape Elizabeth, Cumberland, Falmouth, Gorham and Portland wastewater funds. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2022 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2023 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2022 Balance	2023 Principal	Yr End 2023 Balance	Accrued 2023 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Existing Debt Cape Elizabeth													
10/30/2008	WW08-03	Cape - Generators	2028	5.5750% - 5.5750%	\$95,000	\$28,500	\$4,750	\$23,750	\$1,338	\$0	\$1,338		
12/16/2011	WW11-01	CESO Treatment / Spurwink (SRF)	2031	1.0000% - 1.0000%	\$2,430,000	\$1,093,500	\$121,500	\$972,000	\$10,733	\$0	\$10,733	\$6,622	
10/25/2012	WW12-03	Cape Ottawa Rd CSO Studies / Treatment	2032	2.6100% - 3.7060%	\$160,000	\$80,000	\$8,000	\$72,000	\$2,539	\$0	\$2,539		
05/28/2015	WW15-02	Wastewater CE Garden Lane	2035	2.4900% - 3.8900%	\$240,000	\$156,000	\$12,000	\$144,000	\$5,243	\$0	\$5,243		
05/25/2017	WW17-03	Cape Elizabeth WW Projects	2037	2.1100% - 3.9180%	\$315,000	\$236,250	\$15,750	\$220,500	\$7,578	\$0	\$7,578		
11/02/2017	WW17-07	CE Wildwood PS Upgrade	2037	2.0000% - 4.0650%	\$72,000	\$54,000	\$3,600	\$50,400	\$1,685	\$0	\$1,685		
06/03/2019	WW19-01	Cape Elizabeth UV Treatment Upgrades SRF	2039	1.0000% - 1.0000%	\$875,000	\$743,750	\$43,750	\$700,000	\$7,365	\$0	\$7,365	\$2,559	
05/08/2020	WW20-02	Cape UV Treatment Upgrades SRF Loan #2	2039	1.0000% - 1.0000%	\$130,000	\$110,500	\$6,500	\$104,000	\$1,094	\$0	\$1,094	\$380	
02/18/2021	WW21-01	Little John PS Upgrades SRF	2041	1.0000% - 1.0000%	\$850,000	\$807,500	\$42,500	\$765,000	\$10,696	\$0	\$10,696	\$2,731	
07/01/2021	WW21-02	Cape Elizabeth WWTF HVAC SRF	2041	1.0000% - 1.0000%	\$388,000	\$368,600	\$19,400	\$349,200	\$3,654	\$0	\$3,654	\$1,154	
Total Existing Debt Cape Elizabeth						\$3,678,600	\$277,750	\$3,400,850	\$51,924	\$0	\$51,924	\$13,446	
Proposed Cape Elizabeth													
11/01/2022	WW_Maiden Cove_1	Maiden Cove	2042	4.2500% - 4.2500%	\$575,000	\$575,000	\$28,750	\$546,250	\$24,234	\$0	\$24,234		
11/01/2023	WW_Cape SCADA_1	Cape System SCADA	2033	4.2500% - 4.2500%	\$245,000	\$0	\$0	\$245,000	\$1,735	\$0	\$1,735		\$2,500
11/01/2023	WW_Ottawa Rd PS_1	Ottawa Road PS	2043	4.2500% - 4.2500%	\$350,000	\$0	\$0	\$350,000	\$2,479	\$0	\$2,479		\$2,500
Total Proposed Debt Cape Elizabeth						\$575,000	\$28,750	\$1,141,250	\$28,448	\$0	\$28,448		\$5,000
Total Existing and Proposed Debt Cape Elizabeth						\$4,253,600	\$306,500	\$4,542,100	\$80,373	\$0	\$80,373	\$13,446	\$5,000
Existing Debt Cumberland													
12/22/2006	WW06-01	Cumberland - Tuttle Pump Station (SRF)	2026	1.4200% - 1.4200%	\$125,000	\$25,000	\$6,250	\$18,750	\$348	\$0	\$348	\$330	
Total Existing Debt Cumberland						\$25,000	\$6,250	\$18,750	\$348	\$0	\$348	\$330	
Existing Debt Falmouth													
05/01/2016	WW16-03	Mill Creek PS SRF	2036	1.0000% - 1.0000%	\$4,000,000	\$2,800,000	\$200,000	\$2,600,000	\$28,000	\$0	\$28,000	\$11,400	
03/21/2017	WW17-02	Falmouth Mill Creek PS Phase 2 SRF	2037	1.0000% - 1.0000%	\$760,000	\$570,000	\$38,000	\$532,000	\$5,447	\$0	\$5,447	\$2,176	
Total Existing Debt Falmouth						\$3,370,000	\$238,000	\$3,132,000	\$33,447	\$0	\$33,447	\$13,576	
Existing Debt Gorham													
11/13/2003	WW03-14	Westbrook Treatment Headworks Upgrade (SRF)	2023	0.0000% - 4.4930%	\$73,185	\$3,579	\$3,579	\$0	\$19	\$0	\$19	\$130	
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$252,000	\$37,800	\$12,600	\$25,200	\$599	\$0	\$599	\$661	

Wastewater Funds Long-Term Debt (continued)

Long-Term Debt Detail: (continued)

The tables below contain a list of all outstanding debt for Cape Elizabeth, Cumberland, Falmouth, Gorham and Portland wastewater funds. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2022 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2023 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2022 Balance	2023 Principal	Yr End 2023 Balance	Accrued 2023 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$50,400	\$15,120	\$2,520	\$12,600	\$494	\$0	\$494		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$474,672	\$166,135	\$23,734	\$142,402	\$8,009	\$0	\$8,009		
01/15/2009	WW09-01	Little Falls Conveyance (SRF)	2028	1.4400% - 1.4400%	\$4,258,208	\$1,290,366	\$215,061	\$1,075,305	\$17,807	\$0	\$17,807	\$11,682	
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$253,475	\$76,043	\$12,674	\$63,369	\$729	\$0	\$729	\$672	
05/28/2009	WW09-04	Little Falls Conveyance	2029	2.0800% - 5.5800%	\$233,954	\$81,884	\$11,698	\$70,186	\$2,998	\$0	\$2,998		
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$52,360	\$20,944	\$2,618	\$18,326	\$205	\$0	\$205	\$141	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$308,000	\$246,400	\$15,400	\$231,000	\$2,438	\$0	\$2,438	\$893	
11/04/2021	WW21-08	WEWWTF Sludge storage odor control	2041	0.6700% - 2.9540%	\$53,900	\$51,205	\$2,695	\$48,510	\$993	\$0	\$993		
05/19/2022	WW22-03	Westbrook WWTF Aeration & Clarifiers SRF	2041	1.0000% - 1.0000%	\$2,498,400	\$2,373,480	\$124,920	\$2,248,560	\$23,527	\$0	\$23,527	\$7,433	
Total Existing Debt Gorham						\$4,362,956	\$427,498	\$3,935,458	\$57,818	\$0	\$57,818	\$21,612	
Proposed Gorham													
11/01/2023	WW_West Aeration 2_1	Westbrook Aeration 2	2043	2.2500% - 2.2500%	\$1,232,000	\$0	\$0	\$1,232,000	\$4,620	\$0	\$4,620		\$1,694
Total Proposed Debt Gorham						\$0	\$0	\$1,232,000	\$4,620	\$0	\$4,620		\$1,694
Total Existing and Proposed Debt Gorham						\$4,362,956	\$427,498	\$5,167,458	\$62,438	\$0	\$62,438	\$21,612	\$1,694

Existing Debt Portland

11/13/2003	WW03-12	EETF Dewatering/Clarifiers/Screens/Grit (SRF)	2023	0.0000% - 4.4930%	\$1,230,000	\$58,998	\$58,998	\$0	\$325	\$0	\$325	\$2,187	
11/13/2003	WW03-13	EE Treatment Primary Sedimentation & Odor (SRF)	2023	0.0000% - 4.4930%	\$2,000,000	\$98,952	\$98,952	\$0	\$528	\$0	\$528	\$3,555	
12/03/2004	WW04-01	EE Treatment Odor Control (SRF)	2024	1.3300% - 1.3300%	\$375,000	\$37,500	\$18,750	\$18,750	\$436	\$0	\$436	\$674	
12/03/2004	WW04-02	EE Treatment Dewatering (SRF)	2024	1.3300% - 1.3300%	\$1,740,000	\$174,000	\$87,000	\$87,000	\$2,025	\$0	\$2,025	\$3,126	
12/01/2005	WW05-01	EE Treatment Hypochlorite Upgrade (SRF)	2025	1.6300% - 1.6300%	\$1,900,000	\$285,000	\$95,000	\$190,000	\$4,516	\$0	\$4,516	\$4,982	
04/01/2009	WW09-03	Portland India Pump Station Upgrade (SRF)	2028	1.4700% - 1.4700%	\$5,700,000	\$1,685,964	\$280,994	\$1,404,970	\$24,095	\$0	\$24,095	\$15,289	
11/01/2010	WW10-03	Portland Northeast & Pump Station Upgrades (SRF)	2030	1.0000% - 1.0000%	\$752,200	\$300,880	\$37,610	\$263,270	\$2,946	\$0	\$2,946	\$2,031	
10/27/2011	WW11-02	Portland Pump Station Upgrades	2031	0.5000% - 5.5000%	\$400,000	\$180,000	\$20,000	\$160,000	\$4,595	\$0	\$4,595		
11/04/2013	WW13-02	Peaks Island Sewer Extension	2033	4.0000% - 4.0000%	\$3,000,000	\$1,650,000	\$150,000	\$1,500,000	\$65,000	\$0	\$65,000		
12/04/2015	WW15-07	EEWWTF Aeration Upgrade SRF	2035	1.0000% - 1.0000%	\$2,000,000	\$1,300,000	\$100,000	\$1,200,000	\$12,750	\$0	\$12,750	\$5,650	
07/08/2016	WW16-01	EEWWTF Aeration Phase 2 SRF	2036	1.0000% - 1.0000%	\$7,000,000	\$4,900,000	\$350,000	\$4,550,000	\$48,417	\$0	\$48,417	\$19,950	
07/08/2016	WW16-02	Fore River PS SRF	2036	1.0000% - 1.0000%	\$1,200,000	\$840,000	\$60,000	\$780,000	\$8,300	\$0	\$8,300	\$3,420	
05/01/2017	WW17-01	EEWWTF Aeration Phase 3 SRF	2036	1.0000% - 1.0000%	\$1,900,000	\$1,396,318	\$99,737	\$1,296,581	\$13,797	\$0	\$13,797	\$5,685	
05/24/2018	WW18-03	Northeast Pump Station Odor Control	2038	2.5100% - 4.0420%	\$500,000	\$400,000	\$25,000	\$375,000	\$13,311	\$0	\$13,311		
07/30/2020	WW20-05	East End WWTF Primary Clarifier Upgrade	2040	2.0000% - 2.0000%	\$940,000	\$842,000	\$49,000	\$793,000	\$16,677	\$0	\$16,677		
07/30/2020	WW20-06	India St PS Tide Gate/East End Primary Clarifier	2040	2.0000% - 2.0000%	\$410,000	\$368,000	\$21,000	\$347,000	\$7,290	\$0	\$7,290		
12/10/2020	WW20-08	Fore River Pump Station Phase 2 SRF	2040	1.0000% - 1.0000%	\$3,150,000	\$2,835,000	\$157,500	\$2,677,500	\$28,088	\$0	\$28,088	\$9,293	
07/01/2021	WW21-03	East End WWTF HVAC (dewatering area) SRF	2041	1.0000% - 1.0000%	\$422,000	\$400,900	\$21,100	\$379,800	\$3,974	\$0	\$3,974	\$1,255	
03/09/2022	WW22-01	East End 3rd floor HVAC SRF	2041	1.0000% - 1.0000%	\$476,000	\$452,200	\$23,800	\$428,400	\$4,482	\$0	\$4,482	\$1,416	
05/04/2022	WW22-02	Asset, Billing, Customer Relations System SRF	2031	1.0000% - 1.0000%	\$290,000	\$261,000	\$29,000	\$232,000	\$2,538	\$0	\$2,538	\$1,581	
Total Existing Debt Portland						\$18,466,712	\$1,783,441	\$16,683,271	\$264,089	\$0	\$264,089	\$80,093	

Wastewater Funds Long-Term Debt (continued)

Long-Term Debt Detail: (continued)

The tables below contain a list of all outstanding debt for Cape Elizabeth, Cumberland, Falmouth, Gorham and Portland wastewater funds. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2022 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2023 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2022 Balance	2023 Principal	Yr End 2023 Balance	Accrued 2023 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Proposed Portland													
11/01/2022	WW_Baxter PS_1	Baxter Boulevard Pump Station	2042	2.2500% - 2.2500%	\$2,200,000	\$2,200,000	\$110,000	\$2,090,000	\$49,088	\$0	\$49,088	\$7,975	
11/01/2022	WW_EE Elect_1	East End Plant Electrical System	2042	2.2500% - 2.2500%	\$5,490,000	\$5,490,000	\$274,500	\$5,215,500	\$122,496	\$0	\$122,496	\$19,901	
11/01/2023	WW_EE Paving_1	East End Paving	2043	4.2500% - 4.2500%	\$500,000	\$0	\$0	\$500,000	\$3,542	\$0	\$3,542		\$2,500
11/01/2023	WW_Stroud PS_1	Stroudwater Pump Station	2043	4.2500% - 4.2500%	\$750,000	\$0	\$0	\$750,000	\$5,313	\$0	\$5,313		\$2,500
Total Proposed Debt Portland						\$7,690,000	\$384,500	\$8,555,500	\$180,437	\$0	\$180,437	\$27,876	\$5,000
Total Existing and Proposed Debt Portland						\$26,156,712	\$2,167,941	\$25,238,771	\$444,526	\$0	\$444,526	\$107,970	\$5,000

Wastewater Funds Long-Term Debt (continued):

Long-Term Debt Detail: (continued)

The tables below contain a list of all outstanding debt for the Westbrook wastewater fund. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2022 Bond issues may appear in the proposed section if the target issue date is after the publication date of the 2023 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2022 Balance	2023 Principal	Yr End 2023 Balance	Accrued 2023 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Existing Debt Westbrook													
11/13/2003	WW03-14	Westbrook Treatment Headworks Upgrade (SRF)	2023	0.0000% - 4.4930%	\$266,254	\$13,021	\$13,021	\$0	\$70	\$0	\$70	\$473	
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$1,316,800	\$197,520	\$65,840	\$131,680	\$3,130	\$0	\$3,130	\$3,453	
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$183,360	\$55,008	\$9,168	\$45,840	\$1,798	\$0	\$1,798		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$2,384,641	\$834,624	\$119,232	\$715,392	\$40,236	\$0	\$40,236		
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$974,925	\$292,478	\$48,746	\$243,731	\$2,803	\$0	\$2,803	\$2,584	
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$113,220	\$45,288	\$5,661	\$39,627	\$443	\$0	\$443	\$306	
12/04/2015	WW15-08	Westbrook CSO Upgrade SRF	2035	1.0000% - 1.0000%	\$1,000,000	\$650,000	\$50,000	\$600,000	\$6,375	\$0	\$6,375	\$2,825	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$666,000	\$532,800	\$33,300	\$499,500	\$5,273	\$0	\$5,273	\$1,931	
09/01/2018	WW18-07	Dana Court PS Upgrades SRF	2039	1.0000% - 1.0000%	\$2,200,000	\$1,870,000	\$110,000	\$1,760,000	\$18,517	\$0	\$18,517	\$6,435	
11/04/2021	WW21-08	WEWWTF Sludge storage odor control	2041	0.6700% - 2.9540%	\$116,550	\$110,723	\$5,828	\$104,895	\$2,146	\$0	\$2,146		
05/19/2022	WW22-03	Westbrook WWTF Aeration & Clarifiers SRF	2041	1.0000% - 1.0000%	\$5,290,400	\$5,025,880	\$264,520	\$4,761,360	\$49,818	\$0	\$49,818	\$15,739	
Total Existing Debt Westbrook						\$9,627,342	\$725,316	\$8,902,026	\$130,609	\$0	\$130,609	\$33,746	
Proposed Westbrook													
11/01/2023	WW_West Aeration 2_1	Westbrook Aeration 2	2043	2.2500% - 2.2500%	\$2,664,000	\$0	\$0	\$2,664,000	\$9,990	\$0	\$9,990		\$3,663
Total Proposed Debt Westbrook						\$0	\$0	\$2,664,000	\$9,990	\$0	\$9,990	\$0.00	\$3,663
Total Existing and Proposed Debt Westbrook						\$9,627,342	\$725,316	\$11,566,026	\$140,599	\$0	\$140,599	\$33,746	\$3,663

Wastewater Funds Long-Term Debt (continued):

Long-Term Debt Detail: (continued)

The tables below contain a list of all outstanding debt for the Windham wastewater fund. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2022 Bond issues may appear in the proposed section if the target issue date is after the publication date of the 2023 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2022 Balance	2023 Principal	Yr End 2023 Balance	Accrued 2023 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Existing Debt Windham													
11/13/2003	WW03-14	Westbrook Treatment Headworks Upgrade (SRF)	2023	0.0000% - 4.4930%	\$9,061	\$443	\$443	\$0	\$2	\$0	\$2	\$16	
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$31,200	\$4,680	\$1,560	\$3,120	\$74	\$0	\$74	\$82	
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$6,240	\$1,872	\$312	\$1,560	\$61	\$0	\$61		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$40,687	\$14,240	\$2,034	\$12,206	\$687	\$0	\$687		
01/15/2009	WW09-01	Little Falls Conveyance (SRF)	2028	1.4400% - 1.4400%	\$1,681,792	\$509,634	\$84,939	\$424,695	\$7,033	\$0	\$7,033	\$4,614	
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$21,600	\$6,480	\$1,080	\$5,400	\$62	\$0	\$62	\$57	
05/28/2009	WW09-04	Little Falls Conveyance	2029	2.0800% - 5.5800%	\$196,046	\$68,616	\$9,802	\$58,814	\$2,512	\$0	\$2,512		
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$4,420	\$1,768	\$221	\$1,547	\$17	\$0	\$17	\$12	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$26,000	\$20,800	\$1,300	\$19,500	\$206	\$0	\$206	\$75	
11/04/2021	WW21-07	Depot St WWPS - Phase 1 (PWD share)	2041	0.6700% - 2.9540%	\$615,000	\$584,250	\$30,750	\$553,500	\$11,325	\$0	\$11,325		
11/04/2021	WW21-08	WEWWTF Sludge storage odor control	2041	0.6700% - 2.9540%	\$4,550	\$4,323	\$228	\$4,095	\$84	\$0	\$84		
05/19/2022	WW22-03	Westbrook WWTF Aeration & Clarifiers SRF	2041	1.0000% - 1.0000%	\$211,200	\$200,640	\$10,560	\$190,080	\$1,989	\$0	\$1,989	\$628	
Total Existing Debt Windham						\$1,417,746	\$143,229	\$1,274,517	\$24,052	\$0	\$24,052	\$5,485	
Proposed Windham													
11/01/2023	WW_NO Win 2023_1	No Windham Treat 2023	2053	1.5000% - 1.5000%	\$5,590,814	\$0	\$0	\$5,590,814	\$13,977	\$0	\$13,977		\$8,000
11/01/2023	WW_West Aeration 2_1	Westbrook Aeration 2	2043	2.2500% - 2.2500%	\$104,000	\$0	\$0	\$104,000	\$390	\$0	\$390		\$143
Total Proposed Debt Windham						\$0	\$0	\$5,694,814	\$14,367	\$0	\$14,367		\$8,143
Total Existing and Proposed Debt Windham						\$1,417,746	\$143,229	\$6,969,331	\$38,419	\$0	\$38,419	\$5,485	\$8,143

Capital Reserve – Water

In 2013, a new state law (35-A M.R.S. 6107-A, Funding for Infrastructure Improvements for Water Utilities) was enacted. The law allows a water utility to fund future infrastructure improvements through recovery in rates. As required by the law, the Maine Public Utilities Commission adopted a rule (Chapter 675 – Infrastructure Surcharge and Capital Reserve Accounts) that outlines the maximum amount of funds the may be recovered through rates, use of those funds, and reporting requirements.

The maximum dollar amount of funds that may be recovered through rates depends on the size of the utility. Portland Water District is considered a large utility (utilities with revenues greater than \$750,000 are considered large) and therefore the amount of revenue requirement attributed to funding a capital reserve should not exceed either of the following:

1% of Gross Plant (as of 12/31/21)	\$ 3,698,563
10% of Revenue Requirement (2023 Budget)	\$ 2,904,360

The capital reserve can only be used to pay for the costs of construction associated with the projects identified in the utility's System Infrastructure Assessment Report (SIA) and are related to transmission, distribution, and treatment of water. The District submitted a SIA that identified water mains that need to be replaced due to age or type of material.

SIA Program	Main to be replaced (ft)	Cost per foot	Miles of pipe	Program Cost
A (Cast Iron pipe >100 years old)	559,680	\$225	106 miles	\$126 million
B (Cast Iron pipe 75-100 years old)	443,520	\$225	84 miles	\$100 million
C (Galvanized Iron pipe)	59,136	\$200	11 miles	\$12 million
D (2 ½" diameter Cast Iron pipe)	84,480	\$200	16 miles	\$17 million
Totals			217 miles	\$255 million

The District has chosen to increase each year an additional 1% for 10 years with the revenue reserved to pay the debt service costs of issuing a \$2 million bond each year. The bond proceeds will be used to replace water mains identified in the SIA.

Starting in 2014, 1% of the rate adjustments has been dedicated to the reserve.

	2022 Budget	2022 Projected	2023 Budget
Revenue	2,043,277	2,043,277	2,620,297
Debt Service	1,863,241	1,850,093	2,076,972
Water Mains	-	-	1,000,000
Annual Charge	180,036	193,184	(456,675)
Carry Forward	849,330	1,110,603	1,303,787
	1,029,366	1,303,787	847,112

Renewal & Replacement

Each fund contributes to a renewal and replacement (R&R) fund. These funds are used to pay for smaller capital projects as an alternative to issuing long-term debt. Each fund maintains a R&R fund for assets owned by that fund. In addition, R&R balances are maintained for other groups of assets that, while owned by the Water fund, serve the needs of all District funds. These other R&R balances are:

Douglass St – This fund is for the building and grounds that serve as the District’s main headquarters.

Meters – Water meters measure water flow but provide data used in both water and wastewater billing.

Technology – This category includes both computer hardware and software systems that serve all District funds.

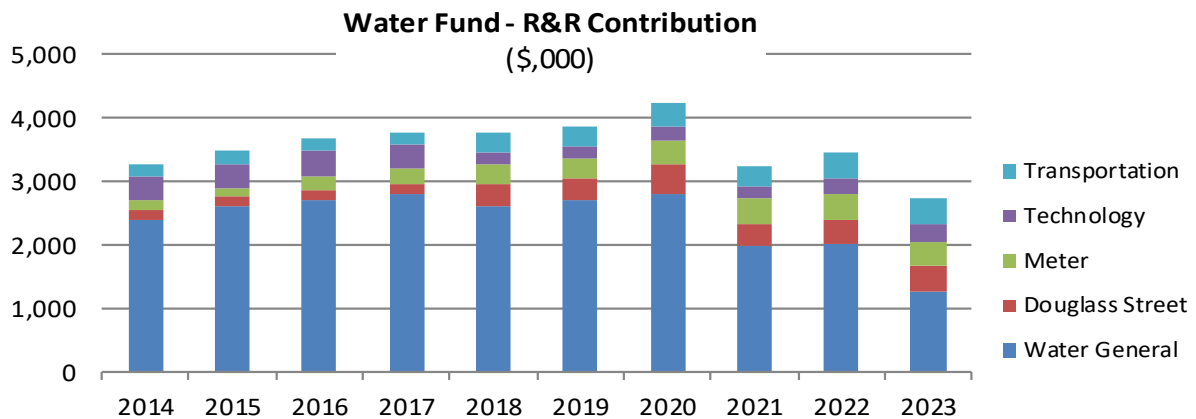
Transportation – These assets are used by all District funds. The charge for the R&R funding is part of the hourly rate of each vehicle (an internal line item).

2023 Contributions:

	Fund	Douglass St	Meters	Technology	Combined*	Total
Water	\$1,250,000	\$255,960	\$259,320	\$149,655	\$664,935	\$1,914,935
Wastewater:						
Cape Elizabeth	155,000	13,080	7,040	11,495	31,615	186,615
Cumberland	40,000	6,400	4,160	6,023	16,583	56,583
Gorham	100,000	9,920	6,680	7,645	24,245	124,245
Portland	1,000,000	88,240	68,920	79,310	236,470	1,236,470
Westbrook	168,000	20,280	17,680	18,233	56,193	224,193
Windham	36,250	2,680	680	2,640	6,000	42,250
Contracted Services:						
Falmouth	-	-	-	-	-	-
Scarborough	-	40	5,160	-	5,200	5,200
South Portland	-	3,400	30,360	-	33,760	33,760
R&R - Funds	\$2,749,250	400,000	400,000	275,000	1,075,000	\$3,824,250
R&R - Transportation						400,000
R&R - Total						\$4,224,250
*Combined = Douglass St + Meters + Technology						

Water Fund - Renewal & Replacement Fund

The District will contribute a total of \$2,725,000 to the renewal and replacement fund in 2023. Similar to the debt service costs, renewal and replacement reserve is directly received from the fund or indirectly through the appropriate allocation method from all funds. The Water renewal and replacement contribution is capped at approximately \$5,209,000, which is the estimated depreciation of all water assets, per Maine Public Utility Commission rules. Starting in 2011, the District began to track and reserve balances by different categories of renewal & replacement with part of the general surplus designated to the transportation, technology, meter and Douglass Street building reserves. A 10-year span is shown in the graph below.



	Water General	Douglass Street	Water Meters	Technology	Transportation	Total
Balance 12/31/20	6,857,858	550,637	(107,837)	165,933	284,799	7,751,390
Contribution - 2021	1,964,000	360,000	400,000	200,000	400,000	3,324,000
Operating Surplus Transfer	487,268	-	-	-	-	487,268
Expenditure	(2,274,189)	(148,004)	(181,511)	(250,362)	(389,738)	(3,243,804)
Balance 12/31/21	7,034,937	762,633	110,652	115,571	295,061	8,318,854
Contribution - 2022	2,000,000	400,000	400,000	250,000	400,000	3,450,000
Operating Surplus Transfer	821,442	-	-	-	-	821,442
Expenditure (Est'd)	(4,084,475)	(1,117,368)	(200,000)	(298,000)	(507,816)	(6,207,659)
Balance 12/31/22 (Est'd)	5,771,904	45,265	310,652	67,571	187,245	6,382,637
Contribution - 2023	1,250,000	400,000	400,000	275,000	400,000	2,725,000
Expenditure (Est'd)	(1,340,000)	(100,000)	(400,000)	(405,000)	(290,000)	(2,535,000)
Balance 12/31/23 (Est'd)	5,681,904	345,265	310,652	(62,429)	297,245	6,572,637

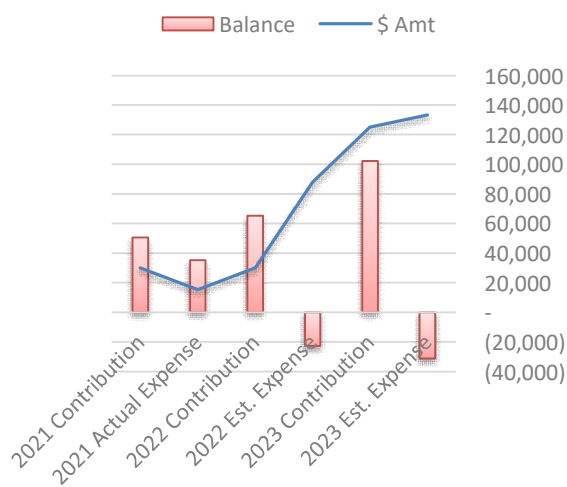
Wastewater Funds - Renewal & Replacement Funds

Each wastewater fund includes an annual contribution to the renewal and replacement (R&R) reserve to finance capital additions or replacements. At the end of fiscal year 2021 proceeds from an agreement with CMP, in the amount of \$100,000, was transferred to Portland's R&R reserve. An additional \$150,000 from this same agreement is expected to be transferred to R&R in fiscal year 2022.

In 2023, R&R contributions increased for Cape Elizabeth (\$145,000 to \$155,000), Gorham (\$75,000 to \$100,000) and Windham (\$18,500 to \$36,250). Contributions for Cumberland, Portland and Westbrook remained the same as the prior year.

The estimated 2023 expenditures from the R&R funds are based on the 2023 Capital Improvements Budget as outlined in the Capital Expenditure section.

	CAPE					
	ELIZABETH	CUMBERLAND	GORHAM	PORTLAND	WESTBROOK	WINDHAM
Balance 12/31/20	523,452	364,964	987,435	5,462,248	4,009,728	358,371
Contribution - 2021	135,000	40,000	100,000	700,000	270,000	35,849
Operating Surplus Transfer	-	-	58,167	498,067	-	-
<u>Expenditure</u>	<u>(81,916)</u>	<u>(239,325)</u>	<u>(262,853)</u>	<u>(1,309,219)</u>	<u>(190,615)</u>	<u>(27,263)</u>
Balance 12/31/21	576,536	165,639	882,749	5,351,096	4,089,113	366,957
Contribution - 2022	145,000	40,000	75,000	1,000,000	168,000	18,500
Operating Surplus Transfer	-	-	-	100,000	-	-
<u>Expenditure (Est'd)</u>	<u>(90,390)</u>	<u>(12,280)</u>	<u>(88,859)</u>	<u>(659,958)</u>	<u>(318,020)</u>	<u>(24,157)</u>
Balance 12/31/22 Estimated	631,146	193,358	868,890	5,791,138	3,939,093	361,300
Contribution - 2023	155,000	40,000	100,000	1,000,000	168,000	36,250
Operating Surplus Transfer	-	-	-	150,000	-	-
<u>Expenditure (Est'd)</u>	<u>(125,000)</u>	<u>(125,000)</u>	<u>(157,060)</u>	<u>(1,060,000)</u>	<u>(466,370)</u>	<u>(31,570)</u>
Balance 12/31/23 Estimated	661,146	108,358	811,830	5,881,138	3,640,723	365,980
Target Renewal & Replacement (5% of Gross Capital Assets)	\$930,000	\$470,000	\$920,000	\$5,827,000	\$1,149,000	\$193,000



The Cumberland fund has a separate contracted R&R reserve that is used to pay its share of capital expenses to the Town of Falmouth. Falmouth operates the facilities and manages the capital projects. They then bill the Cumberland fund for a portion of those capital expenditures because those Falmouth facilities are also used to provide wastewater services to Cumberland. The contracted R&R reserve started in 2018 with a contribution of \$52,910. Contributions for 2021 and 2022 were \$30,000 each. That amount was increased to \$125,000 for the 2023 contribution. The projected 2023 end of year balance is a deficit of \$31,232.

Water Fund - Rate Stabilization & Water Master Plan Funds

On January 27, 2020, the District's Board of Trustees authorized the creation of two new funds – Water Rate Stabilization and Water Master Plan funds. They also allocated \$1,244,548 of the 2019 annual surplus to the funds.

Water Rate Stabilization Fund

The purposes of the fund are to assist in smoothing rates as part of the District's multi-year and annual financial planning and to assure that the minimum debt coverage ratio established in the District's Debt Policy, as amended from time to time, is met. Funds deposited into this reserve are treated as operating costs in the year of deposit and such funds disbursed from this fund will be treated as revenues in the year of disbursed for the purposes of computing the District's debt service coverage ratio. Any withdrawal from the fund will be authorized by the Board.

Water Master Plan Fund

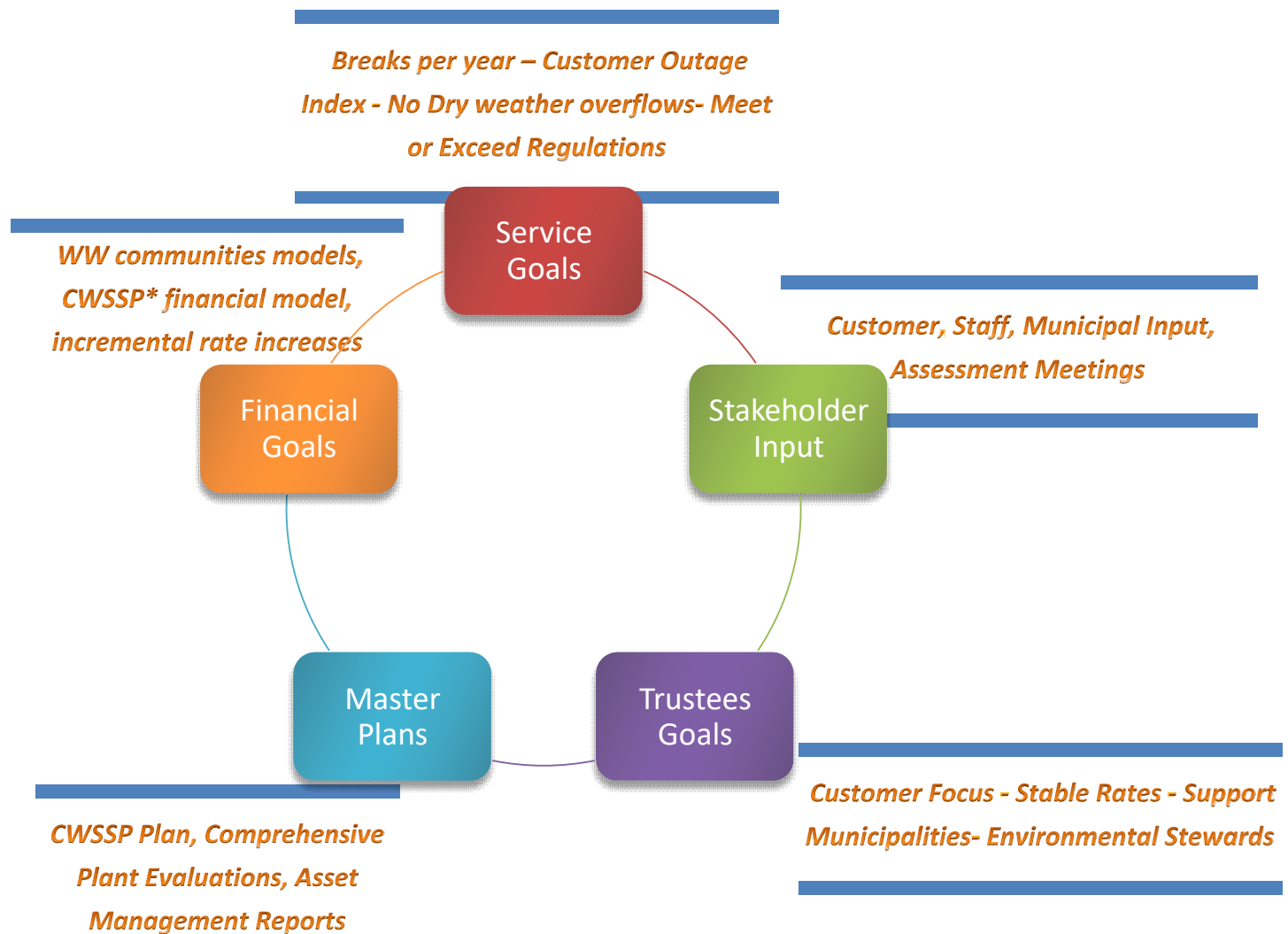
The purpose of the fund is to provide funding for the development and updating of the water master plan and related asset assessments. The District periodically creates and updates a long-term asset management plan and perform assessments of asset to determine the each asset conditions. Any withdrawal from this fund will be approved by the Board. At the Board's discretion, it may reallocate the fund for other District's purposes.

The Capital Improvement Plan includes authorizing and starting Comprehensive Asset Management Strategic Plan project (program 3, subprogram 3071) and related infrastructure assessments. It is expected to be spent in 2023.

	Balance 01/01/22	2022 Projected	2023 Budget	Balance 12/31/23
Rate Stabilization Fund	\$300,000	\$0	\$0	\$300,000
Water Master Plan	944,548	0	(944,548)	0
	\$1,244,548	\$0	(\$944,548)	\$300,000

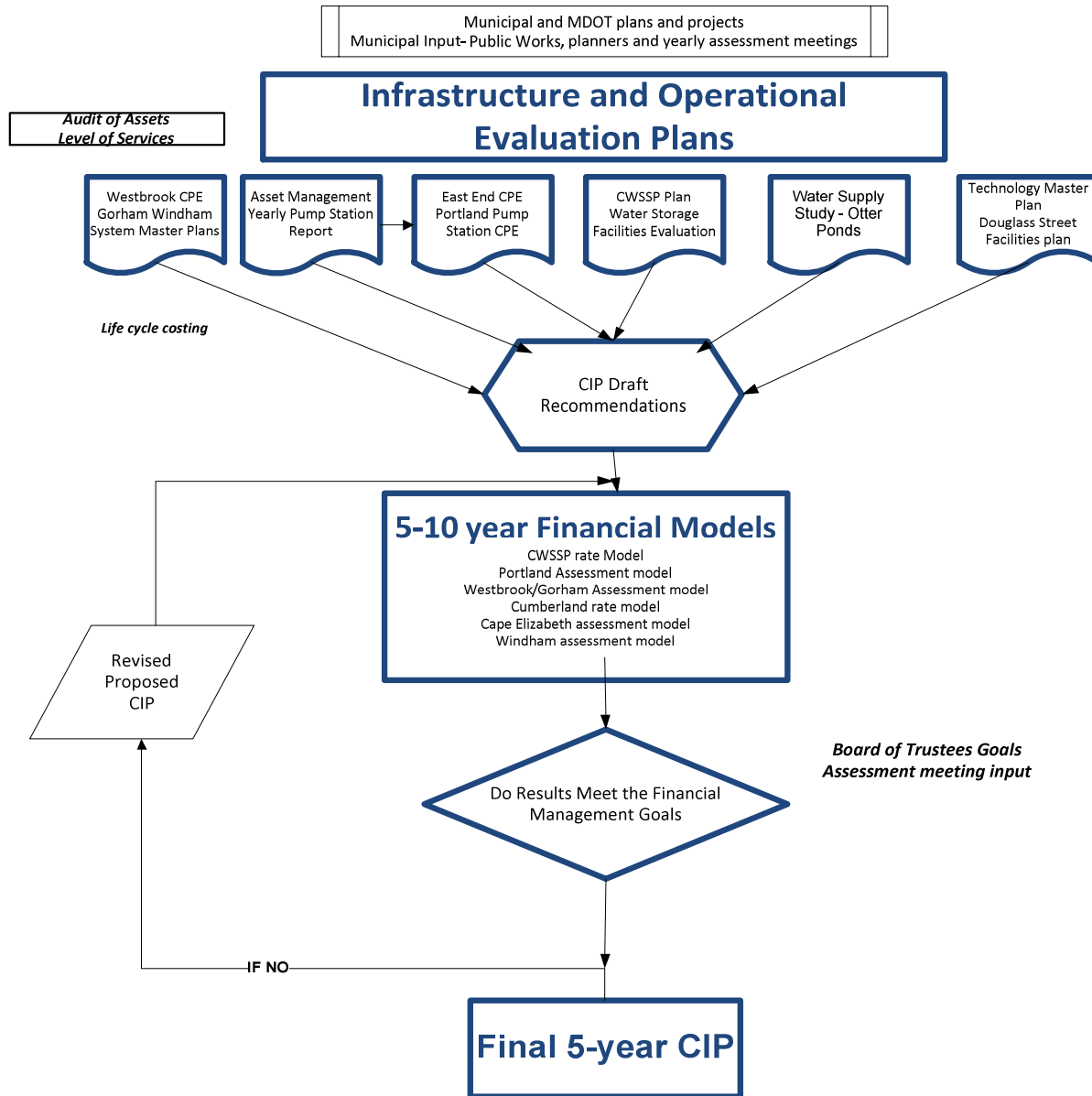
Introduction

A five-year capital improvement plan is developed each year taking into consideration various factors including Infrastructure and Operational Evaluation Plans, Strategic/Tactical Goals and Benchmarks, Multi-year Financial Projections and Board Established Budget Guidelines (described in the Introduction Section). The plan is developed with much of our stakeholders' input, including input from customers, municipalities, regulators and staff. Staff recommends the Board of Trustees authorize the projects for the first year of the plan to be completed. Capital Expenditures are for a physical asset that exceeds \$10,000 and has a useful life of greater than 5 years or extends the useful life of an existing asset for more than 5 years.



