



## Proposed Comprehensive Budget Report



From Sebago Lake to Casco Bay Portland, Maine This Page is Intentionally Blank



Administrative Office 225 Douglass Street Portland, ME 04101

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## Portland Water District Budget - Reader's Guide

Welcome to Portland Water District's 2024 Budget document. This document is intended to provide practical and pertinent information about Portland Water District's (PWD's) financial planning, policies, goals, and priorities for 2024 and beyond. The document holds a wealth of information including how water and wastewater revenues are used to support operations activities and infrastructure.

#### This Budget is a Policy Document.

The 2024 Budget document describes financial and operating policies, goals, and priorities for every PWD fund and department for the coming year and for the 5-year planning horizon. PWD's 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.

The 2024 Budget document 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 2024 and projected projects through 2028. The multi-year financial plan is included in the Appendix.

#### This Budget is a Means of Communication.

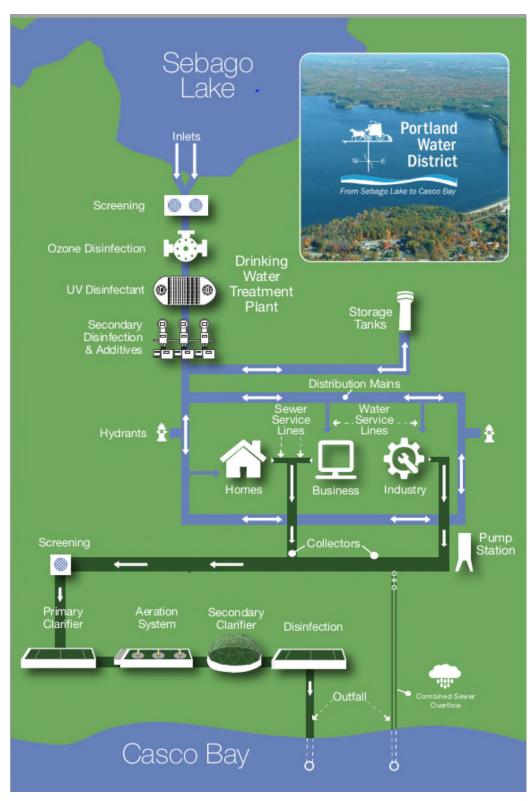
The 2024 Budget document is an easy-to-read document with summary information in charts and graphs that complement the details in the text and tables. The Letter from the General Manager and Treasurer presents an organizational and financial overview of PWD. The budget for each fund—one water fund and six wastewater funds, one for each community served—is described in detail. Supporting information about the Portland metro area's economy, benchmarks, and results of the 2023 Customer Satisfaction Survey are included in the Appendix.

#### This Budget is an Operations Guide.

The 2024 Budget document provides an organizational chart and budget overview for each Department, followed by a detailed budget which includes goals, performance benchmarks, and accomplishments. 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.





October 23, 2023

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 2024. The document is designed to provide a comprehensive financial picture of PWD activities for the 2024 budget year.

PWD continues to face a challenging operating environment because of multiple economic factors. Historically high inflation and supply chain difficulties have abated somewhat, but are still driving up costs above normal levels. The tight labor market continues to put pressure on wages and makes attracting and retaining staff much more difficult. Despite these challenges, PWD continues to provide essential services affordably and without interruption.

PWD has taken a number of steps to respond to challenges in the operating environment. We have implemented a much nimbler and more comprehensive hiring process which includes incentives like signing bonuses for individuals with Commercial Drivers Licenses (CDL) to improve recruitment. Career ladders have been added for additional positions to enhance retention. In addition, a variety of continuous improvement projects are helping to manage cost increases and labor issues.

Factors that will impact the 2024 budget and projections for future budgets include the following:

- **Renewal of Wastewater Assets**. Much of the wastewater treatment infrastructure at PWD and across the U.S. was built in the late 1970s and early 1980s, as a result of the passage of the Clean Water Act of 1972. Constructed largely with federal grant funding, this infrastructure is at the end of its useful life and must be replaced without significant federal funding. Customer will soon have to bear the full cost of the assets, which is something they have never experienced.
- Changes in Regulations Driven by PFAS. Proposed new drinking water standards and continued restrictions on wastewater discharges containing PFAS will create significant budgetary impacts. PWD is in the process of developing a regional solution to wastewater biosolids, but the technologies for addressing PFAS destruction are not well developed. This makes acceptance and permitting a solution challenging.
- Construction of a New \$38 Million Wastewater System In North Windham. A new wastewater system in North Windham with collection and treatment is being built. The system will include a state-of-the-art membrane bioreactor (MBR) design with an innovative subsurface wastewater disposal system.

As you consider the budget for the upcoming 116<sup>th</sup> anniversary year of PWD, please reflect on accomplishments and ongoing challenges. PWD's dedicated staff of 189 employees work every day to ensure that safe and abundant drinking water is delivered to 200,000 plus people, and that wastewater is treated to remove pollution and protect the environment. Below is a summary of key services provided by PWD:

Water Services

Water Services ensures that safe and abundant drinking water is delivered throughout the 11 communities in PWD's service area. It all starts at the source, Sebago Lake. Because of the excellent water quality in the lake and strong watershed protection program, PWD was granted a waiver from the filtration requirements of the Safe Drinking Water Act. PWD's 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 facility. 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) disinfection.

After treatment, drinking water is distributed through a system of more than 1,000 miles of water mains (pipes), 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, PWD has invested over \$79 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.

#### Asset Management and Planning

The Asset Management and Planning (AMaP) Department provides engineering and maintenance planning services related to PWD's assets and supports environmental management activities. AMaP collaborates with stakeholders, including communities, state agencies and developers to executes tens of millions of dollars in complex projects and manage the Sebago Lake Watershed. AMaP oversee design and construction of water and sewer infrastructure, supports long range planning, operates and maintains support facilities, and manages SCADA instrumentation to support operations. These functions are carried out with a deliberate Asset Management approach that minimizes lifecycle costs and maximizes the value of infrastructure.

The Environmental Services Section of AMaP monitors and protects water quality. It champions the protection of Sebago Lake through source protection, environmental education and outreach, and security. It provides certified analytical testing and operational support to water and wastewater treatment facilities and oversees the Industrial Pretreatment Program.

#### Administration and Employee Services

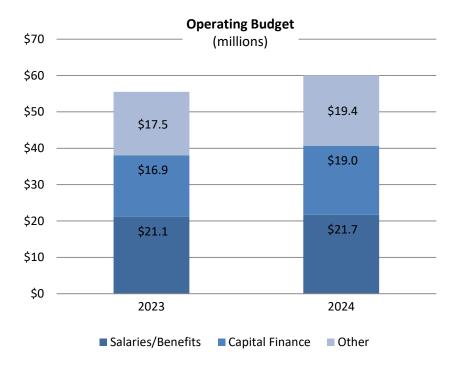
Administration and Employee Services manage the financial, information services, customer services, and other related functions at PWD. In addition, the Corporate Counsel and the Public Relations Manager serve PWD and customers in a number of ways. Within Administration and Employee Services, the Information 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, meter reading, and collections services. The Employee Services Department handles human resources, employee recruitment and development, benefits administration, safety services, and many other employees support activities.

The proposed budget for 2024 recommends \$60.1 million for operations and \$48.6 million for the first year of a five-year Capital Improvement Plan. The operating budget consists of three major expense categories – salaries/benefits (36%), capital finance (32%) and all other materials and services (32%). Salaries reflects an estimated 4% average wage increase. The number of Full-Time Equivalents (FTEs) is unchanged from 2023, but one additional employee position has been added which will be offset by reducing the budget by \$322,000 for expected vacancies (\$286,031, or 2%, higher). Benefit costs

increased by \$253,890 or 3.8%, primarily due to higher pension costs. Capital financing costs are higher primarily due to higher debt service costs (\$1,355,345) and higher capital fund contribution (\$809,500). Total other expenses increased \$1,897,000, or 10.8%, from the prior year.

Significant changes in specific other expense line items include the following:

- Higher electricity costs due to unit costs which are \$372,000 or 17% higher, and new net energy billing (NEB) fees, which are \$468,000 higher. The higher NEB fees are more than offset by NEB revenue of \$868,000, resulting in a net savings of \$400,000.
- Higher unit costs for chemicals and additional volume of chemicals needed at the East End and Westbrook Regional Wastewater Treatment Facilities, which are \$752,000 or 38% higher.
- Higher contracted services due to additional equipment maintenance, computer software licenses and a new \$60,000 Sebago Clean Waters contract (572,300 or 10.8%)

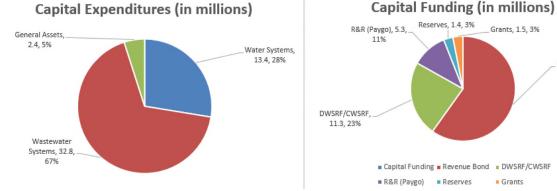


Grants, 1.5, 3%

Revenue Bond, 29.1, 60%

The total amount of budgeted capital expenditures is \$48.6 million. The \$13.4 million water capital budget includes \$9.4 million replacing aging water mains. The \$32.8 million wastewater capital budget includes \$10.0 million for the next phase of North Windham Wastewater Treatment Facility construction and \$15.8 million of upgrades at Portland's East End Wastewater Treatment Facility. Additionally, the capital budget includes an investment of \$2.4 million in general assets such as vehicles, computer system, facilities, and updating the water and wastewater master plan.