*CWSSP – Comprehensive Water System Strategic Plan

Capital Improvement Program Process



Infrastructure and Operational Evaluation Plans

The water and wastewater industry is an infrastructure-oriented industry. Approximately 90% of the District’s total assets are infrastructure assets and capital-financing costs related to those assets are 30% of the annual budget. As the chart above indicates, a number of studies have been conducted to provide an assessment of those assets and is the basis for the capital improvement plan. Some of the studies are discussed in future pages by fund. Annually, internal work groups facilitated by an AMAP engineer review the above plans, new evaluations, current year operations and updated for new staff, municipal, community and Board requests. From the reviews, a draft 5-year project list is created. The draft list is reviewed by senior staff with special attention to staffing and financial capacity. At the November Board Workshop meeting, the Board and public are presented with the proposed capital improvement plans. Taking the feedback into consideration, the final 5-year plan is adopted at the November Board Business meeting.

Program Summary and Board of Trustees Approval Order

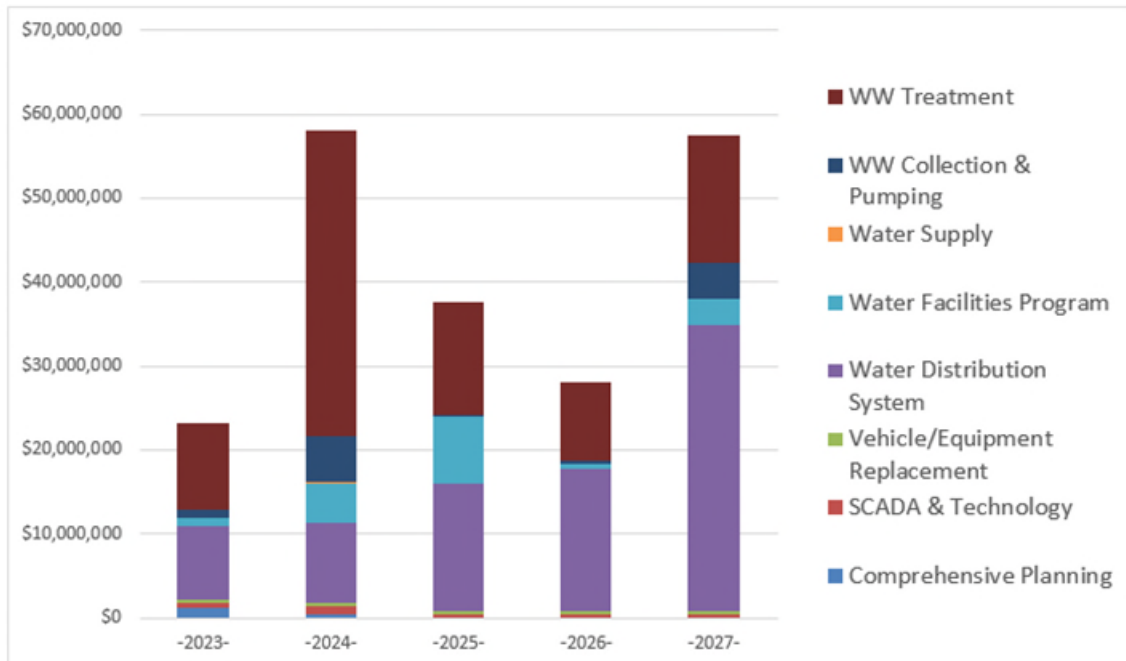
	-2023-	-2024-	-2025-	-2026-	-2027-
Comprehensive Planning	\$1,100,000	\$400,000			
SCADA & Technology	\$735,000	\$925,000	\$350,000	\$350,000	\$325,000
Vehicle/Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$8,775,000	\$9,575,000	\$15,275,000	\$17,075,000	\$34,075,000
Water Facilities Program	\$890,000	\$4,780,000	\$7,955,000	\$550,000	\$3,250,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Collection & Pumping	\$960,000	\$5,595,000	\$255,000	\$280,000	\$4,195,000
WW Treatment	\$10,315,000	\$36,275,000	\$13,515,000	\$9,340,000	\$15,235,000
Grand Total	\$23,090,000	\$57,975,000	\$37,775,000	\$28,020,000	\$57,505,000

NOTE: Projects that require "Special Approval" will be brought back to the Board of Trustees for specific authorization. In 2023 there is one project included in this category, the North Windham Wastewater System.

Proposed Board Action:

ORDERED: that the 2023-2027 Capital Improvement Plan is hereby adopted and the General Manager is authorized to solicit bids or proposals for the year 2023 projects; excepting CIP# 182, project 3241\North Windham Wastewater system and to authorize the General Manager to award contracts for approved projects to the lowest bidder if the bid is within the project budget.

BE IT FURTHER ORDERED: that the General Manager shall solicit bids or proposals and to partner with Municipalities, MDOT and Developers for the year 2023 for the replacement and extension of water mains, services, valves and hydrants as outlined in the Water Distribution Systems Program and to authorize the General Manager to award and enter into contracts if the bid or partnering proposals are within the overall program budget.



Program Summary by Fund

Capital projects are recorded into the appropriate Water or Wastewater fund. The table summarizes the proposed 2023 Capital Improvement Plan by fund with a page reference where more details are provided on the projects. Gorham, Westbrook and Windham Wastewater system has a jointly used treatment plant located in Westbrook. Those costs are allocated between the municipalities – see the financial policies section for more information.

Program Summary Index

	-2023-	Page Reference Introduction	Page Reference Project Listing
Water	\$8,640,000	296	300
SCADA & Technology	\$50,000		
Water Distribution System	\$8,375,000		
Water Facilities Program	\$190,000		
Water Supply	\$25,000		
Cape Elizabeth	\$160,000	317	319
WW Collection & Pumping	\$100,000		
WW Treatment	\$60,000		
Cumberland	\$125,000	322	324
WW Collection & Pumping	\$125,000		
Gorham	\$40,000	326	330
WW Collection & Pumping	\$40,000		
Portland	\$2,895,000	342	346
Comprehensive Planning	\$300,000		
SCADA & Technology	\$165,000		
WW Collection & Pumping	\$355,000		
WW Treatment	\$2,075,000		
Water & Wastewater	\$2,595,000	351	355
Comprehensive Planning	\$800,000		
SCADA & Technology	\$405,000		
Vehicle/Equipment Replacement	\$290,000		
Water Distribution System	\$400,000		
Water Facilities Program	\$700,000		
Westbrook	\$170,000	326	330
WW Collection & Pumping	\$170,000		
Westbrook Joint	\$445,000	326	330
SCADA & Technology	\$115,000		
WW Collection & Pumping	\$150,000		
WW Treatment	\$180,000		
Windham	\$8,020,000	326	330
WW Collection & Pumping	\$20,000		
WW Treatment	\$8,000,000		
Grand Total	\$23,090,000		

Financing Summary of 2023 Capital Improvement Plan

Capital projects are financed through the issuance of bonds – general market bonds or low-interest rate state revolving loan program bonds – or drawdowns from the renewal and replacement funds. The Capital Financing section contains more information.

	Bond	Master Plan Reserve	Operating Expense	Renewal and Replacement	Capital Reserve	Bond SRF	Grand Total
Water	\$6,000,000		\$300,000	\$1,340,000	\$1,000,000		\$8,640,000
SCADA & Technology				\$50,000			\$50,000
Water Distribution System	\$6,000,000		\$300,000	\$1,075,000	\$1,000,000		\$8,375,000
Water Facilities Program				\$190,000			\$190,000
Water Supply				\$25,000			\$25,000
Cape Elizabeth			\$35,000	\$125,000			\$160,000
WW Collection & Pumping				\$100,000			\$100,000
WW Treatment			\$35,000	\$25,000			\$60,000
Cumberland				\$125,000			\$125,000
WW Collection & Pumping				\$125,000			\$125,000
Gorham			\$20,000	\$20,000			\$40,000
WW Collection & Pumping			\$20,000	\$20,000			\$40,000
Portland	\$500,000		\$335,000	\$1,060,000		\$1,000,000	\$2,895,000
Comprehensive Planning			\$300,000				\$300,000
SCADA & Technology				\$165,000			\$165,000
WW Collection & Pumping				\$355,000			\$355,000
WW Treatment	\$500,000		\$35,000	\$540,000		\$1,000,000	\$2,075,000
Water & Wastewater	\$600,000	\$800,000	\$0	\$1,195,000			\$2,595,000
Comprehensive Planning		\$800,000	\$0				\$800,000
SCADA & Technology				\$405,000			\$405,000
Vehicle/Equipment Replacement				\$290,000			\$290,000
Water Distribution System				\$400,000			\$400,000
Water Facilities Program	\$600,000			\$100,000			\$700,000
Westbrook				\$170,000			\$170,000
WW Collection & Pumping				\$170,000			\$170,000
Westbrook Joint				\$445,000			\$445,000
SCADA & Technology				\$115,000			\$115,000
WW Collection & Pumping				\$150,000			\$150,000
WW Treatment				\$180,000			\$180,000
Windham				\$20,000		\$8,000,000	\$8,020,000
WW Collection & Pumping				\$20,000			\$20,000
WW Treatment						\$8,000,000	\$8,000,000
Grand Total	\$7,100,000	\$800,000	\$690,000	\$4,500,000	\$1,000,000	\$9,000,000	\$23,090,000

Five-Year Capital Improvement Plan

In addition to planning the capital projects for the upcoming year, a five-year plan has been developed to assist us in managing our staff, communicating to our external partners to improve coordination and developing financial projections to set expectations of future water rate and wastewater assessments adjustments.

The table below summarizes the planned capital projects in the upcoming year. Additional details on each program are provided on the following pages.

	-2023-	-2024-	-2025-	-2026-	-2027-
Water	\$8,640,000	\$13,050,000	\$20,055,000	\$14,300,000	\$26,500,000
SCADA & Technology	\$50,000	\$50,000	\$75,000	\$50,000	\$50,000
Water Distribution System	\$8,375,000	\$9,175,000	\$13,775,000	\$14,075,000	\$24,075,000
Water Facilities Program	\$190,000	\$3,800,000	\$6,180,000	\$150,000	\$2,350,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Cape Elizabeth	\$160,000	\$1,900,000	\$150,000	\$325,000	\$50,000
WW Collection & Pumping	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Treatment	\$60,000	\$1,875,000	\$125,000	\$300,000	\$25,000
Cumberland	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000
WW Collection & Pumping	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000
Gorham	\$40,000	\$20,000	\$95,000	\$20,000	\$20,000
WW Collection & Pumping	\$40,000	\$20,000	\$95,000	\$20,000	\$20,000
Portland	\$2,895,000	\$26,075,000	\$2,880,000	\$1,820,000	\$2,700,000
Comprehensive Planning	\$300,000				
SCADA & Technology	\$165,000				
WW Collection & Pumping	\$355,000	\$2,875,000	\$75,000	\$175,000	\$75,000
WW Treatment	\$2,075,000	\$23,200,000	\$2,805,000	\$1,645,000	\$2,625,000
Water & Wastewater	\$2,595,000	\$3,055,000	\$3,950,000	\$4,075,000	\$11,575,000
Comprehensive Planning	\$800,000	\$400,000			
SCADA & Technology	\$405,000	\$875,000	\$275,000	\$275,000	\$275,000
Vehicle/Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
Water Facilities Program	\$700,000	\$980,000	\$1,775,000	\$400,000	\$900,000
Westbrook	\$170,000	\$220,000	\$20,000	\$20,000	\$3,220,000
WW Collection & Pumping	\$170,000	\$220,000	\$20,000	\$20,000	\$3,220,000
Westbrook Joint	\$445,000	\$1,200,000	\$585,000	\$420,000	\$2,585,000
SCADA & Technology	\$115,000			\$25,000	
WW Collection & Pumping	\$150,000				
WW Treatment	\$180,000	\$1,200,000	\$585,000	\$395,000	\$2,585,000
Windham	\$8,020,000	\$10,020,000	\$10,020,000	\$7,020,000	\$10,835,000
WW Collection & Pumping	\$20,000	\$20,000	\$20,000	\$20,000	\$835,000
WW Treatment	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
Grand Total	\$23,090,000	\$57,975,000	\$37,775,000	\$28,020,000	\$57,505,000

Significant Non-Recurring Capital Projects

The water and wastewater industry is a relatively capital intensive organization with over \$565 million of assets, which is over 90% of the District's total assets. Approximately \$204 million of capital additions and replacements are planned over the next five years with many projects being the routine replacement of aging infrastructure such as water mains, hydrants and plant equipment. The table below lists several of the larger projects included in the 5-year plan.

	-2023-	-2024-	-2025-	-2026-	-2027-
Water	\$300,000	\$250,000	\$4,350,000		\$12,000,000
18/3007/SLWTF Intake Screening Phase 1		\$250,000	\$3,750,000		
262/3069/SLWTF - Emergency Storage/Transmission- Design	\$300,000		\$600,000		
262/3070/SLWTF - Emergency Storage/Trans - Construction					\$12,000,000
Cape Elizabeth		\$1,850,000			
424/3188/Aeration and Clarification Upgrade		\$1,850,000			
Portland	\$1,000,000	\$17,320,000			
21/3147/Secondary Clarifier Sludge Rake Replacement	\$500,000	\$7,320,000			
21/3204/Dewatering System Upgrade	\$500,000	\$10,000,000			
Water & Wastewater	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
63/3046/Meter Replacement and Leak Detection	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
Windham	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
182/3241/North Windham WWTF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
Grand Total	\$9,700,000	\$29,820,000	\$15,850,000	\$10,000,000	\$32,000,000

SLWTF Intake Screening: Raw water screening for SLWTF was evaluated as part of the Comprehensive Water System Strategic Plan. The current screens at the intake buildings are 70 years old and are in need of replacement. The operating impact of the project is \$300,000 starting in 2026 (all debt service).

SLWTF Emergency Storage: Construct a 7.0 Million Gallon Prestressed Concrete Reservoir near the Sebago Lake Water Treatment Facility (SLWTF). The purpose is to provide additional storage for partial redundancy of the SLWTF so that it can be shut down for longer periods of time and improve water quality by relying less on system storage. The operating impact of the project is \$1,000,000 starting in 2028 (all debt service).

Cape Elizabeth Aeration/Clarification Upgrade: Upgrade aging system at the treatment plant with operating impact of \$130,000 starting in 2026 (all debt service).

Portland Dewatering System Upgrade: Upgrade aging system at the treatment plant which is expected to save \$450,000 in biosolids disposal costs a year. The debt service of \$760,000 will offset those savings starting in 2026.

Portland Secondary Clarifier Rake: Upgrade aging system at the treatment plant with operating impact of \$560,000 starting in 2025 (all debt service).

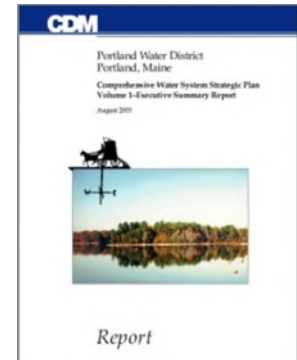
Meter Replacement: In 2026, a new meter and meter reading system will begin to be changed. The project may take several years with total costs up to \$15.3 million. The operating impact of the \$15.3 million project is \$1.2 million starting in 2028 (all debt service).

North Windham WWTF: The Town of Windham has requested the District to construct a new treatment and collection system serving the North Windham area. An almost \$40 million project budget has been estimated to complete all phases. The operating impact of the project is estimated when fully completed to be \$2.4 million (\$900,000 operating and \$1.5 million debt service).

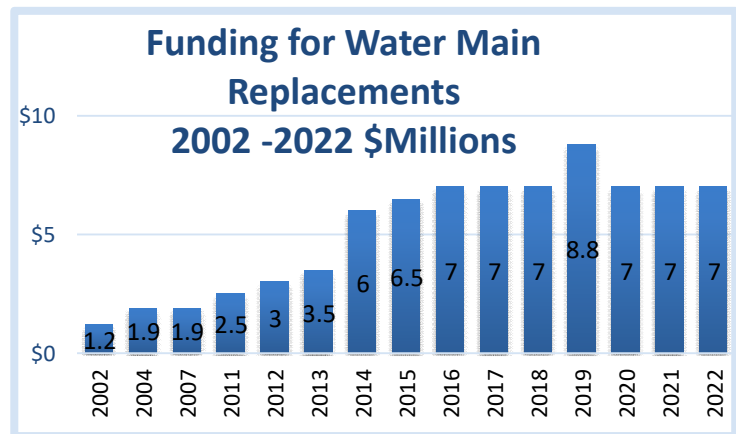
Water Fund

Comprehensive Water System Strategic Plan (CWSSP) - March 2003

Camp Dresser & McKee, engineering consultants, completed the master plan of the distribution system in March of 2003. The plan was prepared to guide the development, operations and financing of the water system through year 2022. The first 7- year planning cycle (priority - 1 projects 2003-2010) included an investment increase in the water main renewal program (see chart below). Along with the increase in water main renewals, the District also undertook the replacement of our existing water meters with new radio read meters. The meter project was completed in 2009 as recommended in the plan. An update to the CWSSP plan (Comprehensive Infrastructure Asset Management Plan) will be recommended in 2023 CIP 3/3071 and is expected to be completed by the end of 2024. This project was originally approved in the 2020 CIP but was canceled due to the pandemic.



CWSSP also recommended removal or rehabilitation of existing water storage tanks. The District has removed three tanks from the system – Munjoy Hill reservoir, Shore Acres and Oak Hill. In 2008, the District rehabilitated 2-tanks, Steep Falls and Gowen. In 2009, the Standish Tank was rehabilitated and a bulk mixer added. In 2012, modifications were made to the concrete tanks to comply with OSHA fall protection standards.



In the plan, system deficiencies and recommended actions were identified. The most significant project identified from the priority - 1 projects was inadequacies associated with service from the Elevation 407 zone. CWSSP recommended the combining of the 407-north zone with the south zone. Many projects have been completed to that end. This included transmission main piping in the MDOT Rte. 202/Presumpscot River Bridge project, installation of 8,000 feet of trunk main on Fort Hill road along with several upgrades in the Little Falls area of Gorham and Windham as part of the Little Falls Conveyance Project. In 2008, 4,000 feet of transmission main was extended to the new pump station location on Ward's Hill road. In 2009, the transmission main was extended from the end of the Fort Hill main along Huston Road to the proposed pump station location. In 2016 the District completed the transmission portion of the north 407 zone by extending 24" main from the pump station site 6,500 feet down Dyer Road and Huston Road to Rte. 202 connecting into the 2008 upgrades. This project provided an increase in pressure to approximately 150 customers that had substandard pressure and increased fire protection to the area.

A hydraulic analysis of the combined system and final design of the new 407 zone pump station (Wards Hill) was completed in 2017. The pump station construction started in 2017 (CIP #307) and was on-line in September 2018. Land acquisition and design for a new storage facility to replace the Windham Center Tank is underway and construction of the new tank was funded in the 2019 CIP (CIP #307) with an expected construction start in the Spring of 2022. In Windham the Depot Street water transmission main connector (2020 CIP 307/3066), to extend the 407 zone transmission system, was completed in the summer of 2021. Proposed in 2022 CIP 307/3067 to continue to extend the 407 transmission system on Main Street from the Depot Street project to River Road. This project is expected to be bid late 2022.

Water Fund (continued)

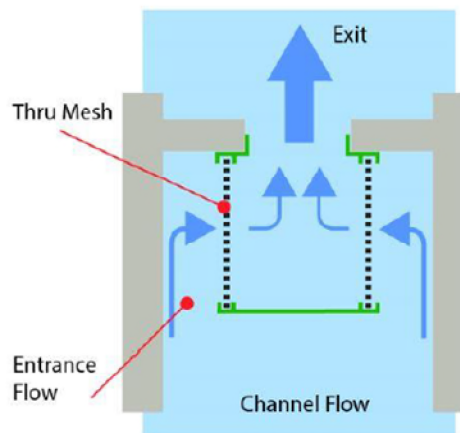
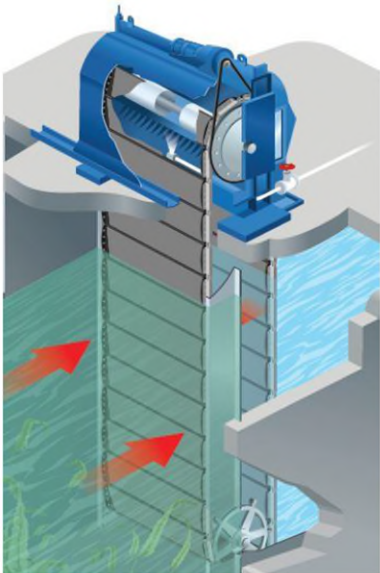
Greater Portland Water System – Water Treatment/Alternate Source – November 2008

Camp Dresser & McKee completed a study of the Sebago Lake Water Treatment Facility (SLWTF) in November of 2008. The primary focus of the study was to evaluate design alternatives for the ultraviolet disinfection process proposed to meet upcoming disinfection requirements and evaluate replacement of the existing 20-year old Ozone equipment. This study also reviewed raw water screening alternatives to replace the existing screening equipment. The third area looked at by this study was to evaluate the potential to connect the well supply that was being investigated in the Otter Ponds Aquifer area to the Sebago Lake Water Treatment Facility (SLWTF) as a backup or supplemental supply.

The report recommended conducting a pilot study of ultraviolet disinfection to evaluate the potential of fouling on the ultraviolet disinfection equipment and to help guide the choice of location and technology. The pilot work was completed in 2011. Final design of the UV facility and Ozone replacement equipment commenced in 2011 and was completed in May 2012. Construction of the \$12 million project was completed and the new system was on-line in April of 2014.

The final hydrogeological study of the Otter Ponds Aquifer well was completed. A production well was developed, tested and is licensed for an emergency supply that could supply Standish, Gorham and Windham if needed. Raw water screening for SLWTF was evaluated as part of this project. The current screens at the intake buildings are 70 years old and are in need of replacement. Preliminary design was completed in 2019 with final design planned for 2024 and construction in 2025.

Proposed 2024-2025 CIP #18, Project 3007 – Replace Mechanical Screens



Typical Flow Path through Dual-Flow Traveling Water Screens

1: Image of a Typical Thru-Flow Traveling Water Screen

Water Fund (continued)

Southern Maine Regional Water Council – Water Master Plan Study – October 2008 (Updated 2016)

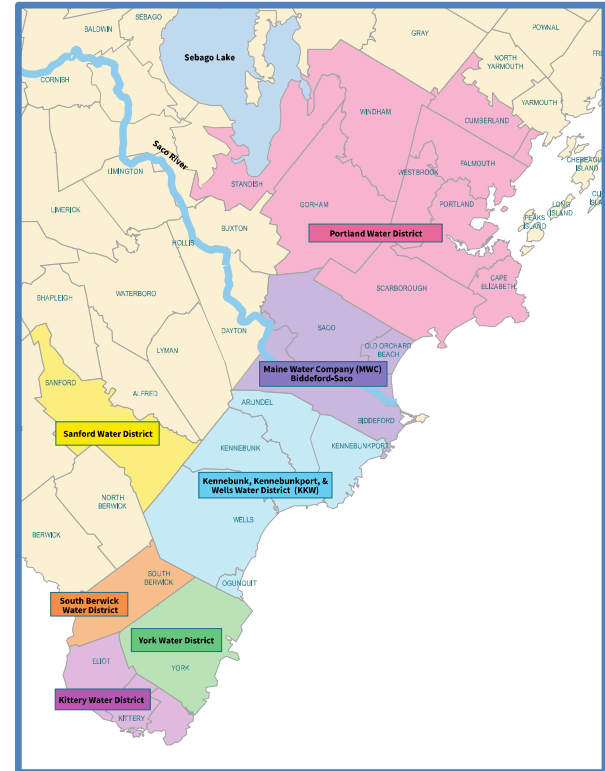


The Southern Maine Regional Water Council, made up of the 7 major water utilities of Cumberland and York County, completed a master plan in October of 2008. This document provides the southern Maine region with a planning tool for regional solutions to sustainable water resources and infrastructure for the foreseeable future. This study attained the following goals:

- Identified existing and potential sources of supply in the region and established the present and projected water needs in the region. Also, identified the limitations and risks of the existing and future supplies.
- Explored the logistics, benefits and impediments of creating an integrated, regional water supply system.
- Detailed the hydraulic considerations and infrastructure required to supply water over a large geographical area and evaluated potential water quality issues associated with blending various supplies and considered existing and future interconnections between systems.
- Developed short-term strategies for mutual-aid and sharing of resources between member utilities and developed an action plan to protect identified resources for future generations.
- Developed an integrated water supply plan for the entire region.
- Considered potential governance models for a regional supply organization.

The Council has continued to collaborate on regional utility planning and purchasing efforts. In 2016, the Council completed an update to the 2008 Regional Plan. The updated plan created a regional hydraulic model, explored in detail individual interconnections between all the utilities, identified and reviewed the following:

- existing capabilities for each system
- hydraulic limitations
- available water from neighboring systems
- water quality compatibility issues



Water Fund (continued)

	-2023-	-2024-	-2025-	-2026-	-2027-
SCADA & Technology	\$50,000	\$50,000	\$75,000	\$50,000	\$50,000
Water Distribution System	\$8,375,000	\$9,175,000	\$13,775,000	\$14,075,000	\$24,075,000
Water Facilities Program	\$190,000	\$3,800,000	\$6,180,000	\$150,000	\$2,350,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Grand Total	\$8,640,000	\$13,050,000	\$20,055,000	\$14,300,000	\$26,500,000

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
SCADA & Technology	\$50,000	\$50,000	\$75,000	\$50,000	\$50,000
110/3058/Miscellaneous Control Project Upgrades	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
110/3061/SLWTF SCADA PC Replacement Project			\$25,000		
Water Distribution System	\$8,375,000	\$9,175,000	\$13,775,000	\$14,075,000	\$24,075,000
262/3069/SLWTF - Emergency Storage/Transmission- Design	\$300,000		\$600,000		
262/3070/SLWTF - Emergency Storage/Trans - Construction					\$12,000,000
3/3282/LCRR Compliance - Phase 1 Investigations		\$100,000	\$100,000		
307/3068/407 Zone Reliability Improvements			\$3,000,000	\$3,000,000	
408/3092/Water System Redundancy (looping), Upsizing	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
43/3121/WMR- Various Main Replacements	\$7,000,000	\$8,000,000	\$9,000,000	\$10,000,000	\$11,000,000
53/3087/Water Valve Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
56/3077/Water Main Replacement - Seasonal Mains	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
61/3082/Water Services - Renew Domestic and Fire	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
65/3072/Water Hydrant Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Water Facilities Program	\$190,000	\$3,800,000	\$6,180,000	\$150,000	\$2,350,000
122/3032/Water Facilities R&R	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
122/3211/Windham Pump Upgrades		\$850,000			
122/3240/SLWTF Raw Water Pump #4 Rebuild			\$180,000		
122/3245/Throttling Valve Rehabilitation		\$350,000			
122/3252/Fuel Storage Tank Upgrade			\$300,000		
122/3260/Zone 510/407 PRV Vault Upgrades	\$40,000				
18/3007/SLWTF Intake Screening Phase 1		\$250,000	\$3,750,000		
203/3102/Water Storage Facility Maintenance & Upgrade	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
203/3104/Water Tank Maintenance- Gorham Tank Rehab		\$650,000			
122/3210/Chemical Storage Facilities Upgrades Phase 1,2,3		\$1,550,000	\$1,800,000		\$2,200,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
46/3097/Water System Security Improvements	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Grand Total	\$8,640,000	\$13,050,000	\$20,055,000	\$14,300,000	\$26,500,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$6,000,000	\$10,650,000	\$17,450,000	\$12,000,000	\$24,200,000
Operating Expense	\$300,000				
Renewal and Replacement	\$1,340,000	\$2,400,000	\$2,605,000	\$2,300,000	\$2,300,000
Capital Reserve	\$1,000,000				
Grand Total	\$8,640,000	\$13,050,000	\$20,055,000	\$14,300,000	\$26,500,000

Subprogram # 110

SCADA/Process Control - Water

Division: Water - General

Manager: Pellerin, Greg

Funding: R & R – Water-Div. 20

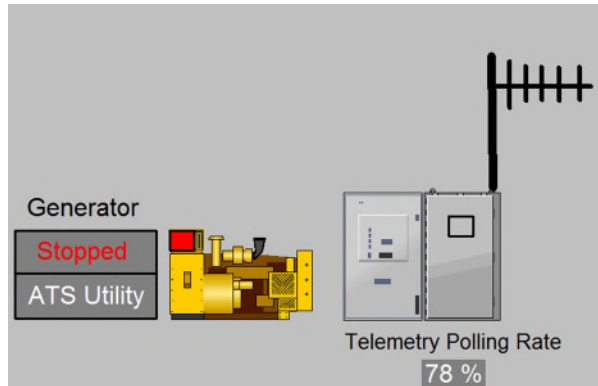
Priority: Upgrade obsolete facility

Description:

The program supports 30 water sites across the District in upgrading and replacing the existing Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to the District SCADA standards and provide for increased automation of the water systems treatment. Programmable Logic Controllers (PLC) have been replaced across the District to meet the new standards and remove outdated, non-maintainable equipment.

Justification / Impact:

The benefit of this program is to increase the automation and reduce the staff hours needed to perform routine activities for the systems and treatment plants across the District.



and

History:

The District started changing out the system in 2003 by replacing the existing 20 year-old system and installing new SCADA equipment where it did not exist. Most systems have been retrofitted or replaced but more automation of these systems will continue.

Origin of the Subprogram:

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$50,000	\$50,000	\$75,000	\$50,000	\$50,000
SCADA & Technology	\$50,000	\$50,000	\$75,000	\$50,000	\$50,000
110/3058/Miscellaneous Control Project Upgrades	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
110/3061/SLWTF SCADA PC Replacement Project			\$25,000		
Grand Total	\$50,000	\$50,000	\$75,000	\$50,000	\$50,000

Previous Years on CIP:

2003

Related Projects:

Subprogram #177

Subprogram # 262 SLWTF - Emergency Storage/60" Transmission Ph. 1

Division: Water - General

Manager: Johnson, Gordon

Funding: Bonds - Water - Div. 20

Priority: Customer driven

Description:

Construct a 7.0 Million Gallon Prestressed Concrete Reservoir near the Sebago Lake Water Treatment Facility (SLWTF) and develop the start of the 60" Transmission system and interconnection to the existing Transmission system.

Justification / Impact:

The purpose is to provide additional storage for partial redundancy of the SLWTF so that it can be shut down for longer periods of time and improve water quality by relying less on system storage.

History:

This project was conceived as part of the Comprehensive Water System Strategic Plan, as a future need and will be assessed further during the future "Comprehensive Infrastructure Asset Management Plan."
– Subprogram # 3

Origin of the Subprogram:

This is a CWSSP recommendation to improve water quality and backup storage.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond			\$600,000		\$12,000,000
Water Distribution System			\$600,000		\$12,000,000
262/3069/SLWTF - Emergency Storage/Transmission- Design			\$600,000		
262/3070/SLWTF - Emergency Storage/Trans - Construction					\$12,000,000
Operating Expense	\$300,000				
Water Distribution System	\$300,000				
262/3069/SLWTF - Emergency Storage/Transmission- Design	\$300,000				
Grand Total	\$300,000		\$600,000		\$12,000,000

Previous Years on CIP:

2004

Related Projects:

CWSSP #267-1150, CAMSP #3-3071

Procurement Issues:

Standard consulting and/or contractor retention procedures.

Subprogram # 307 **Gorham/Windham 407 Zone Improvements**

Division: Water - General

Manager: Johnson, Gordon

Funding: Bonds – Water - Div. 20

Priority: Upgrade obsolete facility

Description:

Phased design and construction of transmission mains, pumps & water tank for the integration of the 407 Zones (Gorham & Windham).

Justification / Impact:

The growth in these communities requires increased capacity. There are also specific service deficiencies and water quality issues that need to be addressed in the 407 Zones.

History:

The projects listed below were anticipated by the 1989 Master Plan. Further analysis and identification was undertaken as part of the 2003 CWSSP study.

Origin of the Subprogram:

Projects identified and proposed phasing outlined in Comprehensive Water System Strategic Plan.

Budget Summary:

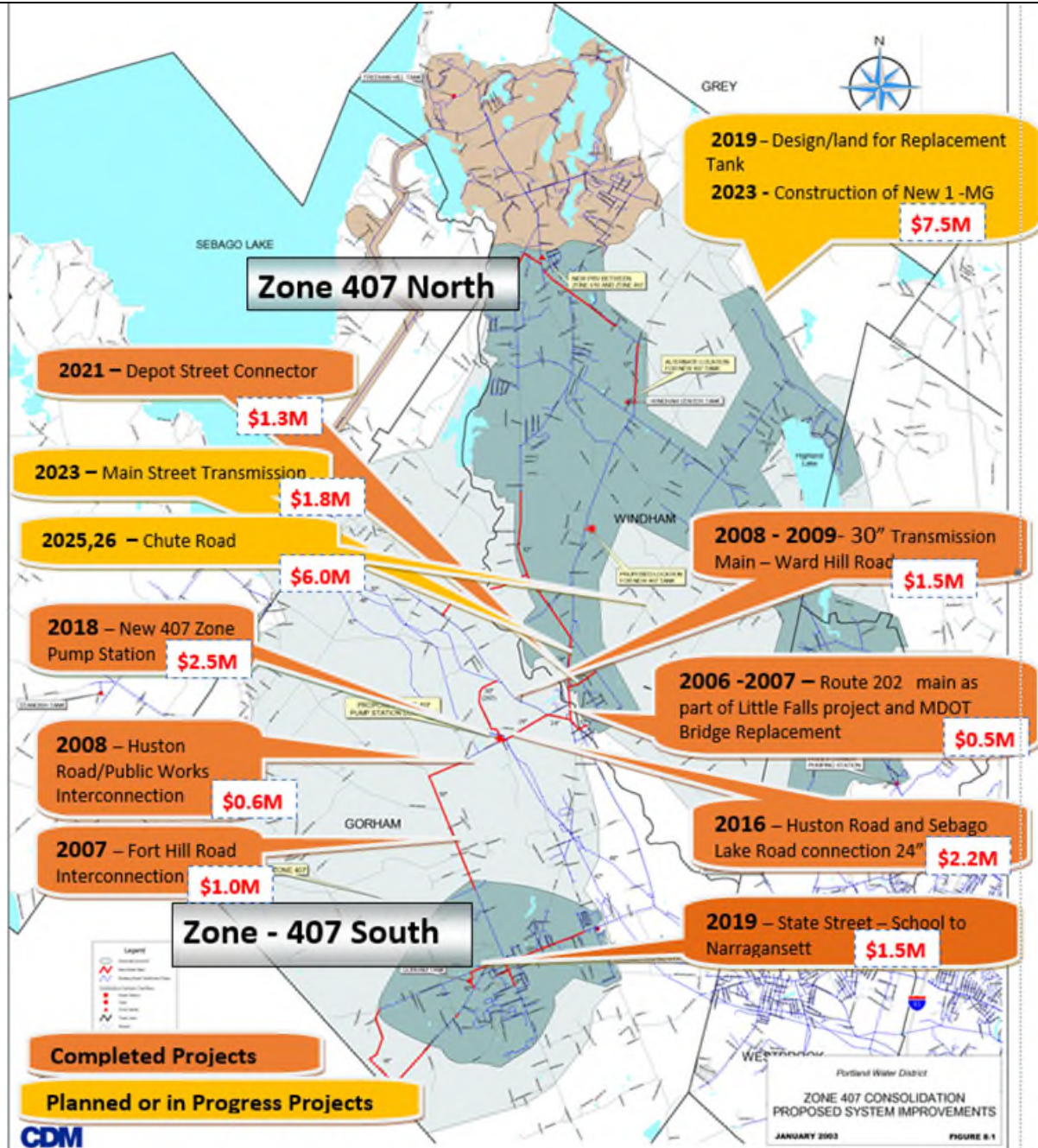


2019 – Subprogram 307, project #3004 Water Storage for 407 zone north. This project will replace an old undersized 1958 Elevated Tank (left) with new ground storage tank (right). Currently under design – Construction to start 2023 with anticipated completion summer of 2024

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond				\$3,000,000	\$3,000,000
Water Distribution System				\$3,000,000	\$3,000,000
307/3068/407 Zone Reliability Improvements				\$3,000,000	\$3,000,000
Grand Total				\$3,000,000	\$3,000,000

Previous Years on CIP: 2000

Subprogram # 307 Gorham/Windham 407 Zone Improvements



Public Health, System Reliability and Public Safety Benefits

- Replacement of two obsolete Pumping Stations (Gorham- 1898, Prides Corner – 1950) with state of the art single new pump station (Wards Hill)
- Elimination of pressure limitations to approximately 150 customers
- Replacement of old 1950 undersized 0.2 MG Windham Center elevated tank with new 1.0 MG ground storage tank
- Improved water quality and water age in entire combined system
- Fire Flow improvements to Gorham Village and Windham

Subprogram # 408 **Water System Redundancy (Looping) and Upsizing**

Division: Water - General
Funding: R & R - Water

Manager: Johnson, Gordon
Priority: Routine replacement

Description:

Identify and evaluate areas requiring system redundancy. Design and schedule the installation of looping these systems and eliminating critical dead end areas in the Distribution System.

Justification / Impact:

The justification, impact, and benefit of this program is a priority system based on, water quality (eliminating dead ends), water availability (increased demands through growth and fire flow demands), and improving general District System and Partnering Water System redundancy.

History:

History is based on decreases in fire flows and increased usage demands noted when conducting activities in these areas such as flushing and temporary shutdown of present supply mains.

Origin of the Subprogram:

The current projects listed are based on increased demand and multiple system redundancy.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Water Distribution System	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
408/3092/Water System Redundancy (looping), Upsizing	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Grand Total	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Previous Years on CIP:

none

Related Projects:

43, 111

Procurement Issues:

District labor & equipment or low bid contract installation

Subprogram # 43 Water Main Replacement

Division: Water - General

Manager: Johnson, Gordon

Funding: Bonds and R&R - Water- Div. 20

Priority: Routine replacement

Description:

Renew, replace, upgrade and loop cast iron water mains using materials and sizing for current and future conditions. Approximately 20,000 feet is scheduled for yearly replacement.

Level of Service – Reliability Performance

Water main break frequency - 10 breaks per 100 miles

Justification / Impact:

This is a cost saving and water quality improvement process. Mains selected for replacement use the same priority system as the Galvanized Main Renewal Program: water quality complaints, leak frequency data, and municipal/state reconstruction projects.

History:

Cast iron mains in sizes 2 inches and above had been a standard from the late 1800s until the introduction of Ductile Iron pipe in the late 1960s and early 1970s and PVC and HDPE pipe in the 1980s. The rigidity and lack of flexibility of cast iron has been attributed to failures such as frost movement, cross trenches, water hammers, contractor damages, as well as normal deterioration and corrosion through age. A percentage of these mains are unlined causing iron build up resulting in restricted flow and dirty water complaints. The District has a long term program to upgrade these mains.

Origin of the Subprogram:

The current list of projects is determined on the basis of water quality complaints, leak frequency data, age of main, and municipal/state reconstruction projects.

Budget Summary:

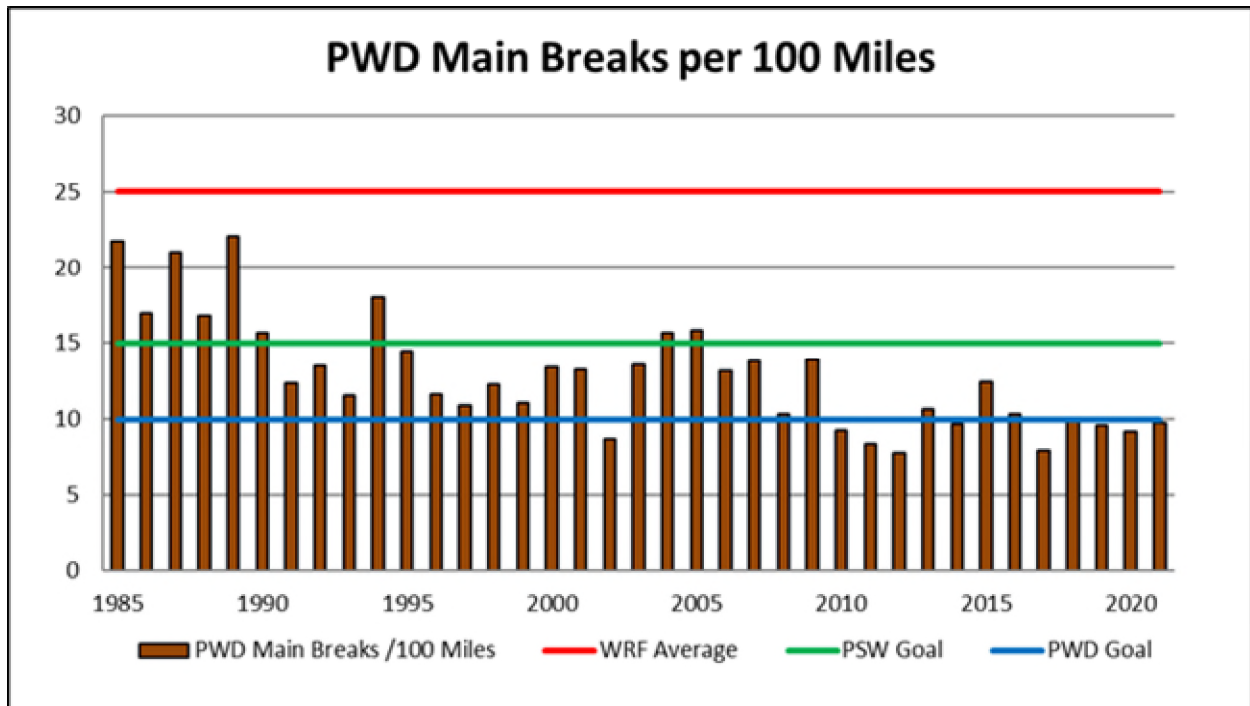
	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$6,000,000	\$7,000,000	\$8,000,000	\$9,000,000	\$10,000,000
Water Distribution System	\$6,000,000	\$7,000,000	\$8,000,000	\$9,000,000	\$10,000,000
43/3121/WMR- Various Main Replacements	\$6,000,000	\$7,000,000	\$8,000,000	\$9,000,000	\$10,000,000
Capital Reserve	\$1,000,000				
Water Distribution System	\$1,000,000				
43/3121/WMR- Various Main Replacements	\$1,000,000				
Renewal and Replacement	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Water Distribution System	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
43/3121/WMR- Various Main Replacements	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Grand Total	\$7,000,000	\$8,000,000	\$9,000,000	\$10,000,000	\$11,000,000

Anticipated water main replacement projects for 2023 and estimated cost

Water Main Replacement Projects - 2023	City	CIP Budget	Pipe Footage		Contracting Partnering Agency
		Est. Cost	Feet	Price/Ft	
Seavy Street, Main Street to	WE	\$ 900,000	1650	\$ 545	
Vaughn Street, Western Prom	PO	\$ 600,000	1000	\$ 600	PO CSO
Hersey, Ocean Ave, Irving	PO	\$ 1,500,000	3000	\$ 500	PO CSO
Sawyer Street - Front to Broadway	SP	\$ 1,500,000	3000	\$ 500	
High Street, Depot to Holly Street	WI	\$ 600,000	1000	\$ 600	
Forest Ave, Marginal way to Park ave	PO	\$ 650,000	1200	\$ 542	
Ridgeway Rd, Highland Ave Ext, Old Oak Lane, and Douglas St	GO	\$ 550,000	1250	\$ 440	
Mt Vernon, Cragmere, Skyline	SP	\$ 550,000	1250	\$ 440	

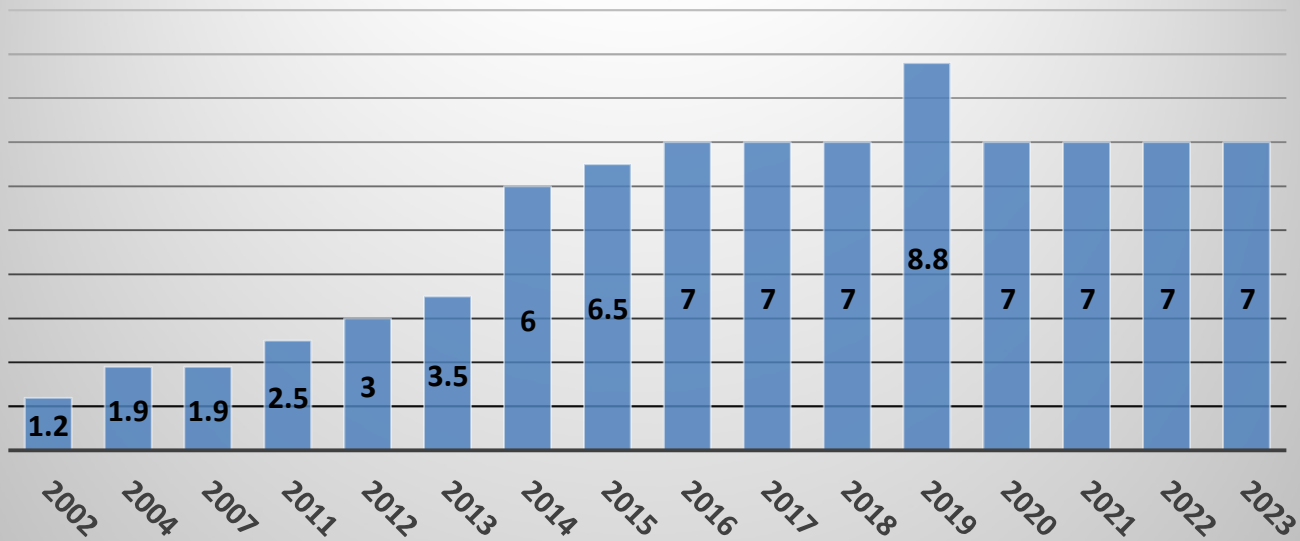
Level of Service – Reliability Performance

Water main break frequency - 10 breaks per 100 miles



WRF = Water Research Foundation, PSW = Partnership for Safe Water

**Funding for Water Main Replacements
2002 -2023 \$Millions**



Subprogram # 53 **Water Valve Replacement**

Division: Water - General
Funding: R & R - Water - Div. 20

Manager: Wallace, Jim
Priority: Routine replacement

Description:
 Replacement of deteriorated valves in the distribution system.

Justification / Impact:
 Replacement is determined and prioritized through data and workorders generated from our Distribution Valve Operation Program, Inspectors Valve Operation Reports, Leak Reports, Flushing Program Data, and the Distribution Maintenance Crews.

History:
 Internal inspection of valves replaced has shown decay of the discs and spreaders that render the valves non-operational and ineffective in isolating a section of the distribution system. External inspection has shown corrosion of nuts and bolts, corroded operating nuts, and bent operating stems. Repacking and rebolting these valves has only provided a costly and temporary solution to the external portion of the valve. Replacement insures the valve will be up to standard and operational for many years to come with no required maintenance.



Origin of the Subprogram:
 Our target is to replace 50 (+ or -) valves per year.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Water Distribution System	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
53/3087/Water Valve Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Grand Total	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000

Previous Years on CIP: All
Related Projects: Subprograms 43, 61
Procurement Issues: Work is to be performed using District Staff, equipment, and materials.

Subprogram # 56 **Water Main Renewal - Seasonal Mains**

Division: Water - General

Manager: Wallace, Jim

Funding: R & R – Water- Div. 20

Priority: Routine replacement

Description:

This portion of the Water Main Renewal Program is to replace depreciated Seasonal Surface mains with new Seasonal Surface mains. Approximately 2000 to 3000 feet of main are included annually in this general program.

Justification / Impact:

This program improves customer satisfaction with improved water flow and quality and reduces maintenance costs via new leak free materials.

History:

This is a long term program in which old galvanized seasonal water mains with capacity, water quality or maintenance problems are replaced on an as-needed basis.

Origin of the Subprogram:

Projects are initiated by monitoring customer complaints and leakage problems. When consistent problems are identified, the main is scheduled for replacement.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Water Distribution System	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
56/3077/Water Main Replacement - Seasonal Mains	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Grand Total	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000

Previous Years on CIP:

All

Related Projects:

#43



2019 CIP #43, Water Main Replacement project – Bedford Street, Portland

Subprogram # 61 Water Services - Renew Domestic & Fire

Division: Water - General
Funding: R & R – Water- Div. 20

Manager: Wallace, Jim
Priority: Routine replacement

Description:

Replace obsolete galvanized, cast iron, cement lined iron, and 50 year old copper services with current materials and sized for future conditions.

Justification / Impact:

Replacement is determined and prioritized by water quality concerns, leaking conditions, street reconditioning, distribution main replacement, and area/report analysis through District Data. This Project is also coordinated with the various municipal paving projects in order to minimize future inflated municipal street opening costs and repairs.

History:

Galvanized and cast iron were common materials used in the installation of services from the early 1900s to the late 1940s. Copper was also used starting in the 1930s. The relatively inferior material of galvanized and cast iron are subject to rust related water quality and restricted flow problems from plugging as well as leak frequency from deterioration and corrosion. Older copper lines (50 years old + or -) are starting to show signs of leak failures from the old tube nut fittings used to couple fittings together. From a cost and end product comparison it is more efficient to replace than repair. The District has a long term program to replace and upgrade all sub standard services.

Origin of the Subprogram:

There are approximately 1,000 (1/2" to 2" size) galvanized, cement lined iron, and cast iron domestic services, and an additional 11,000 copper services installed prior to 1950. We also have 260 cast iron services installed prior to 1950. Our goal is to replace at least 300 services per year.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Water Distribution System	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
61/3082/Water Services - Renew Domestic and Fire	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Grand Total	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000

Previous Years on CIP:

All

Related Projects:

Procurement Issues:

Project to be performed using District Staff, equipment, and materials and contracted through our main replacement projects.



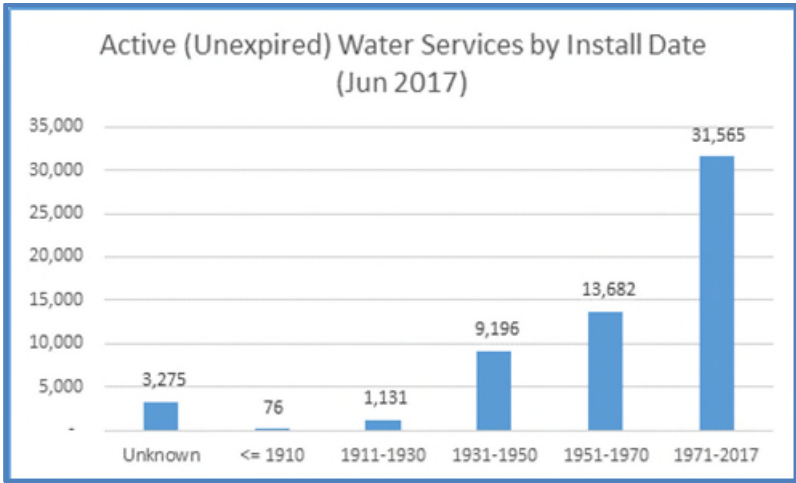
Locates for an 8" Fire Service and 4" domestic Service

Subprogram # 61 **Water Services - Renew Domestic & Fire**

Active (Unexpired) Water Services by Install Date

Install Date	# Services	%
Unknown	3,275	5.9%
<= 1910	76	0.1%
1911-1930	1,131	2.0%
1931-1950	9,196	16.5%
1951-1970	13,682	24.6%
1971-2017	31,565	56.7%

Total **55,650**





Crews repairing water main break on February 2, 2022

Subprogram # 65 Water Hydrants Replacement

Division: Water - General
Funding: R & R – Water –Div. 20

Manager: Wallace, Jim
Priority: Routine replacement

Description:

Replace and upgrade obsolete hydrants to meet current safety and operational standards, and to insure inventory parts availability for hydrant repairs.

Justification / Impact:

Replacement is determined and prioritized by: (1) hydrant failures (major damage and/or external leak,) (2) upgrade and replacement of obsolete sub standard hydrants based on (age - safety standards - repair parts availability - cost comparison to replace or repair,) (3) distribution main replacement program, (4) municipal and state reconstruction projects and (5) data gathered from the Hydrant Repair and Reconditioning Programs and the Winter Hydrant Inspection Program.



History:

The O&M Hydrant Repair/Reconditioning Programs and the Hydrant Winter Inspection Programs have been in place since the early 60s. These programs insure that our hydrants meet fire protection standards and provide direction for our C. I. P. Replacement Program. In recent times the ability to procure replacement parts for the 620 Matthews Post hydrants (Vintage late 1800s to the late 1940s) has become difficult or impossible. The 870 Darling B-50 hydrants (vintage early 1950s to early 1960s) require major internal rebuilding. Both hydrant makes are not traffic model hydrants and fail to have a sheer point to breakaway on impact. This failure results in costly repairs and replacements, and is unsafe in many highway standards (Deadly-Fixed-Objects Regulation).

Origin of the Subprogram:

Our project is focused on replacing and upgrading 75 hydrants per year over a twenty year replacement program of 1450 hydrants.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Water Distribution System	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
65/3072/Water Hydrant Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Grand Total	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000

Previous Years on CIP: All

Related Projects:

Procurement Issues: Project is performed using District staff, equipment, and materials.

Subprogram # 122 Water Facilities Renewal and Replacement

Division: Water - General
Funding: R & R – Water- Div. 20

Manager: Wallace, Jim
Priority: Routine replacement

Description:

This is an ongoing project designed to maintain and improve water pump stations, treatment facilities and related infrastructure. Modifications and upgrades will ensure adequate capacity, reliability and safety of these facilities.

Justification / Impact:

Components of the older pump stations that have reached their useful life and obsolete equipment should be replaced. Replacing this equipment before it fails completely reduces the amount spent on operating and maintaining the equipment.

History:

This planned renewal and replacement will assist operations in moving toward a goal of performing more predictive and preventive maintenance instead of emergency maintenance.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond		\$2,750,000	\$2,100,000		\$2,200,000
Water Facilities Program		\$2,750,000	\$2,100,000		\$2,200,000
122/3210/Chemical Storage Facilities Upgrades Phase 1,2,3		\$1,550,000	\$1,800,000		\$2,200,000
122/3211/Windham Pump Upgrades		\$850,000			
122/3245/Throttling Valve Rehabilitation		\$350,000			
122/3252/Fuel Storage Tank Upgrade			\$300,000		
Renewal and Replacement	\$140,000	\$100,000	\$280,000	\$100,000	\$100,000
Water Facilities Program	\$140,000	\$100,000	\$280,000	\$100,000	\$100,000
122/3032/Water Facilities R&R	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
122/3240/SLWTF Raw Water Pump #4 Rebuild			\$180,000		
122/3260/Zone 510/407 PRV Vault Upgrades	\$40,000				
Grand Total	\$140,000	\$2,850,000	\$2,380,000	\$100,000	\$2,300,000



Steep Falls Well and Radon Removal

Subprogram # 18 SLWTF Intakes - Replace Mechanical Screens

Division: Water - General
Funding: Bonds - Water- Div. 20

Manager: Johnson, Gordon
Priority: Routine replacement

Description:

This project involves selecting and installing a screen system to replace the existing screens in service at the intakes on Sebago Lake. The present systems use two travelling screens with backwash at each location with three sets of hand screens at the 1925 Intake and two sets of hand screens at the 1952 Intake.

Justification / Impact:

The existing equipment is approaching 50 years old and is basically worn out. The new equipment will be chosen to automate the screening process as much as possible to minimize operator time and reduce/prevent fish breakthrough.

History:

The intake screens were supposed to be retired after SLWTF start-up. Manual screens, designed for the inlet channel of the ozone contactor, were supposed to replace the need for the ones at the intakes. Unfortunately, a method for washing the screens was not designed into the facility. Many attempts were made to use the inlet screens before deciding to continue the use of the intake screens.

Origin of the Subprogram:

The hand and travelling screens at the intake buildings were installed in the early 1950's. They are past their expected lifespan. Present washing procedures are labor intensive, requiring nine to fifteen labor hours per week. We have experienced small fish getting by the screens and showing up in the clearwell. The ozone and chlorination process kills the fish, but we do not want to let them escape into the system.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond		\$250,000	\$3,750,000		
Water Facilities Program		\$250,000	\$3,750,000		
18/3007/SLWTF Intake Screening Phase 1		\$250,000	\$3,750,000		
Grand Total		\$250,000	\$3,750,000		

Previous Years on CIP: 1998 to present

Subprogram # 203 Water Storage Facility Maintenance & Upgrade

Division: Water - General

Manager: Johnson, Gordon

Funding: R & R - Water - Div. 20

Priority: Routine replacement

Description:

This project consists of developing a maintenance program. Maintenance that may be necessary includes leak repair, painting, inside liners, base and/or cover needs. Once this work is complete, a multi-year program of maintenance contracts will be implemented to upgrade individual facilities. In some facilities, recirculation systems to routinely turn over the water in the tank and/or new altitude valves will be installed.

Justification / Impact:

Basic maintenance to preserve and prolong the useful life of needed facilities. Prevent water quality problems due to corrosion and from water stagnating in the tank.

History:

Several steel standpipes and elevated tanks have been removed over the last decade. Those that remain will be evaluated for their hydraulic value and water quality impact in the Comprehensive Water System Strategic Plan. Those that are considered to be valuable hydraulic assets to the water system will be upgraded via this ongoing program.

Origin of the Subprogram:

Maintenance has been deferred for several years pending completion of a hydraulic study to determine which tanks still have hydraulic value.

Budget Summary:

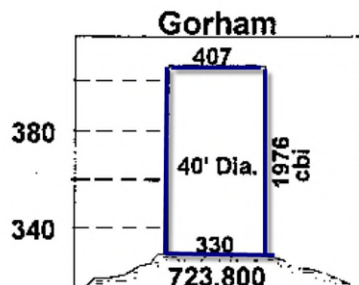
	-2023-	-2024-	-2025-	-2026-	-2027-
Bond		\$650,000			
Water Facilities Program		\$650,000			
203/3104/Water Tank Maintenance- Gorham Tank Rehab		\$650,000			
Renewal and Replacement	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Water Facilities Program	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
203/3102/Water Storage Facility Maintenance & Upgrade	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Grand Total	\$50,000	\$700,000	\$50,000	\$50,000	\$50,000

Previous Years on CIP:

Procurement Issues:

Since 2000

RFP preparation and contract administration will be by District Staff. Maintenance and repair services will be competitively bid.



Gorham Tank is scheduled for Rehabilitation and Painting in 2023



Subprogram # 46 **Water System Security**

Division: Water - General

Manager: Wallace, Jim

Funding: R & R – Water – Div.20

Priority: Security of facilities

Description:

This program is to improve the physical security of the District's water facilities. The program supports installing and upgrading security measures on District property and facilities. These measures include perimeter fencing, signage, access control, cyber keys and locks, video surveillance and monitoring, security lighting and improved SCADA monitoring.

Justification / Impact:

The District has performed two Vulnerability Assessments (2003, 2015) and has been following the recommendations from these reports.

History:

In the fall of 2004 and summer of 2005 fencing was installed on the East and West side of the lower bay inside the 2 mile limit. This was funded through the CIP. In 2005 hatch covers along with alarms were installed over tank hatches and a cyberlock system was installed on all SCADA panels. This was funded by a grant from MEMA - Homeland Security. In subsequent years video surveillance and access control were expanded to all major facilities across the District along with continued improvements to perimeter fencing and access control.



Origin of the Subprogram:

The vulnerability assessment completed in March of 2003 indicated that physical protection of existing facilities could be improved. Many of those recommendations were completed and a new Vulnerability Assessment was completed in 2015 and new recommendations are now determining the water system security improvements.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
46/3097/Water System Security Improvements	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Grand Total	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000

Previous Years on CIP: 2004 to present

Related Projects:

Procurement Issues: Standard purchasing procedures will apply.

Cape Elizabeth Wastewater

Cape Elizabeth – Wastewater Treatment Facilities

In response to a regulatory requirement to eliminate bypassing of flows during periods of wet weather, upgrades were completed in 2012 to increase the peak flow capacity of the facility. These upgrades included new influent screening, high flow and low flow return sludge pumps, upsizing a portion of the secondary clarifier effluent piping, and new effluent pumps. Recent engineering evaluations include assessments of the aeration and secondary clarifier structures, disinfection systems, secondary clarification, aeration process control, electrical/power distribution and plant-wide HVAC. Upgrades recently completed or ongoing include:

- Heating and ventilation system to serve the headworks and sludge thickening areas
- Replacement of the chlorine and sodium bisulfite chemical disinfection systems with Ultraviolet Disinfection



Headworks HVAC Upgrade – 2018 CIP 424, project 2571 - Main air handler and hydronic piping during construction. The system was brought online Summer 2021.

Cape Elizabeth – Sewer System

The current CSO Master Plan identifies reduction of CSO volume through infiltration/inflow (I/I) reduction within the Town's and City of South Portland's collection systems and improvements to the Ottawa Road Pump Station. The Town of Cape Elizabeth completed a project that installed new storm drains and helped remove private I/I from residential homes. South Portland has also done work removing catch basins from the sewer system and installing storm drains. PWD work at the Ottawa Road Pump Station is underway or in development including upgrades to standby power, flow measurement, and pumping.

CCTV assessment of the collection system is ongoing as part of the District's 10 year program to inspect its entire collection system.

Cape Elizabeth - Pump Stations

The District has continued with the installation of standby power generators at key pump stations. These generators enable systems to operate during the frequent power outages that occur in Cape Elizabeth while reducing manpower during these events. Additionally, automated emergency power goes a long way towards eliminating the occasional back-ups that have occurred within the collection system.

In the spring of 2021 PWD completed upgrades to the Family Field (Little John) Pump Station. This project included upgrades to the power distribution system and associated switchgear, controls and telemetry, piping, and pump #1 replacement. Planned improvements for the Cape Elizabeth Wastewater collection and treatment systems are shown in CIP subprograms 52 and 424.

Cape Elizabeth Wastewater (continued)

Program Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
WW Collection & Pumping	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Treatment	\$60,000	\$1,875,000	\$125,000	\$300,000	\$25,000
Grand Total	\$160,000	\$1,900,000	\$150,000	\$325,000	\$50,000

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
WW Collection & Pumping	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
52/3130/Cape Elizabeth Pump Station R&R	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
52/3251/Peabbles Point PS Electrical Enclosure	\$75,000				
WW Treatment	\$60,000	\$1,875,000	\$125,000	\$300,000	\$25,000
424/3129/Cape Elizabeth WWTF- R&R	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
424/3188/Aeration and Clarification Upgrade		\$1,850,000			
424/3189/Boiler Upgrade/Replacement			\$100,000		
424/3207/Sludge Handling and Headworks Odor Control				\$275,000	
424/3280/Outfall Condition Assessment	\$35,000				
Grand Total	\$160,000	\$1,900,000	\$150,000	\$325,000	\$50,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Operating Expense	\$35,000				
Renewal and Replacement	\$125,000	\$50,000	\$150,000	\$325,000	\$50,000
Bond SRF		\$1,850,000			
Grand Total	\$160,000	\$1,900,000	\$150,000	\$325,000	\$50,000

Subprogram # 52

Cape Elizabeth Pump Stations - R&R

Division: Wastewater - Cape Elizabeth

Manager: Poulin, Charlene

Funding: Bond and R&R – Wastewater – Div. 51

Priority: Routine replacement

Description:

This program provides a planned approach for the replacement of obsolete equipment in Cape Elizabeth wastewater pump stations.

Justification / Impact:

The pump stations have reached the end of their useful design life and obsolete equipment must be replaced. Upgrades, including the addition of VFD's in some cases, will provide more pumping capacity, mitigate CSO activity, and provide some power savings.

History:

This planned approach will assist maintenance and operations in moving toward a goal of performing more predictive/preventative maintenance instead of emergency maintenance.



Ottawa Road Pump Station – Installed in 1976 – in the process of being upgraded

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Collection & Pumping	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
52/3130/Cape Elizabeth Pump Station R&R	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
52/3251/Peabbles Point PS Electrical Enclosure	\$75,000				
Grand Total	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000

Previous Years on CIP: 2005 to present

Related Projects: Subprogram #407

Condition Assessment – Cape Elizabeth Pump Stations

2020 Cape Elizabeth Pump Station Report

Cape Elizabeth			
ID	Name	2020 ratings	2014 ratings
CEP70	Wildwood	4.66	2.95
CEP62	Broad Cove South	4.65	3.15
CEP44	Family Field	4.49	2.76
CEP60	Stonegate North	4.49	3.47
CEP41	Garden Ln Pump Station	4.16	5.0
CEP69	Tall Pines	4.02	2.58
CEP50	Cragmoor North	4.00	3.65
CEP57	Clifford	4.00	4.00
CEP67	Hunt's Point	4.00	3.90
CEP72	Gull Crest	4.00	3.08
CEP73	Gull Crest Transfer Station	4.00	3.04
CEP51	Cragmoor South	3.86	3.30
CEP53	Birch Knoll	3.79	4.00
CEP52	Pachios	3.78	3.97
CEP74	Tall Pines East	4.02	4.67
CEP68	Spurwink	3.72	4.16
CEP63	Broad Cove North	3.71	3.79
CEP65	Peabbles Cove	3.57	3.31
CEP64	Algonquin	3.47	3.30
CEP49	Oakhurst	3.44	2.94
CEP47	Mitchell Road	3.43	3.16
CEP71	Cross Hill	3.42	3.65
CEP61	Running Tide	3.14	3.59
CEP59	Stonegate South	3.12	3.04
CEP66	Peabbles Point (2023 proposed)	3.12	2.87
CEP43	Ottawa Road (2022 under construction)	2.79	2.09
CEP42	Maiden Cove Completed Upgrades 2022	2.14 5.0	1.98
Cape Elizabeth Average		3.74	3.53
PWD -All Average		3.72	

Subprogram # 424

Cape Elizabeth WWTF

Division: Wastewater - Cape Elizabeth

Manager: Firmin, Scott

Funding: R & R – Wastewater – Div. 51

Priority: Routine replacement

Description:

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The plant came online in 1988 along with the Spurwink Pump Station that pumps all of the Southern Cape Elizabeth system’s flow to the plant. Treated water is pumped to an outfall located near Peabbles Cove in accordance with the plant’s discharge permit which was renewed in December 2016.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. Planned upgrades include instrumentation and control in accordance with current industry practice and provide enhanced automation, monitoring and control of the treatment processes. Regulatory requirements are continuously revised and updated by the EPA and administered by the Maine Department of Environmental Protection.

This account provides for the equipment replacement and system upgrades necessary to continue to meet regulatory and operational requirements.



History:

To meet the goals of this subprogram the District is continuously engaged in the Capital Improvement Program Process described in the Introduction of the Capital Expenditures section. Within the past 10 years investments have been made in influent screening, headworks HVAC, effluent disinfection, effluent pumping, and return activated sludge pumping. Recent assessments include the plant’s treatment tankage, HVAC systems, electrical systems, and activated sludge process control.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond SRF		\$1,850,000			
WW Treatment		\$1,850,000			
424/3188/Aeration and Clarification Upgrade		\$1,850,000			
Operating Expense	\$35,000				
WW Treatment	\$35,000				
424/3280/Outfall Condition Assessment	\$35,000				
Renewal and Replacement	\$25,000	\$25,000	\$125,000	\$300,000	\$25,000
WW Treatment	\$25,000	\$25,000	\$125,000	\$300,000	\$25,000
424/3129/Cape Elizabeth WWTF- R&R	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
424/3189/Boiler Upgrade/Replacement			\$100,000		
424/3207/Sludge Handling and Headworks Odor Control				\$275,000	
Grand Total	\$60,000	\$1,875,000	\$125,000	\$300,000	\$25,000

Previous Years on CIP:

2006

Cumberland Wastewater

Cumberland – Pump Stations

In 2007, the District completed upgrading the Tuttle Road pump station and the Foreside Road pump station. The Powell Road pump station was completed in 2008. In 2011, the 4th year of CCTV assessment of buried infrastructure was completed. An emergency generator was installed at the Smalls Brook Crossing pump station. This was part of a continued program to install emergency generators at pump stations. In 2014, an assessment of all of the pump stations in the system was completed to assist with prioritization and CIP development. In 2017, the Longmeadow pump station was upgraded including replacement pumps and telemetry panel. Longmeadow does not have a permanent generator on site and requires a portable generator to be transported during power outages. Programmed in CIP 2023 project #41/3243 Longmeadow PS Generator Addition to address the situation.

The District and the Town of Cumberland have investigated infiltration and inflow (I/I) sources in the collection system. CCTV work, flow monitoring, and smoke testing are used to identify sources of I/I. The Town of Cumberland, with the District's assistance, also inspects homes in an effort to properly manage sump pumps and other sources of inflow. This project is intended to better understand the peak flows that will be sent to Falmouth for treatment and will possibly impact the capacity and cost of shared infrastructure in Falmouth.

The Town of Falmouth replaced the joint use Mill Creek Pump Station and Force Main, which came online in 2017. Planned improvements to the Cumberland system are shown in CIP subprogram #41.

Cumberland WW system



Cumberland Wastewater (continued)

Program Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
WW Collection & Pumping	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000
Grand Total	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
WW Collection & Pumping	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000
41/3136/Cumberland WW Pump Stations - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
41/3171/Stony Ridge Pump Replacement		\$290,000			
41/3172/Ocean Terrace PS Pump Replacement, Bypass		\$350,000			
41/3173/Ferne Lane PS Pump Replacement		\$300,000			
41/3174/Ledge Rd PS Upgrades		\$190,000			
41/3175/Brookside PS Pump and Electrical Upgrades		\$300,000			
41/3176/Cumberland Meadows PS Upgrades		\$260,000			
41/3177/Smalls Brook PS Upgrades		\$190,000			
41/3243/Longmeadow PS Generator Addition	\$105,000				
41/3244/Powell Rd PS Conversion to Submersible PS		\$535,000			
Grand Total	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$125,000	\$20,000	\$20,000	\$20,000	\$20,000
Bond SRF		\$2,415,000			
Grand Total	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000

Subprogram # 41**Cumberland WW Pump Stations - R&R****Division:** Wastewater - Cumberland**Manager:** Poulin, Charlene**Funding:** R & R – Wastewater- Div. 53**Priority:** Routine replacement**Description:**

This project provides for continual upgrade of the pumping stations located within the Cumberland wastewater system. In most cases the work involves pump and rail replacements along with control modifications.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. This program will provide a planned approach to the maintenance management of Cumberland's wastewater pump stations.

History:

This planned approach will assist maintenance and operations in moving towards a goal of predictive and preventative maintenance.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond SRF		\$2,415,000			
WW Collection & Pumping		\$2,415,000			
41/3171/Stony Ridge Pump Replacement		\$290,000			
41/3172/Ocean Terrace PS Pump Replacement, Bypass		\$350,000			
41/3173/Ferne Lane PS Pump Replacement		\$300,000			
41/3174/Ledge Rd PS Upgrades		\$190,000			
41/3175/Brookside PS Pump and Electrical Upgrades		\$300,000			
41/3176/Cumberland Meadows PS Upgrades		\$260,000			
41/3177/Smalls Brook PS Upgrades		\$190,000			
41/3244/Powell Rd PS Conversion to Submersible PS		\$535,000			
Renewal and Replacement	\$125,000	\$20,000	\$20,000	\$20,000	\$20,000
WW Collection & Pumping	\$125,000	\$20,000	\$20,000	\$20,000	\$20,000
41/3136/Cumberland WW Pump Stations - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
41/3243/Longmeadow PS Generator Addition	\$105,000				
Grand Total	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000

Previous Years on CIP: 2001 to present**Procurement Issues:** RFP for engineering services. Construction services will be low bid.

Condition Assessment – Cumberland Pump Stations

2020 Cumberland Pump Station Report

Cumberland			
ID	Name	2020 rating	2014 rating
CUP45	Longmeadow – (no generator - 2023 CIP proposed generator additions)	4.56	3.26
CUP54	Drowne Road	4.06	4.93
CUP55	Twin Brook	4.00	3.83
CUP41	Foreside Road	3.93	3.75
CUP51	Cumberland Meadow	3.75	3.63
CUP46	Ledge Road (2024 proposed)	3.70	3.82
CUP52	Small's Brook Crossing (2024 proposed)	3.54	3.43
CUP43	Tuttle Road (2024 proposed)	3.51	3.80
CUP44	Ocean Terrace (2024 proposed)	3.45	3.26
CUP42	Powell Road (2024 proposed)	3.36	3.73
CUP47	Ferne Lane (2024 proposed)	3.35	3.81
CUP48	Brookside (2024 proposed)	3.31	3.18
CUP50	Stony Ridge (2024 proposed)	3.19	3.60
Cumberland Average		3.67	3.72
PWD -All Average		3.72	



2016 – Longmeadow P.S. installed in 1983 – condition rating was 3.26 - Upgrades included new SCADA and pump control panels, pumps, valves, and electrical work. New rating is 4.56
2023 – Proposed Project 41/3243 – Generator addition

Gorham/Westbrook/Windham Wastewater

Westbrook Regional Treatment Plant

The Westbrook Regional WWTF was brought online in the mid '70s. Over the years the District has completed various improvements including:

- Plant water system (2006)
- Clarifier scum removal (2006)
- Scum handling, and sludge conveyances control (2006)
- Plant electrical system – Standby Generator (2008)
- Polymer system (2010)
- RAS pumps (2011)
- Plant Control System (2013)
- RAS distribution and flow split to the secondary clarifiers (2014)
- Sludge Dewatering (2018)

Proposed major modifications for a headworks upgrade were set aside in favor of installing screens at the two major pump stations feeding the treatment plant. Start-up of these systems at the Cottage Place and East Bridge St. Pump Stations in 2008 successfully eliminated pump plugging and has reduced the quantity of rags at the treatment plant. Additional improvements to reduce the spacing of the screens at the pump stations are planned to begin in the fall of 2022 to further remove rags and debris from the plant influent.

In 2013, design and replacement of the control system began. This was completed in 2014 along with chemical feed pumps, residual samplers, and enhanced automation of the disinfection system.

The aeration system was evaluated in 2015 to develop a roadmap for the eventual upgrade of the aeration system as it nears the end of its service life. The 2019 CIP included design phase services to upgrade the aeration system and secondary clarification process. These upgrades will facilitate process control to maintain dissolved oxygen to meet today's loadings, match current peak demand, and provide more energy efficient oxygen delivery. Similar to the East End plant in Portland, a selector is recommended to enhance process control and improve settleability.

The secondary clarification process at Westbrook has not been upgraded or modified since its original construction and the sludge withdrawal mechanisms are nearing the end of their useful life based on an assessment of the clarifiers completed in 2016. Construction of the aeration and secondary clarification upgrade is underway and scheduled for completion by the summer of 2023. In addition to much needed replacement of the aeration and secondary clarification equipment, the upgrades will include new power distribution systems and electrical switchgear.

Gorham/Westbrook/Windham Wastewater (continued)

In 2015, the District completed an evaluation of sludge dewatering technologies for the Westbrook Regional WWTF, including rehabilitation of the existing belt filter press. Alternative technologies were piloted to quantify the improvement in dewatering performance as compared to the existing equipment. It was determined that alternative technologies would increase the dewatered sludge solids content from an average of approximately 16% to a minimum of 20%, which significantly reduces the volume of sludge to be disposed. As a result, in 2016 the proposed belt filter press rehabilitation project was replaced with a proposed upgrade to an alternative technology (CIP #167 project 2534). In 2016, equipment was competitively procured and upgrade to a screw press began in January of 2017 and was completed in the spring of 2018.

In 2020 the District competitively pre-procured a 3-way valve and pneumatic actuator to create a 4th discharge zone to facilitate more complete filling of the sludge storage container with the drier cake produced by the new screw press system. The new valve was installed along with a new control station and associated electrical during the summer of 2021.



2019 CIP 416 project 3001 - Cake Unloading Valve during installation

In 2020 the District designed improvements to the dewatering polymer handling system including competitive pre-procurement of a polymer makedown system and an improved tote storage area to facilitate access, polymer mixing, and complete tote drainage to maximize product usage. Construction of the new storage area is now complete and in use.



2019 CIP 416 project 3026 - Polymer System Improvements

Gorham/Westbrook/Windham Wastewater (continued)

Westbrook – Sewer System

In late 2007, the District hired Woodard & Curran, Brown & Caldwell and Jordan Environmental to update the City of Westbrook's CSO Master Plan. This plan was completed and submitted to Maine DEP in 2008. Some of the work included in the plan involved the City, and some involved the District. Because the City operates the collection system, the bulk of the first five years would focus on the removal of infiltration and inflow (I/I) from the City collection system. Later portions of the plan would include storage and other work on District owned assets. Since the plan was updated, all flow from all the CSO outfalls are now continuously monitored.

The plan was updated in 2014 and submitted to the DEP per the State's requirements. The plan included a summary of the work completed in the first 5 years and a revised set of projects and schedule. The projects that involve District facilities are being completed in accordance with the Master Plan and have included several projects to increase the capacity of the interceptor system. The Master Plan included upgrades and capacity increase at the Dana Court Pump Station (CIP #29 project 2527). This project was completed in 2019. The plan also included the addition of floatables containment at the CSO diversion structure prior to the Cottage Place pump station (CIP #29 project 2524). This project was completed in 2020. The most recent 5 year portion of the mitigation, or Long Term Control Plan, has been in large part completed. The plan is currently undergoing another review and will be updated with the next series of projects and goals to be completed in the next 5 year period.

Gorham/Windham – Pump Stations and Collector Systems

In May of 2008, flows from the Town of Windham, the Maine Correctional Center and the Little Falls section of Gorham were re-directed to the Westbrook/Gorham/Windham WWTF for treatment. This action led to the closure of two outfalls into the Presumpscot River. This project also led to an upgrade of the Tow Path pump station and the decommissioning of the treatment plant in Little Falls in 2010. Due to the relatively young age of most of Gorham's other pump stations, preventive maintenance, condition assessment through CCTV inspection of buried infrastructure, and minor repairs have been the focus in recent years.