The capital projects will be funded from a number of sources: Revenue Bonds issued by PWD or through the Maine Municipal Bond Bank; rate subsidized bonds issued through the Clean Water and Drinking Water State Revolving Loan funds (CWSRF/DWSRF); Renewal and Replacement funds which are generated through operating budget contributions; Grants from the CWSRF/DWSRF programs; and Water Capital/Master Plan reserve balances.



<b>ET HIGHLIGHTS</b> <b>JDGET SUMMARY</b> ng Budget is proposed to be \$60.1 se of \$4.6 million or 8.3% over the 3 Operating Budget.	CHALLENGES AND ISSUES Long range biosolids management options related to
ng Budget is proposed to be \$60.1 se of \$4.6 million or 8.3% over the	Long range biosolids
se of \$4.6 million or 8.3% over the	
	management options related to
3 Operating Budget.	
	PFAS/PFOA concerns
e projected at \$60.7 million, which	Aging infrastructure requires
% average water rate increase Jary 1, 2024, and wastewater	asset replacement; federal dollars for infrastructure
meet the revised municipalities' expectations.	projects are scarce.
	Recruiting and retaining new
• •	employees and training existing employees to adjust to needed
	workforce skills
•	
vledge management, continues to ining, and provides incentives for	
r v d	expectations. set is proposed at \$48.6 million. It mitment to invest in water mains wastewater facilities. s increase by one to 189, but total ralents (FTEs) remain the same. dget continues to fund technology wledge management, continues to ining, and provides incentives for ti-skill development.

The 2024 budget guidelines established by the Board of Trustees are reflected in this budget proposal:

- Operating fund expenses are increasing \$4.6 million or 8.3%
- Wastewater assessments meet the municipal expectations
- Water rates are affordable and sufficient to meet operational needs
- FTEs are optimized to meet the workload
- Investment in our infrastructure continues as planned

The proposed budget assumes a water rate adjustment effective January 1, 2024. The typical residential customer's monthly bill would be \$28.71, which is \$1.52 or 5.6% higher than their current bill.

Assessments to wastewater communities meet or are lower than revised municipal expectations. The range of assessments increases range between 3.9% and 8%. 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.

Seth Garrison (General Manager)

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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 2023, one scholarship was awarded to Samuel Plummer of Windham. He is pursuing a degree in Marine Science at Saint Joseph's College.

#### **Environmental Education**

Through our environmental education program, we connect with thousands of students- teaching about our water resources and encouraging stewardship.

## Water Bottle Filling Fountain Grants

The Board of Trustees awarded seven grants: Deering Center Neighborhood Association, Cape Elizabeth High School (2), Equality Community Center, Maine Health-MMC Food Pantry, Edna Libby School, Portland Adult Education.

Over the past ten years, PWD has awarded \$63,000 to support the installation of approximately 43 Water Bottle Filling Fountains through its grant program.

## **Annual Giving**

Portland Water District conducts an annual giving campaign each year where employees contribute to charities through payroll deductions. Last year, employees donated over \$10,000 to worthy causes.

#### 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.

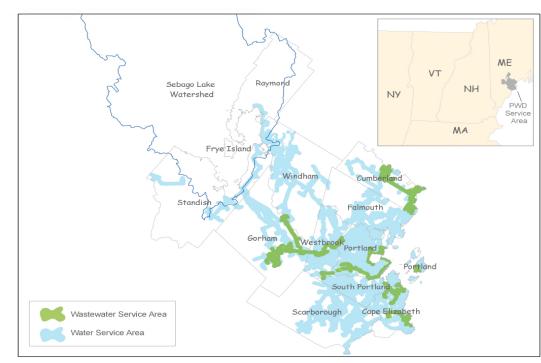


Photo: Portland Public Health

Portland Water District (PWD) is a quasi-municipal utility authorized by state legislative charter to provide water service to 11 greater Portland communities and wastewater treatment and interception services to six of those communities. Water service is provided to 54,548 customer accounts, representing over 200,000 people. Sebago Lake is the primary source of drinking water. A network of 1,000 miles of water mains delivers water from Sebago Lake to customers. The system provides fire protection through 5,248 fire hydrants and 2,607 sprinkler systems. PWD provides wastewater-related services through contracts with six communities. Additional services include sewer billing and collector/storm drain system operations.

#### Summary of Wastewater Services Provided:

	B	y Charter:		By Contract:		
Community	Customers	Treatment	Interceptors	Collectors	Storm Drains	Billing
Cape Elizabeth	2,450	Yes	Yes	No	No	Yes
Cumberland	1,273	No	Yes	Yes	No	Yes
Falmouth	2,170	No	No	No	No	Yes
Gorham	1,992	Yes	Yes	Yes	No	Yes
Portland	17,313	Yes	Yes	Peaks Island (only)	Peaks Island (only)	Yes
Scarborough	481	No	No	No	No	Yes
South Portland	7,960	No	No	No	No	Yes
Westbrook	4,828	Yes	Yes	No	No	Yes
Windham	60	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 fire protection and continued growth. Private wells were no longer sufficient for domestic needs and fire protection. The 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, 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, the Portland area grew into the commercial and economic hub of the state. Growth in the Portland area necessitated several upgrades in 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 Methyl *tert*-butyl ether (MTBE) contamination.

As a logical extension of its role as the regional water supplier and environmental steward, in the 1960s Portland Water District offered to construct facilities to treat the region's wastewater. PWD now operates wastewater treatment facilities in Portland (1979), Westbrook (1978), Little Falls (1987), Cape Elizabeth (1987), and Peaks Island (1993). PWD is building a new facility in North Windham that will go in service in 2026. 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 unregulated in years prior. 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 customer communication.

The decade starting in 2000 also witnessed PWD's wastewater treatment facilities beginning to reach the end of their useful lives and an increased emphasis on odor control. Portland's East End Wastewater Treatment Facility (EEWWTF) started undergoing renewal efforts and upgrades to the odor control facility, while an evaluation of the Westbrook/Gorham Wastewater Treatment Facility was conducted and upgrades began. Both facilities will need sustained capital investment through the 2020s to address aging assets.

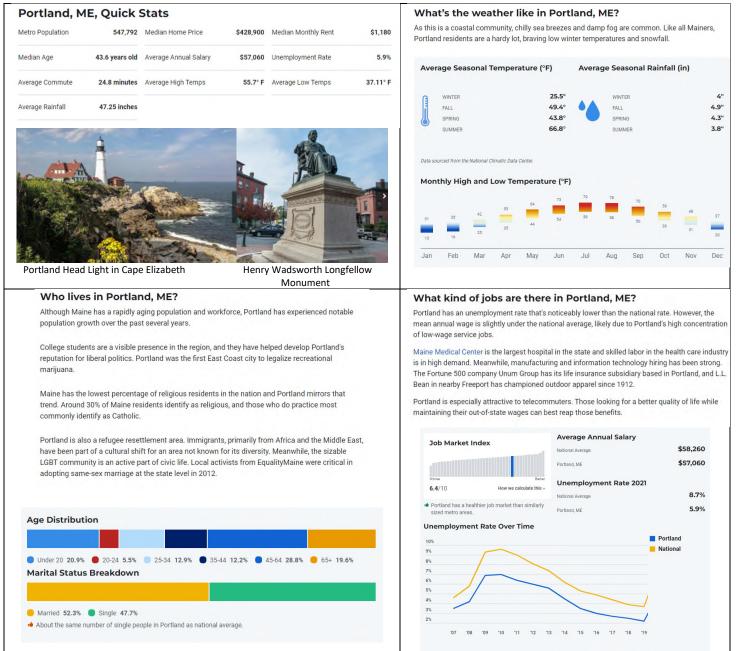
In 2001, the Town of Raymond became the tenth member PWD; water service in the town began in 2002.

A focus on aging water mains began in 2011 when the PWD Board of Trustees committed to double the main renewal budget by 2016. In 2014, the Board established a capital reserve fund to provide an additional \$2 million for main renewal. A \$7.0 million investment in water main replacement is budgeted for 2024.

#### **The Portland Metropolitan Area**

U.S. News & World Report perennially reviews metro areas across the county and recently ranked the Portland metropolitan area as the 7<sup>th</sup> best place to live and 37<sup>th</sup> best place to retire in the U.S. The information below is from their report.

"For the people of Maine, there is only one Portland. Maine's largest metro area and economic hub features cobblestone streets and ships sheltered within the island-specked waters of Casco Bay. Artful living and farm-to-table dining are not just trends in Portland – they have been a way of life for years. A "do it yourself" spirit resonates throughout the region, so don't be surprised if a neighbor offers you extra produce from a community garden, home-brewed beer or knitting tips. All around Portland, you'll find dozens of local entrepreneurs offering homegrown or homemade products, from mittens to coffee."



#### **The Regulatory Environment**

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 enforced by these layers of government affect not only PWD's operations in a regulatory sense, but its budget as it complies with various government mandates.

PWD'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 a public water supply. Under the SDWA, the EPA establishes a maximum contaminant level standard that regulates physical, chemical, biological and radiological substances in a drinking water supply.

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 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 U.S. 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 states 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. PWD's treatment facilities must obtain a discharge permit issued by the DEP utilizing those stricter requirements.

In addition to the environmental regulations which govern PWD's operations, the PWD's water business is also partially regulated by the Maine Public Utilities Commission (PUC) under 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. PWD filed exemption requests from certain regulations. Effective January 1, 2016, the District is exempt from PUC regulation related it its water rates and standards of service. Historically, the PUC regulated PWD's water business operations through review and approval of its Terms and Conditions of Service, and established the rates it charges 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.