To increase reliability and improve service during power outages, standby generators have been installed at most of the pump stations. In 2014, an assessment of all of the pump stations in the system was completed, and stations with identified needs were then flagged for more detailed investigation. As a result of those studies, upgrades at the Androscoggin PS (CIP #180 project 2317) and Canterbury Pines PS (CIP #60 project 1117) were completed by the end of 2017.

To ensure that accurate wastewater flow is measured and used for allocating operating costs to the Town of Gorham, a flow meter was installed to measure the flow from the Town of Gorham to the Westbrook/Gorham/Windham WWTF. This meter was installed and is maintained by a third party vendor as part of the District's extensive flow monitoring program.

Gorham/Westbrook/Windham Wastewater (continued)

Gorham, Westbrook and Windham are served by a centralized wastewater treatment plant in Westbrook. Capital costs are allocated by each municipality's relative design capacity of the specific infrastructure.

Program Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
SCADA & Technology	\$115,000			\$25,000	
Westbrook Joint	\$115,000			\$25,000	
WW Collection & Pumping	\$380,000	\$260,000	\$135,000	\$60,000	\$4,075,000
Gorham	\$40,000	\$20,000	\$95,000	\$20,000	\$20,000
Westbrook	\$170,000	\$220,000	\$20,000	\$20,000	\$3,220,000
Westbrook Joint	\$150,000				
Windham	\$20,000	\$20,000	\$20,000	\$20,000	\$835,000
WW Treatment	\$8,180,000	\$11,200,000	\$10,585,000	\$7,395,000	\$12,585,000
Westbrook Joint	\$180,000	\$1,200,000	\$585,000	\$395,000	\$2,585,000
Windham	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
Grand Total	\$8,675,000	\$11,460,000	\$10,720,000	\$7,480,000	\$16,660,000

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
SCADA & Technology	\$115,000			\$25,000	
177/3127/Westbrook SCADA Server Replacement Program	\$115,000			\$25,000	
WW Collection & Pumping	\$380,000	\$260,000	\$135,000	\$60,000	\$4,075,000
180/3138/Windham- Little Falls WW System - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
180/3139/Windham - Depot St/Keddy Mill Forcemain					\$750,000
180/3183/Route 202 Telemetry Upgrade					\$65,000
29/3231/PEND - CSO Storage Facility					\$3,200,000
411/3134/Westbrook WW Systems R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
411/3284/Cottage Place Roof Replacement	\$150,000				
60/3137/Gorham WW Pump Station - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
60/3180/Briarwood PS Telemetry Upgrade			\$75,000		
60/3274/East Bridge Roof Replacement	\$150,000				
60/3275/Dana Ct. Forcemain Replacement		\$200,000			
60/3276/South Gorham Sewer Study	\$20,000				
WW Treatment	\$8,180,000	\$11,200,000	\$10,585,000	\$7,395,000	\$12,585,000
182/3241/North Windham WWTF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
416/3132/Westbrook Gorham Windham WWTF R&R	\$130,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls				\$125,000	
416/3166/Process Area Ventilation Upgrades		\$750,000			
416/3190/Access Road and Parking Lot Resurfacing	\$15,000	\$400,000			
416/3191/TWAS Mixing System Replacement			\$150,000		
416/3198/WAS and GBT System Upgrade/Rehabilitation			\$350,000		
416/3232/Septage Screening Facilities				\$200,000	\$2,000,000
416/3256/Dewatered Sludge Conveyance Upgrade					\$500,000
416/3270/Process Valve/Actuator Replacement				\$20,000	
416/3271/Structural/Architectural Assessment/Rehab			\$35,000		\$35,000
416/3272/Fire Monitoring System Upgrade	\$35,000				
Grand Total	\$8,675,000	\$11,460,000	\$10,720,000	\$7,480,000	\$16,660,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond					\$1,250,000
Operating Expense	\$20,000		\$35,000	\$20,000	\$35,000
Renewal and Replacement	\$655,000	\$1,460,000	\$685,000	\$260,000	\$175,000
Bond SRF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,200,000	\$15,200,000
Grand Total	\$8,675,000	\$11,460,000	\$10,720,000	\$7,480,000	\$16,660,000

Subprogram # 180

Windham - Little Falls WW System

Division: Wastewater - Windham Little Falls
Funding: Bonds, R&R – Wastewater – Div. 55

Manager: Poulin, Charlene
Priority: Routine replacement

Description:

This program provides for a planned approach to the replacement of obsolete equipment for the Windham-Little Falls wastewater pump stations. Few improvements had taken place during the first 35 years of operation. The scope of this program is based on the amount of required maintenance and current performance of the existing infrastructure. The scope includes complete replacement of drives, motors, pumps, controls and other major equipment to ensure operational reliability of the pump stations.

Justification / Impact:

When pump stations have reached the end of their useful design life (typically 20-years) obsolete equipment should be replaced. These improvements will ensure the pump stations continue to deliver adequate flows to the WWTF with increased reliability. Additionally, these needed improvements will allow for a Preventative Maintenance plan that will keep the pump stations operating at the design level well into the life of the upgrade.

History:

The original Windham-Little Falls wastewater system was built in 1987. The original system included two pump stations. These two pump stations were to be replaced with a single new pump station as part of the 2008 redevelopment of the Keddy Mill site. This project was never completed and the existing pump stations are now more than 35-years old. In 2019 CIP Depot street Pump Station Phase 1 design and construction was approved but due to delays the project was completed in October of 2021. Phase 2 of the Depot Street Pump Station project will coincide with the Keddy Mill clean-up and redevelopment.

Origin of the Subprogram:

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond					\$750,000
WW Collection & Pumping					\$750,000
180/3139/Windham - Depot St/Keddy Mill Forcemain					\$750,000
Renewal and Replacement	\$20,000	\$20,000	\$20,000	\$20,000	\$85,000
WW Collection & Pumping	\$20,000	\$20,000	\$20,000	\$20,000	\$85,000
180/3138/Windham- Little Falls WW System - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
180/3183/Route 202 Telemetry Upgrade					\$65,000
Grand Total	\$20,000	\$20,000	\$20,000	\$20,000	\$835,000

Previous Years on CIP:

2000 to present

Procurement Issues:

Engineering and contracting will be via standard competitive retention procedures.

Subprogram # 180**Windham - Little Falls WW System**

The Depot Street Pump Station Project – Phase 1 (2019 – project # 3139)– Replacing siphon with new Pump Station in conjunction with the District replacing water mains on Depot Street and installing a 407- zone transmission main and the town reconstructing portion of Depot Street. This was completed in 2021.



2019 CIP 180/3139, Phase 1 - new Depot Street Pump Station completed Fall of 2021

Condition Assessment – Windham Pump Stations**2020 Windham Pump Station Report**

Windham			
ID	Name	2020 rating	2014 rating
WIP43	Androscoggin	4.26	2.93
WIP52	RT 202 PS (Proposed 2022)	2.88	2.87
	Depot Street - new PS	5.0	
Windham Average		4.04	2.90
PWD -All Average (74 Pump Stations)		3.72	3.47

Subprogram # 182 North Windham - Water Resources Reclaimed Water System

Division: Wastewater – North Windham
Funding: Bonds, R&R – Wastewater – Div. 67

Manager: Pellerin, Greg
Priority: Customer Driven

Description:

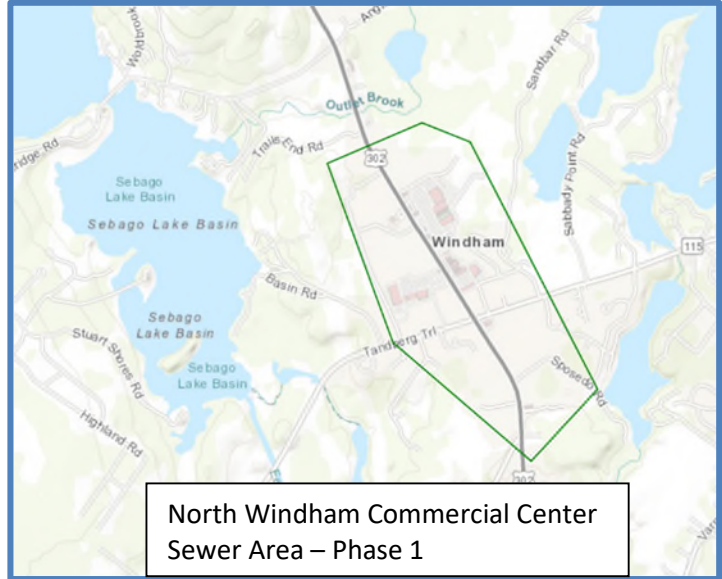
In recent years, the Town of Windham (“Town”) has redoubled its efforts to address wastewater treatment needs in the northern area. These efforts led to the development of a Comprehensive Wastewater Management Plan (CWWMP) published in May 2018. On May 26, 2020, the Town and PWD signed a Memorandum of Agreement to partner on the procurement of engineering services and construction of wastewater treatment facilities in North Windham to serve the “Phase 1 Area” which can be generally described as the commercial center along Route 302 north of River Rd and south of Chaffin Pond.

Justification / Impact:

Per the Memorandum of Agreement, the Town has determined that a wastewater treatment system is needed in the North Windham Area to mitigate groundwater pollution and would allow for more sustainable growth opportunities (North Windham System).

History:

PWD completed a Preliminary Design Report in January 2022 which estimated the Project at \$40M. The District received a conditional permit from the DEP that would allow for discharge of highly treated effluent to the ground. In April of 2022 the District received a SRF loan award from the DEP Clean Water State Revolving Loan fund for \$38.6M loan with a \$2.25M principal forgiveness award. In June of 2022 the town voted overwhelmingly in favor of the North Windham Sewer Project. The District and the Town are proceeding in 2023 to construction utilizing a Design Build process.

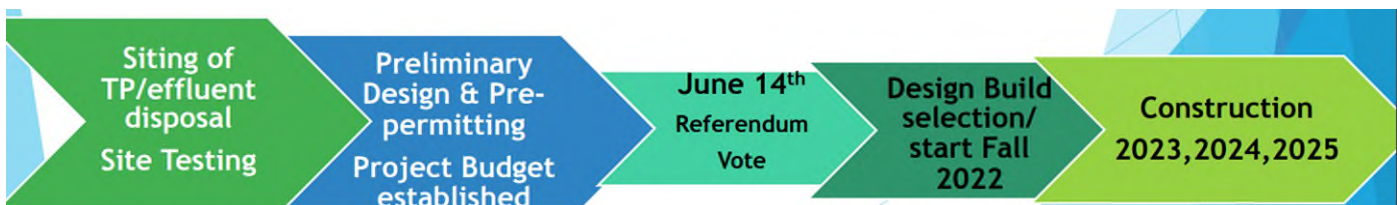


Origin of the Subprogram:

This Subprogram was created to address the goals established in the Memorandum of Agreement.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond SRF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
WW Treatment	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
182/3241/North Windham WWTF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
Grand Total	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000



Subprogram # 29 **Westbrook CSO Abatement**

Division: Wastewater - Westbrook
Funding: Bond – Wastewater Div 62

Manager: Poulin, Charlene
Priority: Regulatory mandate

Description:

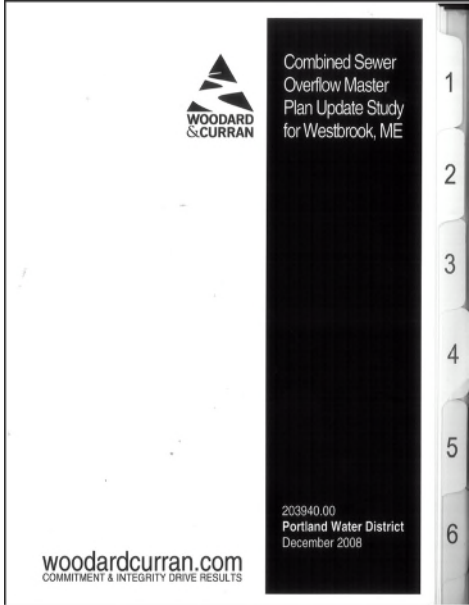
This project is driven by the permit requirement to mitigate combined sewer overflows in the City of Westbrook. The most recent 5 year portion of the mitigation, or Long Term Control Plan, has been in large part completed. The plan is currently undergoing another review and will be updated with the next series of projects and goals to be completed in the next 5 year period.

Justification / Impact:

The work completed by PWD and the City of Westbrook have dramatically reduced the frequency and volume of overflows. With an ultimate goal of further reducing, or even eliminating, these events, the next phase of the Long Term Control Plan is being developed. This plan, when submitted and approved by DEP, will identify the next series of projects to continue the work.

History:

The City and PWD have jointly entered into a permit that has developed and implemented previous plans. Those projects have been very successful. Future plans will likely focus on the possible storage conduit at Cottage Place Pump Station, optimization of sewer and pump station storage, the location of flows contributing to combined sewer overflows, and collection system work to address those flows.



Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond SRF					\$3,200,000
WW Collection & Pumping					\$3,200,000
29/3231/PEND - CSO Storage Facility					\$3,200,000
Grand Total					\$3,200,000

Previous Years on CIP: 2000 to present
Weir at Warren Ave CSO



Subprogram # 177 SCADA/Process Control - Wastewater

Division: Wastewater – Westbrook, Div 64
Funding: R & R - Wastewater

Manager: Pellerin, Greg
Priority: Upgrade obsolete facility

Description:

The program supports all 80 wastewater sites across the District in upgrading and replacing the existing Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to the District SCADA standards and provide for increased automation of wastewater systems and treatment. Programmable Logic Controllers (PLC) have been replaced across the District to meet the new standards and remove outdated, non-maintainable equipment.

Justification / Impact:

The benefit of this program is to increase the automation and reduce the staff hours needed to perform routine activities for the systems and treatment plants across the District.

History:

The District started changing out the system in 2003 by replacing the existing 20 year-old system across the six wastewater communities and installing new SCADA equipment where it did not exist. All systems have been retrofitted or replaced but more automation of these systems will continue.

Budget Summary:

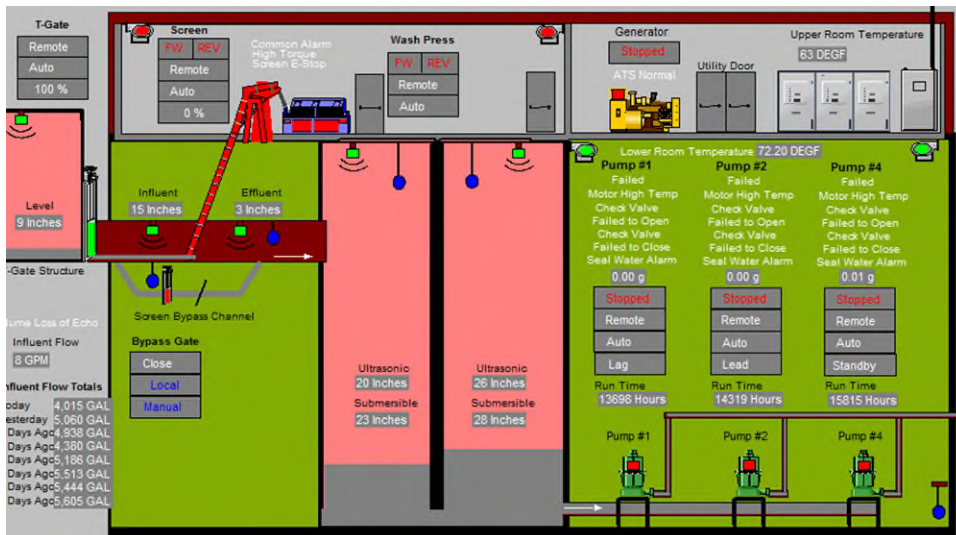
	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$115,000			\$25,000	
SCADA & Technology	\$115,000			\$25,000	
177/3127/Westbrook SCADA Server Replacement Program	\$115,000			\$25,000	
Grand Total	\$115,000			\$25,000	

Previous Years on CIP:

2003 to present

Related Projects:

Subprogram #110 Water, #177 Sewer Portland,



Subprogram # 411 Westbrooke WW Systems R&R

Division: Wastewater - Westbrook
Funding: R&R - Wastewater – Div. 62

Manager: Poulin, Charlene
Priority: Routine replacement

Description:

This project provides for the timely renewal of equipment associated with pump stations and the purchase of monitoring equipment for the interceptor system. Major pump stations have been recently upgraded but funds need to be available for replacement parts when necessary.

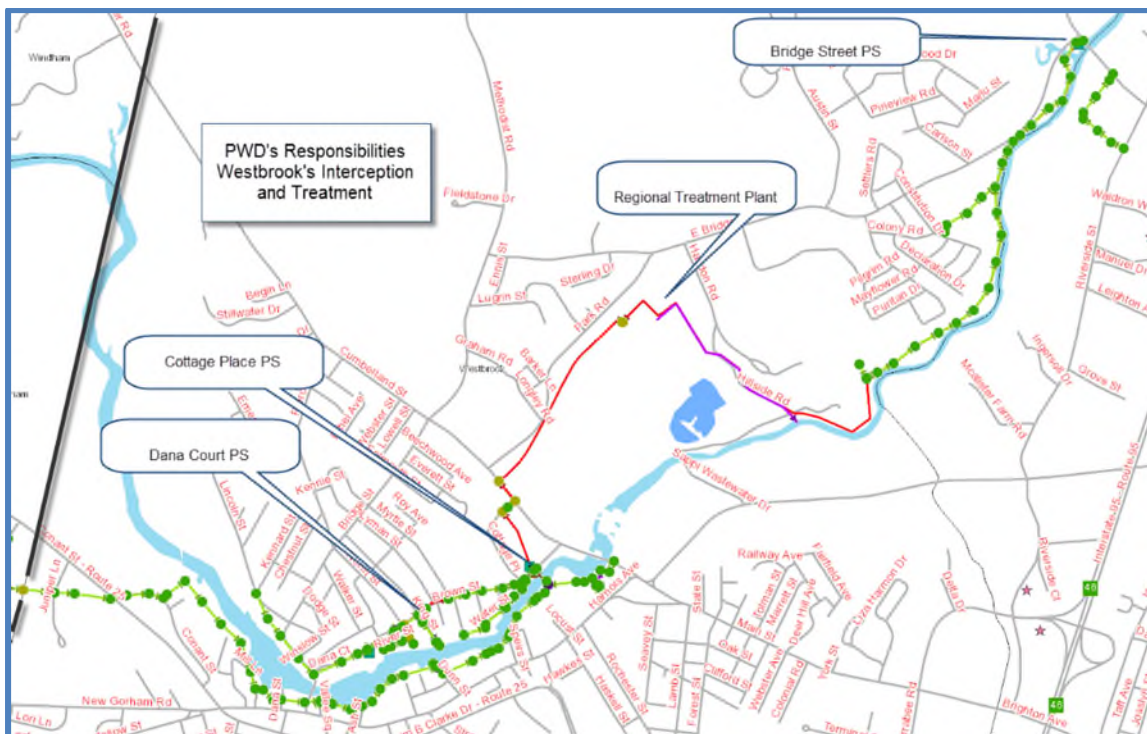
Justification / Impact:

An on-going study to upgrade the Westbrook CSO Master Plan will be complemented with the addition of a portable flow monitoring device.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
WW Collection & Pumping	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
411/3134/Westbrooke WW Systems R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Grand Total	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$150,000				
WW Collection & Pumping	\$150,000				
411/3284/Cottage Place Roof Replacement	\$150,000				
Grand Total	\$150,000				



Condition Assessment – Westbrook Pump Stations

2020 Westbrook Pump Station Report

Westbrook			
ID	Name	2020 rating	2014 rating
WEP43	Dana CT PS	4.61	2.90
WEP42	E. Bridge St. PS	3.79	3.85
WEP41	Cottage Place	3.66	3.93
Westbrook Average		4.02	3.56
PWD -All Average (74 Pump Stations)		3.72	3.47



East Bridge Pump Station



Cottage Street Pump Station



Dana Court Pump Station
New dry pit submersible pumps installed in 2019

Subprogram # 60 **Gorham WW Pump Stations - R&R**

Division: Wastewater - Gorham Village

Manager: Poulin, Charlene

Funding: Bond and R&R – Wastewater – Div. 61

Priority: Routine replacement

Description:

This is an ongoing project designed to maintain and improve Gorham wastewater pump stations. Modifications and upgrades will ensure adequate capacity, reliability and safety.

Justification / Impact:

Components of the older pump stations have reached their useful life and obsolete equipment should be replaced. Replacing this equipment before it fails completely reduces the amount spent on operating and maintaining the equipment.

History:

This planned renewal and replacement will assist operations in moving toward a goal of performing more predictive and preventive maintenance instead of emergency maintenance.

Budget Summary:

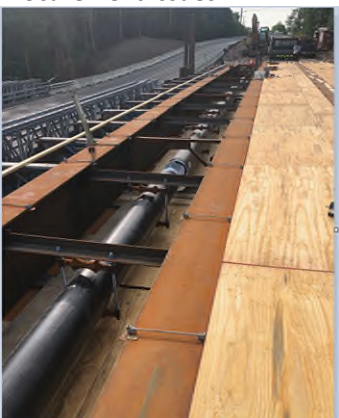
Fund		Gorham				
Projects by Program		-2023-	-2024-	-2025-	-2026-	-2027-
WW Collection & Pumping		\$40,000	\$20,000	\$95,000	\$20,000	\$20,000
60/3137/Gorham WW Pump Station - R&R		\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
60/3180/Briarwood PS Telemetry Upgrade				\$75,000		
60/3276/South Gorham Sewer Study		\$20,000				
Grand Total		\$40,000	\$20,000	\$95,000	\$20,000	\$20,000

Previous Years on CIP:

2000 - present

Procurement Issues:

Primarily staff labor for installation using standard parts procured competitively.



2020 CIP 60, 43 Project #3212 Little River Bridge Replacement – Force Main and Water Main replacement in conjunction with the MDOT replacement of the bridge

New 12" insulated bridge crossing water main (left)

Map showing existing 8" force main and 12" water (right)



Condition Assessment – Gorham Pump Stations

2020 Gorham Pump Station Report

Gorham			
ID	Name	2020 rating	2014 rating
GOP50	Canterbury Pines	4.71	3.54
GOP51	Gateway Commons	4.01	3.83
GOP45	University	4.00	3.95
GOP47	Southwoods	4.00	3.63
GOP55	Little River	4.00	4.08
GOP56	Mallison	4.00	4.06
GOP57	Old Dynamite	4.00	4.96
GOP58	Olde Canal	4.00	4.03
GOP59	Tink Drive	4.00	4.93
GOP41	Tow Path	3.97	
GOP52	Meadowland	3.92	3.72
GOP54	Heartwood	3.92	3.81
GOP46	Glenwood	3.76	3.59
GOP48	Briarwood	3.52	3.78
GOP53	Park South	3.23	3.98
Gorham Average		3.94	3.98
PWD -All Average (74 Pump Stations)		3.72	3.47



Park South – condition rating is 3.2 out of 5

Subprogram # 416 Westbrook Gorham Windham Regional WWTF

Division: Wastewater - Joint Westbrook
Funding: Bonds, R&R – Wastewater- Div. 64

Manager: Firmin, Scott
Priority: Upgrade obsolete facility

Description:

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The main focus of the proposed projects is to improve plant performance and efficiency.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. Planned upgrades also include instrumentation and control in accordance with current industry practice and provide enhanced automation, monitoring and control of the treatment processes. Regulatory requirements are continuously revised and updated by the EPA and administered by the Maine Department of Environmental Protection. This account provides for the equipment replacement and system upgrades necessary to continue to meet regulatory and operational requirements.



History:

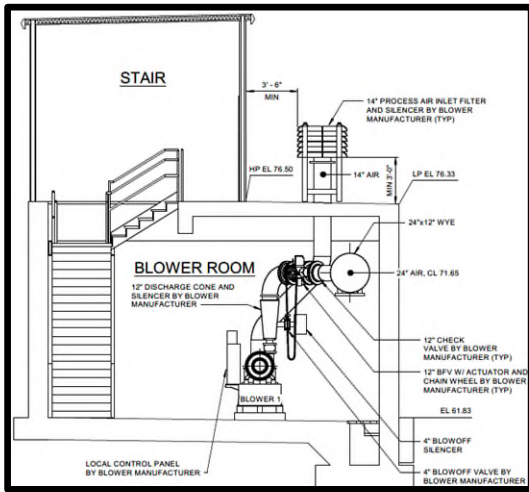
To meet the goals of this subprogram the District is continuously engaged in the Capital Improvement Program Process described in the Introduction of the Capital Expenditures section. Recent planning and design efforts include the Aeration System Alternatives Analysis (2015), the Secondary Clarifier Condition Assessment (2016), and the Aeration and Secondary Clarification Upgrade Design (2019). These projects are currently under construction with an expected startup date of Summer of 2023.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond					\$500,000
WW Treatment					\$500,000
416/3256/Dewatered Sludge Conveyance Upgrade					\$500,000
Bond SRF				\$200,000	\$2,000,000
WW Treatment				\$200,000	\$2,000,000
416/3232/Septage Screening Facilities				\$200,000	\$2,000,000
Operating Expense			\$35,000	\$20,000	\$35,000
WW Treatment			\$35,000	\$20,000	\$35,000
416/3270/Process Valve/Actuator Replacement				\$20,000	
416/3271/Structural/Architectural Assessment/Rehab			\$35,000		\$35,000
Renewal and Replacement	\$180,000	\$1,200,000	\$550,000	\$175,000	\$50,000
WW Treatment	\$180,000	\$1,200,000	\$550,000	\$175,000	\$50,000
416/3132/Westbrook Gorham Windham WWTF R&R	\$130,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls				\$125,000	
416/3166/Process Area Ventilation Upgrades		\$750,000			
416/3190/Access Road and Parking Lot Resurfacing	\$15,000	\$400,000			
416/3191/TWAS Mixing System Replacement			\$150,000		
416/3198/WAS and GBT System Upgrade/Rehabilitation			\$350,000		
416/3272/Fire Monitoring System Upgrade	\$35,000				
Grand Total	\$180,000	\$1,200,000	\$585,000	\$395,000	\$2,585,000

Subprogram # 416 Westbrooke Gorham Windham Regional WWTF

CIP 2020, Subprogram #416, Project # 3023: \$11,250,000 - Westbrook aeration and secondary clarifier upgrade. Construction Started in 2021 with an anticipated two year construction duration. To the left is a diagram of the below grade aeration blower building. Right is foundation being constructed and below is the completed blower building.



Subprogram # 60**Westbrook WW Pump Stations - R&R****Division:** Wastewater - Westbrook**Manager:** Poulin, Charlene**Funding:** Bond and R&R – Wastewater – Div. 62**Priority:** Routine replacement**Description:**

This is an ongoing project designed to maintain and improve Westbrook wastewater pump stations. Modifications and upgrades will ensure adequate capacity, reliability and safety.

Justification / Impact:

Components of the older pump stations have reached their useful life and obsolete equipment should be replaced. Replacing this equipment before it fails completely reduces the amount spent on operating and maintaining the equipment.

History:

This planned renewal and replacement will assist operations in moving toward a goal of performing more predictive and preventive maintenance instead of emergency maintenance.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$150,000	\$200,000			
WW Collection & Pumping	\$150,000	\$200,000			
60/3274/East Bridge Roof Replacement	\$150,000				
60/3275/Dana Ct. Forcemain Replacement		\$200,000			
Grand Total	\$150,000	\$200,000			

Previous Years on CIP:

2000 - present



East Bridge PS roof replacement scheduled for 2023

Portland Wastewater

East End Treatment Plant

PWD has completed a number of significant upgrade projects to key systems at the East End Wastewater Treatment Facility in recent years, including the following

- Aeration (2015)
- Sludge Dewatering (2011)
- Installation of a second CSO rated screen in the headworks (2010)
- Addition of a second waste activated sludge thickener, enclosed for odor control (2015)
- Building envelope improvements including roofing and windows (2016-2017)
- Addition of a screenings wash press (2014)
- Rehabilitation of the grit removal equipment and piping (2017-2019)
- Replacement of the sodium hypochlorite storage tanks and piping (2019)
- Overhaul of the main odor control fan OCF-1 (2019)
- HVAC upgrades to the dewatering and chemical handling areas (2021)

In 2015, upgrade of the aeration system began to expand the system's capability to manage the spikes in pollutant loading to the treatment plant while exercising regular process control to better manage the performance of the treatment system. Since substantial completion in 2017, the upgrade has had a significant positive impact on the activated sludge system by promoting good settling, reducing odors, and enabling a significant amount of nitrogen management. The project was awarded a grant from Efficiency Maine for energy efficient design.

In 2015-2016, evaluations of the plant's electrical and HVAC systems were completed and long term replacement programs were developed. In 2018 design of the EEWTF/Northeast PS Backup Power Upgrade began. Due to the purchase and sale agreement with Central Maine Power for installation of a substation and new primary feeders for the East End plant, this effort is recommended for combination with switchgear replacement which was also recommended as part of the electrical system evaluation. Design of power distribution upgrades at the plant including a new medium voltage loop and transformers and new main switchgear was completed in October 2020; construction is underway and anticipated to be complete by the end of 2022.

The third floor HVAC upgrade was completed in the Fall of 2021. Rehabilitation of primary clarifier sludge removal mechanism #3 was completed in 2018. Rehabilitation of mechanisms #1 and #2 were completed in the Summer of 2021. Upgrades to the chlorine contact tank isolation gate actuators were completed in the Spring of 2020. In the spring of 2019 overhaul of the main odor control system fan (OCF-1) was completed including installation of the spare fan impeller and replacement of all wear components.

The headworks channels were modified over the winter of 2020-2021 to include overflow bypass channels to handle influent flow in the event of a screening system failure. Replacement of the effluent flow meter was completed in 2021.

**Proposed CIP 2023 21/3204
dewatering upgrade engineering to
replace existing rotary presses**

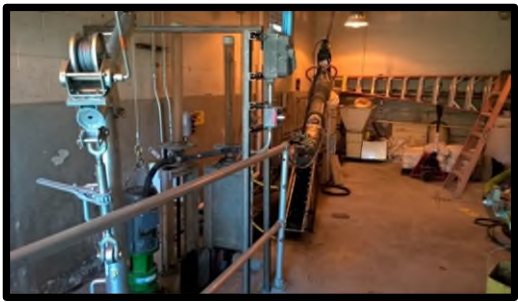


Portland Wastewater (continued)

Peaks Island Treatment Plant

In 2014, the District conducted a feasibility study of ultraviolet disinfection at the Peaks facility as a potential replacement of the batch chlorination/dechlorination process. The study concluded that UV disinfection would provide a cost effective alternative to chlorination while enhancing the plant's ability to disinfect during wet weather flows. The system was installed in 2015 and has been performing well.

In 2018, the District installed a control panel and associated lifting systems to facilitate sequencing batch reactor tank dewatering in a timely fashion for maintenance, inspection and repairs. Also in 2018, the District installed a ventilation system in the headworks along with carbon air purification. In the spring of 2019 the influent screen was replaced with a new combination screen/screenings washer-compactor.



**New Peaks Island
Treatment Plant's
Influent Screen
Rotated out of the
Channel for Inspection**

Pump Stations

PWD has undertaken several significant upgrades to the Portland pumping systems in recent years. India Street was upgraded in 2008 to include self-cleaning wet wells, new pumps, and odor control. Upgrades to the Northeast pump station have included internal piping and Pumps 2, 3 and 4 in 2007-2008, Pump 1 replacement in 2017, and the addition of odor control in 2018.

Further modifications to the Northeast pump station are pending future CSO and storm water work planned by the City. CIP subprogram #70 outlines future plans for the remaining pump stations in the City. The full upgrade of the Baxter Boulevard Pump Station was delayed (only pumps, with the ability to be expanded, were replaced) to allow the City's plan to include possible upgrades to the flow capacity of the pump station. Thompson Point Pump Station and the associated force main were upgraded along with the Arcadia Pump Station in 2013.

Phase 1 of the Fore River Pump Station pumping system and controls upgrade is complete. Phase 2 of upgrades to the Fore River station are underway, including installation of a bypass connection and force main condition assessment. The phase 2 upgrades were completed in 2021 and included upgrade of the station's screening, electrical, and ventilation systems. Upgrade of the Baxter Blvd. Pump Station (CIP #70 project 3144) was completed in 2022; the project included improvements to the station's power distribution system, electrical switchgear, piping, controls/telemetry, and a station bypass system. The Baxter Blvd. PS force main was replaced in 2022.

The City of Portland submitted a Tier III Long-Term Control Plan for the mitigation of CSO flows to Maine DEP in 2011. The plan includes a \$167 million plan over 15 years. This plan focuses on storage and dedicated wet weather systems at the East End WWTF in the later years of the plan. A 2-million gallon storage conduit along Baxter Blvd. and Payson Park was commissioned in 2013. Design and construction of the next two storage conduits is underway. These storage conduits are part of the City's collection system and are owned, operated, and maintained by the City. The treatment of flow from the storage conduits is coordinated with the City on an ongoing and regular basis.

The Portland City Council approved a \$3.1 million sewer expansion on Peaks Island. The project was managed, constructed, and financed by the District. The project was completed in 2014.

Portland Wastewater (continued)

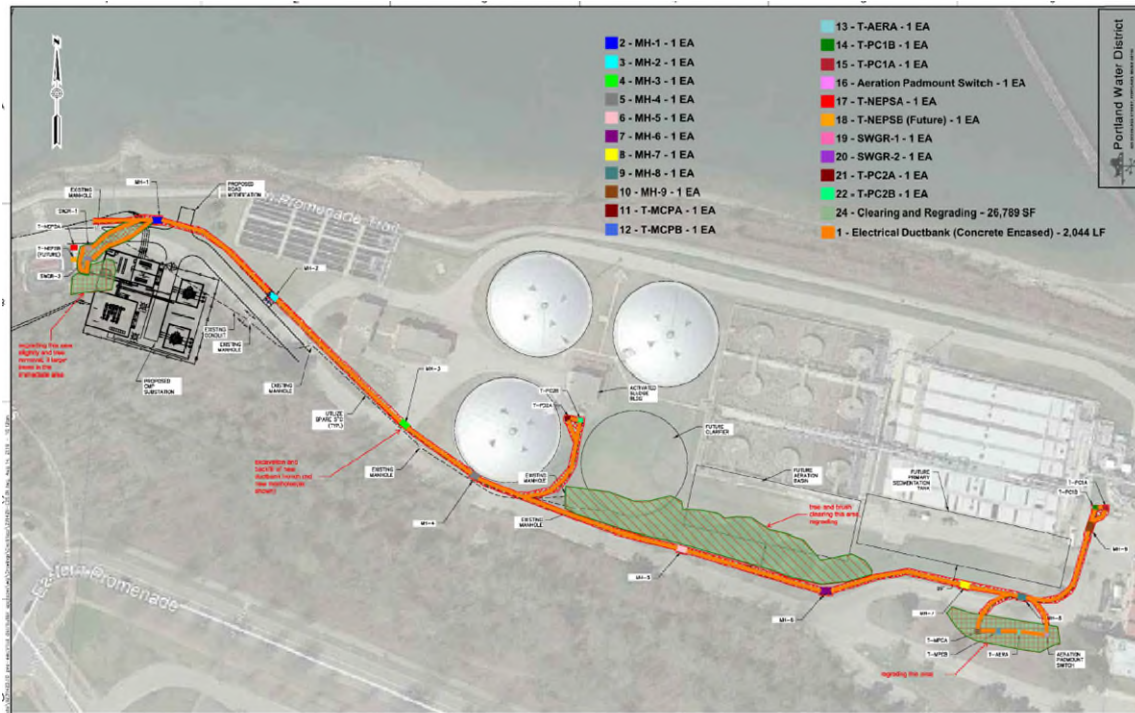
Program Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Comprehensive Planning	\$300,000				
SCADA & Technology	\$165,000				
WW Collection & Pumping	\$355,000	\$2,875,000	\$75,000	\$175,000	\$75,000
WW Treatment	\$2,075,000	\$23,200,000	\$2,805,000	\$1,645,000	\$2,625,000
Grand Total	\$2,895,000	\$26,075,000	\$2,880,000	\$1,820,000	\$2,700,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$500,000	\$650,000			
Operating Expense	\$335,000				
Renewal and Replacement	\$1,060,000	\$1,705,000	\$1,980,000	\$445,000	\$950,000
Bond SRF	\$1,000,000	\$23,720,000	\$900,000	\$1,375,000	\$1,750,000
Grand Total	\$2,895,000	\$26,075,000	\$2,880,000	\$1,820,000	\$2,700,000

2019 -2020 CIP 21 project 3014 East End Medium Voltage Power Distribution Upgrade – This project is currently under construction with an expected start-up date in November of 2022.



Portland Wastewater (continued)

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
Comprehensive Planning	\$300,000				
3/3268/Portland Forcemain Eval /Condition Assessment	\$300,000				
SCADA & Technology	\$165,000				
177/3128/EEWWTF SCADA Server Replacement Program	\$165,000				
WW Collection & Pumping	\$355,000	\$2,875,000	\$75,000	\$175,000	\$75,000
423/3182/Torrington Point PS Upgrades				\$100,000	
423/3279/Stormwater System Upgrades	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
70/3135/Portland WW Pump Stations - R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
70/3144/Baxter Blvd PS Upgrades Phase II		\$650,000			
70/3187/India St PS Generator&HVAC Upgrade		\$850,000			
70/3205/Northeast PS Generator and Switchgear Replacement		\$1,300,000			
70/3254/ISPS Roof Rehabilitation	\$175,000				
70/3255/ISPS Landscaping	\$30,000				
WW Treatment	\$2,075,000	\$23,200,000	\$2,805,000	\$1,645,000	\$2,625,000
21/3009/Dewatering Odor Control Rehab and Expansion		\$1,000,000			
21/3019/Gravity Thickener #2 Rehabilitation					\$1,750,000
21/3020/Process Valve and Actuator Replacement	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
21/3133/East End WWTF R&R	\$210,000	\$230,000	\$150,000	\$75,000	\$75,000
21/3145/East End WWTP Paving	\$500,000				
21/3146/Gravity Belt Thickener Replacement			\$550,000		
21/3147/Secondary Clarifier Sludge Rake Replacement	\$500,000	\$7,320,000			
21/3148/Return Sludge Piping Replacement		\$2,750,000			
21/3149/HVAC Upgrades - Process Area			\$500,000		
21/3150/HVAC Upgrades - Tunnel and Pump Gallery		\$100,000	\$900,000		
21/3151/Influent Screen #2 and Headworks Conveyors		\$1,250,000			
21/3154/RAS Pump Rehabilitation and AG Building Electrical					\$100,000
21/3156/Clarifier Ventilation				\$1,375,000	
21/3157/HVAC Upgrades - 2nd Floor Admin					\$175,000
21/3202/Thickened Sludge Storage and Mixing Rehab			\$500,000		
21/3204/Dewatering System Upgrade	\$500,000	\$10,000,000			
21/3263/Disinfection Yard Piping Replacement	\$100,000				
21/3264/Primary Clarifier Cross Collector #3 Replacement	\$150,000				
21/3266/Structural/Architectural Assessment/Rehab			\$75,000		\$75,000
21/3267/Outfall Condition Assessment			\$50,000		
423/3131/Peaks Island R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
423/3192/Aeration System Upgrade					\$300,000
423/3193/Decanter and Mixer Upgrade, Tanks A and B		\$500,000			
423/3195/RDT Rehabilitation				\$30,000	
423/3196/Activated Sludge Process Control Upgrade					\$100,000
423/3197/WAS Processing System Upgrade/Rehabilitation				\$115,000	
423/3239/Sludge Handling Upgrades - Design			\$30,000		
423/3277/Fire Monitoring System Upgrade	\$30,000				
423/3278/Outfall Condition Assessment	\$35,000				
Grand Total	\$2,895,000	\$26,075,000	\$2,880,000	\$1,820,000	\$2,700,000

Subprogram # 70 **Portland WW Pump Stations - R&R**

Division: Wastewater - Portland
Funding: R&R, Bonds – Wastewater- Div. 57

Manager: Poulin, Charlene
Priority: Routine replacement

Description:

This program provides for a planned approach to the replacement of obsolete equipment in the Portland wastewater pump stations. Few improvements have taken place during the 25 years of operation. Pumps have to be upgraded, screens reconsidered and control systems revamped.

Justification / Impact:

The pump stations have reached the end of their useful design life and obsolete equipment must be replaced. Continued attention to the pump stations will allow for a predictive approach to maintenance while ensuring operational optimization and reliability.

History:

This program is based on the Portland Pump Station CPE performed by Wright-Pierce and contemplates improvements with funding from the R&R accounts.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond		\$650,000			
WW Collection & Pumping		\$650,000			
70/3144/Baxter Blvd PS Upgrades Phase II		\$650,000			
Bond SRF		\$1,300,000			
WW Collection & Pumping		\$1,300,000			
70/3205/Northeast PS Generator and Switchgear Replacement		\$1,300,000			
Renewal and Replacement	\$255,000	\$900,000	\$50,000	\$50,000	\$50,000
WW Collection & Pumping	\$255,000	\$900,000	\$50,000	\$50,000	\$50,000
70/3135/Portland WW Pump Stations - R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
70/3187/India St PS Generator&HVAC Upgrade		\$850,000			
70/3254/ISPS Roof Rehabilitation	\$175,000				
70/3255/ISPS Landscaping	\$30,000				
Grand Total	\$255,000	\$2,850,000	\$50,000	\$50,000	\$50,000

2020 CIP 70-3143-Baxter Boulevard PS Upgrades

\$2,000,000 project completed in Spring of 2022. Below the contractor is lowering a new splitter box for the new electrical service



2022–CIP 70/3257 Baxter Pump Station Force Main Replacement

Completed May of 2022- 1000 ft. of 1980 -12" DI force main replaced with new 12" PVC force main. The District received \$400,000 of ARPA funds from the City of Portland for this project.



Sargent Corp, Installing new Baxter Blvd Force Main

Condition Assessment – Portland Pump Stations

2020 Portland Pump Station Report

Portland /Peaks Island			
ID	Name	2020 rating	2014 rating
POP04	Great Pond Pump Station	4.79	5.0
POP01	Centennial	4.57	2.59
POP03	Rye Field	3.79	3.66
POP02	Torrington Point	3.70	3.26
POP43	Fore River	4.44	2.35
POP45	Thompson's Point	3.90	4.33
POP46	Arcadia Street	3.84	4.41
POP42	India Street	3.79	3.95
POP48	Westbrook Street	3.69	3.65
POP41	Northeast	3.21	2.89
POP47	Stroudwater Under construction	2.97	3.34
POP44	Baxter Boulevard (completed upgrade in 2022)	2.73 4.0	3.11
POP49	Garrison Street (2021 under design)	1.63	2.65
POP50	Congress Street (2021 under design)	1.63	2.80
Portland Average		3.47	3.43
PWD -All Average (74 Pump Stations)		3.72	3.47



Garrison Street Pump Station - Controls / Pneumatics Pumps-
 2021 CIP project #3184 under design to replace ejector style pump station with submersible pump station

Subprogram # 21 East End WWTF Upgrade

Division: Wastewater – Portland

Manager: Firmin, Scott

Funding: Bonds & R&R– Wastewater – Div. 57

Priority: Upgrade obsolete facility

Description:

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The main focus of the proposed projects to improve plant performance and efficiency.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. Planned upgrades also include instrumentation and control in accordance with current industry practice and provide enhanced automation, monitoring and control of the treatment processes. Regulatory requirements are continuously revised and updated by the EPA and administered by the Maine Department of Environmental Protection. This account provides for the equipment replacement and system upgrades necessary to continue to meet regulatory and operational requirements.

History:

This implementation program began with the Woodard & Curran CPE completed in 1998. In recent years, several system assessments have been conducted to support continued efforts to meet the objectives of this subprogram, including influent channel flow diversion, secondary clarifier CCT isolation, secondary clarification and sludge withdrawal, return activated sludge piping replacement, and primary gallery electrical systems. The largest recent investments were an \$11M upgrade of the aeration system completed in 2015 and \$5M investment in the plant’s medium voltage distribution network and backup generator replacement completed in 2022.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$500,000				
WW Treatment	\$500,000				
21/3145/East End WWTP Paving	\$500,000				
Bond SRF	\$1,000,000	\$22,420,000	\$900,000	\$1,375,000	\$1,750,000
WW Treatment	\$1,000,000	\$22,420,000	\$900,000	\$1,375,000	\$1,750,000
21/3009/Dewatering Odor Control Rehab and Expansion		\$1,000,000			
21/3019/Gravity Thickener #2 Rehabilitation					\$1,750,000
21/3147/Secondary Clarifier Sludge Rake Replacement	\$500,000	\$7,320,000			
21/3148/Return Sludge Piping Replacement		\$2,750,000			
21/3150/HVAC Upgrades - Tunnel and Pump Gallery		\$100,000	\$900,000		
21/3151/Influent Screen #2 and Headworks Conveyors		\$1,250,000			
21/3156/Clarifier Ventilation				\$1,375,000	
21/3204/Dewatering System Upgrade	\$500,000	\$10,000,000			
Renewal and Replacement	\$490,000	\$260,000	\$1,855,000	\$105,000	\$455,000
WW Treatment	\$490,000	\$260,000	\$1,855,000	\$105,000	\$455,000
21/3020/Process Valve and Actuator Replacement	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
21/3133/East End WWTF R&R	\$210,000	\$230,000	\$150,000	\$75,000	\$75,000
21/3146/Gravity Belt Thickener Replacement			\$550,000		
21/3149/HVAC Upgrades - Process Area			\$500,000		
21/3154/RAS Pump Rehabilitation and AG Building Electrical					\$100,000
21/3157/HVAC Upgrades - 2nd Floor Admin					\$175,000
21/3202/Thickened Sludge Storage and Mixing Rehab			\$500,000		
21/3263/Disinfection Yard Piping Replacement	\$100,000				
21/3264/Primary Clarifier Cross Collector #3 Replacement	\$150,000				
21/3266/Structural/Architectural Assessment/Rehab			\$75,000		\$75,000
21/3267/Outfall Condition Assessment			\$50,000		
Grand Total	\$1,990,000	\$22,680,000	\$2,755,000	\$1,480,000	\$2,205,000

Previous Years on CIP:

1999 to present

Subprogram # 421 Wastewater Asset Condition Evaluations

Division: Wastewater - Portland

Manager: Pellerin, Greg

Funding: R & R – Wastewater – Div. 57

Priority: Routine replacement

Description:

This subprogram will provide needed engineering evaluation and programming of similar asset classes across all wastewater treatment plants and critical influent pump stations and force mains. Many of the processes have been upgraded over the years but systems such as electrical and HVAC were not prioritized to be replaced but are critical to the overall operations. Performing engineering evaluations on these critical systems would be the first step in developing a long term plan to replace or upgrade these systems to meet current codes.

Justification / Impact:

Engineering evaluation to develop prioritized schedule and budget to upgrade electrical distribution and heating and ventilation systems across the major wastewater treatment plants. This was completed in 2017 and has led to multi-year CIP improvements as outlined in the evaluations. Many of these systems are original to the plants and pump stations (35- 40 years old). The goal is to upgrade these systems to meeting code and allow for additional capacity to meet the future needs.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Operating Expense	\$300,000				
Comprehensive Planning	\$300,000				
3/3268/Portland Forcemain Eval /Condition Assessment	\$300,000				
Grand Total	\$300,000				

Previous Years on CIP:

none

Related Projects:

Subprogram # 3, Comprehensive Infrastructure Asset Management Plan

Procurement Issues:

RFP for engineering procurement

From Corrosion Probe Inc. Evaluation of the India Street Force Main in 2019

“Overall, the force main where exposed and evaluated appears to be in fairly good condition. However, chloride intrusion has occurred and future corrosion of the PCCP’s pre-stressed wires can be expected in the coming years. CPI recommends that this force main be evaluated for future replacement or remedial measures such as external concrete encasement or protective wrapping for long term service life extension. Currently, no evidence of immediate failure is present, but a longer-range plan for this force main should be developed after further portions of the pipeline have been evaluated.”



Pictured: India Street 33” pre-stressed Force Main exposed during installation of City Storm Sewer in 2019

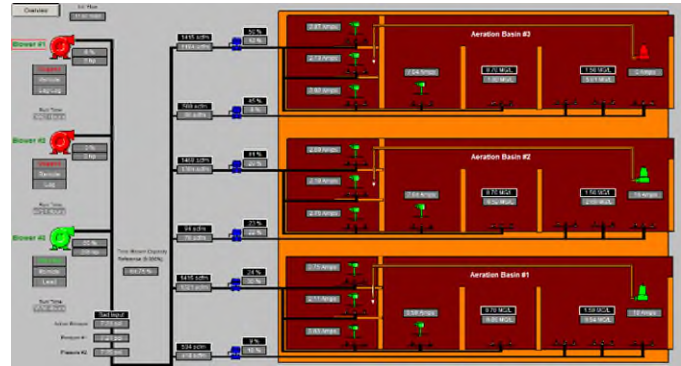
Subprogram # 177 SCADA/Process Control - Wastewater

Division: Wastewater - Portland
Funding: R & R – Wastewater – Div. 57

Manager: Pellerin, Greg
Priority: Upgrade obsolete facility

Description:

The program supports all 80 wastewater sites across the District in upgrading and replacing the existing Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to the District SCADA standards and provide for increased automation of wastewater systems and treatment. Programmable Logic Controllers (PLC) have been replaced across the District to meet the new standards and remove outdated, non-maintainable equipment.



Justification / Impact:

The benefit of this program is to increase the automation and reduce the staff hours needed to perform routine activities for the systems and treatment plants across the District.

In 2017, the new aeration system went on line. The system is fully automated and is represented in the District's SCADA system.

History:

The District started changing out the system in 2003 by replacing the existing 20 year-old system across the six wastewater communities and installing new SCADA equipment where it did not exist. All systems have been retrofitted or replaced but more automation of these systems will continue.

Budget Summary:

East End WWTF – Existing Rotary Press dewatering equipment

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$165,000				
SCADA & Technology	\$165,000				
177/3128/EEWWTF SCADA Server Replacement Program	\$165,000				
Grand Total	\$165,000				

Previous Years on CIP: 2003 to present
Related Projects: Subprogram #110



Subprogram # 423 Peaks Island WW Treatment and Systems

Division: Wastewater - Peaks

Manager: Firmin, Scott

Funding: R & R – Wastewater – Div. 66

Priority: Routine replacement

Description:

This account will provide for timely routine replacement of equipment at the Peaks Island Treatment Plant and pump stations.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. This project provides funding for the efficient and timely replacement of equipment using routine and replacement funds.

History:

This program has been used at most PWD wastewater systems in the past.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Operating Expense	\$35,000				
WW Treatment	\$35,000				
423/3278/Outfall Condition Assessment	\$35,000				
Renewal and Replacement	\$150,000	\$545,000	\$55,000	\$270,000	\$425,000
WW Collection & Pumping	\$100,000	\$25,000	\$25,000	\$125,000	\$25,000
423/3182/Torrington Point PS Upgrades				\$100,000	
423/3279/Stormwater System Upgrades	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Treatment	\$50,000	\$520,000	\$30,000	\$145,000	\$400,000
423/3131/Peaks Island R&R	\$20,000	\$20,000			
423/3192/Aeration System Upgrade					\$300,000
423/3193/Decanter and Mixer Upgrade, Tanks A and B		\$500,000			
423/3195/RDT Rehabilitation				\$30,000	
423/3196/Activated Sludge Process Control Upgrade					\$100,000
423/3197/WAS Processing System Upgrade/Rehabilitation				\$115,000	
423/3239/Sludge Handling Upgrades - Design			\$30,000		
423/3277/Fire Monitoring System Upgrade	\$30,000				
Grand Total	\$185,000	\$545,000	\$55,000	\$270,000	\$425,000

Previous Years on CIP: 2007 – present

Peaks Island Treatment Plant – Built 1994



Water and Wastewater – Multi-fund Program

The projects below are being completed and benefits multiple water and wastewater funds and are allocated to the respective fund based on the relative use of the asset.

Program Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Comprehensive Planning	\$800,000	\$400,000			
SCADA & Technology	\$405,000	\$875,000	\$275,000	\$275,000	\$275,000
Vehicle/Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
Water Facilities Program	\$700,000	\$980,000	\$1,775,000	\$400,000	\$900,000
Grand Total	\$2,595,000	\$3,055,000	\$3,950,000	\$4,075,000	\$11,575,000

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
Comprehensive Planning	\$800,000	\$400,000			
3/3071/Comprehensive Infrastructure Asset Management Plan	\$800,000	\$400,000			
SCADA & Technology	\$405,000	\$875,000	\$275,000	\$275,000	\$275,000
50/3038/Technology Upgrade and Replacement	\$275,000	\$275,000	\$275,000	\$275,000	\$275,000
50/3039/Upgrade of Finance System		\$600,000			
50/3281/Douglass St PI Server Upgrade	\$130,000				
Vehicle/Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
326/3041/Vehicle and Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
63/3046/Meter Replacement and Leak Detection	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
Water Facilities Program	\$700,000	\$980,000	\$1,775,000	\$400,000	\$900,000
68/3050/Facility Upgrades	\$100,000	\$75,000	\$75,000	\$100,000	\$100,000
68/3054/HVAC Improvements -Phases 2, 3, 4	\$600,000	\$525,000	\$1,600,000		
68/3055/Douglass Street Roof repl. Ph 4		\$280,000			
68/3217/Office Renovations- post HVAC projects		\$100,000	\$100,000	\$100,000	
68/3283/Douglass St - Aggregate Storage Facility				\$200,000	\$800,000
Grand Total	\$2,595,000	\$3,055,000	\$3,950,000	\$4,075,000	\$11,575,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$600,000	\$1,125,000	\$1,600,000	\$200,000	\$800,000
Master Plan Reserve	\$800,000				
Operating Expense	\$0	\$400,000			
Renewal and Replacement	\$1,195,000	\$1,530,000	\$2,350,000	\$3,875,000	\$10,775,000
Grand Total	\$2,595,000	\$3,055,000	\$3,950,000	\$4,075,000	\$11,575,000

Subprogram # 3 Comprehensive Infrastructure Asset Management Plan

(Updated CWSSP Plan)

Division: Allocation

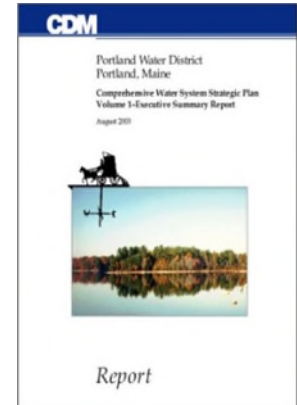
Manager: Crovo, Chris

Funding: Water Master Plan Reserve

Priority:

Description:

The District completed a Comprehensive Water System Strategic Plan (CWSSP) in 2003. This plan has served as the District’s water system master plan for the past 16 years and also served as a driver to develop an Asset Management approach to infrastructure maintenance and replacement of all the District’s assets. This project will provide an update to the existing CWSSP plan but will also build out Asset Management Plans for all the District’s water and wastewater critical assets.



Justification / Impact:

Since the completion of the CWSSP plan in 2003 the District has completed the following;

- Completed an Asset Inventory of our Infrastructure Systems
- Fully developed and integrated our CMMS and GIS system (Asset Information Management System – AIM)
- Updated portions of the Hydraulic Model for the Water system
- Completed many of the recommended capital projects
- Maintained a financial model for water system and wastewater communities
- Conducted many evaluations and condition assessments of many critical assets

The District is preparing to take the next step in Asset Management and would be seeking consulting assistance to complete the following;

- Determine assets that are critical to sustained performance and develop asset management plans for each asset class
- Development of condition-based monitoring plans and deployment
- Determine long-term optimized financial strategy

This effort would be used to update and create a single document outlining the status of our infrastructure and a multi-year plan on projects to be completed in the coming decade.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Master Plan Reserve	\$800,000				
Comprehensive Planning	\$800,000				
3/3071/Comprehensive InfrastructureAsset Management Plan	\$800,000				
Operating Expense	\$0	\$400,000			
Comprehensive Planning	\$0	\$400,000			
3/3071/Comprehensive InfrastructureAsset Management Plan	\$0	\$400,000			
Grand Total	\$800,000	\$400,000			

Previous Years on CIP: 2019

Related Projects:

Procurement Issues: Engineering consulting procurement – purchasing policy

Subprogram # 50 Technology Upgrade and Replacement

Division: Allocation
Funding: R & R – Water- Div. 10

Manager: Davis, Chad
Priority: Routine replacement

Description:

PWD has made a commitment to using technology as a means of operating more efficiently. This project is therefore an ongoing one and crosses all department lines and major processes. The focus is on establishing and maintaining a stable reliable network and databases to support PWD decision making, planning, budgeting and daily work activities. The project must also plan for growth and adaptation as new technology solutions become feasible.

Justification / Impact:

While economic payback can be demonstrated for many of the line items in this project, replacement of obsolete facilities is also a factor in technology investment. A fast, secure, reliable network and databases impacts PWD’s ability to be proactive and competitive. Better available information that is timely supports a customer-centric business perspective.

History:

Technology infusion into PWD began anew after an EMA study in 1996 recommended the use of technology to reduce a competitive gap, improve customer service and operating efficiency. Early on a technology master plan was developed as a guide for our investments. Key development work focused on building a stable reliable network infrastructure, acquiring best fit software solutions and populating the associated databases and documenting standard operating procedures. Most of the work was done in team environments to ensure the technology solution met the needs of the target PWD employee group. The PWD network consists of a 206 PC/Laptop/Thin Client wide area network supported by 39 servers housing various applications and data sources supporting asset management, customer billing, financials, GIS, voice mail, email, and VoIP phone. Our network also supports over fifty employees in the field via a wireless data network. Technology advances and cost savings continue to influence the design and delivery of information to our employees and customers.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond		\$600,000			
SCADA & Technology		\$600,000			
50/3039/Upgrade of Finance System		\$600,000			
Renewal and Replacement	\$405,000	\$275,000	\$275,000	\$275,000	\$275,000
SCADA & Technology	\$405,000	\$275,000	\$275,000	\$275,000	\$275,000
50/3038/Technology Upgrade and Replacement	\$275,000	\$275,000	\$275,000	\$275,000	\$275,000
50/3281/Douglass St PI Server Upgrade	\$130,000				
Grand Total	\$405,000	\$875,000	\$275,000	\$275,000	\$275,000

Previous Years on CIP: All since 1996

Related Projects:

Procurement Issues: Standard procurement procedures are used for major hardware, software and consulting purchases.

Subprogram # 326 **Vehicle and Equipment Replacement**

Division: Allocation
Funding: R & R – Water- Div. 10

Manager: Hudak, Joshua
Priority: Routine replacement

Description:

This project is to replace a portion of the District's Vehicle and Equipment fleet each year. This year's review included the evaluation of all of the vehicles and equipment which have met or exceeded the trade criteria. In reviewing the fleet, the replacement cost is between \$4,500,000 and \$5,000,000.

Justification / Impact:

The rolling stock and construction equipment fleet are essential to the District's "mission to provide our customers with quality water, wastewater and related environmental services." Maintaining a reliable fleet of vehicles and equipment enables staff to fulfill the mission with safety, efficiency and timeliness. Worker safety, efficient operations and customer satisfaction are the basic benefits of maintaining a sound vehicle and equipment inventory.

History:

The Asset Management Department conducts an annual evaluation of major pieces of equipment and vehicles to determine our annual replacement needs. The various trade criteria are also reviewed to ensure that they are appropriate. Based on the age and use of the fleet, projections of future annual costs are included in the five-year plan. These projections are re-reviewed each year to develop a minimum replacement program for the current year. Several major pieces of equipment will need to be replaced in the next two to four years.



Origin of the Subprogram:

Annual review and replacement of vehicles and equipment is a basic operating need of any geographically dispersed utility.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
Vehicle/Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
326/3041/Vehicle and Equipment Replacement	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000
Grand Total	\$290,000	\$400,000	\$400,000	\$400,000	\$400,000

Previous Years on CIP:

All

Procurement Issues:

Specifications are developed and proposals are solicited from approximately thirty vehicle and equipment dealers. Purchases are made on the basis of price and other criteria which lead to lowest life cycle cost.

2023 Annual Vehicle and Equipment Estimated Replacement Cost and Trade-in values

2023 Annual Vehicle and Equipment Replacement		Estimated Cost
1- 4x4 1 Ton Utility PU VEH23020	ASSET PURCHASE	\$49,000
VEH15030 (Foreman's Truck)	TRADE	(\$10,000)
4 - 4x4 1/2 Ton PU w/ Cap	ASSET PURCHASE	\$183,000
VEH17080/VEH12070/VEH14010/VEH15070(Vans)	TRADE	(\$49,000)
1-4x4 1 Ton Utility PU w/ Plow VEH23010	ASSET PURCHASE	\$55,000
VEH14070 (Sanding Truck) w/ Plow	TRADE	\$11,000
Sweeper Attachment	ASSET PURCHASE	\$31,000
UTV Electric EEWWTF	ASSET PURCHASE	\$20,000
Vehicle Set Up Costs	SET UP	\$22,000
	Total CIP Request	\$290,000



New Lake Patrol Boat - Replaced in 2022

Subprogram # 63 **Meter Replacement and Leak Detection**

Division: Allocation
Funding: R & R – Water - Div. 10

Manager: Wallace, Jim
Priority: Routine replacement

Description:

This work includes the cost to maintain the Long Service Meter Change program, and replacement of damaged meters. It also includes the purchasing of leak detection and monitoring equipment. The District completed a change out of all of its 50,000 meters to radio read system in 2009. The meters and batteries are expected to last 20 years for the smaller meters and less for the larger meters.

Justification / Impact:

This is a required program to meet PUC requirements and maintain accurate billing of customer accounts and account for lost water. Since long service meters typically underestimate the actual water flow, the Long Service Meter Change program is needed to ensure that the District receives all the revenue to which it is entitled.

History:

New terms and conditions have recently been instituted to increase the long service interval from 15 to 20 years.

Origin of the Subprogram:

These costs do not reflect the value of meters and radio reading devices that are contributed by customers.

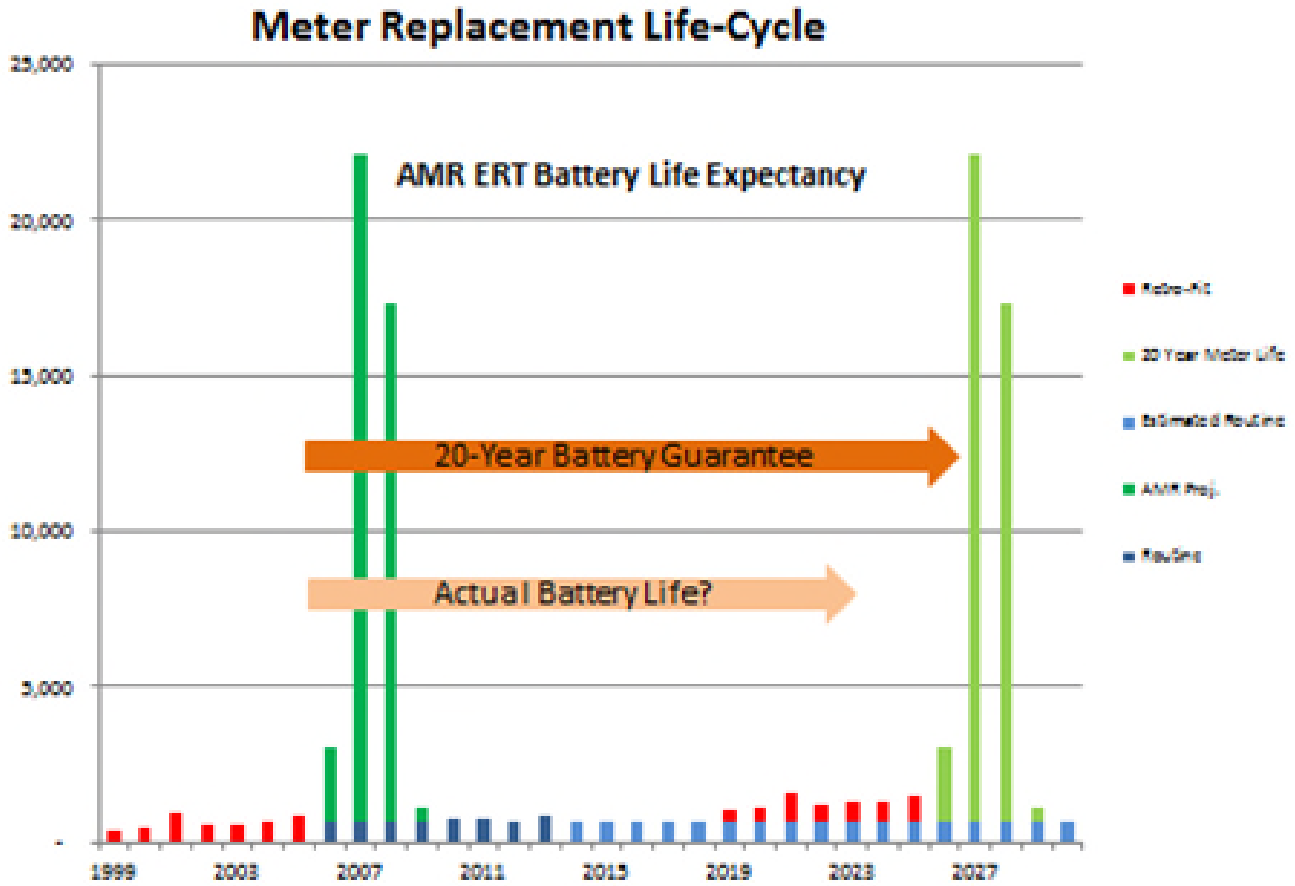
Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
Water Distribution System	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
63/3046/Meter Replacement and Leak Detection	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000
Grand Total	\$400,000	\$400,000	\$1,500,000	\$3,000,000	\$10,000,000

Previous Years on CIP: All
Related Projects: none
Procurement Issues: Standard meter procurement procedures.



Subprogram # 63 **Meter Replacement and Leak Detection**



The above graph is projecting the life cycle of the District's 50,000 meters.
 The next major meter change-out is projected for 2026-2028.

Subprogram # 68

Facilities Improvements

Division: Allocation
Funding: R & R – Water- Div. 10

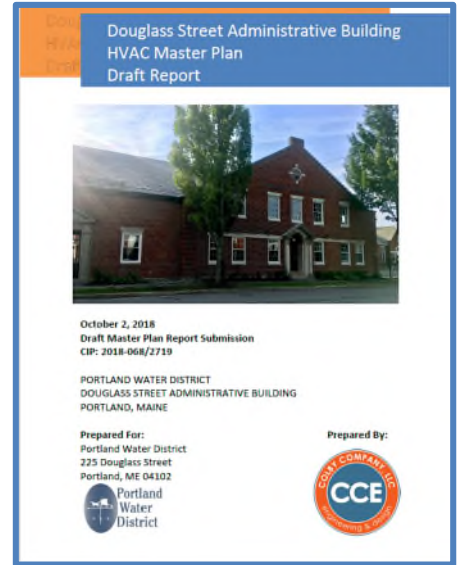
Manager: Hudak, Josh
Priority: Upgrade obsolete facility

Description:

This project is a combination of numerous subprojects addressing the improvements and maintenance needs of the Douglass Street and Lake office facilities. Some of the projects shown in this year’s plan are ongoing projects while others are for the current plan year only.

Justification / Impact:

In order to maintain our office facilities in good condition and provide a suitable environment for our employees and customers, it is necessary to have a program to address any problem areas and additional requirements. In order to maintain the integrity of the facilities, problem areas such as leaks, indoor air quality, worn out or aging equipment and infrastructure needs to be addressed on an ongoing basis.



Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$600,000	\$525,000	\$1,600,000	\$200,000	\$800,000
Water Facilities Program	\$600,000	\$525,000	\$1,600,000	\$200,000	\$800,000
68/3054/HVAC Improvements - Phases 2, 3, 4	\$600,000	\$525,000	\$1,600,000		
68/3283/Douglass St - Aggregate Storage Facility				\$200,000	\$800,000
Renewal and Replacement	\$100,000	\$455,000	\$175,000	\$200,000	\$100,000
Water Facilities Program	\$100,000	\$455,000	\$175,000	\$200,000	\$100,000
68/3050/Facility Upgrades	\$100,000	\$75,000	\$75,000	\$100,000	\$100,000
68/3055/Douglass Street Roof repl. Ph 4		\$280,000			
68/3217/Office Renovations- post HVAC projects		\$100,000	\$100,000	\$100,000	
Grand Total	\$700,000	\$980,000	\$1,775,000	\$400,000	\$900,000

Previous Years on CIP: 2000



2020 CIP – Project 68/3215 Generator/Electrical Upgrades \$400k - **Completed September 2022**. Replaced 40-year old generator, transformer, switch gear, along with installing new CMP feed at Douglass St.

New generator placed on pad, new transformer installed



Watershed/Land Funds

Subprogram # 1

Watershed Land Acquisition

Division: Water - General
Funding: Watershed Land Reserve

Manager: Jackson, Laurel
Priority: Regulatory mandate

Description:

Purchase land with or without buildings in accordance with the Watershed Land Purchase Policy.

Justification / Impact:

Ownership of land, particularly along the shore of Sebago Lake within the two-mile limit is the surest way to control land use that affects Lower Bay water quality and body contact.

History:

The District has a long standing policy to purchase Sebago Lake water frontage and other critical land for the purpose of watershed protection and long-term maintenance of Sebago Lake water quality. We do not aggressively solicit land to buy, but we have made public our interest to purchase Watershed land and, in recent times, all purchases have resulted from seller initiated contacts.

Origin of the Subprogram:

Budget Summary:

Budget year	Project	Budget Year Cost
PEND 1	Watershed Protection Land Purchase	\$434,000
Total Cost, All Years:		\$434,000

Previous Years on CIP:

All since 1994

Related Projects:

None

Procurement Issues:

Purchase decisions are negotiated on the basis of professional real estate appraisals. Board of Trustees approval of individual purchases is required.

Eel Cove – Shorefront properties within the 2 mile limit left.



Properties left in Eel cove:

Tax Map Lot	Tax Assessed Value		
	Land	Building	Total
18-1	\$316,900	\$37,500	\$354,400
18-2	\$400,700	\$78,500	\$479,200
42-2	\$229,300	\$42,500	\$271,800
42-4	\$237,700	\$21,600	\$259,300
42-12A	\$30,900	\$0	\$30,900
42-13	\$30,900	\$0	\$30,900
42-18	\$269,500	\$184,700	\$454,200
42-20	\$396,200	\$125,800	\$522,000
42-24	\$63,300	\$11,700	\$75,000
TOTALS			\$2,477,700

Recent

purchases: Lanni/Porter purchased in 2007, Stanford in 2008 , Messenger 2017, Webb 2018

Subprogram # 2 Watershed Land Conservation

Division: Water - General

Manager: Hunt, Paul

Funding: Watershed Land Reserve

Priority: Regulatory mandate

Description:

Contribute towards land conservation projects in accordance with the Watershed Land Conservation Policy.

Justification / Impact:

There is a direct link between the degree to which a watershed is forested and the quality of water in the lakes and streams within it (AWWA, 2004). Conservation of forested land in perpetuity protects water quality, which benefits both customers of the Portland Water District and all other users of Sebago Lake.

History:

In 2007 the Portland Water District trustees adopted a policy to support measures to preserve Sebago Lake watershed land in perpetuity and to provide open space for lake-friendly public access. The District acknowledges that it is neither feasible nor necessary to own all land in the watershed. Instead the District cooperates and partners with organizations and individuals who seek to preserve and manage their watershed lands in a manner that protects water quality and therefore protects the health of drinking water consumers. In 2012, the policy was amended to allow for a contribution of up to 25% of the easement/acquisition value and a Standard Operating Procedure was developed for assessing projects. The District works closely with local partners and conservation organizations to achieve its watershed land protection goals and in 2017 a partnership called Sebago Clean Waters (SCW) was formalized. In 2020, the District, on behalf of Sebago Clean Waters, was awarded an \$8 million dollar grant from the Natural Resources Conservation Service via its Regional Conservation Partnership Program. As lead partner the District will manage the funds and report to NRCS on an annual basis. A goal of the grant is to conserve 10,000 acres over its 5-year term and the District's estimated contribution is outlined in the budget summary.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2022	Pend Watershed Land Conservation - District's match	\$280,000

Previous Years on CIP:

None

Related Projects:

Subprogram #1 – Watershed Land Acquisition (lower bay)

Procurement Issues:

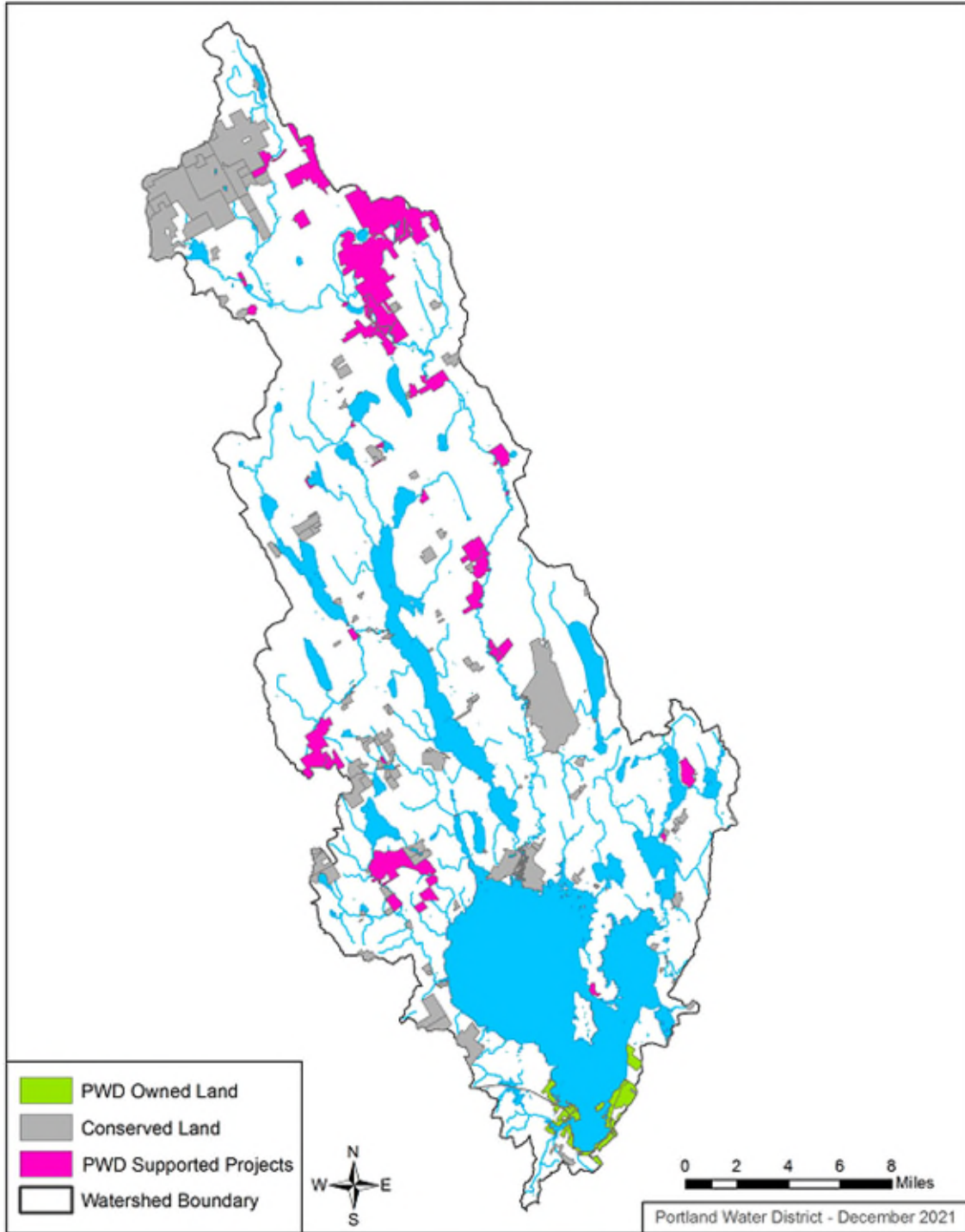
Project contributions are recommended by staff based on a formula. Board of Trustees approval of contributions is required.

Subprogram #1 and #2 are pending unscheduled work that may occur in 2023. If projects are undertaken, the Board of Trustees will be requested to approve and the Capital Improvement Plan amended. The project funding has not been included in the 2023 budget.

Summary of Watershed Conservation Projects 2000-2020 – 13, 646 Acres Conserved – District's contribution \$1,433,662

Name	Town	Acres	Year	PWD Contribution
Holt Pond	Bridgton	300	2000	\$10,000
Pondicherry Park	Bridgton	66	2006	\$6,000
Hague	Waterford	350	2008	\$5,000
Little Moose Pond	Waterford	23	2009	\$500
Camp Wawenock	Raymond	60	2011	\$10,000
Watkins	Waterford	690	2011	\$9,250
Tenny River	Raymond	28	2014	\$5,000
Hague Farmstead	Waterford	88	2012	\$1,900
Perley Mills	Bridgton/Denmark	800	2013	\$50,000
Maple Ridge	Harrison	35	2013	\$5,880
Moon Valley	Harrison	14	2013	\$5,510
Flint Farm	Albany Township	156	2013	\$7,600
Perley Pond/NW River	Sebago	150	2014	\$33,600
Crooked River Watershed Forestland	Harrison/Otisfield	791	2015	\$268,899
Cummings Parcel	Harrison	10	2014	\$5,000
Raymond Community Forest	Raymond	350	2016	\$38,944
Stanley Parcel	Waterford	21	2015	\$1,575
Whitney Pond	Stoneham	70	2017	\$15,010
Proctor Pond	Albany Twnship	54	2016	\$9,000
Howe Woodlot	Waterford	40	2017	\$3,200
Fogg Lot	Otisfield	68	2017	\$13,600
Hawk Mountain	Waterford	16	2018	\$2,420
Edwards	Harrison	38	2019	\$5,270
Peabody-Fitch	Bridgton	191	2019	\$20,724
Tiger Hill/ Sebago Community Forest	Sebago	1417	2019	\$345,000
Deering-Northwest River	Sebago	20	2021	\$8,190
Briggs	Waterford	27	2020	\$9,000
Scribner	Otisfield	41	2020	\$8,610
City Brook	Waterford	16	2021	\$4,675
Crooked River Headwaters	Albany, Greenwood, Norway, Waterford	7700	2021	\$497,000

Sebago Lake Watershed Conserved Land



Introduction

The District has the responsibility to manage their financial resources by establishing and following prudent financial policies and procedures. A summary of the significant financial policies is listed below. The district is in compliance with the policies except where noted below. Each policy is designated as being adopted by Law, Board or Management – see designation in parenthesis by policy title. Policies are review periodically for relevance and adherence to the policy.