## The Regulatory Environment (continued)

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

The annual costs for PWD'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). PWD's charter provides that prior to January 15 of each year, it 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 PWD and establish their respective sewer user rates considering the District's assessment and the costs of maintaining their respective sewer collection systems. PWD'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 (PUC) to exempt certain individual utilities from state regulation, if requested by the utility, or classes of utilities (PUC Rule 6114).

PWD 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 its publicly elected officials without PUC review.

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

## Water Rate Change Process

In 2024, PWD's Board of Trustees will consider a 6.4% average rate adjustment. The chart on the next page outlines the process PWD will follow for the 2024 rate adjustment. PWD will continue the same Board and public review process, but does not require Maine PUC approval.

A PUC 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 PWD's 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. PWD filed the SIA in October 2013 and has incorporated funding the reserve by designating 1% of the proposed January 1, 2024, 6.4% rate adjustment for the reserve. With this adjustment, the total percent of revenue allocated to the capital reserve will be 10% of revenue – the maximum allowed under the law.

#### Water Rate Case Process

The next adjustment is proposed to be January 1, 2024. The proposed schedule to implement the next year's rate adjustment is as follows:

September 11, 2023	The PWD Board of Trustees' Administration and Finance Committee reviews and makes final rate recommendations. Finance staff provides up-to-date financial information and revenue projections.
September 18, 2023	PWD Board considers approving Administration and Finance Committee's recommendation.
October 13, 2023	Supporting documentation for a rate adjustment is available to the public
October 28, 2023	Publish notice of a rate adjustment is sent to all customers. The notice includes an invitation to attend the public hearing.
November 13, 2023	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 27, 2023	Board business meeting – Approve final rate schedule. The final rate schedule incorporates changes based on the public hearing and Board's feedback.

December 27, 2023 File final rate schedule based on public hearing and Board review. Rate schedule is distributed to Maine PUC for informational purposes only.

January 1, 2024 Rate adjustment effective date.

Public Hearing Notice on Proposed Water

## Proposed Water Rate Adjustment

Portland Water District (PWD) is proposing a rate adjustment effective January 1, 2024. The impact on a typical residential customer is \$1.52 per month. The impacts on other customer classes are shown in the table below. The proposed increase does not affect wastewater fees which are set by city and town governments, but billed by PWD.

#### Adjustment by Customer Type

Customer Classification	Percent Increase	Revenue Increase	Avg. Monthly Increase*		
Residential 5.9%		\$1,035,875	\$1.52		
Commercial	7.3%	\$377,273	\$6.37		
Industrial	9.0%	\$168,151	\$162.82		
Government	8.4%	\$98,093	\$18.62		
Private Fire	5.7%	\$ 93,420	\$2.38		
Public Fire	5.7%	\$78,468			
	6.4%	\$1,851,280			

\*For typical customer in this classification

Rate adjustments are needed to invest in critical infrastructure to ensure reliability and quality services. Although operational costs have increased, especially chemicals, electricity, and supplies, PWD has worked diligently to balance budgets and contain costs.



#### MORE INFORMATION

Customers will have an opportunity to learn more and ask questions at a public hearing to be held on November 13, 2024, at 6:30 p.m. in the Nixon Development Center located at 225 Douglass Street in Portland. Customers have the right to request additional information relating to rates. Materials supporting the rate increase are available online and can be mailed on request.

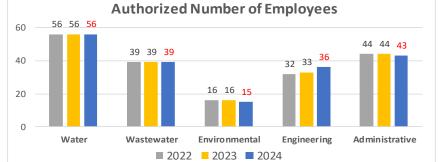


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#### **Organization Structure**

Portland Water District is overseen by an 11-person Board that is publicly elected. The Board appoints a General Manager, who oversees the PWD's daily operation. 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. No changes made in 2024. Reports to the Director of Water Services.
- Wastewater Services provides wastewater treatment and interception/collector system operation and maintenance services. In 2024, created another operation foreperson and reduced an operator position. Reports to the Director of Wastewater Services
- Environmental Services provides watershed protection and laboratory services. New Environmental Compliance Manager offset the reduction of an Industrial Pretreatment and Environmental Education Coordinators in 2024. Reports to the Executive Director of Asset Management & Planning.
- Engineering Services provides general engineering, facility and vehicle maintenance services. Added a Project Engineer position in 2023 to manage the North Windham Wastewater project. Added an Association Engineer, Asset Management Technician and CAD Specialist positions in 2024. Also, a Facility Technician position was created offset by eliminating a Millwright position. A SCADA Manager position was created offset by eliminating a Senior Project Engineer position. Reports to the Executive Director of Asset Management & Planning.
- Administrative Services provides customer, computer, finance, employee services and general management services. In 2024, reduced the number of work force management positions by 1 to 3 positions. A Customer Service Coordinator Foreperson position was created and Customer Service Coordinator eliminated. Reports to the Executive Director of Administrative Services and Director of Employee Services.

PWD's affairs 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 PWD's website (<u>www.pwd.org</u>) and in the Portland Press Herald. The meeting agenda is sent to the town and city managers of PWD member communities. 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



William Lunt, III President -Falmouth & Cumberland



Guy Cote Westbrook



Charles Shattuck-Heidorn Portland



Joseph Siviski Vice President -South Portland and Cape Elizabeth



Kenneth Levinsky Portland



Leroy Crockett Scarborough



Louise Douglas Windham & Raymond



Gary Libby Portland



Daniel Willett Gorham



Matthew Beck South Portland and Cape Elizabeth



Fredrick McCann 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:
<b>Mission Statement and Strategic Goals.</b> 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
<b>External Factors</b> . A review of the industry, economic, and stakeholders' trends provided information to make better planning decisions.	Introduction Section, External Factors Impacting the Budget
<b>Multi-Year Ratemaking Revenue Projections.</b> 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.
<b>Capital Master Plans and Asset Evaluations Studies</b> . The proposed budget incorporates recommendations from the various infrastructure plans/studies.	Capital Expenditures Section, Infrastructure and Operational Evaluation Plans
<b>Customer Satisfaction Survey</b> . 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
<b>Workforce Management</b> . 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
<b>Financial Policies</b> . Financial policies were reviewed to assure budget decisions were made consistent with good financial standards.	Financial Policies Section
<b>Employee Satisfaction Survey/Comments.</b> General Manager's forum was held to receive input from all employees. A formal survey was conducted in 2019. A survey is planned for late 2023.	Human Resource Section, Introduction Section

The table 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, 2024. The Boards meetings are open to the public. Agenda, meeting minutes and meeting video is available on our website - <u>https://www.pwd.org/trustee-meetings</u>.

	Public	Board	Staff
2023			
April 1 to Jun 1			Senior Management Teams review budget process and timeline, external factors impacting budget, major policy/allocation issues
June			Prepares first draft operating and capital budget
July	Public provides feedback at Board's Workshop session	Board reviews high level operational and financial goals	
August			Prepares second draft budget incorporate Board's directions
September		Board reviews recommended January 1, 2024 proposed Rate Adjustment.	Final proposed budget is prepared Updates the Long-term Financial Plan based on updated Capital Improvement Plan and Department Plans
October	All Customers receive notice of proposed rate adjustment		Proposed Budget presented to Board
November	Provides feedback on proposed Capital Plan at Workshop Provides feedback on proposed Water Rate Adjustment at Public Meeting/Hearing. Public can attend Committee meetings reviewing budget.	Board reviews Capital Plan at Workshop. Board seeks input on Water Rate Adjustment as special Public Hearing. The three Board Committees review Departmental Operating Budget with Department Managers Approves Budget and Rates.	Meets with Wastewater Municipalities to review proposed 2024 Assessment
2024			
January			Implements new Water Rates.
			Informs Wastewater Municipalities of 2024 Assessment

## Mission Statement

PWD's mission is to protect public health, safety, and the environment by providing customers with high-quality, reliable and affordable water services. In order to fulfill the mission, the following five strategic goals have been established. The strategic goals were developed through a series of meeting by employees. A draft was shared with the Board at a public meeting and was adopted by the Board. Subsequently, goals and related performance measurements are reviewed by the Senior Management Team at the beginning of the budget process. In 2024, the review prompted significant changes are incorporated below. The changes will be presented to the Board and the public for feedback.

## Goal 1 - Public Health and Safety

Protect public health and safety by providing services that meet or exceed federal, state and local health, and safety standards.

## **Goal 2 – Environmental Stewardship**

Ensure the sustainability of natural resources by protecting the environment within our shared watersheds and service area.

## Goal 3 - Reliable & Sustainable Service

Provide services in a manner that is reliable and sustainable, so customers can depend on them.

## **Goal 4 - High Value**

Provide high value services, which requires engaging and understanding customer needs and priorities; balancing competing goals with the cost of services with customers' ability to pay.

## **Goal 5 – High-Performance and Supportive Work Environment**

Maintain a safe work atmosphere that values diversity and inclusiveness, collaboration, engagement, and respect, while embracing continuous improvement and efficiency.

Strategic performance measures have been created to indicate PWD's performance over the long-term. The impact of variations in the performance measures are 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 following pages. In 2024, a review and update of the strategic goal's performance measures began but was not completed before publication of budget documents and therefore all the measures above do not have values.

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**

#### **Goal 1 - Protect Public Health and Safety**

Protect public health and safety by providing services that meet or exceed federal, state and local health, and safety standards.

#### **Summary**

One of the original reasons for the creation of a water system was to provide adequate water volumes and pressures to combat fires. Prior to the existence of the water system a devastating fire in 1866 destroyed 1,800 buildings including 1,200 residences that were home to more than 10,000 people in Portland. The fire destroyed the City Hall, the Customs House, the Post Office, all the city's banks, and many hotels, shops, and offices. 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 Portland Water District maintains infrastructure and operation it to improve the ISO fire protection rating within each service community.