Significant Financial Policies

Accounting, Auditing, and Financial Reporting:

Basis of Accounting (Law-Charter)

The District maintains its accounting records and reports on its financial conditions and results of operations in accordance with generally accepted accounting principles (GAAP) as promulgated by the Governmental Accounting Standards Board (GASB). As a business-type activity, the District is accounted for in enterprise funds. Enterprise funds are accounted for on the flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities are included in the statement of net position, revenues are recorded when earned, and expenses are recorded the time the liabilities are incurred. (See Budgeting and Financial Planning section for difference between GAAP and Budget.)

Fund Structure (Law-Charter)

As required by the District's charter, eight-supporting enterprise funds will be maintained – one fund for water service and seven funds for each of the communities we provide wastewater service. Revenues and expenses that are solely for the benefit of that fund are allocated directly to the enterprise fund. Enterprise funds, used for business-like activities, operate on an accrual basis. The accrual basis of accounting used by enterprise funds requires revenue to be recognized when it is earned and expenses to be recognized when the related benefit is received.

By contract, the District provides billing and meter reading services to two other communities. Related costs are recorded in the appropriate fund. Costs that benefit more than one fund are recorded in an allocated fund. The balance in each fund is fully allocated to the appropriate enterprise or contracted utility billing funds. A detail explanation of the allocation methods used is provided on subsequent pages (see Cost Allocation Policy Detail on subsequent pages).

2022/2023 Policy Changes/Highlights

Fixed Asset

Effective January 1, 2023, the dollar threshold increases to \$25,000 from \$10,000 for expenditures in the Water and Portland Wastewater funds. All other funds retain the \$10,000 threshold.

Service Fees

Normally, the water fund's terms and conditions (T&C) is usually updated every 2 years. Because of COVID-19, the T&C have not been updated since 2019. The 2023 Budget assumes the fees are updated effective January 1, 2023 and will generate an estimated \$ 52,000 additional revenue.

Non-tariff fee schedule will now be approved as part of the annual budget process. The specific septage hauler's treatment fees will be included in the schedule.

North Windham

A new wastewater treatment plant for North Windham, the business center in Windham, has been approved. As noted in the Cost Allocation section, a new North Windham fund has been created to capture related costs.

Capital Reserve Funding.

In 2014, the Board adopted a policy to create a capital reserve that was allowed under a new state law. The law stated the District could allocate 10% of revenue to a capital reserve that could be used to finance approved projects. Each year the District increased its rates by 1% with the money going to pay for the debt service on a \$2 million bond. The tenth bond will be issued in 2023 and will now have 10% of annual revenue dedicated to capital fund.

Significant Financial Policies (continued)

Financial Planning Policies:

Annual Audit (Law-Charter)

Annual audit shall be conducted each year by June 30. The Board of Trustees shall appoint auditors.

Financial Reporting (Management)

Monthly financial reports should be distributed to the Board of Trustees and Management for their review. The report should include a comparison of actual results to budget with variances noted and explained.

Basis of Budgeting (Management)

The budget is consistent with GAAP, including the utilization of accrual accounting, except for the following items:

- Depreciation, being a non-cash expense, is not budgeted,
- Contributions to asset renewal and replacement cash reserve is budgeted,
- Principal Payments are included in the budget,
- Contributed assets are not included in the operating or capital budget,
- Pension Actuarially Determined Contribution is included in the budget opposed to the pension expense, and
- Net proceeds of asset sales are not recorded in the budget.

The Board must authorize any amendment to the operating budget that results in a net increase in the total net operating budget. The general manager and treasurer are authorized to approve transfers between departments and funds. The Board of Trustees must approve all capital projects. The upcoming year's projects listed in the Capital Expenditure section of this document are approved when the document is adopted. As long as the actual costs are at or below the approved amount and it is awarded to the lowest bidder, the project does not need additional Board approval.

The policy requires the preparation of a multi-year projection of operating and capital expenses. The budget must be completed so the wastewater communities can be assessed the annual estimated costs by January 15th. The budget year is January 1 to December 31.

Balanced Budget (Charter)

A balanced operating budget is a budget that has total expenditures equal to total revenues, including use of fund balance. A balanced capital budget is a budget that has total expenditures that do not exceed available renewal/replacement fund amounts and external financing (bonds, grants or contributions).

Significant Financial Policies (continued)

Financial Planning Policies (continued):

Long-Range Planning (Management)

Capital Improvement Plan

A five-year capital improvement plan will be updated annually. The Board may authorize capital expenditures in the upcoming year as long as the staff awards the project to the lowest bidder and the total project budget is within the amount in the capital improvement plan.

Operating Budget

Operating projections of at least three future years are created. For the water fund, the projection is used to decide the appropriate water rate adjustment to consider. For most communities, wastewater services are a joint effort of the District providing treatment and interception service and the community providing collection and storm drain services. The District's projected assessment of our cost and their internal costs are considered when determining the appropriate sewer rate. All funds incorporate the recommendations of the capital improvement plans and operational evaluations/studies when projecting operating costs.

Asset Inventory (Management)

The District utilizes an asset management system that identifies the District's assets. All employees must record their time to work orders and the applicable asset they are working on. Asset classifications are being reviewed for accuracy and completeness with review focusing on the most important assets. Condition rating of assets has been done on some assets and efforts will continue on critical assets. Asset evaluation studies are completed periodically on critical assets.

Revenue Policies:

Water Rates (Board)

Water rates are established to provide sufficient revenues to fully support the operation of the water fund's activities. In 1994, 2006, and 2016 cost of service studies calculated for each customer class (e.g. – residential, commercial, etc.) the amount of revenues generated and costs incurred. The study indicated that some classes were subsidizing other classes. Recognizing the impact of changing rates to reflect the cost of service for each customer class would cause significant rate shock for some customers, the approach of gradually adjusting rates over the future rate adjustments was adopted. Cost of service studies should be done periodically, approximately every 10 years, or if significant financial or operational change occurs that may have shifted the costs to serve the different customer classes. Generally, the Board has approved a small annual rate adjustment near the increase in the consumer price index.

In 2013, a new state law allowed for funding through an infrastructure capital reserve. The law allows the District to include an additional 10% in rates to fund a capital reserve. The 2022 budget assumes 1% of the proposed March 1, 2022 3.6% water rate adjustment be dedicated to the capital reserve. The 1% will fund the debt service on \$2 million, 10-year bond for replacing aging water mains. Past practice is to issue 20-year bond to finance main renewal. An additional 1% will be added for the each of the ten years beginning in 2014. The 2023 Budget contains the tenth bond and now allocates the maximum 10% of revenue maximum to the capital reserve.

Significant Financial Policies (continued)

Revenue Policies (continued):

Wastewater Assessment (Law -Charter)

Wastewater assessments are established to provide sufficient revenues to support the operation for each of wastewater funds' activities. By state law, the municipality must pay the district's assessment.

Service Fees (Board)

Fees for miscellaneous service should be based on the cost to provide the service. Effective January 1, 2016, the District's Board can unilaterally authorize changes for water related fees. The District must file 'terms and conditions' (T&C) with the Maine Public Utilities Commission for information only. The T&C includes the fees for any service the District requires customers to obtain from the District. The District intends to file updated T&C at least every two years to assure the fees assessed covers the costs of providing the service. Updated T&C were approved with an effective date of May 1, 2019. Additionally the Board approved a policy authorizing non-water related fees and will approve those fees in the future at the same time they approve the water related fees. Updated fees will be presented to the Board for its consideration in November 2022 with an effective date of January 1, 2023.

Investments (Board)

Operating fund investments must be invested with the primary objective, in priority order, of safety, liquidity and yield. Investments should be made in securities that are backed directly or indirectly by the federal government. Currently, we are in compliance with the policy.

Pension funds' investments will be primarily invested in a diversified portfolio of equity and debt securities within guidelines established in the policy. The policy was revised to allow for US equities portion of plan assets, securities of foreign-based issuers that are transacted in US dollars on US exchanges are permitted up to a limit of 20%, an increase from 10%, and will be classified as US equities.

	Minimum <u>Weight</u>	Target <u>Weight</u>	Maximum <u>Weight</u>
US Equities	30%	40%	50%
International Equities	10%	25%	30%
Bonds	20%	25%	40%
Alternatives	0%	10%	15%
Cash & Equivalents	0%	0%	30%

Use of One-time/Unpredictable Revenue (Board)

The District's Board has established a fund to collect the net proceeds of water land sales. The fund is dedicated to future investment in protecting the watershed land. Unexpected water net income is typically allocated to contingency or rainy day fund. However, the Board considers whether any portion should be allocated to the watershed land fund. The Board has established a goal of 25% and 15% of operating expense for the contingency and watershed land funds, respectively. Unexpected wastewater net income is retained in the individual funds contingency fund.

Significant Financial Policies (continued)

Expenditure Policies:

Debt (Board)

Debt may be issued for capital expenditures only. There is no legal limit for the amount of debt the District can issue. However, the Board has set a maximum target for debt service in any fund to 35% of total budget. The target is close to industry standard (AWWA Industry Benchmark, median quartile, 2012). In addition, operating revenue available for debt service should be at least 125% of the annual debt service. The District is projected to be in compliance with the benchmarks in 2023 except in Gorham and Windham due to significant municipal requested projects (i.e. – Little Falls Conveyance and North Windham Wastewater System projects). Debt will not be issued for longer than the useful life of the assets being financed. The average duration of outstanding debt should be 10 years or less.

Reserve Balances (Board)

Each operating fund has a target balance of 25% of annual net operating budget. The Water and Portland Wastewater funds are expected to meet the target this year. Other wastewater funds are expected to have deficits drawing their balance below the 25% threshold. The deficits are a result of unexpected expenditures.

Each fund has a cash reserve fund for the renewal and replacement of fixed assets. The target balance for the water and wastewater funds are 1% and 5%, respectively, of gross fixed asset costs. The wastewater target was increased from 3% to 5% in 2017. The Water, Westbrook Wastewater and Windham Wastewater meet the target balance. Cape Elizabeth, Cumberland, Gorham and Portland Wastewater Funds do not meet the increased target. In addition, the Water fund has a target balance of 15% of the annual net operating budget for a watershed land reserve. We project the reserve to be at 6.8% at the end of 2023. The 2023– 2027 trend of operating and renewal & replacements fund balances for each of the Water & Wastewater funds are located in the Budget by Fund section.

Capital Expenditures (Board)

A capital expenditure is a project with a cost of \$25,000 (Water/Portland funds) or \$10,000 (other funds) or more and has a useful life greater than 5 years. An exception is made for certain assets annually purchased in bulk that exceed the \$25,000 (Water/Portland funds) or \$10,000 (other funds) amount in a year. For example, individual hydrants, meters, valves and service lines cost less than \$25,000 but total annual purchases exceed \$25,000.

The Board of Trustees must approve all capital expenditures. An annual capital improvement plan is reviewed and approved by the Board and provides authorization for capital expenditures as long as the project costs are not exceeded and the lowest bid is accepted. If project cost is anticipated to exceed budget or the lowest bid is not accepted, the Board must specifically authorize. The General Manager, who must inform the Board of the expenditure, must approve emergency capital expenditures.

Purchasing (Board)

The policy outlines the requirements for obtaining competitive pricing and the formal bidding processes. It also establishes authorization levels for operating expenses including the requirement that expenses greater than \$50,000 be approved by the Board. Amounts less than \$50,000 must be included in the Board approved budget. We are in compliance with the policy.

Significant Financial Policies (continued)

Expenditure Policies (continued):

Pension Funding Policy (Board)

The Board voted to fully fund the District's defined benefit plan by contributing at least the annual required contribution as calculated by the actuary. Because of new accounting rules that went into effect in 2015, the Board adopted a new pension funding policy effective for 2015. The policy states the District's intention to adequately fund the pension plan and contribute at least the actuarially determined contribution consistent with assumption used to calculate the pension expense under the new accounting rule, except to spread out the funding for impact of changes of the benefits negotiated as part of the three-year union contract over the life of the union contract. The policy states the District will fund \$1 million a year, assuming the \$1 million is greater than the actuarially determined contribution (ADC). The 2023 Budget assumes the ADC of \$1.52 million will be paid in 2023, an increase of \$0.826. The increase was due to lower investment returns.

Risk Management Policies

Maine Tort Claims Act (Law-State)

As a public entity, the District's liability for third party tort claims is limited by the provisions of the Maine Tort Claims Act. The Act provides that the District is immune from claims, unless the Act provides a specific exception from immunity. In the District's case, the exception most likely to affect the District is one making the District liable for negligent use of machinery and equipment. Should the District be liable for a claim under the provisions of the Act, its liability is capped by the Act at \$400,000. The immunity provided public entities by the Tort Claims Act helps to keep the cost of the District's insurance lower, allowing the District to pass this savings to its ratepayers.

Property and Liability Insurance (Board)

Property and liability insurance is purchased to cover building and personal property losses including losses due to flood and earthquakes. Certain liability claims are limited under the Maine Tort Claim Act to \$400,000. The Board adopted a change to limit insurance on claims covered by the Tort Claim Act to the Act's limit.

Safety Program (Management)

A full-time safety officer and executive safety team oversee various safety policies including confined space entry, electrical safety, ergonomic for video display terminals, fall protection, hazard communication and safety commitment policies. A safety incentive policy outlines an employee award program recognizing good safety performance.

Employee Management (Management)

A four-person Employee Services department oversees the district's employee relations management and practices. Over 60 policies have been created to guide management and employees with one goal of reducing the District's risk to losses.

In-House Legal Counsel (Board)

In 2006, the Board authorized hiring in-house legal counsel. Legal counsel actively participates in overseeing the district's operation, including reviewing all contracts, and proactively identifying ways to reduce or avoid legal issues.

Cost Allocation Policy Detail

The District has one water fund and six wastewater funds (Cape Elizabeth, Cumberland, Gorham, Portland, Westbrook and Windham). In addition, the District also provides billing and/or meter reading services to three other municipalities (Falmouth, Scarborough and South Portland).

It is the District's policy to directly assign expenses to a fund/municipality whenever possible. However, there are some expenses, such as paid time off or work done by administrative personnel, where such an assignment is not possible. In such cases, an allocation of that cost must be done.

In 1995, the District engaged an outside consultant to review and update its cost allocation process. Since that time, organizational and other changes have necessitated updates and modifications. The changes that were made used the guidelines from the 1995 study. The current allocations were reviewed and approved by the District's current auditors during 2013.

Currently the District uses the following methods to allocate costs:

- Customers Served
- Direct Labor
- General Allocation Percentage
- Gross Asset Value
- Meter Equivalent Units
- Relative Benefits
- Square Footage Utilized

A description of each method, the percentages used in this Budget and the dollars allocated, are in the following pages.

Each financial transaction is assigned a cost center number when the transaction is recorded in the financial system. The fund number indicates whether it is a 'direct' charge to the fund or an 'indirect' charge that will be allocated. Each department's costs are broken down into the fund category in the Departmental Expense section. All costs ultimately are assigned to one of the seven enterprise funds or three contract billing municipalities.

Fund	Description	Fund	Description
10	Allocated to All Direct Funds	57	Portland Wastewater
20	Water - members	59	South Portland Billing
30	Water - nonmembers	61	Gorham Wastewater
50	Allocated to All Wastewater Funds	62	Westbrook Wastewater
51	Cape Elizabeth Wastewater	64	Allocated to
53	Cumberland Wastewater		Gorham/Westbrook/Windham
54	Falmouth Wastewater	65	Allocated to Gorham/Windham
55	Windham Wastewater	66	Portland Wastewater (Peaks Island)
		67	North Windham

Customers Served

This method determines the ratio of customers per fund to the total number of customers served based on the average total number of water and sewer customers.

The costs for Customer Service have three different allocations (general, billing and meter reading costs) that vary slightly. Falmouth has flat billings for their sewer customers; therefore, their general needs are limited (compared with sewer bills based on usage) and they do not utilize meter reading data. In addition, Scarborough does its own billing and payment processing utilizing the District’s meter reading data, thus they have no general or billing expenses.

Sub-Groups Using Method:

- F1 – Customer Service
- H1 – Financial Services (payment processing)

2023 Allocation %:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	67.98%	66.47%	67.95%	66.47%
Cape Eliz	2.15%	2.15%	2.15%	2.15%
Cumberland	1.08%	1.08%	1.08%	1.08%
Falmouth	0.38%	1.89%	0.00%	1.89%
Gorham	1.71%	1.71%	1.71%	1.71%
Portland	15.31%	15.31%	15.31%	15.31%
Scarborough	0.00%	0.00%	0.41%	0.00%
So Portland	7.09%	7.09%	7.09%	7.09%
Westbrook	4.25%	4.25%	4.25%	4.25%
Windham	0.05%	0.05%	0.05%	0.05%
	100.00%	100.00%	100.00%	100.00%

2022 Allocation %:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	67.82%	66.35%	67.68%	66.35%
Cape Eliz	2.15%	2.15%	2.15%	2.15%
Cumberland	1.10%	1.10%	1.10%	1.10%
Falmouth	0.37%	1.84%	0.00%	1.84%
Gorham	1.72%	1.72%	1.72%	1.72%
Portland	15.44%	15.44%	15.51%	15.44%
Scarborough	0.00%	0.00%	0.38%	0.00%
So Portland	7.12%	7.12%	7.16%	7.12%
Westbrook	4.23%	4.23%	4.25%	4.23%
Windham	0.05%	0.05%	0.05%	0.05%
	100.00%	100.00%	100.00%	100.00%

Dollars Allocated:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	\$785,166	\$274,709	\$47,033	\$158,776
Cape Eliz	\$24,832	\$8,886	\$1,488	\$5,136
Cumberland	\$12,474	\$4,463	\$748	\$2,580
Falmouth	\$4,389	\$7,811	\$0	\$4,515
Gorham	\$19,750	\$7,067	\$1,184	\$4,085
Portland	\$176,830	\$63,273	\$10,597	\$36,571
Scarborough	\$0	\$0	\$284	\$0
So Portland	\$81,889	\$29,302	\$4,907	\$16,936
Westbrook	\$49,087	\$17,564	\$2,942	\$10,152
Windham	578	207	34	117
	\$1,154,995	\$413,282	\$69,217	\$238,868

Dollars Allocated:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	\$713,519	\$245,033	\$52,194	\$137,165
Cape Eliz	\$22,620	\$7,940	\$1,658	\$4,445
Cumberland	\$11,573	\$4,062	\$848	\$2,274
Falmouth	\$3,893	\$6,795	\$0	\$3,804
Gorham	\$18,096	\$6,352	\$1,326	\$3,556
Portland	\$162,441	\$57,020	\$11,961	\$31,919
Scarborough	\$0	\$0	\$293	\$0
So Portland	\$74,908	\$26,294	\$5,522	\$14,719
Westbrook	\$44,503	\$15,622	\$3,278	\$8,745
Windham	525	185	39	103
	\$1,052,078	\$369,303	\$77,119	\$206,730

Direct Labor

This method calculates the ratio of labor dollars directly charged by the area to specific funds.

Sub-Groups Using Method:

- B1 – Wastewater Administration
- B3 – East End (Portland) Wastewater Treatment
- C1 – Facilities Services
- E7 – SCADA Services Group (general wastewater)
- L6 – Laboratory
- L9 – Water/Wastewater Systems

2023 Allocation %:	B1	B3	C1	E7	L6	L9
Water	0.00%	0.00%	76.26%	0.00%	56.62%	0.00%
Cape Elizabeth	13.21%	9.28%	3.34%	13.21%	4.18%	13.21%
Cumberland	3.83%	0.00%	0.98%	3.83%	0.00%	3.83%
Gorham	6.32%	2.80%	1.55%	6.32%	1.86%	6.32%
Portland	60.48%	71.39%	13.12%	60.48%	26.43%	60.48%
Westbrook	14.16%	16.15%	4.69%	14.16%	10.66%	14.16%
Windham	<u>2.00%</u>	<u>0.38%</u>	<u>0.06%</u>	<u>2.00%</u>	<u>0.25%</u>	<u>2.00%</u>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Dollars Allocated:	B1	B3	C1	E7	L6	L9
Water	\$0	\$0	\$170,604	\$0	\$193,695	\$0
Cape Elizabeth	62,729	55,103	7,472	14,679	14,300	85,453
Cumberland	18,187	0	2,192	4,256	0	24,776
Gorham	30,011	16,626	3,468	7,023	6,363	40,883
Portland	287,197	423,897	29,351	67,206	90,416	391,234
Westbrook	67,241	95,895	10,492	15,735	36,468	91,598
Windham	<u>9,498</u>	<u>2,256</u>	<u>135</u>	<u>2,222</u>	<u>855</u>	<u>12,938</u>
	\$474,863	\$593,777	\$223,714	\$111,121	\$342,097	\$646,882
2022 Allocation %:	B1	B3	C1	E7	L6	L9
Water	0.00%	0.00%	78.36%	0.00%	44.46%	0.00%
Cape Elizabeth	13.35%	9.55%	4.24%	13.35%	5.34%	13.35%
Cumberland	3.78%	0.00%	1.28%	3.78%	0.00%	3.78%
Gorham	5.79%	2.19%	1.51%	5.79%	2.22%	5.79%
Portland	62.13%	74.13%	10.91%	62.13%	33.82%	62.13%
Westbrook	12.68%	13.64%	3.29%	12.68%	13.68%	12.68%
Windham	<u>2.27%</u>	<u>0.49%</u>	<u>0.41%</u>	<u>2.27%</u>	<u>0.48%</u>	<u>2.27%</u>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Dollars Allocated:	B1	B3	C1	E7	L6	L9
Water	\$0	\$0	\$198,812	\$0	\$122,535	\$0
Cape Elizabeth	56,995	48,613	10,758	12,969	14,717	78,003
Cumberland	16,138	-	3,248	3,672	-	22,086
Gorham	24,719	11,148	3,831	5,625	6,118	33,831
Portland	265,252	377,350	27,680	60,355	93,211	363,022
Westbrook	54,135	69,433	8,347	12,318	37,703	74,088
Windham	<u>9,692</u>	<u>2,494</u>	<u>1,040</u>	<u>2,204</u>	<u>1,324</u>	<u>13,264</u>
	\$426,931	\$509,038	\$253,716	\$97,143	\$275,608	\$584,294

General Allocation Percentage

The ratio is calculated by determining each fund's operating budget (total expenditures less other/interest income) as a percentage to the total operating budget.

Sub-Groups Using Method:

E7 – SCADA Services Group

H1 – Financial Services

G1 – Information Service

I1 – Employee Services

J1 – General Manager's Office

2023 Allocation %:	E7	G1	H1	I1	J1
Water	54.42%	54.42%	54.42%	54.42%	54.42%
Cape Elizabeth	4.18%	4.18%	4.18%	4.18%	4.18%
Cumberland	2.19%	2.19%	2.19%	2.19%	2.19%
Gorham	2.78%	2.78%	2.78%	2.78%	2.78%
Portland	28.84%	28.84%	28.84%	28.84%	28.84%
Westbrook	6.63%	6.63%	6.63%	6.63%	6.63%
Windham	<u>0.96%</u>	<u>0.96%</u>	<u>0.96%</u>	<u>0.96%</u>	<u>0.96%</u>
	100.00%	100.00%	100.00%	100.00%	100.00%

Dollars Allocated:	E7	G1	H1	I1	J1
Water	\$123,175	\$806,123	\$446,215	\$380,723	\$1,206,688
Cape Elizabeth	9,461	61,918	34,274	29,243	92,686
Cumberland	4,957	32,440	17,957	15,321	48,560
Gorham	6,292	41,180	22,795	19,449	61,643
Portland	65,277	427,207	236,473	201,765	639,487
Westbrook	15,006	98,210	54,362	46,384	147,011
Windham	<u>2,173</u>	<u>14,221</u>	<u>7,871</u>	<u>6,717</u>	<u>21,286</u>
	\$226,341	\$1,481,299	\$819,947	\$699,602	\$2,217,361

2022 Allocation %:	E7	G1	H1	I1	J1
Water	55.41%	55.41%	55.41%	55.41%	55.41%
Cape Elizabeth	3.96%	3.96%	3.96%	3.96%	3.96%
Cumberland	2.08%	2.08%	2.08%	2.08%	2.08%
Gorham	2.54%	2.54%	2.54%	2.54%	2.54%
Portland	28.61%	28.61%	28.61%	28.61%	28.61%
Westbrook	6.47%	6.47%	6.47%	6.47%	6.47%
Windham	<u>0.93%</u>	<u>0.93%</u>	<u>0.93%</u>	<u>0.93%</u>	<u>0.93%</u>
	100.00%	100.00%	100.00%	100.00%	100.00%

Dollars Allocated:	E7	G1	H1	I1	J1
Water	\$111,822	\$706,159	\$403,451	\$349,589	\$1,054,794
Cape Elizabeth	7,992	50,467	28,834	24,984	75,383
Cumberland	4,198	26,508	15,145	13,123	39,595
Gorham	5,126	32,370	18,494	16,025	48,352
Portland	57,737	364,613	208,315	180,504	544,625
Westbrook	13,057	82,455	47,109	40,820	123,164
Windham	<u>1,876</u>	<u>11,854</u>	<u>6,772</u>	<u>5,869</u>	<u>17,704</u>
	\$201,808	\$1,274,426	\$728,120	\$630,914	\$1,903,617

Gross Asset Value

The allocation percentage is each fund's gross (fixed) asset value as a ratio to all gross assets. Costs allocated include those that involve all District assets (All) or in some cases only wastewater assets (WW). The same asset values are used in both calculations except that the Water assets are removed for the wastewater calculations.

Sub-Group Using Method:

E2 – Planning and Design

2023 Allocation %:

	All	WW
Water	64.94%	0.00%
Cape Elizabeth	3.27%	9.33%
Cumberland	1.65%	4.70%
Falmouth	0.00%	0.00%
Gorham	3.52%	10.05%
Portland	21.13%	60.28%
Westbrook	4.68%	13.33%
Windham	0.81%	2.31%
	100.00%	100.00%

2022 Allocation %:

	All	WW
Water	65.20%	0.00%
Cape Elizabeth	3.42%	9.82%
Cumberland	1.70%	4.89%
Falmouth	0.00%	0.00%
Gorham	3.38%	9.72%
Portland	21.46%	61.66%
Westbrook	4.25%	12.20%
Windham	0.59%	1.71%
	100.00%	100.00%

Dollars Allocated:

	All	WW
Water	\$774,523	\$0
Cape Elizabeth	39,000	30,409
Cumberland	19,679	15,318
Falmouth	0	0
Gorham	41,982	32,755
Portland	252,012	196,467
Westbrook	55,817	43,446
Windham	9,662	7,529
	\$1,192,675	\$325,924

Dollars Allocated:

	All	WW
Water	\$663,423	\$0
Cape Elizabeth	34,799	30,542
Cumberland	17,298	15,209
Falmouth	0	0
Gorham	34,392	30,231
Portland	218,360	191,776
Westbrook	43,245	37,945
Windham	6,003	5,319
	\$1,017,520	\$311,022

Meter Equivalent Units

This calculation takes each meter and assigns a weight based on its size to determine a value of meter service provided to each fund.

Sub-Group Using Method:

A6 – Utility Services (meter service)

2023 Allocation %:

	A6
Water	64.83%
Cape Elizabeth	1.76%
Cumberland	1.04%
Gorham	1.67%
Portland	17.23%
Scarborough	1.29%
South Portland	7.59%
Westbrook	4.42%
Windham	0.17%
	100.00%

2022 Allocation %:

	A6
Water	65.58%
Cape Elizabeth	1.75%
Cumberland	1.00%
Gorham	1.59%
Portland	17.05%
Scarborough	1.15%
South Portland	7.51%
Westbrook	4.24%
Windham	0.13%
	100.00%

Dollars Allocated:

	A6
Water	\$113,145
Cape Elizabeth	3,072
Cumberland	1,815
Gorham	2,915
Portland	30,071
Scarborough	2,251
South Portland	13,247
Westbrook	7,714
Windham	296
	\$174,526

Dollars Allocated:

	A6
Water	\$111,806
Cape Elizabeth	2,984
Cumberland	1,705
Gorham	2,711
Portland	29,068
Scarborough	1,961
South Portland	12,804
Westbrook	7,229
Windham	220
	\$170,488

Relative Benefits

This method of allocation is based upon management's assessment of the benefit received by the departments and funds from the areas providing the service. Customer Service (control/dispatch) allocation previously had 5% allocated to wastewater funds based on the number of pump stations in each community. During the COVID-19 pandemic the Wastewater Systems department took over responding to alarms at wastewater pump stations and will continue doing so moving forward; therefore the allocation for control/dispatch is now 100% water. The Laboratory wastewater split was determined by the number of tests run for each community. The allocation (new in 2019) for Industrial Pretreatment (IPT) is based on the applicable industries in each community.

Sub-Groups Using Method:

- F1 – Customer Service (control/dispatch center)
- L6 – Laboratory (general wastewater)
- L6 – Industrial Pretreatment (IPT)

2023 Allocation %:

	F1	L6	IPT
Water	100.00%	0.00%	0.00%
Cape Elizabeth	0.00%	9.24%	0.00%
Cumberland	0.00%	0.00%	0.00%
Gorham	0.00%	4.00%	12.20%
Portland	0.00%	61.29%	58.60%
Westbrook	0.00%	24.60%	26.80%
Windham	0.00%	0.87%	2.40%
	100.00%	100.00%	100.00%

Dollars Allocated:

	F1	L6	IPT
Water	\$195,335	\$0	\$0
Cape Elizabeth	0	22,404	0
Cumberland	0	0	0
Gorham	0	9,699	8,178
Portland	0	148,611	39,283
Westbrook	0	59,648	17,966
Windham	0	2,110	1,609
	\$195,335	\$242,472	\$67,036

2022 Allocation %:

	F1	L6	IPT
Water	100.00%	0.00%	0.00%
Cape Elizabeth	0.00%	9.24%	0.00%
Cumberland	0.00%	0.00%	0.00%
Gorham	0.00%	4.00%	12.20%
Portland	0.00%	61.29%	61.00%
Westbrook	0.00%	24.60%	24.40%
Windham	0.00%	0.87%	2.40%
	100.00%	100.00%	100.00%

Dollars Allocated:

	F1	L6	IPT
Water	\$217,814	\$0	\$0
Cape Elizabeth	0	21,486	0
Cumberland	0	0	0
Gorham	0	9,301	7,112
Portland	0	142,518	35,561
Westbrook	0	57,203	14,224
Windham	0	2,023	1,399
	\$217,814	\$232,531	\$58,296

Square Footage Utilized

The costs of the Douglass Street administrative facility are charged to each area based on the square footage they occupy. Office space is charged out at a higher rate (five times higher) than warehouse space. Dollars are allocated to the sub-groups.

2023 Allocation %:

Water Operations	
A1 - Water Administration	1.66%
A2 - Transmission/Distribution	5.86%
A6 - Utility Services	<u>1.36%</u>
	8.88%
Environmental Services	
A5 - Water Resources	0.80%
L6 - Water/WW Laboratory (IPT)	<u>0.54%</u>
	1.34%
Wastewater Operations	
B1 - WW Administration	1.75%
L9 - Water/WW Systems	<u>3.60%</u>
	5.35%
Engineering Services	
C1 - Facility Services	22.74%
E2 - Planning & Design	15.87%
E7 - SCADA Services Group	<u>1.63%</u>
	40.24%
Administration	
F1 - Customer Service	11.33%
G1 - Information Services	6.06%
H1 - Financial Services	7.78%
I1 - Employee Services	4.44%
J1 - BOT & Senior Management	<u>14.58%</u>
	44.19%
	100.00%

Dollars Allocated:

	\$
Water Operations	\$66,086
Environmental Services	9,972
Wastewater Operations	39,815
Engineering Services	299,470
Administration	<u>328,865</u>
	\$744,210

2022 Allocation %:

Water Operations	
A1 - Water Administration	1.99%
A2 - Transmission/Distribution	5.75%
A6 - Utility Services	<u>1.55%</u>
	9.29%
Environmental Services	
A5 - Water Resources	0.81%
L6 - Water/WW Laboratory (IPT)	<u>0.55%</u>
	1.36%
Wastewater Operations	
B1 - WW Administration	1.77%
L9 - Water/WW Systems	<u>3.64%</u>
	5.41%
Engineering Services	
C1 - Facility Services	22.99%
E2 - Planning & Design	14.95%
E7 - SCADA Services Group	<u>1.33%</u>
	39.27%
Administration	
F1 - Customer Service	11.45%
G1 - Information Services	6.13%
H1 - Financial Services	7.86%
I1 - Employee Services	4.49%
J1 - BOT & Senior Management	<u>14.74%</u>
	44.67%
	100.00%

Dollars Allocated:

	\$
Water Operations	\$70,309
Environmental Services	10,293
Wastewater Operations	40,944
Engineering Services	297,204
Administration	<u>338,071</u>
	\$756,821

Vehicle Rates

Internal Transportation costs are charges the departments receive for the availability of District owned vehicles. Each type of vehicle and piece of equipment has an assigned hourly rate. Most vehicles are charged for 40 hours per week. Charges are either assigned directly to the task or to a “stand-by” account or later allocated. Transportation costs represent the expense of operating the garage and include labor, materials, occupancy and depreciation. Overall budget is 10.7% (\$132,080) greater than 2022 due to higher fuel (\$105k) and employee expense (\$36k).

2023 Budget Details

Vehicle Type	Rate	Active Hours	Stand-by Hours	Total Hours
Backhoe/Loader <19,501 GVW	\$ 39.91	850		850
Backhoe/Loader >=19,500 GVW	\$ 45.96	150		150
Car	\$ 3.79	2,130	4,260	6,390
Compressor	\$ 24.17	5,624		5,624
Dump Truck < 15,000 GVW	\$ 10.19	685	1,395	2,080
Dump Truck 15,001-40,000 GVW	\$ 13.09	1,040	3,120	4,160
Dump Truck >= 40,000 GVW	\$ 17.50	3,880	4,440	8,320
Generator/Load Bank	\$ 41.11	316		316
Misc. Const. Equipment - Forklift, etc.	\$ 27.80	3,065		3,065
Misc. Trailed Equipment - Trailer Mounted Pump, Jet Ma	\$ 18.15	2,986		2,986
Pick-up Truck/SUV - Light - < 6,000 GVW	\$ 3.79	2,030	4,210	6,240
Pick-up Truck/SUV - Medium - 6,001-7,500 GVW	\$ 4.07	9,739	25,621	35,360
Pick-up Truck/SUV - Heavy - 7,501-10,000 GVW	\$ 4.95	8,442	8,498	16,940
Special Purpose - C - Crane, Sludge, etc.	\$ 54.41	50		50
Special Purpose - D - Jetvac, etc.	\$ 72.55	1,494		1,494
Utility Truck 10,001 - 14,000 GVW	\$ 4.07	5,726	6,754	12,480
Utility Truck 14,001 - 16,000 GVW	\$ 5.82	4,786	5,614	10,400
Utility Truck 16,001 - 19,500 GVW	\$ 6.41	4,131	4,189	8,320
Utility Truck 6,001 - 10,000 GVW	\$ 6.98	6,717	3,683	10,400
Van 6,001-7,500 GVW	\$ 4.06	1,132	948	2,080
Van 7,501-10,000 GVW	\$ 4.95	23,237	14,203	37,440
Total Hours		88,210	86,935	175,145

Sub-Group	2022 Budget	2023 Budget	\$ - Difference	% - Difference
A1 - Water Administration	\$ -	\$ -	\$ -	n/a
A2 - Transmission/Distribution	\$ 592,762	\$ 695,233	\$ 102,471	17.3%
A3 - Water Treatment	\$ 35,577	\$ 36,938	\$ 1,361	3.8%
A5 - Water Resources	\$ 39,058	\$ 39,752	\$ 694	1.8%
A6 - Utility Services	\$ 182,331	\$ 189,415	\$ 7,084	3.9%
B1 - WW Administration	\$ -	\$ -	\$ -	n/a
B3 - Wastewater Treatment	\$ 62,366	\$ 64,748	\$ 2,382	3.8%
C1 - Facility Services	\$ 66,731	\$ 67,503	\$ 772	1.2%
E2 - Planning & Design	\$ 20,519	\$ 19,326	\$ (1,193)	-5.8%
E7 - SCADA Services Group	\$ 23,900	\$ 24,833	\$ 933	3.9%
F1 - Customer Service	\$ 16,287	\$ 16,338	\$ 51	0.3%
I1 - Employee Services	\$ -	\$ -	\$ -	n/a
J1 - BOT & Senior Management	\$ -	\$ -	\$ -	n/a
L6 - Water/WW Laboratory	\$ -	\$ 861	\$ 861	n/a
L9 - Water/WW Systems	\$ 194,481	\$ 211,145	\$ 16,664	8.6%
	\$1,234,012	\$1,366,092	\$132,080	10.7%

Joint Use Facilities – Operations and Maintenance Allocations

The District has two areas where wastewater flows from more than one community are combined. Costs associated are allocated by the percentage of the flow contributed by each:

Portland Water District Facilities:

Westbrook Regional – All of the wastewater from Gorham, Westbrook and Windham is treated at Westbrook Regional WWTF, with one pump station handling the flow from all communities. The budget for 2023, up \$368,715 (25.3%) due to higher costs for labor/benefits, biosolids disposal and chemicals.

Little Falls – The Little Falls areas of Gorham and Windham previously used a small treatment facility. Since 2008, flows from this area have been conveyed to the Westbrook Regional WWTF. Wastewater from Windham moves into Gorham where it is combined with that community’s flow until it joins with the Westbrook flow at the Westbrook town line. The budget is \$88,516, a \$288 decrease (0.3%) from the previous year.

----- Westbrook Regional -----				----- Little Falls -----	
	Gorham	Westbrook	Windham	Gorham	Windham
2015	13.00%	84.70%	2.30%	20.00%	80.00%
2016	15.00%	82.00%	3.00%	22.50%	77.50%
2017	16.50%	80.25%	3.25%	21.50%	78.50%
2018	15.75%	81.00%	3.25%	27.50%	72.50%
2019	13.00%	84.00%	3.00%	28.00%	72.00%
2020	13.00%	84.00%	3.00%	24.50%	75.50%
2021	13.00%	84.00%	3.00%	22.50%	77.50%
2022	13.50%	83.50%	3.00%	27.00%	73.00%
2023	14.50%	83.50%	2.00%	40.00%	60.00%

Contracted Services Facilities:

South Portland – Wastewater from the Northern portion of Cape Elizabeth is treated at the South Portland Treatment Facility (SPTF). The contractual agreement charges the District based on Cape Elizabeth’s portion of the total flow at the SPTF, that flow (from last 12 months) decreased slightly from 8.3% to 8.0%. Shared costs rose 13.2% increasing Cape Elizabeth’s portion 10.4% (\$26,468).

Falmouth – All of Cumberland’s wastewater is treated at the Falmouth Treatment Facility (FTF) through a contractual agreement. This cost is budgeted to be \$645,517 in 2023 which is an increase of \$126,438 from the previous year. Most of the increase is due to upcoming capital projects at FTF.