The quality of drinking water and treated wastewater are predominantly governed by the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA). Ensuring compliance with these regulations help guarantee the safety of drinking water and the quality of treated wastewater. In addition, Portland Water District protects public health and safety by ensuring that there is an adequate supply of water to fight fires and providing reliable water for sanitary purposes (toilets, bathing, washing, etc.). Protecting public health and safety requires short- and long-term initiatives aimed at protecting, monitoring, treating, and suppling water.

Ensuring the quality of drinking water begins with protecting the source – Sebago Lake. The largely forested watershed provides a natural mechanism to ensure clean drinking water. Portland Water District protects the watershed through programs aimed at promoting forest conservation, regulating and inspecting development, monitoring the water quality of the lake and its tributaries, providing security around the water intakes to the treatment facility, and performing education/outreach.

The people of the region are fortunate to have an incredible source of drinking water. The water quality is so spectacular, it is one of about 50 (out of roughly 13,000) surface water supplies in the country that do not require filtration. Less water treatment is good for the environment and provides a big financial benefit for customers. Filtering Sebago Lake water would add millions in annual operations costs and require a new \$150+ million treatment facility.

Portland Water District endeavors to be in compliance with all drinking water regulatory standards. Three key groups of water quality measures are monitored:

- 1. The quality of the source water in Sebago Lake
- 2. Treatment effectiveness
- 3. Distribution water quality

One measure of the quality of Sebago Lake is 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 excellent for drinking water quality. Treatment effectiveness is measured by the ability to inactivate microorganisms through Ozone and Ultraviolet (UV) processes. Distribution water quality is monitored through coliform bacteria testing, a group of harmless indicator microorganisms, and the levels of chloramine residual. 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.

Wastewater treatment ensures that the effluent from each of the five wastewater treatment facilities does not harm the environment. A number of parameters, detailed in each facility's National Pollution Discharge Elimination System (NPDES) permit, ensure that microbiological, chemical and nutrient loading are appropriate for the receiving waters.

## <u>Strategic Goals</u> Goal 1 – Protect Public Health and Safety (continued)

#### **Current Year Budget Considerations:**

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

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.

A new federal law dealing with lead will require Portland Water District to increase its field sampling and monitoring program and address lead piping. The 2024 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. The budget includes \$2.8 million dollars to replace galvanized pipes and geolocate service lines as part of the comply with the revised law.

PERFORMANCE MEASURE	2019	2020	2021	2022	2023	Industry Median <sup>1</sup>	PWD Goal
Protect Public Health and Safety							
Percentage of watershed land conserved	12.55%	12.58%	15.87%	15.91%	16.06%	n/a	25%
Sebago lake trophic state index	27.5	28.5	26.9	27.0	n/a		<30
SDWA Drinking Water Quality Violations	0	0	0	0	0	n/a	0
Coliform bacteria testing compliance (%)	100%	100%	100%	100%	100%	n/a	100%
Coliform Occurrence (%)	0.00%	6.00%	2.30%	2.50%	8.00%	Nn/a	<5%

#### **Strategic Goal 2: Environmental Stewardship**

Ensure the sustainability of natural resources by protecting the environment within our shared watersheds and service area.

#### Summary

Portland Water District treats and recycles 23 million gallons of wastewater to the Casco Bay watershed on average each day. The quality of the treated wastewater must be sufficiently high to protect sensitive plant and animal populations and to ensure the receiving waters are suitable for various forms of recreation. Prior to the Clean Water Act (CWA) in 1972, and the subsequent construction of the East End Wastewater Treatment Facilities in Portland, people were unable to swim and enjoy Casco Bay. The environment was degraded and the smell of raw sewage was a regular occurrence. Today, people swim, fish and enjoy the resource, knowing that increasing stringent standards are protecting water quality.

The CWA establishes the structure for regulating discharges into the waters of the U.S. and gives the U.S. Environmental Protection Agency (EPA) authority to implement pollution control programs, such as the National Pollutant Discharge Elimination System Permit (NPDES) systems which establishes permit limits for individual wastewater facilities. The EPA works with the Maine Department of Environmental Protection (DEP) on regulation of the NPDES program and wastewater regulation. The DEP has more stringent monitoring requirements for biosolids, whole effluent toxicity and mercury than the requirements established by EPA.

#### **Current Year Budget Considerations:**

PWD will continue to allocate resources and develop watershed partnerships to prevent non-point pollution into Sebago Lake; for example, PWD will continue developing the Sebago Clean Water coalition to generate additional funds to protect watershed land. Plans to coordinate the execution of watershed projects, including conservation easement purchases, using an \$8 million grant received from U.S. Department of Agriculture through its Natural Resources Conservation Service Regional Conservation Partnership Program

Portland Water District endeavors to meet the standards required by each wastewater facility outlined in their NPDES permit. The standards include compliance with numerous parameters, tested daily, weekly, and monthly. In addition, the elimination of any discharges of untreated wastewater during dry weather (i.e. – no rain or snow melt) and the reduction of stormwater mixed with wastewater during wet weather events are additional requirements. This is challenging given that major parts of the wastewater systems have combined sewer systems; systems that mix sanitary sewage flows with stormwater runoff – combined sewers. Combined sewer systems are common in many older municipalities across the country.

The nature of the combined collection systems in much of the service area make compliance with all parameters challenging, especially during wet weather events. Non-compliance incidents occur during wet weather when the wastewater facilities cannot fully treat the volume of water from combined sewers, resulting in less treated wastewater being discharged. In 2023, the focus in each system is as follows:

<u>Cape Elizabeth</u> – Assisting the town in identifying the source and solution for the overflow related to the Ottawa Road pump station, including a completing a \$500,000 pump station upgrade in 2024.

Portland and Westbrook – Assisting the city in eliminating combined sewer overflows in the city's collector system.

PERFORMANCE MEASURE	2019	2020	2021	2022	2023	Industry Median <sup>1</sup>	PWD Goal
Environmental Stewardship							
East End WWTF NPDES permit compliance	7	13	11	18			
Westbrook/Gorham/Windham WWTF NPDES permit compliance	0	5	4	3			
Cape Elizabeth WWTF NPDES permit compliance	7	2	13	1			
Peak's Island (Portland) WWTF NPDES permit compliance	2	1	0	3			
No. of dry weather sanitary sewer overflows (SSOs)	6	7	14	7		n/a	0

#### Goal 3 -Reliable & Sustainable Service

Provide services in a manner that is reliable and sustainable, so customers can depend on them.

#### **Summary**

Portland Water District strives to provide reliable and sustainable service 24/7. Service standards encompass regulatory water quality standards, as well as reliability, financial, and other standards. Regulatory service standards are established by the Maine Public Utilities Commission (PUC), the Department of Health and Human Services – Drinking Water Program, and other agencies. These standards include those related to water quality, customer services, accounting practices, and billing. Wastewater service standards are established by the Maine Department of Environmental Protection (DEP). Portland Water District establishes additional Level of Service (LOS) standards for many activities to ensure customers receive high quality services reliably. These are set by Portland Water District by considering industry best practices and customer expectations. The number of leaks and breaks per 100 miles of pipe and the responsiveness of crews for repairs are examples of measures that Portland Water District tracks to ensure services are reliable and sustainable.

#### **Current Year Budget Considerations:**

In 2024, one of the most significant water system capital programs is replacing of older water mains (\$7 million). The investment reduces the number of main leaks to level that the number of leaks is below the national average.

Capital projects throughout each wastewater municipalities will continue renovating aging pump stations and treatment facilities to maintain or improve reliability. Two of the more significant projects are Secondary Clarifiers and Primary Gallery Upgrade & Dewatering System Upgrade projects at the East End Treatment Facility in Portland (\$22 million).

PERFORMANCE MEASURE	2019	2020	2021	2022	2023	Industry Median <sup>1</sup>	PWD Goal
Provide Reliable & Sustainable Services							
No. of leaks and breaks per 100 miles of pipe (annually)	13.7	14	13.6	16.8		21.7	
Water service disruptions <4h – unplanned disruptions (disruptions per 1,000 accounts)	NA	NA	NA	NA	NA	0.85	

#### **Strategic Goal 4: Achieve High Value**

Provide high value services, which requires engaging and understanding customer needs and priorities; balancing competing goals with the cost of services with customers' ability to pay.

#### Summary

To provide high value to customers, we must first engage customers to identify public priorities, build an understanding of the issues, and nurture trust and support for needed investments and improvements. Building trust with the public starts with consistent and frequent messages, services, and professionalism.

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. Portland Water 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.

#### **Current Year Budget Considerations:**

Portland Water District periodically conducts a formal customer satisfaction survey. The most recent customer satisfaction survey shows customer satisfaction to be exceptionally high with 96% of customers indicating they are satisfied and pleased with the level, quality and reliability of the water and wastewater services provided.

Water rates are proposed to increase by 6.4% effective January 1, 2024. Operating expenses increased by 3.8%, close to inflation rate. However, debt service and related capital costs increase almost 17% due the several capital projects including the construction of a water tank in Windham and replacing aging water mains. The proposed increase is consistent with the Board of Trustees' direction to have incremental water rate increases annually. Rates for a typical residential customer have increased at the rate of inflation since 2010. In 2024, Wastewater assessments increased on average by 6.3% - higher than rate of inflation. Higher chemicals, electricity costs are significant costs and are rising at a rate higher than inflation. Additionally, capital related expenses are more than 8% higher.

PERFORMANCE MEASURE	2019	2020	2021	2022	2023	Industry Median <sup>1</sup>	PWD Goal
Achieve High Value							
Customer Accounts per Employee	287	292	289	290	291	476	
Water produced (MGD per water employee)	0.18	0.20	0.19	0.19	0.19	0.21	
Wastewater (MGD treated per wastewater employee)	0.24	0.24	0.22	0.22	0.22	0.19	
Operations and maintenance cost – water (\$/account)	\$ 286	\$ 312	\$ 312	\$ 329	\$ 361	\$444	
Operations and maintenance cost – wastewater (\$/account)	\$ 369	\$ 369	\$ 403	\$ 438	\$ 482	\$378	
Bond Rating	Aa 3/AA	Aa3/AA	Aa 3/AA	Aa 3/AA	Aa 3/AA	High grade (AA or above)	Prime (AAA)
Percent of customers satisfied with service (customer satisfaction survey)	2017- 75%				96%		
% of Median household Income (MHI)				0.33%	0.38%	<2.0 %	
Debt Ratio (%)	23%	23%	23%	23%	24%	41%	

#### Goal 5 -High-Performance and Supportive Work Environment

Maintain a safe work atmosphere that values diversity and inclusiveness, collaboration, engagement, and respect, while embracing continuous improvement and efficiency.

Maintain a safe work atmosphere that values collaboration, engagement, respect, and diversity, while embracing continuous improvement and efficiency.

#### **Summary**

Since 1995, a periodic survey of all employees has been 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 Portland Water District's injury rate with other organizations with similar risk exposure. Portland Water District seeks workers' compensation injury rate that is no higher than industry average (i.e. – a rating of 1 or less). Too technical

This measure for worker's compensation is achieved through a focus on safety. Thorough accident investigations are routinely completed, and safety recommendations are made and implemented. Medical outcomes are improved by providing immediate medical services, and modifications to the work environment to ensure future safety.

Supporting employee development is an important goal. The goal is for each employee to receive an average of 80 training hours, including safety training per year.

#### **Current Year Budget Considerations:**

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. Most importantly, we will continue to work safely and do all that we can to provide a safe work environment for all employees.

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.

PERFORMANCE MEASURE Maintain a High-Performance Work	2019	2020	2021	2022	2023	Industry Median <sup>1</sup>	PWD Goal
Environment							
Employee turnover (%)	8%	9%	11%	19%	10%	9.30%	
Average employee tenure (years)					10.35	11	
Internal promotion rate (%)	8%	9%	11%	19%	10%	42%	
Training hours per employee (FTE)	101	73	75	89		15.6	80
Workers' compensation modification factor	0.5	0.87	1.13	0.86	0.86	1	<1

## **Board Established Annual Budget Guidelines**

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

Guideline	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.

The Guideline is established to limit growth of the budget to a reasonable growth level not exceeding the inflation rate. Inflation since last year's budget is 4.6%. The budget contains an 8.3% increase. <u>Over</u> the long-term, the requested budget is only \$2.6 million above inflation not adjusted for federal/state/local mandates.



<u>Guideline</u>	Capital expenditures will be consistent with the levels recommended in the Wa				
	and Wastewater system plans.				

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. <u>The</u> <u>proposed capital expenditures meet the guidelines – see Infrastructure and Operational Evaluation</u> <u>Plans in the Capital Expenditures section for details.</u>

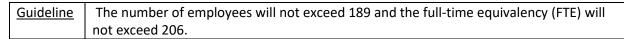
## **Board Established Annual Budget Guidelines (continued)**

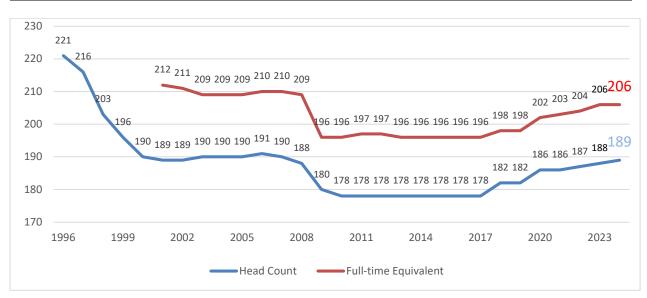
Guideline	Water Revenue Requirement and Wastewater Assessments increases will not
	exceed the rate of inflation excluding the impact of mutually agreed upon changes
	in services, capital investments, surplus fund utilization or Board's request to
	increase surplus balance.

At the July 2023 Workshop, staff presented updated targets for 2024 that were higher than expected due to expedited capital projects and rise in prices for a couple of significant expenses. <u>The proposed</u> **2024 is better than those revised targets**.

	2024 Revised Target		2024 Proposed Budget	
Water	\$ 31,130,343	8.9%	\$30,779,641	6.0%
Cape Elizabeth	\$ 2,409,729	4.8%	\$2,390,220	3.9%
Cumberland	\$ 1,290,252	8.9%	\$1,279,680	8.0%
Gorham	\$ 1,687,190	7.7%	\$1,675,344	6.9%
Portland	\$16,634,472	5.3%	\$16,543,176	4.7%
Westbrook	\$ 4,078,282	9.5%	\$3,995,964	7.3%
Windham- South	\$ 490,873	5.1%	\$488,484	4.6%
Windham- North	\$ 320,000	558.3%	\$320,004	558.3%

Salary and benefits are one of PWD's most significant costs. To control costs, a targeted headcount is established. The proposed budget contains 189 employees and 206 full-time equivalent employees – meeting the Goal.





#### **External Factors Impacting the Budget**

#### **Economy**

Greater Portland's unemployment rate has declined to pre-Covid levels of 2.4%. During most of 2023, the real estate market has continued to be strong though below the levels of prior years when it was ranked in the top 10 markets nationally.

The national economy issues have an impact PWD's costs. Approximately 10% of PWD's expenses are related to chemical, metal and fuel markets. The 2024 budget reflects the commodity prices available in mid-2023. Rising interest rates have an impact on borrowing costs and investments returns. In 2024, the total planned bond issuances are more than \$42,400,000, so a 1% variance in interest rates would increase annual costs by \$424,000. Offsetting those costs are higher earnings on operating reserve balances, which are projected to be \$811,000 higher; assuming an average return of 3%.

#### **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. Two relatively new regulatory issues relate to drinking water's Lead and Copper Rule Revision and wastewater's PFAS concern. The 2024 Operating and Capital Budget includes over \$1.8 million 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 million increase is costs since 2022. During 2023, a biosolids master plan process began and with a goal of developing a more cost-effective biosolid disposal process, including addressing the PFAS concerns.

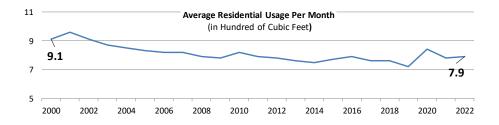
#### Capital Project Funding from Federal Government

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. The Town of Windham and Cumberland County intends to allocate \$3.2 million of ARPA funds, along with \$2 million of direct federal funds, to the new North Windham sewer systems. The amounts receive decrease the amount needed to be bonded or withdrawn from capital balances.

The Bipartisan Infrastructure Law (BILS) is providing over \$3.7 million to help fund the new North Windham sewer system, new Water Tank, and Main replacement & service line geospatial location project to comply with the new federal Water Lead Copper rule.

#### 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 13% 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:

<u>Salaries and Wages</u> (\$14.81 million or 24.6% of total budget). The Union wage rates in the 2024 Budget are set by the contract that is effect through the end of October 2024. In addition, Non-Union anticipated increases for 2024 are consistent with budget projections.

In addition, the operating budget assumes 18,718 hours of overtime and double-time pay. The amount of overtime and double-time is directly related to amount of emergency repair work that is needed. For every additional 1,000 hours of overtime/double-time pay, costs increase by approximately \$48,610.

<u>Purchased Power</u> (\$2.94 million or 4.9% of total budget). Electricity costs consist of delivery charges purchased from Central Maine Power (\$1,004,110) and energy costs purchased from Constellation Energy (\$1,384,312). Typically, CMP implements a rate adjustment effective July 1<sup>st</sup>. The amount of the 2024 increase is unknown. The 2024 budget assumes a 3% increase. For every variance of 1%, the budget would be impacted by approximately \$10,000. Energy contracts lock in the prices for the most of the year, except for 67% of the summer-time usage at Water Treatment facility, which will pay the actual daily market rate.

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 \$100,000.

<u>Chemicals</u> (\$2.72 million or 4.5% 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.

<u>Biosolids Disposal</u> (\$3.20 million or 5.3% 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 2024 budget assumes 21%. In the past 5 years, the annual average has varied from 18.6% to 20.8%. A 1% difference is approximately \$158,100.

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 \$139/wet ton. Given the projected volume of biosolids, each dollar of change in the rate is \$22,748.

<u>Weather</u> 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**

<u>Personnel.</u> While the authorized headcount was increased by one (1), the number of hours budgeted decreased by 12,606 (2.9%) as the organization recognized the dollar impact of employee turnover that creates "open positions" during the year.

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

<u>Employee Benefits</u> The costliest employee benefits are pension benefits and health insurance. Pension expenses rose \$142k (6.7%) with increase to both the defined benefit and deferred compensation plans. Health Insurance had a small decrease (\$83.7k or 2.9%) as premiums were flat and changes in usage assumptions drove the reduction.

<u>Wastewater Sewer Lines Inspection</u> In 2008, a commitment was made to inspect all sewer lines at least once every 10 years. In 2024, \$61,250 was allocated to meet that commitment.