----- South Portland -----			----- Falmouth -----		
	Cape Eliz	So Portland	Cumberland	Falmouth	Millcreek PS
2015	6.7%	93.3%	24.0%	76.0%	40.8%
2016	6.7%	93.3%	24.0%	76.0%	40.8%
2017	6.7%	93.3%	24.0%	76.0%	40.8%
2018	6.7%	93.3%	24.0%	76.0%	40.8%
2019	6.7%	93.3%	24.0%	76.0%	40.8%
2020	6.7%	93.3%	24.0%	76.0%	40.8%
2021	6.7%	93.3%	24.0%	76.0%	40.8%
2022	8.3%	91.7%	24.0%	76.0%	40.8%
2023	8.0%	92.0%	24.0%	76.0%	40.8%

Joint Use Facilities – Capital Cost Sharing Allocations

The District has two areas where wastewater flows from more than one community are combined. Costs associated with these combinations are allocated by the percentage of the design flow contributed by each community. The areas of combined flow are:

Portland Water District Facilities:

Westbrook Regional – All of the wastewater from Gorham, Westbrook and Windham is treated at Westbrook Regional Wastewater Treatment Facility. In addition, one pump station handles the combined waste from all three communities.

System	--- Millions of Gallons/Day (MGD) ---				----- Flow Percentage -----		
	Westbrook	Gorham	Windham	Total	Westbrook	Gorham	Windham
Southside Interceptor above Manhole 60	0.16	1.06	0.12	1.34	12.0%	79.1%	9.0%
Manhole 60 up to and including Siphon	5.00	1.06	0.12	6.18	81.0%	17.2%	1.9%
Cottage Place Pumping Station & Force Main	2.12	0.70	0.06	2.88	73.7%	24.3%	2.1%
Westbrook Regional WWTF & Outfall	3.02	1.40	0.12	4.54	66.6%	30.8%	2.6%

Little Falls – The Little Falls areas of Gorham and Windham used to be a self-contained system with a small wastewater treatment facility. Starting in 2008, wastewater from this area was conveyed to the Westbrook Regional Wastewater Treatment Facility. As it is presently constituted, wastewater from Windham moves into Gorham where it is combined with that community's flow until it joins with the Westbrook flow at the Westbrook town line.

Facility Name	----- Gallons/Day -----			-- Flow Percent --	
	Gorham	Windam	Total	Gorham	Windam
Gray Rd/Mallison St Gravity Sewer	63,500	53,500	117,000	54.3%	45.7%
Mallison St Pump Station (PS)/Flow Meter (FM)	84,000	100,000	184,000	45.6%	54.4%
Mosher Rd Gravity Sewer	145,000	100,000	245,000	59.2%	40.8%
Little River PS/FM	222,500	100,000	322,500	69.0%	31.0%
Mosher Rd & Cross Country Gravity Sewer	638,000	100,000	738,000	86.4%	13.6%
Industrial Park Gravity Sewer Upgrade	2,105,000	100,000	2,205,000	95.5%	4.5%
Woodlawn Ave PS (Tow Path Rd) effective 2008	-	-	-	100.0%	0.0%
Fire Station (Route 202) PS	-	-	-	0.0%	100.0%
Androscoggin St PS	-	-	-	0.0%	100.0%

Contracted Services Facilities:

South Portland – All of the wastewater from the Northern portion of Cape Elizabeth is treated at the South Portland Treatment Facility through a contractual agreement.

Facility Name	--- Millions Gallons/Day (MGD) ---			----- Flow Percentage -----	
	Cape Eliz	So Portland	Total	Cape Eliz	So Portland
Treatment Plant	0.716	8.584	9.300	7.7%	92.3%

Note: In Cape Elizabeth 1/13th of average design flow = 7.7% per Sewer Service Agreement dated 08/11/93.

Falmouth – All of the wastewater from Cumberland is treated at the Falmouth Treatment Facility through a contractual agreement.

Facility Name	Millions of Gallons/Day (MGD)*			----- Flow Percentage -----	
	Cumberland	Falmouth	Total	Cumberland	Falmouth
Route 88 Interceptor - Town Line to Millcreek PS	1.790	1.007	2.797	64.0%	36.0%
Millcreek PS & Force Main	1.076	1.998	3.074	35.0%	65.0%
Millcreek Interceptor	2.030	1.595	3.625	55.5%	44.5%
Treatment Facility (average design flow)	0.468	1.092	1.560	30.0%	70.0%
Cumberland Route 1 Sewer Extension to Johnson Rd PS	0.144	0.490	0.634	22.7%	77.3%
Existing Sewers & Mains - Johnson Rd to Millcreek	0.144	0.216	0.360	40.0%	60.0%
Johnson Road PS (gallons pumped per minute)	100	150	250	40.0%	60.0%

* = Peak flow unless noted otherwise

Introduction

The appendix contains the following:

- 2023-2027 Financial Forecast
- Maine Measures of Growth 2021 Scorecard
- Population Change and Density
- Portland Water District Rate Sheet Summary
- Customer Satisfaction Survey
- Board of Trustees' Orders and Resolutions
- Glossary

2023 to 2027 Financial Forecast

A long-term financial forecast is developed incorporating estimated cost adjustments to operating expense line items and impact of projects in the capital improvement plan. A summary of the operating and capital budget plans are provided below. An income statement for each fund is provided in the Budget by Fund section.

Consolidated Operating Budget:

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Water Sales	26,509,749	26,824,845	29,043,602	31,024,509	33,889,863	36,212,487	37,928,205
Assessment Income	21,083,736	22,346,196	25,403,484	26,523,869	28,672,960	31,042,904	32,301,470
Contracted Billing Income	212,796	220,236	242,268	243,745	249,841	254,534	260,359
Interest Income	-27,737	104,660	354,946	354,946	354,946	354,946	354,946
Other Income	991,755	726,451	1,021,252	1,021,252	1,021,252	1,021,252	1,021,252
Total Revenues	\$ 48,770,299	\$ 50,222,388	\$ 56,065,552	\$ 59,168,321	\$ 64,188,862	\$ 68,886,123	\$ 71,866,232
Operating Expenses:							
Salaries & Wages	6,797,364	7,098,299	8,097,899	8,421,817	8,758,690	9,065,244	9,382,526
Employee Benefits	3,114,973	3,008,557	3,492,164	3,666,772	3,850,110	4,042,615	4,244,746
Biosolids Disposal	2,275,184	2,333,500	3,444,636	3,582,422	3,707,807	3,819,041	3,933,613
Chemicals	1,236,358	1,294,556	1,972,351	2,031,522	2,092,467	2,155,241	2,219,899
Contracted Services	3,421,740	3,385,809	3,850,237	3,965,744	4,084,716	4,207,258	4,333,475
Facilities	96,123	110,723	105,381	108,542	111,798	115,152	118,607
Heat/Fuel Oil	272,639	295,461	425,538	438,305	451,454	464,997	478,947
Insurance	76,864	97,957	107,972	111,211	114,547	117,984	121,524
Materials & Supplies	1,124,893	1,214,146	1,279,520	1,317,905	1,357,442	1,398,166	1,440,109
Other Expense	88,509	129,494	142,378	146,650	751,049	1,055,581	1,060,244
Purchased Power	1,897,303	2,000,556	2,027,520	2,230,273	2,319,484	2,389,069	2,460,741
Regulatory/Taxes	333,333	557,736	326,906	336,713	346,814	357,218	367,935
Tele/Other Utilities	307,507	309,278	230,829	237,755	244,888	252,235	259,800
Transportation	951,770	999,145	1,197,992	1,233,932	1,270,950	1,309,080	1,348,351
SS - Administration	6,319,619	6,470,444	7,299,366	7,591,340	7,894,995	8,191,057	8,498,223
SS - Engineering Services	1,521,398	1,881,209	2,079,775	2,161,926	2,247,323	2,331,036	2,417,868
SS - Environmental Services	570,291	571,856	655,826	682,058	709,341	735,942	763,540
SS - Wastewater Services	1,597,986	1,520,263	1,715,522	1,734,143	1,753,509	1,769,266	1,785,613
SS - Water Services	141,632	171,124	175,310	182,324	189,618	196,730	204,106
Total Operating Expenses	32,145,486	33,450,113	38,627,122	40,181,354	42,257,002	43,972,912	45,439,867
Debt Service & Lease	11,000,912	12,078,648	12,943,899	14,312,575	16,889,468	19,320,819	20,133,973
Renewal & Replacement - Direct	3,244,849	3,446,500	2,749,250	2,980,849	3,098,849	3,348,849	3,898,849
Renewal & Replace - Indirect/Contract	990,000	1,080,001	1,200,001	1,093,543	1,093,543	1,093,543	1,093,543
Capital Finance Expense	15,235,761	16,605,149	16,893,150	18,386,967	21,081,860	23,763,211	25,126,365
Total Operating Expenses	\$ 47,381,247	\$ 50,055,262	\$ 55,520,272	\$ 58,568,321	\$ 63,338,862	\$ 67,736,123	\$ 70,566,232
Current Year Surplus(Deficit)	\$ 1,389,052	\$ 167,126	\$ 545,280	\$ 600,000	\$ 850,000	\$ 1,150,000	\$ 1,300,000

Consolidated Capital Budget:

	-2023-	-2024-	-2025-	-2026-	-2027-
Water	\$8,640,000	\$13,050,000	\$20,055,000	\$14,300,000	\$26,500,000
Cape Elizabeth	\$160,000	\$1,900,000	\$150,000	\$325,000	\$50,000
Cumberland	\$125,000	\$2,435,000	\$20,000	\$20,000	\$20,000
Gorham	\$40,000	\$20,000	\$95,000	\$20,000	\$20,000
Portland	\$2,895,000	\$26,075,000	\$2,880,000	\$1,820,000	\$2,700,000
Water & Wastewater	\$2,595,000	\$3,055,000	\$3,950,000	\$4,075,000	\$11,575,000
Westbrook	\$170,000	\$220,000	\$20,000	\$20,000	\$3,220,000
Westbrook Joint	\$445,000	\$1,200,000	\$585,000	\$420,000	\$2,585,000
Windham	\$8,020,000	\$10,020,000	\$10,020,000	\$7,020,000	\$10,835,000
Grand Total	\$23,090,000	\$57,975,000	\$37,775,000	\$28,020,000	\$57,505,000

2023 to 2027 Financial Forecast(continued)

A summary of future revenue impact to water ratepayers and wastewater municipal assessments is provided below. Total water revenues are projected to increase on average 7% each year. The impact to retail customers is listed in the second table.

All 2022 wastewater assessments, except Windham, are above projections that were provided to the wastewater municipalities for ratemaking purposes due to unexpected cost increases. The updated 2024-2027 are preliminary and will be reviewed with municipal officials in November 2022 before being finalized.

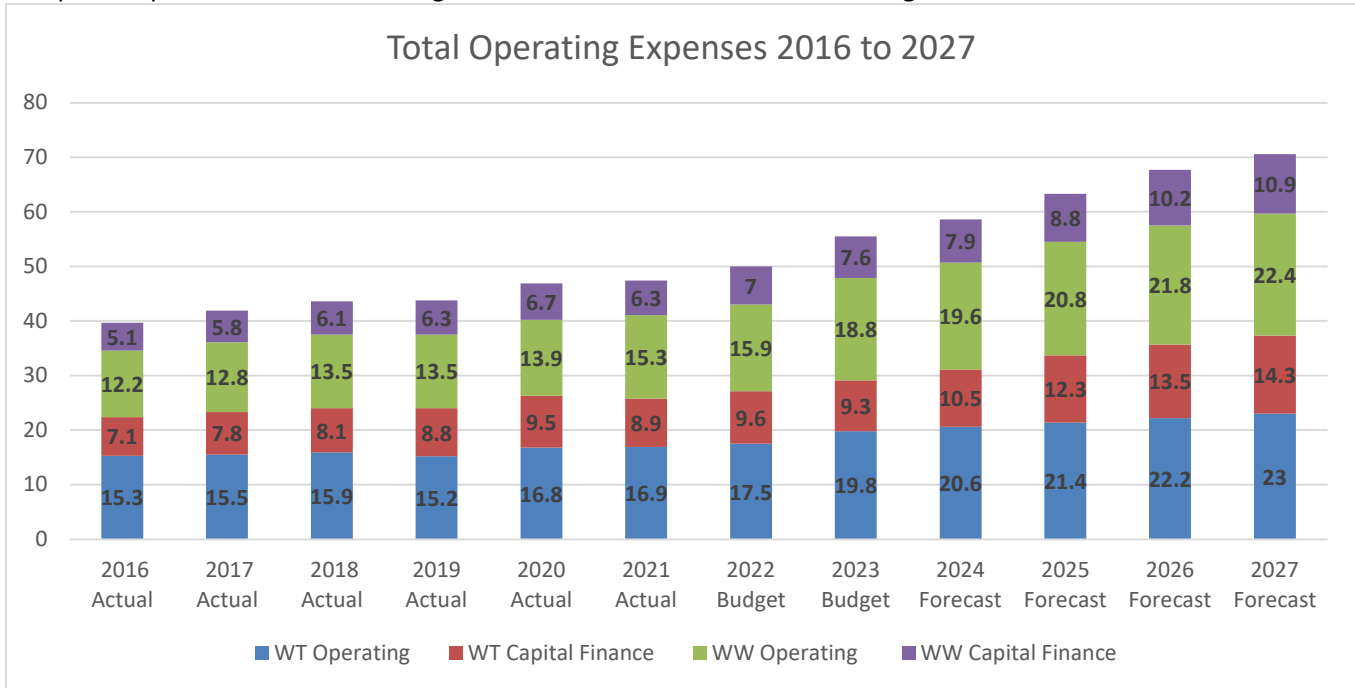
Water Revenues and Municipal Assessments:

	Proposed 2023 Budget	Prior Year 2023 Projection	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Water	\$ 29,043,602	\$ 28,556,594	\$ 31,024,509	\$ 33,889,863	\$ 36,212,487	\$ 37,928,205
	8.3%	6.5%	6.8%	9.2%	6.9%	4.7%
Wastewater:						
Cape Elizabeth	2,300,004	2,191,874	2,362,515	2,493,139	2,495,848	2,565,226
	11.6%	6.3%	2.7%	5.5%	0.1%	2.8%
Cumberland	1,184,904	1,040,709	1,217,059	1,408,314	1,428,554	1,448,210
	17.8%	3.5%	2.7%	15.7%	1.4%	1.4%
Falmouth	\$ 314,112	\$ 307,099	\$ 305,084	\$ 303,352	\$ 302,450	\$ 299,878
	0.00%	-2.23%	-2.87%	-1.22%	-0.86%	-1.15%
Gorham	\$ 1,566,816	\$ 1,438,347	\$ 1,682,283	\$ 1,711,484	\$ 1,725,304	\$ 1,753,129
	19.3%	9.5%	7.4%	1.7%	0.8%	1.6%
Portland	\$ 15,798,744	\$ 14,149,653	\$ 16,253,061	\$ 17,033,337	\$ 18,756,395	\$ 19,648,893
	13.2%	1.4%	2.9%	\$ 0	10.1%	4.8%
Westbrook	\$ 3,723,096	\$ 3,359,593	\$ 3,899,208	\$ 4,055,755	\$ 4,068,281	\$ 4,155,772
	17.3%	5.9%	4.7%	4.0%	0.3%	2.2%
Windham	\$ 515,808	\$ 659,969	\$ 804,659	\$ 1,667,579	\$ 2,266,072	\$ 2,430,362
	0.0%	27.3%	56.0%	107.2%	35.9%	7.2%

(By Dollar)		3/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
							2148.0%
Residential	.62" meter, 7 HCF	\$ 25.91	\$ 27.19	\$ 28.80	\$ 31.30	\$ 33.19	\$ 34.50
Commercial	.62" meter, 40 HCF	\$ 124.08	\$ 130.93	\$ 139.69	\$ 153.20	\$ 163.53	\$ 170.71
Small Industrial	2" meter, 1,300 HCF	\$ 2,032.14	\$ 2,174.81	\$ 2,367.53	\$ 2,674.27	\$ 2,912.29	\$ 3,085.62
Large Industrial	8" meter, 56,000 HCF	\$ 65,786.45	\$ 70,327.11	\$ 76,566.02	\$ 86,764.89	\$ 94,696.87	\$ 100,366.34
Government	2" meter, 70 HCF	\$ 209.94	\$ 223.51	\$ 241.33	\$ 269.27	\$ 290.89	\$ 306.22
Sprinkler	6" meter (month)	\$ 39.92	\$ 41.92	\$ 44.54	\$ 48.55	\$ 51.58	\$ 53.77
Public Fire (per year)		\$ 1,566,432	\$ 1,644,768	\$ 1,747,560	\$ 1,904,832	\$ 2,023,860	\$ 2,109,888
(By Percent)							
Residential	.62" meter, 7 HCF	3.2%	4.9%	5.9%	8.7%	6.0%	3.9%
Commercial	.62" meter, 40 HCF	3.8%	5.5%	6.7%	9.7%	6.7%	4.4%
Small Industrial	2" meter, 1,300 HCF	4.7%	7.0%	8.9%	13.0%	8.9%	6.0%
Large Industrial	8" meter, 56,000 HCF	4.5%	6.9%	8.9%	13.3%	9.1%	6.0%
Government	2" meter, 70 HCF	4.3%	6.5%	8.0%	11.6%	8.0%	5.3%
Sprinkler	6" meter (month)	3.6%	5.0%	6.2%	9.0%	6.2%	4.2%
Public Fire (per year)		3.6%	5.0%	6.2%	9.0%	6.2%	4.3%

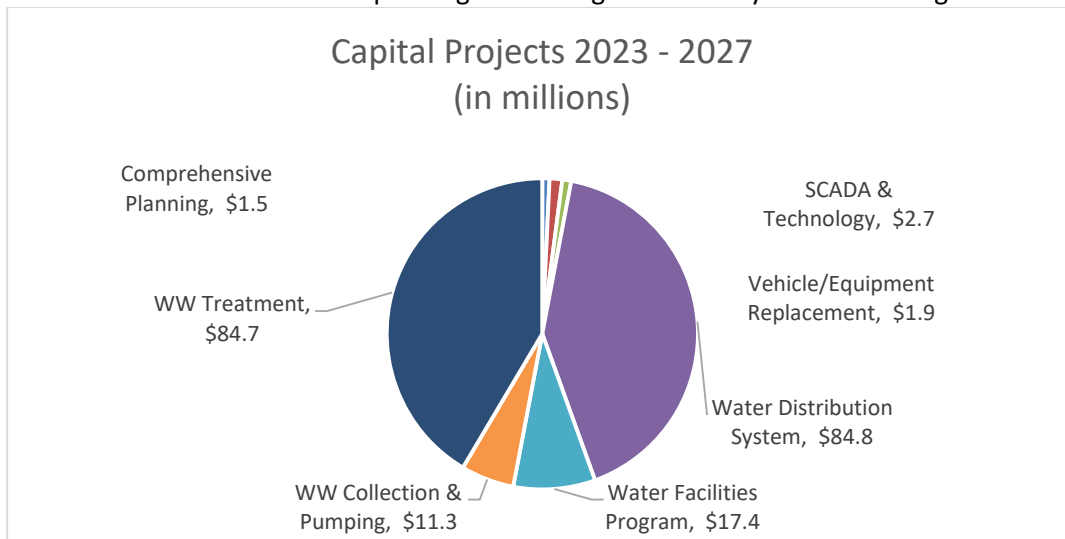
2023 to 2027 Financial Forecast (continued)

Total expenses are projected to increase to almost \$70 million by 2027, a 78% total increase since 2016 (or 7% a year). As the chart shows, increases in capital financing are driving the increases with water and wastewater capital finance cost increasing by 101% and 114%, respectively. Capital finance costs consists of two components – debt service payments and contribution to the renewal and replacement funds. The debt service component portion of the total budget increases from 19% of the total budget to 29%.



Major assumptions incorporated in the projections are as follows:

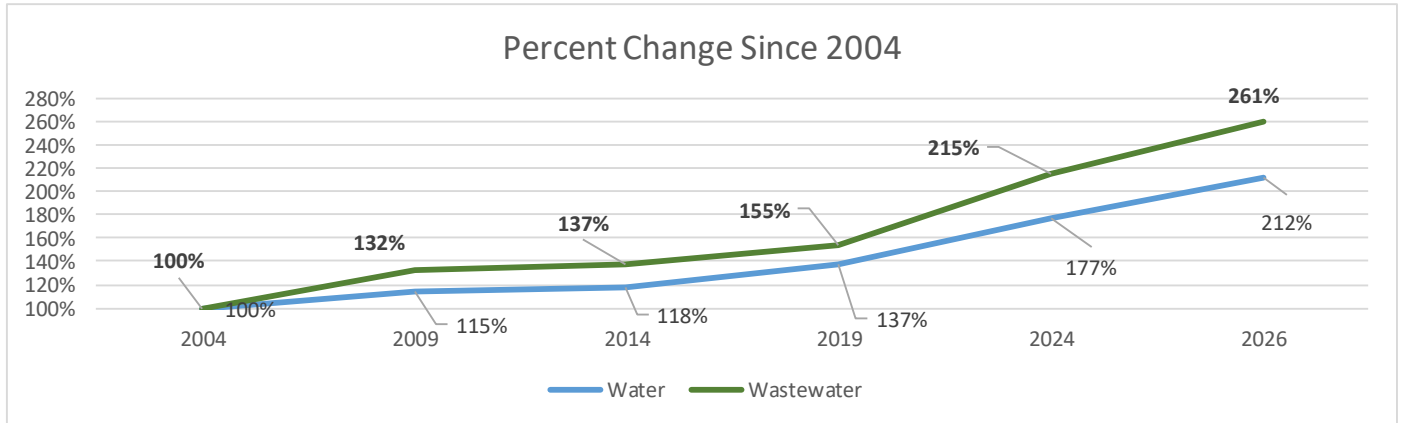
- Salary increases of 4.0% in 2024/2025 and 3.5% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase between 3% and 4% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2023 5-year capital plan, which includes close to \$204 million of capital project. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing.



2023 to 2027 Financial Forecast (continued)

Budget by Fund Trends

Between 2004 and 2009, significant bonded capital projects including the connecting the Little Falls area in Windham and Gorham to the Westbrook Regional Treatment facility and upgrades at the treatment facilities. Significant investment in the wastewater funds, including major plant & pump stations upgrade, along with the new facility serving North Windham causes the gap between the two parts of the company to widen



Total Expense Budget

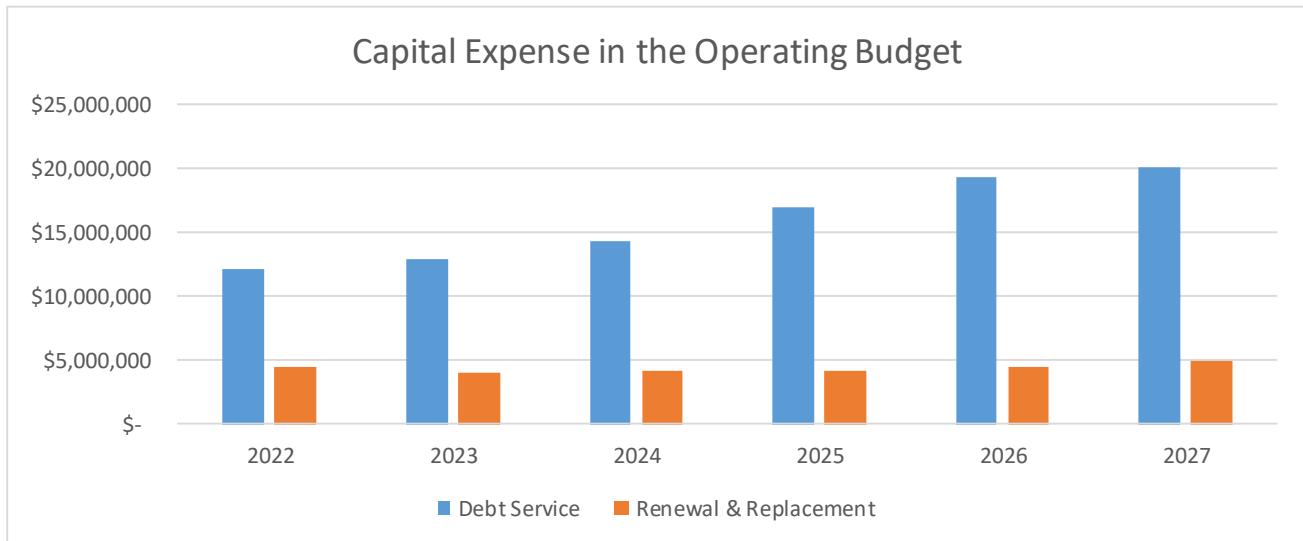
Fund	2004	2009	2014	2019	2024	2027
Water	\$17,608,717	\$20,245,019	\$20,817,310	\$24,087,928	\$31,080,452	\$37,284,148
WW- Cape Elizabeth	1,043,475	1,089,695	1,378,857	1,571,432	2,390,841	2,593,582
WW- Cumberland	498,146	767,586	771,632	954,624	1,229,893	1,461,044
WW- Falmouth	45,721	10,937	15,012	306,132	306,272	301,066
WW- Gorham	578,340	1,056,084	1,121,671	1,103,156	1,696,201	1,767,050
WW- Portland	8,481,000	10,951,209	10,982,397	12,535,853	16,798,141	20,193,973
WW- Westbrook	1,920,536	2,474,362	2,645,693	2,688,293	4,013,257	4,269,821
WW- Windham	54,091	338,117	355,253	391,218	807,661	2,433,364
Other Contract Billing	<u>136,834</u>	<u>206,279</u>	<u>189,158</u>	<u>196,122</u>	<u>245,570</u>	<u>262,184</u>

2023 to 2027 Financial Forecast (continued)

Capital

The operating budget includes the annual contribution to a renewal/replacement fund to pay for smaller capital projects, and debt service on existing and proposed larger capital projects.

For 2022-2027, the expense increases on average more than 8% a year.



Over \$160 million of new bonds are forecasted to be issued between 2023 and 2027. Eligible projects will be financed through the State Revolving Loan fund at a subsidized interest. The assumed rate for bonds issued directly to the market up to 4.5%. The Capital Improvement Plan assumes the following funding of future projects.

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond	\$7,100,000	\$12,425,000	\$19,050,000	\$12,200,000	\$26,250,000
Bond SRF	\$9,000,000	\$37,985,000	\$10,900,000	\$8,575,000	\$16,950,000
Capital Reserve	\$1,000,000				
Master Plan Reserve	\$800,000				
Operating Expense	\$690,000	\$400,000	\$35,000	\$20,000	\$35,000
Renewal and Replacement	\$4,500,000	\$7,165,000	\$7,790,000	\$7,225,000	\$14,270,000
Grand Total	\$23,090,000	\$57,975,000	\$37,775,000	\$28,020,000	\$57,505,000

2023 to 2027 Financial Forecast (continued)

Bond Limits

The District has no legal limits of debt. A board-approved policy establishes a target maximum level of debt service to 35% of total fund budget and minimum debt service ratio of 1.25. The table indicates the status and projected status.

Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%

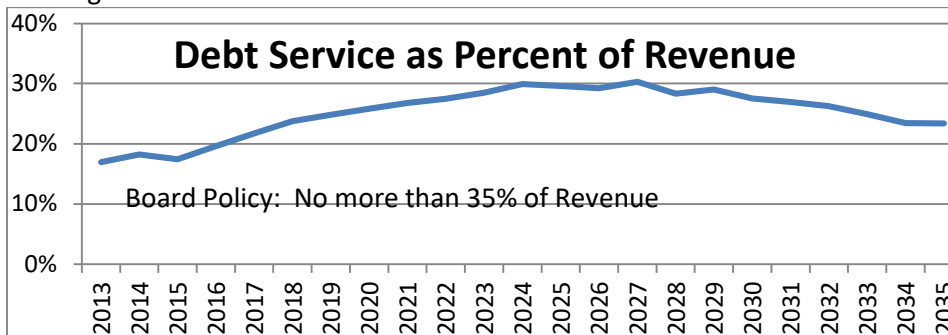
Funds	2021	2022	2023	2024	2025	2026	2027
Water	24%	26%	25%	27%	29%	30%	30%
Wastewater							
Cape Elizabeth	16%	18%	19%	20%	24%	23%	25%
Cumberland	30%	29%	24%	24%	33%	32%	31%
Gorham	31%	35%	33%	35%	34%	33%	32%
Portland	20%	18%	17%	16%	19%	24%	24%
Westbrook	21%	24%	24%	27%	25%	23%	22%
Windham	34%	48%	46%	65%	46%	47%	50%

Debt Service Ratio – Target: Greater or Equal to 1.25

Funds	2021	2022	2023	2024	2025	2026	2027
Water	1.41	1.41	1.33	1.34	1.35	1.38	1.39
Wastewater							
Cape Elizabeth	1.51	1.46	1.43	1.37	1.30	1.30	1.27
Cumberland	1.28	1.29	1.62	1.61	1.39	1.40	1.40
Gorham	1.32	1.21	1.24	1.21	1.21	1.22	1.22
Portland	1.33	1.47	1.44	1.43	1.26	1.17	1.22
Westbrook	1.52	1.28	1.24	1.11	1.18	1.20	1.20
Windham	1.28	1.10	1.18	1.09	1.05	1.04	1.03

Long-Term Water Fund Target

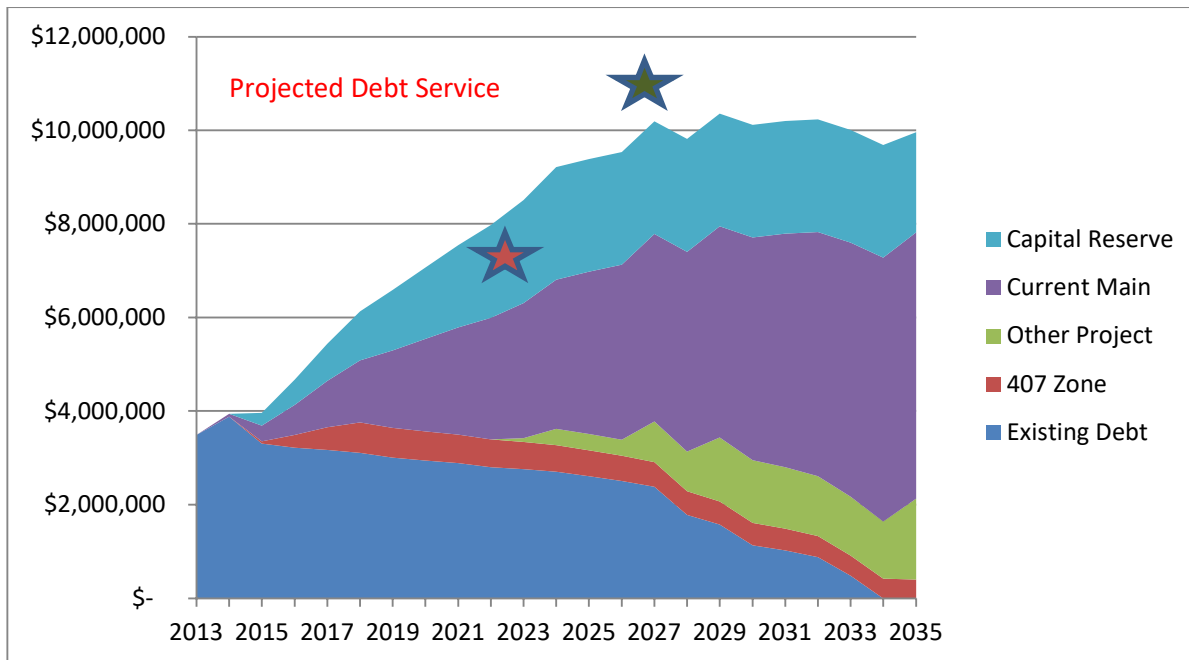
The long-term water fund target was established in 2013. The projected 2023-2027 ratio is at or below the established target.



2023 to 2027 Financial Forecast (continued)

Projected Water Debt

The Water Fund has significant future bond financing needs including completing the 407 zone system upgrades and main renewals. In 2011, the Board adopted the policy to double the investment in main renewal by incrementally increasing the amount spent by \$500,000 until reaching an annual level of \$4 million in 2016. Starting in 2014, an additional annual investment of \$2 million was bonded to pay for main renewal and funded through the capital reserve. Other major projects include the installation of a new meter reading system and transmission line projects.



★ The 2023 Budget requests \$7.4 million of debt service, below the long-term plan

★ The updated multi-year projection is for \$11.2 million in 2027, \$1.0 above 2027 target. The 2023 multi-year plan recommends higher level of main renewal investments (up to \$11 million from the planned \$7M) and the impact of the higher than expected Windham Tank project.

2023 to 2027 Financial Forecast (continued)

Projected Debt by Fund

Projected debt including proposed debt to finance the 5-year Capital Plan for next 20 years.

	Water		Cape Elizabeth Wastewater	
	Principal	Interest	Principal	Interest
2022	\$ 5,314,319	\$ 1,777,163	2022	\$ 277,750 \$ 52,728
2023	\$ 5,698,639	\$ 1,837,776	2023	\$ 306,500 \$ 80,373
2024	\$ 6,071,195	\$ 2,051,458	2024	\$ 348,500 \$ 99,099
2025	\$ 6,871,754	\$ 2,608,340	2025	\$ 441,000 \$ 119,199
2026	\$ 7,438,491	\$ 2,973,394	2026	\$ 441,000 \$ 110,923
2027	\$ 7,658,156	\$ 3,279,954	2027	\$ 441,000 \$ 102,540
2028	\$ 7,932,868	\$ 3,369,134	2028	\$ 441,000 \$ 94,200
2029	\$ 7,478,851	\$ 3,070,477	2029	\$ 436,250 \$ 85,935
2030	\$ 7,139,019	\$ 2,781,975	2030	\$ 436,250 \$ 77,649
2031	\$ 6,898,626	\$ 2,507,325	2031	\$ 436,250 \$ 69,286
2032	\$ 6,527,256	\$ 2,249,895	2032	\$ 314,750 \$ 61,089
2033	\$ 6,078,200	\$ 2,009,163	2033	\$ 306,750 \$ 53,920
2034	\$ 5,749,153	\$ 1,782,885	2034	\$ 282,250 \$ 47,162
2035	\$ 5,001,804	\$ 1,571,506	2035	\$ 282,250 \$ 41,254
2036	\$ 4,568,166	\$ 1,387,877	2036	\$ 270,250 \$ 35,402
2037	\$ 4,199,577	\$ 1,219,844	2037	\$ 270,250 \$ 29,941
2038	\$ 3,914,840	\$ 1,064,350	2038	\$ 250,900 \$ 24,600
2039	\$ 3,719,840	\$ 915,191	2039	\$ 250,900 \$ 19,894
2040	\$ 3,483,840	\$ 769,589	2040	\$ 200,650 \$ 15,272
2041	\$ 3,398,840	\$ 630,042	2041	\$ 138,750 \$ 10,553
	<u>\$ 118,183,274</u>	<u>\$ 40,350,233</u>		<u>\$ 6,573,200 \$ 1,231,019</u>

	Cumberland Wastewater		Gorham Wastewater	
	Principal	Interest	Principal	Interest
2022	\$ 6,250	\$ 436	2022	\$ 431,204 \$ 54,945
2023	\$ 6,250	\$ 348	2023	\$ 427,498 \$ 62,438
2024	\$ 6,250	\$ 8,086	2024	\$ 485,519 \$ 78,261
2025	\$ 127,000	\$ 46,741	2025	\$ 485,519 \$ 70,075
2026	\$ 127,000	\$ 44,304	2026	\$ 472,919 \$ 61,763
2027	\$ 120,750	\$ 41,875	2027	\$ 472,919 \$ 53,346
2028	\$ 120,750	\$ 39,527	2028	\$ 472,919 \$ 45,388
2029	\$ 120,750	\$ 37,179	2029	\$ 242,664 \$ 38,987
2030	\$ 120,750	\$ 34,831	2030	\$ 207,233 \$ 36,117
2031	\$ 120,750	\$ 32,482	2031	\$ 204,615 \$ 33,261
2032	\$ 120,750	\$ 30,134	2032	\$ 204,615 \$ 30,422
2033	\$ 120,750	\$ 27,786	2033	\$ 204,615 \$ 27,574
2034	\$ 120,750	\$ 25,438	2034	\$ 204,615 \$ 24,724
2035	\$ 120,750	\$ 23,090	2035	\$ 204,615 \$ 21,872
2036	\$ 120,750	\$ 20,742	2036	\$ 204,615 \$ 19,018
2037	\$ 120,750	\$ 18,394	2037	\$ 204,615 \$ 16,160
2038	\$ 120,750	\$ 16,046	2038	\$ 204,615 \$ 13,299
2039	\$ 120,750	\$ 13,697	2039	\$ 189,215 \$ 10,460
2040	\$ 120,750	\$ 11,349	2040	\$ 189,215 \$ 7,748
2041	\$ 120,750	\$ 9,001	2041	\$ 189,215 \$ 5,034
	<u>\$ 2,084,000</u>	<u>\$ 481,486</u>		<u>\$ 5,902,959 \$ 710,892</u>

2023 to 2027 Financial Forecast (continued)

Projected Debt by Fund

Projected debt including proposed debt to finance the 5-year Capital Plan for next 20 years.

	Portland Wastewater		Westbrook Wastewater	
	Principal	Interest	Principal	Interest
2022	\$ 2,029,450	\$ 317,192	2022	\$ 738,799 \$ 123,945
2023	\$ 2,167,941	\$ 444,526	2023	\$ 725,316 \$ 140,599
2024	\$ 2,072,491	\$ 486,803	2024	\$ 845,495 \$ 176,306
2025	\$ 2,431,741	\$ 683,574	2025	\$ 845,495 \$ 160,009
2026	\$ 3,440,241	\$ 1,008,896	2026	\$ 779,655 \$ 143,763
2027	\$ 3,509,991	\$ 967,372	2027	\$ 779,655 \$ 128,678
2028	\$ 3,508,991	\$ 901,129	2028	\$ 779,655 \$ 112,624
2029	\$ 3,227,997	\$ 835,302	2029	\$ 721,741 \$ 98,910
2030	\$ 3,227,997	\$ 772,864	2030	\$ 602,509 \$ 91,127
2031	\$ 3,185,387	\$ 710,630	2031	\$ 596,848 \$ 83,406
2032	\$ 3,136,387	\$ 649,683	2032	\$ 596,848 \$ 75,723
2033	\$ 3,136,387	\$ 589,013	2033	\$ 596,848 \$ 68,021
2034	\$ 2,986,387	\$ 529,316	2034	\$ 596,848 \$ 60,315
2035	\$ 2,986,387	\$ 474,590	2035	\$ 596,848 \$ 52,603
2036	\$ 2,886,387	\$ 420,097	2036	\$ 546,848 \$ 45,012
2037	\$ 2,378,650	\$ 367,187	2037	\$ 546,848 \$ 37,790
2038	\$ 2,376,650	\$ 318,520	2038	\$ 546,848 \$ 30,619
2039	\$ 2,351,650	\$ 270,054	2039	\$ 403,548 \$ 22,460
2040	\$ 2,194,150	\$ 221,078	2040	\$ 403,548 \$ 16,651
2041	\$ 2,108,050	\$ 175,030	2041	\$ 403,548 \$ 10,839
	<u>\$ 55,343,312</u>	<u>\$ 11,142,856</u>		<u>\$ 12,653,748 \$ 1,679,400</u>

	Windham Wastewater		Total	
	Principal	Interest	Principal	Interest
2022	\$ 143,688	\$ 25,149	\$ 7,771,457	\$ 2,172,668
2023	\$ 143,229	\$ 38,419	\$ 8,322,559	\$ 2,401,442
2024	\$ 334,347	\$ 118,407	\$ 8,832,783	\$ 2,763,853
2025	\$ 476,422	\$ 184,446	\$ 10,347,917	\$ 3,642,300
2026	\$ 701,960	\$ 269,627	\$ 12,148,692	\$ 4,407,144
2027	\$ 809,235	\$ 325,196	\$ 12,539,132	\$ 4,716,937
2028	\$ 1,166,295	\$ 459,159	\$ 13,169,904	\$ 4,863,149
2029	\$ 1,258,928	\$ 507,972	\$ 12,522,776	\$ 4,536,865
2030	\$ 1,245,092	\$ 489,187	\$ 12,169,108	\$ 4,156,506
2031	\$ 1,244,871	\$ 470,376	\$ 11,885,884	\$ 3,790,099
2032	\$ 1,244,871	\$ 451,520	\$ 11,344,014	\$ 3,442,321
2033	\$ 1,244,871	\$ 432,560	\$ 10,886,958	\$ 3,112,442
2034	\$ 1,244,871	\$ 413,580	\$ 10,383,411	\$ 2,798,381
2035	\$ 1,244,871	\$ 394,572	\$ 9,636,062	\$ 2,505,012
2036	\$ 1,244,871	\$ 375,539	\$ 9,090,424	\$ 2,239,657
2037	\$ 1,244,871	\$ 356,472	\$ 8,214,098	\$ 1,991,838
2038	\$ 1,244,871	\$ 337,355	\$ 7,908,011	\$ 1,760,871
2039	\$ 1,243,571	\$ 318,213	\$ 7,686,711	\$ 1,537,049
2040	\$ 1,243,571	\$ 299,058	\$ 7,242,961	\$ 1,316,346
2041	\$ 1,243,571	\$ 279,884	\$ 7,009,961	\$ 1,104,510
	<u>\$ 19,968,877</u>	<u>\$ 6,546,691</u>	<u>\$ 202,152,663</u>	<u>\$ 59,752,285</u>

2023 to 2027 Financial Forecast (continued)

Strategic Goal Impact

In the next five years, the District is forecasted to spend over \$315 million in operating expenses and \$204 million in capital expenditures to meet our mission to protect public health, safety, and the environment by providing our customers with reliable and affordable water, wastewater and related services. Below is an overview of some of the significant impacts spending the money will have on meeting our mission and strategic goals.