<u>Wastewater Combined Sewer Overflow (CSO) Monitoring</u> To assist the municipalities in meeting their federal CSO requirements, PWD remotely monitors the flow. In 2024, \$154,000 was allocated to meet their request.

<u>Water System Flushing</u> 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 2024 budget continues this effort by allocating \$104,825.

<u>Renewal and Replacement</u> - The annual commitment of current revenue committed to capital projects was \$4.76 million which is an increase of \$0.81 million over last year's budget. The contribution covers the expected capital expenditure withdrawal except for \$643,300. The funds have adequate surplus balances to pay the \$643,300.

<u>Biosolids</u> – The budget assumes a disposal rate of \$139/wet ton, which is a small decrease from the previous year's assumption of \$142/wet ton. The average rate takes into account weekend pickup and other surcharges under the current contract.

# Major Policy and Resource Allocation Decisions (continued)

# **Capital Projects**

The 2007 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 2024, the amount dedicated to replace aging water mains will be \$9.4 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 2024, it is expected to spend \$10 million on the project.
- Portland's East End Wastewater Treatment Plant Significant upgrades are planned for the dewatering/odor control system (\$11.0 million), sludge piping replacement (\$3.0 million) and for influent screens/headworks (\$1.25 million).
- Cumberland The plan calls for the replacement of 2,600 feet of force main on Tuttle Road (\$900k) and the conversion of the Powell Road Wastewater Pump Station to a submersible pump station (\$800k).

## **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 6.4% increase is planned to be implemented with an effective date of January 1, 2024.

The January 2024, 6.4% increase includes allocating 1.0% to the Capital Reserve fund. The Maine Public Utilities Commission adopted a rule in 2013 allowing PWD 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 reserve will be used to pay the debt service on bonds issued since 2023 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 2024, \$1 million will be withdrawn from the fund reducing the need for the annual budget allocation.

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# 2024 Operating Budget Summary

The proposed budget includes \$60.68 million in revenues and \$60.12 million in expenses.

#### **Revenues**

The two major revenue sources are water sales (\$30.78 million or 50.7% of total revenue) and wastewater assessment revenues (\$27.01 million or 44.5% of total revenue). Wastewater revenues have increased from \$17.12 million (57.7%) since 2015 principally due to addressing capital needs requested by municipalities or aging infrastructure.

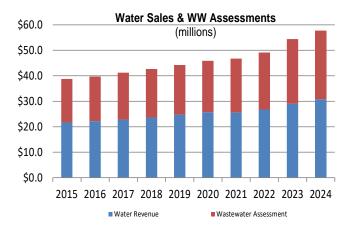
Water revenues are generated from potable water and sprinkler charges to individual customers, and public fire protection charges to municipalities. The 2024 Budget assumes an increase of 6.4% over current rates effective April 1, 2023.

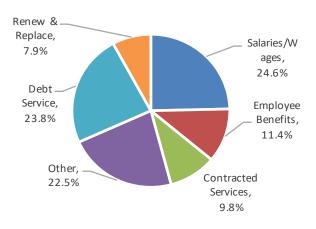
Wastewater assessments are the amounts billed individual municipalities to provide collection, sewer treatment, interception, utility billing

#### **Expenses**

Operating Expenses increased to \$60.12 million, an increase of 8.3%.

Personnel Costs, (Salaries/Wages and Employee Benefits) which are 36.0 % of the total budget, increased only 2.6%. Debt Service (23.8% of expense) increased 10.5% due to new debt issues. Contracted Services (\$5.88 million) increased 10.8% (\$572,229). Renewal and Replace contributions increased \$809,500 (20.5%) while Other Expense increased \$1.2 million (10.9%). services and, by request, collection and billing services. Assessments in 2024 increased 6.3% overall (\$1.60 million).





#### 2024 Expenditures

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# 2024 Capital Budget Summary

The proposed Capital Budget is \$46.62 million with projects for the water and wastewater funds of \$15.79 and \$32.83 million, respectively.

## Water

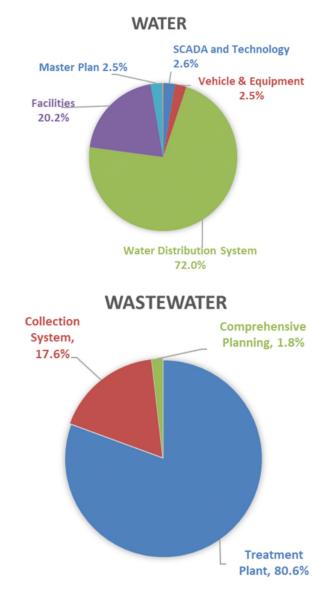
Of the \$15.78 million in water capital projects, the largest component (72.0%) involves the renewal of water distribution assets such as mains, services, meters and hydrants. The other categories include water facilities (20.2%), vehicles and equipment (2.5%), SCADA and technology (2.6%), master plan (2.5%) and water supply (<1%).

The projects will be funded by issuing \$9.6 million in bonds, utilizing \$3.2 million in drawdowns from renewal and replacement funds, \$1.0 million from Capital Reserve, \$1.55 million from Grants and \$400k from the Master Plan Reserve.

## Wastewater

The wastewater capital plan includes a wide variety of projects. Major projects include wastewater treatment in Portland (\$15.78 million), North Windham (\$10.0 million), Westbrook (\$450k) and Cape Elizabeth (\$225k). Additionally, in Cumberland \$1.73 million will be spend on the collector system impacting wastewater pump station and a major section of force main.

The projects will be funded by issuing \$19.75 million in bonds, a \$11.00 million bond anticipation note and \$2.08 from renewal and replacement funds.



# **2024 Combined Water and Wastewater Operating Funds**

Total revenues are \$60.68 million, \$5,843,164 or 8.2% higher than last year's budget. The Budget proposes a 6.4% water rate increase, along with a 5.7% increase for Public Fire Protection, effective January 2024. Wastewater Assessment increases for the full year are budgeted in Cape Elizabeth (3.9%), Cumberland (8.0%), Gorham (6.9%), Portland (4.7%), Westbrook (7.3%). Windham's assessment, due to debt service related to the treatment plant project, will increase (56.7%).

Operating Expenses are \$60.12 million, an increase of 8.3%. The following pages provide additional detail.

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Beginning Fund Balance	\$12,329,462	\$11,730,509	\$12,402,544	\$10,873,852		
Water Sales	27,780,678	13,305,112	29,043,602	30,779,641	\$1,736,039	6.0%
Assessment Income	22,346,196	12,701,742	25,403,484	27,006,984	1,603,500	6.3%
Contracted Billing Income	220,236	121,134	242,268	250,860	8,592	3.5%
Interest Income	346,246	442,428	354,946	1,171,042	816,096	229.9%
Other Income	1,130,781	503,542	1,021,252	1,467,700	446,448	43.7%
Total Revenue	51,824,137	27,073,958	56,065,552	60,676,227	4,610,675	8.2%
Salaries & Wages	12,981,101	6,771,819	14,521,475	14,807,506	286,031	2.0%
Employee Benefits	5,415,530	3,103,504	6,612,066	6,865,956	253,890	3.8%
Biosolids Disposal	2,411,502	1,581,260	3,444,636	3,201,668	-242,968	-7.1%
Chemicals	1,906,577	1,138,759	1,974,650	2,726,202	751,552	38.1%
Contracted Services	5,188,099	2,672,019	5,308,612	5,880,841	572,229	10.8%
Heat/Fuel Oil	429,977	262,349	502,143	403,490	-98,653	-19.6%
Insurance	274,557	154,796	291,901	324,792	32,891	11.3%
Materials & Supplies	2,274,136	1,030,301	1,997,802	2,000,480	2,678	0.1%
Other Expense	711,475	355,747	723,479	672,939	-50,540	-7.0%
Purchased Pow er	2,000,182	1,031,758	2,101,222	2,941,373	840,151	40.0%
Regulatory/Taxes	338,472	166,067	329,406	344,496	15,090	4.6%
Tele/Other Utilties	519,013	237,861	453,184	516,099	62,915	13.9%
Transportation	1,284,254	623,219	1,332,618	1,275,299	-57,319	-4.3%
(less) Trans Offset	-916,005	-441,439	-966,072	-896,935	69,137	-7.2%
Department Expense	34,818,870	18,688,020	38,627,122	41,064,206	2,437,084	6.3%
Debt Service & Lease Expense	12,067,225	6,298,782	12,943,898	14,299,243	1,355,345	10.5%
Renew al & Replacement - Direct	3,446,500	1,384,105	2,749,250	3,516,250	767,000	27.9%
Renew al & Replace - Indirect	1,052,064	537,500	1,075,000	1,145,000	70,000	6.5%
R&R - Contracted	30,000	62,500	125,000	97,500	-27,500	- <u>22.0</u> %
Operating Expense	51,414,659	26,970,907	55,520,270	60,122,199	4,601,929	8.3%
Current Surplus (Deficit)	409,478	103,051	545,282	554,028		
Transfer to R&R	-250,649	0	0	0		
Transfer to Capital Reserve	-333,579	-271,663	-543,325	-543,325		
ABC Project Transfer	-115,000	0	0	0		
Return of WW Accml Surplus	-309,203	0	0	0		
Ending Fund Balance	11,730,509	11,561,898	12,404,501	10,884,555		

# **2024 Combined Operating, Capital and Grant Funds**

The total combined revenue and funding for 2024 is \$109.3 million, total combined expenditures are \$108.8 million. The combined budgeted surplus for 2024 is \$537,219.

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.