Goal 1 - Public Health: The District will provide products and services that meet all federal, state and local quality standards.

In 2027, a new 7 million gallons reservoir is proposed at cost of \$12 million. The purpose is to provide additional storage for partial redundancy of the SLWTF so that it can be shut down for longer periods of time and improve water quality by relying less on system storage.

A new federal law dealing with lead will require the District to increase its field sampling and monitoring program and address any lead piping found in its system. In 2022, we began preparing for the Revised Lead and Copper Rule's compliance deadline of September 16, 2024. The 2023 Budget includes a dedicated person to focus on compliance with an operating budget of almost \$185,000. Also, the capital budget includes \$200,000 for possible pipe replacements.

The District is coordinating significant investment in protecting land in the Sebago Lake Watershed through the Sebago Clean Waters Coalition. The Coalition's long-term goal is to protect from development and conserve an additional 35,000 acres of land over the next 15 years. By protecting the land, we retain the 'natural water filter' to maintain Sebago Lake's excellent water quality. Conserving and protecting land from development to maintain the water quality will continue to allow the District to avoid a federal requirement to construct a \$150 million filtration plant. The five-year forecast includes impact of issuing up to \$1.4 million bonds of bonding to support the effort and match others' contributions of up to \$5 million.

Goal 2 - Public Safety: The District will design and maintain its water system to meet modern firefighting needs.

The same service level and efforts to maintain our ability to deliver the quantity with adequate pressure will continue. In the coming year, construction on a new 10 million tank in Windham replacing an aging smaller tank will improve the water pressure and availability, including for fire protection. Additional investment of \$6 million in the Gorham/Windham area (407 Zone) will improve fire protection in those areas.

In many communities, new residential construction requires sprinklers systems. The new homeowner pays for the initial costs so there is no additional costs to include in the forecast but the change is a significant improvement to the ability to respond to fires and actually reduces the capacity needs as the sprinkler systems stop or reduce the need from the public fire system.

2023 to 2027 Financial Forecast (continued)

Strategic Goal Impact

Goal 3 - Environment: The District will promote the sustainability of natural resources within Casco Bay watershed.

The five-year forecast includes the impact of constructing and operating a new treatment facility serving the North Windham area of Windham. Annual costs are forecasted to be almost \$2 million in 2027 (\$1.1 million debt service and \$0.9 million operating costs). In addition to allow additional economic development of the Lake Region area, the new facility will significantly improve the water quality in the water aquifer.

The forecast continues the more than \$10 million per year level of investment in direct treatment, interception and collection system operation and maintains service to our wastewater communities that will continue to return clean sewer water back to the environment.

Part of the direct service is supporting the municipalities efforts to reduce the impact of their combined sewer overflow (CSO) facilities. Many of the CSO facilities are owned and operated by the community and utilize our expertise and system monitoring capabilities. The five-year forecast includes the construction of a \$3.2 million CSO Storage facility, assuming it is decided that a facility is needed.

The forecast assumes the continuation of our efforts to mitigate nutrients from our wastewater treatment plants without the need to make significant capital upgrades. Concerns about PFAS, including PFAS in wastewater effluent and biosolids, is a concern of the public and industry. A study is underway to review options and possible additional operating and capital costs may be incurred but are not included in the 5-year forecast.

Goal 4 - Reliability: The District can be trusted to provide its products and services in a manner that meets all reasonable customer expectations.

Significant dollars— close to \$145 million --are being spent over the next 5 years on upgrading our facilities to maintain or improve reliability of the system. The biggest component is replacing \$45 million of water mains. This continues the Board's 2014 commitment to increase the investment in water mains. Starting in 2024, the annual investment in water mains is projected to increase by an additional \$1 million a year.

Goal 5 - Affordability: The District will balance the delivery of products and services with customers' ability to pay water and wastewater rates and charges.

Water rates are expected to increase faster than the rate of inflation - by 33%, or 6.6% per year on average, over the next 5 years. For median income, typical households, rates will be considered affordable. However, for lower income households, the burden is becoming more of a challenge.

Wastewater Assessments to our member communities also increase at a rate higher than rate of inflation – by 44%, or 8.9% per year. When combined with the municipal wastewater budget, the user rates assessed by the municipalities will have more ratepayers paying higher than the national standard.

2023 to 2027 Financial Forecast (continued)

Strategic Goal Impact

Goal 6 - Employees and Work Environment: The District will have well trained and satisfied employees who will work in a safe and work environment conducive to productive work.

The forecast continues allocating an average of 80 hours of training for all employees and supports participation in over 30 water and wastewater related organizations. Safety will continue to be emphasized and one full-time person is dedicated to overseeing the safety program.

Forecast Impact on the District's Financial Health

Operating Budget. All Funds have been projected that revenues meet or exceed expenses for each year when accompanied by regular, modest rate adjustments. The table below indicates the operating and capital reserve forecasted balances at the end of the five years. All funds have significant cash available .

	Operating	Contingency Reserve	Percent of Budget	Capital Reserve
Water	\$	7,816,988	21%	\$ 4,176,904
Wastewater:				
Cape Elizabeth	\$	365,167	14%	\$ 706,147
Cumberland	\$	69,976	5%	\$ 188,359
Gorham	\$	169,258	10%	\$ 450,829
Portland	\$	3,405,260	17%	\$ 4,062,686
Westbrook	\$	358,219	9%	\$ 2,632,723
Windham	\$	162,223	7%	\$ 312,975

The capital investments are being paid for with a mix of bonds, primarily with a 20 year term, and current year revenues. The debt service burden does increase over the next 5 years with debt service between 22% to 50%. Windham's amount is high due to the Town's request to construct the new North Windham Wastewater system. With the exception of Windham, the debt service burden is lower than average water/wastewater utility.











	Debt Service - Percent of Budget	Debt Service Ratio
Water	30%	139%
Wastewater:		
Cape Elizabeth	25%	127%
Cumberland	31%	140%
Gorham	32%	122%
Portland	24%	122%
Westbrook	22%	120%
Windham	50%	103%

Maine Measures of Growth 2021 Scorecard

FUNDAMENTAL PERFORMANCE INDICATORS	ECONOMY
PROSPERITY	INNOVATION
<p>+10% 1. Wages pg 4</p> <p>In 2020, average wages rose 10%, but may be distorted because many low-wage jobs were lost due to COVID.</p>	<p>0% 9. Research & Development pg 13</p> <p>From 2017 to 2018, R&D spending remained virtually unchanged.</p>
<p>-1% 2. Poverty pg 5</p> <p>In 2019, poverty fell about 1%. Official 2020 estimates are not yet available.</p>	<p>-14% 10. International Exports pg 14</p> <p>In 2020, Maine's exports fell 14%, similar to the national decline of 13%.</p>
<p>-4% 3. Gender Income Equity pg 6</p> <p>In 2019, women's average earnings fell 4% further behind men's earnings, to 80%.</p>	<p>+4% 11. Entrepreneurship (NEW) pg 15</p> <p>In 2019, the number of business starts exceeded closures by 4%.</p>
<p>+2% 4. Racial/Ethnic Income Equity pg 7</p> <p>In 2015-2019, the average incomes of BIPOC* and Latino or Hispanic Mainers rose but remained 37% below white Mainers, dramatically short of full equity. (*Black, Indigenous, People of Color)</p>	<p>TALENT</p> <p>★ +2% 12. Prekindergarten Education pg 16</p> <p>In 2020-21, the share of schools with a pre-K program rose from 77% to 79%.</p>
<p>PEOPLE</p> <p>🚩 -3% 5. Labor Force pg 8</p> <p>In 2020, the labor force shrank 3% (20,000 fewer working Mainers).</p>	<p>0% 13. Fourth-Grade Reading pg 17</p> <p>In 2019, the share of 4th graders proficient in reading remained at 36%.</p>
<p>-2% 6. Labor Force Participation (NEW) pg 9</p> <p>In 2020, 60.5% of Maine adults were in the labor force, down 2 percentage points.</p>	<p>-2% 14. Eighth-Grade Math pg 18</p> <p>The share of 8th graders proficient in math dropped slightly and has remained below 40% for decades.</p>
<p>PRODUCTIVITY</p> <p>+2% 7. Value-Added pg 10</p> <p>In 2020, value added per worker rose 2%, but remained 25% below the U.S. average.</p>	<p>+2% 15. Postsecondary Degrees & Credentials pg 19</p> <p>In 2019, 53% of Mainers had a degree or a professional credential, up 2% from 2018 but still below the New England average of 58%.</p>
<p>-4% 8. Gross Domestic Product pg 11</p> <p>Maine's GDP fell 4% in 2020, mirroring declines elsewhere in the U.S.</p>	<p>BUSINESS CLIMATE</p> <p>0% 16. Cost of Doing Business pg 20</p> <p>In 2020, Maine's cost of doing business was unchanged.</p>
	<p>-0.7% 17. Cost of Health Care pg 21</p> <p>In 2020, health care spending dropped to 17.3% of total expenditures.</p>

Why is this of significance to Portland Water District? Ability to hire new skilled employees will be a challenge in the future. Cost of doing business in Maine is high, which might inhibit the ability to continue to increase water rates.

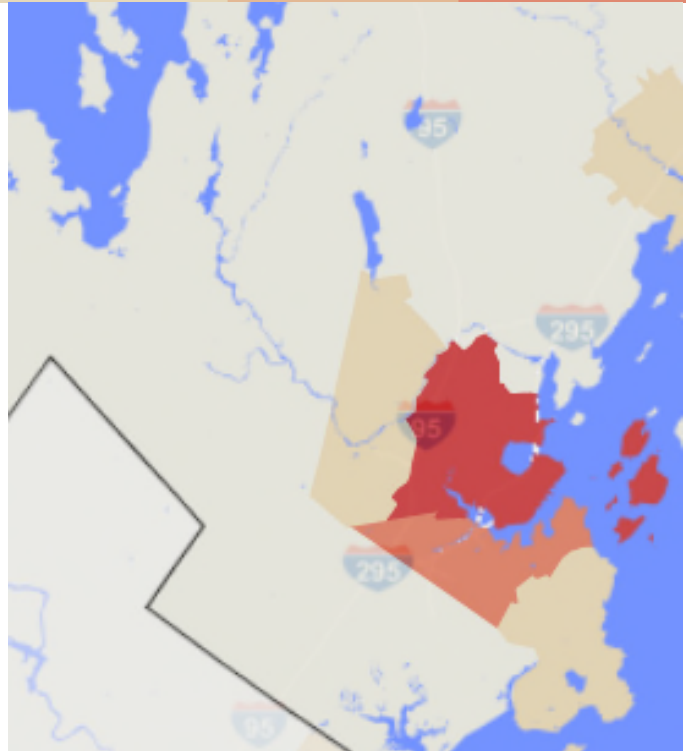
Maine Measures of Growth 2021 Scorecard

<p>-0.3¢ 18. Cost of Energy pg 22 The price of industrial electricity fell 0.3¢/kWh in 2020 but still exceeds the U.S. average.</p>	<p>0% 24. Wellness and Prevention pg 29 In 2020, the share of overweight or obese adults remained about 66%.</p>
<p>0.9% 19. State and Local Tax Burden pg 23 In 2019, Maine's tax burden was 12.3%.</p>	<p>0% 25. Health Insurance Coverage pg 30 In 2019, 92% of Mainers had health insurance, unchanged from 2018.</p>
<p> COMMUNITY</p>	<p> ENVIRONMENT</p>
<p>INFRASTRUCTURE</p>	
<p> 20. Broadband Connectivity pg 25  COVID highlighted the critical need of high-speed internet but new data show just 18% of Maine locations have access to high-speed service (100 Mbps/100 Mbps).</p>	<p>-0.6% 26. Food Security pg 31 In 2018-2020, Mainers experiencing food insecurity fell 0.6% to 11.4%. Federal COVID-relief aid may have helped bolster food security in 2020.</p>
<p>+1% 21. Transportation pg 26 In 2020, 59% of Maine roads were rated excellent, good or fair, about the same as 2019.</p>	<p>+2 DAYS 27. Air Quality pg 33 In 2020, there were 26 moderately unhealthy days, slightly worse than last year.</p>
<p> 22. Housing Affordability pg 27  In 2020, Maine's housing affordability index fell 4%.</p>	<p> 28. Water Quality pg 34 0% Maine's water quality remains high but no new data have been released since 2016.</p>
<p>HEALTH & SAFETY</p>	
<p> 23. Safety pg 28  In 2020, the crime rate fell 7% and was well below the U.S. average.</p>	<p>-8% 29. Sustainable Forest Lands pg 35 In 2019, the growth-to-harvest ratio fell 8% but remained well above the sustainability goal, at 1.27.</p>
	<p> 30. Greenhouse Gas Emissions (NEW) pg 36 From 2016 to 2017, GHG emissions fell 5%.</p>

Population Change and Density

Maine is a relatively rural state with low population density. Growth has been modest with 8% growth in the past 10 years. Cities (red area) are more dense in population however in the past 10 years the towns have grown at a faster pace than the city population. As the population spreads out, we need to make sure our infrastructure supports their water needs. One example is a series of capital projects in the 407 zone (Windham/Gorham) area (see Capital Expenditure Section – Water Program 307 – almost \$18 million of projects).

2020 vs 2010				
City/Town	2020 Population	2010 Population	Increase-#	Increase-%
Members:				
Cape Elizabeth	9,535	9,015	520	6%
Cumberland	8,473	7,211	1262	18%
Falmouth	12,444	11,185	1259	11%
Gorham	18,336	16,381	1955	12%
Portland	68,408	66,194	2214	3%
Scarborough	22,135	18,919	3216	17%
South Portland	26,498	25,002	1496	6%
Westbrook	20,400	17,494	2906	17%
Windham	18,434	17,001	1433	8%
Raymond	4,512	4,436	76	2%
Total	209,175	192,838	16337	8%
Non-Member:				
Standish	10,244	9,874	370	4%
Total Population in Communities Served				
	219,419	202,712	16707	8%



Portland Water District Rate Sheet Summary

A summary of Portland Water District's Water Rates and Municipalities' Sewer Rates as of October 1, 2022 is presented below. Water and Sewer is billed based on actual water consumption for all communities except Falmouth Wastewater customers. The chart shows the typical usage by the number of occupants in the household.

PORTLAND WATER DISTRICT RATE SHEET 07.01.22

Typical monthly consumption and charges for Residential users with 5/8' meter on daily usage of 60 gallons per person

Usage is rounded to nearest hundred cubic feet (hcf). 1 HCF = 748 gallons.

WATER RATES				
Effective Date		03/01/22		
# OF PEOPLE	GALLONS = HCF	MEMBERS	NON-MEMBERS	
1	1,800 =	2	12.96	14.92
2	3,600 =	5	20.73	23.89
3	5,400 =	7	25.91	29.87
4	7,200 =	10	33.68	38.84
5	9,000 =	12	38.86	44.82
6	10,800 =	14	44.04	50.80
7	12,600 =	17	51.81	59.77
8	14,400 =	19	56.99	65.75
9	16,200 =	22	64.76	74.72

SEWER RATES						
07/01/22	09/01/18	09/01/21	07/01/22	01/01/22	07/01/22	04/01/22
PORTLAND	CUMBERLAND	SOUTH PORTLAND	CAPE ELIZABETH	WESTBROOK	WINDHAM	GORHAM
24.60	47.96	11.48	56.84	20.46	48.84	22.03
61.50	64.52	28.70	74.39	43.65	48.84	43.00
86.10	75.56	40.18	86.09	59.11	64.34	56.98
123.00	92.12	57.40	103.64	82.30	87.59	77.95
147.60	103.16	68.88	115.34	97.76	103.09	91.93
172.20	114.20	80.36	127.04	113.22	118.59	105.91
209.10	130.76	97.58	144.59	136.41	141.84	126.88
233.70	141.80	109.06	156.29	151.87	157.34	140.86
270.60	158.36	126.28	173.84	175.06	180.59	161.83

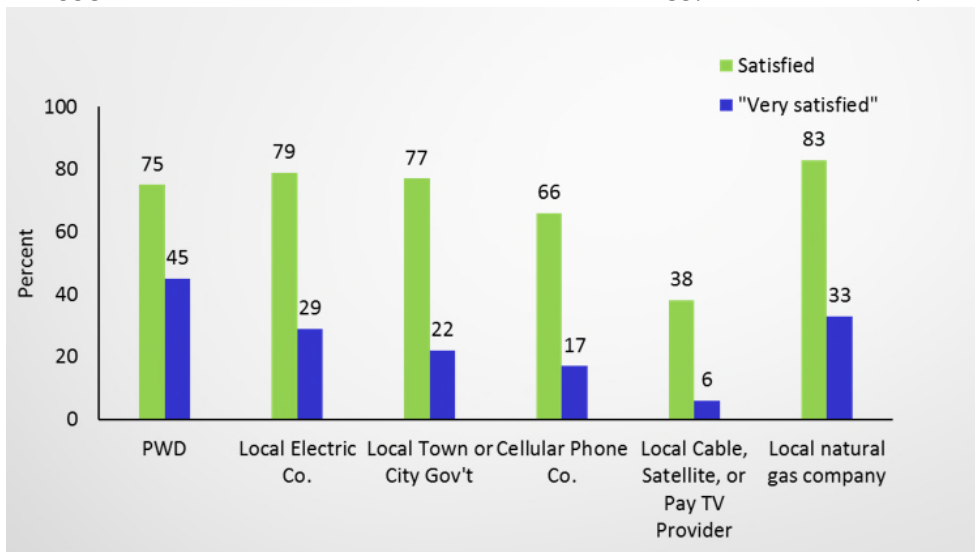
WATER RATES	Min Charge includes 1 HCF	Per additional HCF 2-30 HCF	Per additional HCF 31-100 HCF	Lifeline Water Rate (Reduction in Monthly Minimum Charge)	Minimum includes 1 HCF
MEMBERS	10.37	2.59	2.34	MEMBERS	2.59
NON-MEMBERS	11.93	2.99	2.70	NON-MEMBERS	2.99

SEWER RATES	Min HCF	MIN CHARGE	HCF	Municipal Contacts for Sewer	
PORTLAND	1	12.30	12.30	Ben Pearson	874-8843
CUMBERLAND	0	36.92	5.52	Pam Bosarge	829-2207
SOUTH PORTLAND	1	5.74	5.74	Colleen Mitchell	767-7675
CAPE ELIZABETH	1	50.99	5.85	Ben McDougal	799-5251
WESTBROOK	1	12.73	7.73	Eric Dudley	854-9105 x222
GORHAM	1	15.04	6.99	Freeman Abbott	222-1608
				Laurie Nordfors	222-1675
WINDHAM	5 hcf per unit	48.84	7.75	Barry A. Tibbetts	892-1907
FALMOUTH eff 07.01.2022	RATE PER LIVING UNIT	Commercial Fixtures > 17	SCHOOLS	Beth Pauls	781-4462
	\$48.28 x # of units (Residential)	(\$48.28 x # of units) + (# of fixtures - 17 fixtures x \$2.28) (Com'l combination of fixtures)	\$40.23 for every 15 students (Schools)	Note: These are the most common sewer rates, but this is not a complete list.	

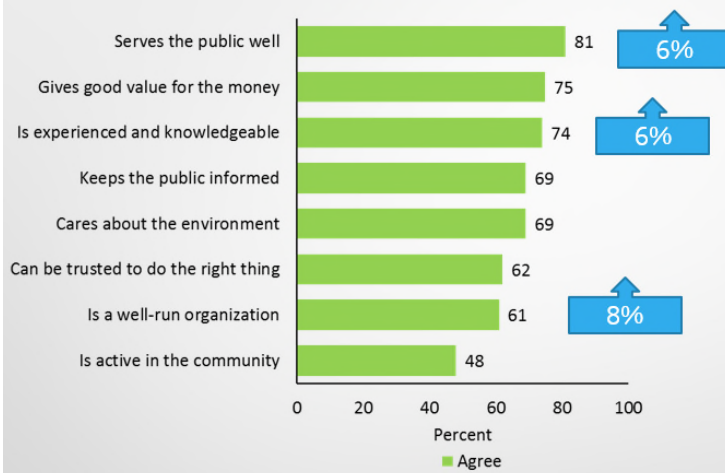
Customer Satisfaction Survey

A periodic customer satisfaction survey is conducted. The last survey was conducted in 2017. A summary of the results is below and indicate that overall satisfaction remains high relative to other local utilities. The 2023 Budget includes funding to do another survey.

Year	Overall	Water Service/Quality	Sewer
2017	75%	89%	85%
2014	82%	88%	70%
2011	87%	92%	71%
2008	85%	90%	76%
2005	88%	89%	78%
2002	89%	90%	83%
2000	89%	91%	79%
1998	NA	85%	74%



General Reputation Trends



Generally, respondents (92%) feel very positive about the Portland Water District. 7%

Proposed Board of Trustees' Orders and Resolutions



Portland Water District
From Sebago Lake To Casco Bay

BOARD OF TRUSTEES / AGENDA ITEM SUMMARY

Agenda Items:

Date of Meeting: November 28, 2022
 Subject: Proposed Budget Orders
 Presented By: Seth Garrison, General Manager

The Administration and Finance, Operations and Planning Committees reviewed the 2023 Budget and CIP for which they have jurisdiction. Below are the recommended motions to be considered at the regular meeting.

Wastewater Assessment and Billing Service Fee

The proposed motion accepts the 2023 budget and authorizes billing the municipalities for wastewater and billing services.

Order 22-44

ORDERED that the 2023 Budget and Wastewater Assessments as presented by the General Manager are accepted and adopted and shall be filed with the minutes of this meeting; and pursuant to Section 12 of the District's Charter, to assess for 2023 the participating municipalities for wastewater related costs as follows:

Town of Cape Elizabeth	\$ 2,300,004
Town of Cumberland	1,184,904
Town of Falmouth	314,112
Town of Gorham	1,566,816
City of Portland	15,798,744
City of Westbrook	3,723,096
Town of Windham	515,808

and to assess non-participating municipal corporations for billing-related costs as follows:

City of South Portland	\$ 228,984
Scarborough Sanitary District	13,284

Water Rates, Terms and Condition and Non-Tariff Services Fees

The proposed motions to update the rates and fees assessed to customers.

Water Rates

The 2023 Budget assumes an average water rate increase of 5.6%. The proposed motion authorizes the specific rates to be adopted.

Order 22-45

ORDERED that the final rate schedule for the water rate increase, hereto and incorporated herein by reference, are hereby adopted with an effective date of January 1, 2023.

Water – Terms and Conditions (T&C)

The T&C outlines the water business practices and fees. The proposed motion updates the fees for current costs. Because the District was granted a waiver from the Public Utilities Commission from rate-related filings, the T&C changes need only Board approval.

Order 22-46

ORDERED the revisions to the District's Terms & Conditions of water service, hereto and incorporated herein by reference, are hereby adopted with an effective date of January 1, 2023.

Non-Water Tariff Services

The fee schedule was last amended in March 2022 (Order 22-010). The proposed schedule is amended reflecting changing in the septage fees approved by the Board in September 2022.

Order 22-47

ORDERED the revision to the Fee Schedule for Non-Water Tariff Services, hereto and incorporated herein by reference, is hereby adopted with an effective date of January 1, 2023.

Capital Budget and Related Bond Reimbursement Motions

The motion accepts the proposed capital improvement plan and authorizes staff to implement the 2023 projects within the restrictions stated below and in compliance with the purchasing policy guidelines.

Order 22-48

ORDERED that the 2023-2027 Capital Improvement Plan is hereby adopted and the General Manager is authorized to solicit bids or proposals for the year 2023 projects; excepting CIP# 182, project 3241\North Windham Wastewater system and to authorize the General Manager to award contracts for approved projects to the lowest bidder if the bid is within the project budget;

BE IT FURTHER ORDERED that the General Manager shall solicit bids or proposals and to partner with Municipalities, MDOT and Developers for the year 2023 for the replacement and extension of water mains, services, valves and hydrants as outlined in the Water Distribution Systems Program and to authorize the General Manager to award and enter into contracts if the bid or partnering proposals are within the overall program budget.

In compliance with Internal Revenue Service (IRS) regulation, an 'intent to borrow' motion must be approved by the Board before expenditures are incurred on a project that may be financed with tax-exempt financing. Resolution 22-15 indicates the intent to borrow motions for all funds. Before a bond is actually authorized or issued, a public hearing will be held. Subsequent to the hearing, the Board will consider authorizing the bond.

Resolution 22 - 15

RESOLVED the Board hereby declares its intent to issue debt to reimburse costs incurred by the District for water fund, Portland wastewater fund, and Westbrook, Gorham and Windham wastewater funds projects identified in the 2023 CIP. The full form of the resolution is attached hereto and incorporated herein by reference, and shall be part of the minutes of this meeting.

Resolution 22-15
DECLARATION OF OFFICIAL INTENT PURSUANT TO
TREASURY REGULATION §1.150-2

WHEREAS, the Portland Water District (the “Issuer”) intends to proceed with the projects described in section 2 below (the “Projects”); and

WHEREAS, the Issuer intends to finance some or all of the costs of the Projects through the issuance of tax-exempt bonds or notes in anticipation thereof; and

WHEREAS, the Issuer may incur certain of the costs of the Projects prior to the issuance of such bonds or notes and the Issuer expects to be reimbursed from the proceeds thereof; and

WHEREAS, Treasury Regulation §1.150-2 requires that the Issuer declare its official intent to reimburse itself for such expenditures with the proceeds of such bonds or notes.

NOW, THEREFORE, the Issuer does hereby declare its official intent as follows:

- 1. Declaration of Intent.** The Issuer reasonably expects to reimburse itself for expenditures made on the Projects with the proceeds of tax-exempt bonds or notes in anticipation thereof to be issued by the Issuer to finance the costs of the Projects in the maximum principal amount of \$43,805,000.
- 2. General Description of Property to which Reimbursement Relates.** The following is a reasonably accurate general functional description of the type and use of the property with respect to which reimbursements will be made:

Water Fund CIP Projects

- Construction or installation of new water mains, valves, hydrants, services and meters;
- Acquisition of vehicles, leak detection and related equipment;
- Renovation of various water facilities;
- Acquisition and installation of various computer and other IT-related equipment; and
- Building improvements at the Douglass Street facilities including but not limited to the HVAC system and roof.

Portland Wastewater Fund CIP Projects

- Renovation, repair and replacement of machinery and equipment and facilities at the East End and Peaks Island Treatment Plant, including but not limited to projects related to the secondary clarifier sludge rake, parking lot, and dewatering system;
- Replacement of obsolete assets, machinery and equipment or installation of new machinery and equipment and force mains at various pump stations, including but not limited to India Street pump station; and
- Acquisition and installation of SCADA equipment.

Westbrook, Gorham and Windham Wastewater Funds CIP Projects

- Construction and equipping of a new wastewater treatment plant and related infrastructure in the North Windham area of Windham, and

- Renovation, repair and replacement of machinery, equipment and facilities at the Westbrook Regional Treatment Plant and various pump stations in Gorham, Westbrook and Windham.

3. Public Availability of Official Intent. This Declaration of Official Intent shall be maintained as a public record of the Issuer.

4. Treasury Regulations. This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.

5. Authority for Declaration. This declaration is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.

Glossary/Acronyms

Term	Description
407 Zone	A water pressure zone, supported by pump stations and water tanks, that is at an elevation above the District's water source (Sebago Lake).
ABC Project	ABC stands for "Asset, Billing & Customer Relations". It is made up of two parts: the Cayenta Billing and Central Square Asset Management projects.
Accurate bill index	The ratio of correct read adjustments on accounts to the total of all accounts.
Accrual Basis	The method of accounting under which revenues are recorded when they are earned (whether or not cash is received at that time) and expenditures are recorded when goods and services are received (whether or not cash disbursements are made at the time)
AED	Automated external defibrillator
AL	Aluminum
AMaP	Asset Management and Planning group, consisting of Engineering and Environmental Services
Amortization	The write-off of costs that has a financial benefit exceeding 1 year but is not a capital expenditure. The write-off period is determined based on an estimate of asset's useful life.
AMR	Automated Meter Reading
Asset Information Management (AIM) System	Computerized asset identification system used to document all asset maintenance schedules / procedures from day of acquisition to disposal.
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand - a measure of organic material in the influent / effluent of the wastewater system expressed in lbs./ day
Bond	A written promise to pay (debt) a specified sum of money (called principal) at a specified future date (called the maturity date(s)) along with periodic interest payments at a specific percentage of principal (interest rate).
Booster Station	Water pump station
Capital Expenditure	Expenditures for a physical asset that exceeds \$25,000 and has a useful life of greater than 5 years or extends the useful life of an existing asset for more than 5 years.

Glossary/Acronyms

Term	Description
Cayenta Billing Project	Current project to update/replace the District's billing and customer service information system.
CMAR	Construction Manager at Risk
CCTV	Closed Circuit Television
Central Square Asset Management Project	Current project to update/replace the District's asset management and computerized maintenance management system (CMMS).
CEWWTF	Cape Elizabeth Wastewater Treatment Facility
CMMS	Computerized maintenance management system
CMP	Acronym for Central Maine Power, electricity provider
Combined Sewer Overflow (CSO)	CSO's are a part of a combined sewer system that contains both sanitary waste and storm water. Under high flow events, generally due to wet weather that exceed the sewer system's capacity, CSO's will discharge excess flows into nearby bodies of water.
CPE	Comprehensive Plant Evaluation
CRM	Customer relationship management
Cross Connection Fees	Fees collected for work relating to the inspection of water backflow devices.
Cryptosporidium	A one cell parasite that originates from the feces of infected animals and humans that can cause gastrointestinal illness.
Customer Activation Fees	Fees charged customer if a new billing account needs to be created; typically when a customer moves into a new home.
Customer Connection Fees	Applications fees charged to customers requesting to install a new water main, service line or meter.
Customer Penalties	Disconnection fees charged to customers for non-payment of services.
CWSSP	Comprehensive Water System Strategic Plan
CWWMP	Comprehensive Wastewater Management Plan
Deferred Costs	Costs that have been incurred for a purpose that has a beneficial period in excess of one year but does not culminate into a capital expenditure. These costs are normally written-off to operating expense over the estimated useful life of the item.
DEP	Department of Environmental Protection, State of Maine

Glossary/Acronyms

Term	Description
Depreciation	The write-off of an asset based on the decrease in value of property over its estimated useful life.
DHHS	Department of Health and Human Services
EEWWTF	East End Wastewater Treatment Facility
Enterprise Fund	A proprietary fund used by governments to account for business-type activities. Such a fund is appropriately used for operations that are financed and operated in a manner similar to private business enterprise where the intent is that the costs be financed or recovered primarily through user charges.
EPA	Environmental Protection Agency, Federal Agency
ERP	Emergency Response Plan
FEMA	Federal Emergency Management Agency - a federal agency that provides financial assistance after declared national disasters.
Fire Service Outage Index	Standard to monitor hydrants returned to service within 3 business days.
Force Main (Sewer)	Sewer force mains are necessary when gravity flow is not sufficient to move water runoff and sewage through a gravity line. Force mains move wastewater under pressure by using pumps or compressors located in lift stations.
Fouling	Settlement, and sometimes the growth, of undesired materials on solid surfaces in a way that reduces the efficiency of the affected part.
Fund	An independent fiscal and accounting entity with a self-balancing set of accounts recording cash and /or other resources together with all related liabilities, obligations, reserves, and equities which are segregated for the purpose of carrying on specific activities or attaining certain objectives.
Generally Accepted Accounting Principal (GAAP)	Uniform minimum standards of, and guidelines for, external financial and reporting. They govern the form and content of basic financial statements of an entity. GAAP encompasses the conventions, rules and procedures necessary to define accepted accounting practice at a particular time. The primary authoritative statements on the application of GAAP to local governments are Government Accounting Standards Board pronouncements (GASB).
HCF	Hundred Cubic Feet- the standard measure used for billing water usage, 1 HCF is equal to 748 gallons of water, 1 cubic foot of water is equal to 7.48 gallons.
Hydrogeological	Adjective of hydrogeology that means the branch of geology dealing with the waters below the earth's surface and with the geological aspects of surface waters.
Industrial Pretreatment Program (IPT)	A program responsible for permitting and monitoring industrial sewer customers who discharge significant quantities of non-domestic wastewater to the collection system to ensure their activities do not impact our operation or the receiving waters.

Glossary/Acronyms

Term	Description
I/I	Abbreviation for Infiltration and Inflow. Inflow and infiltration are terms used to describe the ways that groundwater and storm water enter the sanitary sewer system. Inflow is water that is dumped into the sewer system through improper connections, such as downspouts and groundwater sump pumps. Infiltration is groundwater that enters the sewer system through leaks in the pipe.
Interest from Customers	Late fees charged to past due balances. An account is considered delinquent 25 days after the bill is mailed to customer.
Jobbing Revenue	Revenue for work performed by District employees which is billable to outside parties.
LOTO	Lockout tag-out
LOX	Liquid Oxygen, LOX is used by the District in the production of ozone which is used in the water treatment process
LTD	Long Term Debt
MCL	Maximum contaminant level
MDOT Cash Reserve	Funds received from Maine Department of Transportation from sales of land to be reserved for future land purchases.
MEANS	Main Extension and New Services program
MGD	Acronym for million gallons per day (Mgal/d). Measures rate of flow of liquid.
MMBB	Maine Municipal Bond Bank
MPLS	Multiprotocol Label Switching
NFPA 70E	National Fire Protection Association standard for electrical safety in the workplace.
Ozone	A gas formed by electrical discharge in air used as an oxidizing, deodorizing and bleaching agent in the purification of water.
PFAS	Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals potentially impacting the District's wastewater biosolids.
PI	Plant Information - a database used to automatically compile performance information on a specific asset.
PIWWTF	Peaks Island Wastewater Treatment Facility
PLC	Programmable logic controller is an industrial computer control system that continuously monitors the state of input devices and makes decisions based upon a custom program to control the state of output devices.

Glossary/Acronyms

Term	Description
PPB	Parts per billion
Proprietary Funds	Accounting funds established to separate assets and operational costs based on the type of system (i.e. Water or Wastewater) or Wastewater municipality.
PRTG	Paessler Router Traffic Grapher, refers to network monitoring software
PS	Pump Station
PUC	Public Utilities Commission, a State of Maine agency charged with regulating utilities.
Quasi-municipality	Independent government entity as defined by state law. It has many of the responsibilities and rights of a typical governmental entity.
R&R Multi-fund Assets	Assets utilized by all funds and paid for by allocations to the funds (i.e. computers, meters, administrative office space).
R&R	Renewal and Replacement Funds, a cash reserve created to fund smaller capital projects.
Sanitary Sewer Overflows (SSO)	Sewer systems that contain only sanitary flows that may discharge directly into water bodies without being treated.
SCADA	Supervisory Control and Data Acquisition
SDS	Safety data sheets
SLWTF	Sebago Lake Water Treatment Facility
SOP	Standard operating procedure
Spatial Scheduling	Use of the district's geographic information system to schedule customer appointments on a daily basis to best utilize manpower and vehicle usage.
SRF	State Revolving Fund- Maine Municipal Bond Bank program for long-term financing
STD	Short Term Debt
SU	Standard units of measuring pH with a range of 1 - 14.
Sub-meters	Meters installed to measure water that will not be returned to the sewer system for disposal. This water may be used for irrigation purposes or other outside use and therefore should not be included in the calculation of wastewater disposal charges.
SWTR standards	Surface Water Treatment Rules
TCR samples	Total Coliform Rule
10th Percentile Chlorine Residual	Minimum residual found in water samples approximately 90% of the time.
TIF	Tax Increment Finance - a designated municipal fund established to fund structural improvements

Glossary/Acronyms

Term	Description
TPS	Thickened Primary Sludge
Tropic State Index	Calculated measure of lake productivity with clear, clean water as the desired result. Range of less than 30 to greater than 100 with the lower the number, the better the results.
TSS	Total Suspended Solids - a measure of suspended material in the influent / effluent of the wastewater system expressed in lbs. / day
Unaccounted for Water	Water not measured by metered flow such as fire service use, main leaks, etc.
UV	UV stands for Ultra Violet. UV water or wastewater treatment systems use special lamps that emit UV light of a particular wavelength that have the ability, based on their length, to disrupt the DNA of micro-organisms.
Water Outage Index	Index of the ratio of customer outage hours/million hours available. Customer outage hours are computed by taking the # of customers without water service times the number of hours the outage lasts. The hours available is derived by taking the number of customers times number of days times 24 hours per day.
Watershed	A stretch of high land dividing the areas drained by different rivers or river systems into Sebago Lake.
Watershed Reserve	PUC allowed reserve of Water revenue to be used for future land purchases to protect PWD's watershed.
Weighted average unit price	Total cost of a product divided by the total product units
WEWWTF	Westbrook/Gorham/Windham Regional Treatment Facility
WIMS	Water information management solution (software)
WWPS	Wastewater Pump Station
WTF	(Drinking) Water Treatment Facility
WWTF	Wastewater Treatment Facility

Watershed Protection

In the 2023 budget document, transactions related to protecting the watershed were separated from the Operating Fund on the Combined Funds statement on the adjacent page. The District has \$1.8 million reserved for activities to protect the watershed land including purchasing conservation easements and contributions to organization supporting such efforts. A three-year \$20,000 pledge has been made to Sebago Clean Waters. Two bonds have been issued for conservation easements - 2020- a \$295,000 bond for property in Sebago called Tiger Hills and 2021- a \$480,000 bond for an easement on the land adjacent to the Crooked River. A federal grant of \$8 million was awarded to the District to asset in watershed protection efforts over 5 years starting in 2022.