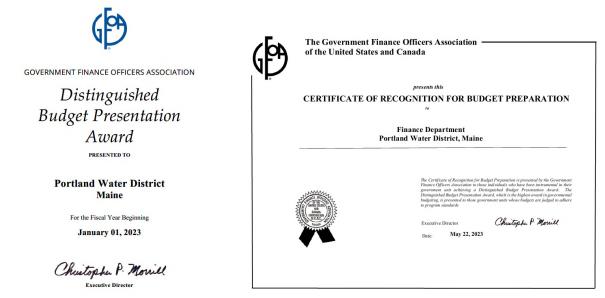
	Operating	Capital	Land Fund	Total
Water Sales	\$30,779,641	-	-	\$30,779,641
Assessment Income	27,006,984	-	-	27,006,984
Water Bond	-	9,635,000	-	9,635,000
Water R&R	-	3,205,000	-	3,205,000
Wastew ater Bond	-	19,750,000	-	19,750,000
Wastew ater R&R	-	2,075,000	-	2,075,000
Water Capital Reserve	-	1,000,000	-	1,000,000
Water Master Plan Reserve	-	400,000	-	400,000
Bond Anticipation		11,000,000		11,000,000
Grant		1,550,000		1,550,000
Contracted Billing Income	250,860	-	-	250,860
Interest Income	1,171,042	-	16,000	1,187,042
Other Income	1,467,700		-	1,467,700
Total Revenue	60,676,227	48,615,000	16,000	109,307,227
Salaries & Wages	14,807,506	473,808	-	15,281,314
Employee Benefits	6,865,956	190,243	-	7,056,199
Biosolids Disposal	3,201,668	-	-	3,201,668
Chemicals	2,726,202	-	-	2,726,202
Contracted Services	5,880,841	47,148,338	-	53,029,179
Heat/Fuel Oil	403,490	-	-	403,490
Insurance	324,792	-	-	324,792
Materials & Supplies	2,000,480	712,912	-	2,713,392
Other Expense	672,939	-	-	672,939
Purchased Pow er	2,941,373	-	-	2,941,373
Regulatory/Taxes	344,496	-	-	344,496
Tele/Other Utilities	516,099	-	-	516,099
Transportation	1,275,299	89,699	-	1,364,998
Trans Offset	(896,935)	-	-	(896,935)
Operating Expense	41,064,206	48,615,000	-	89,679,206
Debt Service	14,299,243	-	32,809	14,332,052
Renew al & Replacement - Direct	3,516,250	-	-	3,516,250
Renew al & Replace - Indirect	1,145,000	-	-	1,145,000
Renew al & Replace - Contracted	97,500	-	-	97,500
Total Expense	60,122,199	48,615,000	32,809	108,770,008
			,000	,
Surplus (Deficit)	554,028	-	(16,809)	537,219

# **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, 2023. 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.

For the 2023 document, 'Special Long Range Financial Plans Recognition' was given for the first time. The recognition is given for entity rated outstanding in its presentation of their multi-year plans.



# **Introduction**

PWD 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.

## <u>Relationship between Portland Water District Funds/Municipalities' Sewer Funds</u> <u>and the Ratepayer</u>

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

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

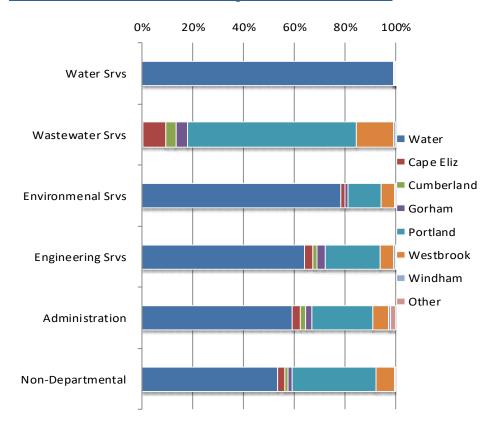
Portlan	d Water District			Municipalities' Sewer Funds			
Water Fund (\$30.8 Million)	PWD Wastewater Funds (\$27.0 Million)			Municipalities' Sewer Funds (\$12.3 Million)			
				ervice Provided l	· · · · · · · · · · · · · · · · · · ·		
		Municipality	Treatment/ Interceptors	Collectors	Storm Water		
PWD provides all		Cape Elizabeth	PWD	Municipality	Municipality		
water services.		Cumberland	PWD	PWD	Municipality		
		Falmouth	Municipality	Municipality	Municipality		
		Gorham	PWD	PWD	Municipality		
		Portland	PWD	Municipality*	Municipality		
		Westbrook	PWD	Municipality	Municipality		
		Windham	PWD	PWD	Municipality		
PWD determines rates.		based on PWD a contract, incl	ssessed costs a udes the fees o	ty determines s and municipal c on monthly wate to each munici	osts. PWD, by er bills and		
Customers pay water charges of \$30.8 million.	Customers pay wastewater charges of \$38.0 million = PWD Wastewater Funds (\$27.0M) + Municipalities' Sewer Funds (\$12.3)						

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## **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, 99.0% of the costs of the Water Services department are assigned to the Water Fund and 98.8% of the Wastewater Services department costs go to the Wastewater funds. The expenditures of the remaining departments assign between 53.3% and 78.4% 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	\$11,075,470	99.0%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%	0.2%
Wastewater Srvs	14,804,746	0.2%	9.2%	4.1%	4.3%	66.7%	14.4%	1.1%	0.0%
Environmenal Srvs	2,560,113	78.4%	1.5%	0.0%	1.2%	13.3%	5.3%	0.3%	0.0%
Engineering Srvs	5,379,840	63.8%	3.6%	1.6%	3.0%	21.9%	5.0%	0.9%	0.2%
Administration	7,368,187	59.0%	3.5%	1.8%	2.5%	24.2%	6.1%	0.8%	2.1%
Non-Departmental	772,785	53.3%	3.0%	1.0%	1.7%	33.3%	7.2%	0.4%	0.0%
Department Exp	41,961,141								
(less) Trans Exp	(896.935)								
Fund Expense	41,064,206								



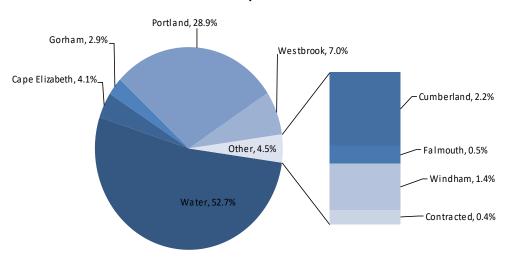
## Allocation of Costs Between Departments and Funds

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

# **2024 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 /Cont
Beg Balance	\$10,873,852	\$6,622,149	\$230,374	\$11,327	\$101,941	\$3,583,126	\$61,608	\$196,743	\$66,584
Water Revenue	30,779,641	30,779,641	-	-	-	-	-	-	-
WW Assess	27,006,984	-	2,390,220	1,279,680	1,675,344	16,543,176	3,995,964	808,488	3 14 , 112
Contract Billing	250,860	-	-	-	-	-	-	-	250,860
Interest Income	1,171,042	665,921	40,361	21,976	35,415	247,603	136,416	15,776	7,574
Other Income	1,467,700	558,559	42,445	14,930	24,564	717,053	103,813	6,336	
	60,676,227	32,004,121	2,473,026	1,316,586	1,735,323	17,507,832	4,236,193	830,600	572,546
Depart Expense	41,064,206	20,595,077	1,853,641	826,926	1,011,476	13,313,242	3,002,478	279,643	181,723
Debt Service	14,299,243	8,263,627	428,622	333,941	596,520	2,758,617	1,070,089	507,239	340,587
Renew & Repl	4,758,750	2,602,092	190,763	155,719	127,327	1,435,973	163,626	43,714	39,537
	60,122,199	31,460,796	2,473,026	1,316,586	1,735,323	17,507,832	4,236,193	830,596	561,847
Surplus (Deficit)	554,028	543,325	-	-	-	-	-	4	10,699
Transfer-Cap Resrv	(543,325)	(543,325)	-	-	-	-	-	-	-
Ending Surplus	\$10,884,555	\$6,622,149	\$230,374	\$11,327	\$101,941	\$3,583,126	\$61,608	\$196,747	\$77,283

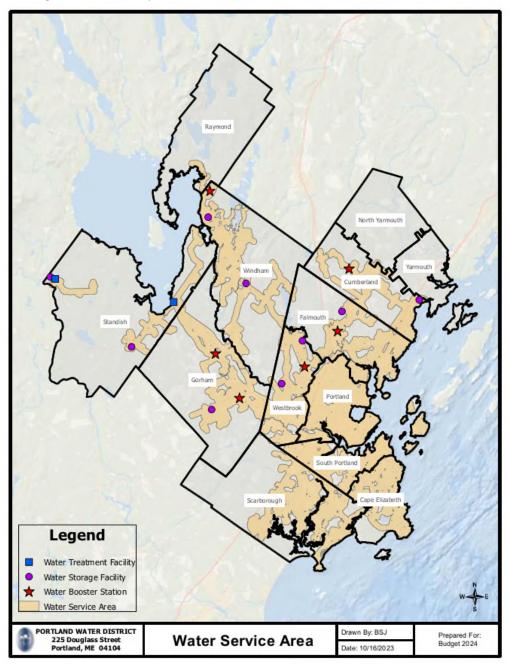


#### Revenues by Fund 2024

## **Fund: Water**

## Background

The Portland Water District's charter authorizes PWD 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.



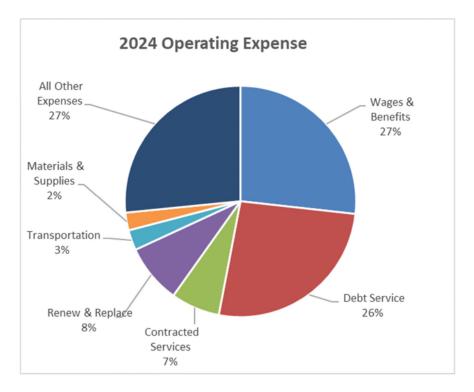
## Fund: Water

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 PWD was fortunate to receive a waiver from the filtration requirement that is normal for most surface water supplies. In order to maintain this waiver, PWD must have an effective source protection program and meet stringent requirements for disinfecting the water.

## **2024 Financial Summary**

The proposed Operating expense and Capital budgets are \$31,460,796 and \$13,360,000, respectively.

Operating Expense are \$2,304,576 or 7.9%, higher than the previous year. Departmental Expense are up 3.8% (\$756,067) and Debt Service & Lease Expense increased \$861,352 (11.6%) due to newly issued debt. Renewal & Replacement increased \$687,157. The 2024 Capital budget includes \$7.0 million for distribution main renewals, \$2.4 million for replacement of lead services and galvanized mains, \$0.85 million for water pump upgrades and \$0.66 million for replacing the roof at the Sebago Lake Water Treatment Facility.



# 2024 Operating Expense Highlights

**Salaries/Wages** – Salaries and wages have decreased 1.2%, or \$70,262, to an amount of \$5,838,503. Regular wages increased an average of 5.0%, hours charged to the Water Fund were down 3.6%.

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 1.4% (\$34,463).

**Chemicals** – Costs are budgeted to increase \$281,440 (39.2%). Chemical usage is projected to be relatively flat. The increase is primarily attributable to the rise in the per unit cost of all chemicals. The actual per unit costs of all chemicals for 2023 was much higher than what had been anticipated in the 2023 Budget.

**Contracted Services** – The cost for services provided by third party vendors increased \$113,964 (5.6%). The budget includes a new expenditure of \$60,000 to support Sebago Clean Waters and for additional maintenance efforts at the Water Treatment Facility in Standish.

**Purchased Power** – Overall this category is up \$186,943 (44.4%). Energy costs increased \$29.2k as savings from long term contracts for large facilities somewhat offset increased medium and small accounts. Transmission and Delivery was up \$50.6k (29.6%). In addition, this year's budget includes \$107k in expense related to renewable energy. This is offset by \$199k in renewal energy credits for a net gain in this fund of \$92k. In prior years the net gain was listed in the revenue section, last year the net gain was \$68k.

**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 \$294,998 or 5.2%.

**Debt Service/Lease Expense** – This is the annual principal and interest payments on bonds issued to finance capital projects. This expense will increase 11.6% (\$861,352) 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 \$65.6 million at the end of 2023 to \$68.2 million at the end of 2024.

**Renewal & Replacement** – These are dollars put aside to fund capital projects. The total for this item is \$2,602,092 in the 2024 budget, an increase of \$687,157 or 35.9%.

Budget by Fund - Water

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Water Sales	27,780,678	13,305,112	29,043,602	30,779,641	1,736,039	6.0%
Interest Income	219,124	260,780	203,824	665,921	462,097	226.7%
Other Income	397,133	230,741	452,119	558,559	106,440	<u>23.5</u> %
Total Revenue	28,396,935	13,796,633	29,699,545	32,004,121	2,304,576	7.8%
Salaries & Wages	4,891,212	2,667,380	5,908,765	5,838,503	(70,262)	-1.2%
Employee Benefits	1,949,525	1,159,175	2,544,171	2,578,634	34,463	1.4%
Chemicals	651,446	384,802	718,471	999,911	281,440	39.2%
Contracted Services	1,874,448	896,405	2,036,284	2,150,248	113,964	5.6%
Facilities	109,244	54,766	105,381	121,167	15,786	15.0%
Heat/Fuel Oil	133,618	88,180	188,724	144,012	(44,712)	-23.7%
Insurance	43,506	20,088	37,012	42,593	5,581	15.1%
Materials & Supplies	759,963	413,778	773,569	775,035	1,466	0.2%
Other Expense	137,550	73,669	149,266	82,701	(66,565)	-44.6%
Purchased Power	402,156	188,437	421,433	608,376	186,943	44.4%
Regulatory/Taxes	286,230	160,142	280,276	288,566	8,290	3.0%
Tele/Other Utilties	100,348	45,317	96,220	103,584	7,364	7.7%
Transportation	852,870	409,095	903,528	890,839	(12,689)	-1.4%
SS - Administration	4,079,684	2,080,279	4,300,768	4,383,619	82,851	1.9%
SS - Engineering Services	1,313,923	640,696	1,068,302	1,247,074	178,772	16.7%
SS - Environmental Services	165,430	118,208	193,695	195,479	1,784	0.9%
SS - Water Services	183,588	116,896	113,145	144,736	31,591	<u>27.9</u> %
Operating Expense	17,934,741	9,517,313	19,839,010	20,595,077	756,067	3.8%
Debt Service & Lease Expense	6,907,927	3,635,954	7,402,275	8,263,627	861,352	11.6%
Renewal & Replacement - Direct	2,000,000	625,000	1,250,000	1,905,000	655,000	52.4%
Renewal & Replace - Indirect	655,514	332,467	664,935	697,092	32,157	<u>4.8</u> %
Total Expense	27,498,182	14,110,734	29,156,220	31,460,796	2,304,576	7.9%
Current Year Surplus (Deficit)	898,753	(314,101)	543,325	543,325		
Transfer to Capital Reserve	(333,579)	(271,663)	(543,325)	(543,325)		
Prior Year Surplus	6,824,529	7,289,054	7,816,988	6,622,149		
Accumulated Surplus	7,289,054	6,703,291	7,816,988	6,622,149		

## **Operation Summary**

The current treatment processes at the Sebago Lake Water Treatment Facility (SLWTF) include ozone, ultraviolet 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, PWD installed a UV treatment system in 2014. The construction project also included the replacement of the 20year-old ozone production system.

PWD maintains approximately 1,020 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 2024, PWD plans to spend \$9.4 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, PWD 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.



PWD reported basic distribution system data for the first few years. In 2016, PWD 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. PWD is not eligible to join the Treatment Plant Optimization Program because PWD has a waiver from filtration.

In future years, PWD 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.

			Demonstrand	Constal	
	Bond	Grant	Renewal and Replacement		Grand Total
Projects:					
110/3058/Miscellaneous Control Project Upgrades			\$50,000		\$50,000
122/3032/Water Facilities R&R			\$250,000		\$250,000
122/3211/Windham Pump Upgrades	\$850,000				\$850,000
122/3245/Throttling Valve Rehabilitation			\$350,000		\$350,000
122/3287/SLWTF - Roof Replacement Phase 1	\$660,000				\$660,000
18/3007/SLWTF Intake Screening Phase 1	\$250,000				\$250,000
203/3102/Water Storage Facility Maintenance & Upgrade			\$50,000		\$50,000
408/3092/Water System Redundancy (looping), Upsizing			\$50,000		\$50,000
43/3121/WMR- Various Main Replacements	\$6,000,000			\$1,000,000	\$7,000,000
43/3296/WMR- Lead Copper Galv. Replacement	\$1,100,000	\$1,300,000			\$2,400,000
46/3097/Water System Security Improvements			\$25,000		\$25,000
53/3087/Water Valve Replacement			\$200,000		\$200,000
56/3077/Water Main Replacement - Seasonal Mains			\$25,000		\$25,000
61/3082/Water Services - Renew Domestic and Fire			\$600,000		\$600,000
61/3282/LCRR Compliance - Phase 1 Inventory (GPS services)	\$150,000	\$250,000			\$400,000
65/3072/Water Hydrant Replacement			\$200,000		\$200,000
Grand Total	\$9,010,000	\$1,550,000	\$1,800,000	\$1,000,000	\$13,360,000

#### Renewal and Replacement/Capital Reserve Funds:

Reserve Balance, Beginning of Year	\$6,588,621	\$987,506
Annual Contribution	\$1,905,000	\$3,068,684
Debt Service Payments		-\$2,388,454
Projects	-\$1,800,000	-\$1,000,000
Reserve Balance, End of Year	\$6,693,621	\$667,736

## **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 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$94 million of capital projects. 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 \$39,402,500 in 2028, a 28% increase over 2024 Budget, which results in an average annual increase of 6.4%. The most significant cost change relates to debt service issued to finance capital projects. Operating Ratios and Reserves are better than target and Capital Renewal & Replacement fund (R&R) balance are above the target balance.



#### **Reserve Fund Balances**

Percent	of Budget	Dedicated t	to Debt Sei	vice – Targ	et: Not to I	Exceed 35%
<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
26%	25%	26%	27%	26%	28%	28%

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

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
141%	133%	138%	143%	151%	151%	152%

# **Projections for Rate-Making Purposes (continued)** Water Fund

## **Operating Fund:**

07 700 670						
27,780,678	29,043,602	30,779,641	32,947,948	34,816,264	37,506,758	39,402,500
219,124	203,824	665,921	665,921	665,921	665,921	665,921
397,133	452,119	558,559	558,559	558,559	558,559	558,559
28,396,935	29,699,545	32,004,121	34,172,428	36,040,744	38,731,238	40,626,980
4,891,212	5,908,765	5,838,503	6,130,428	6,344,993	6,567,068	6,796,915
1,949,525	2,544,171	2,578,634	2,733,352	2,897,353	3,071,194	3,255,466
651,446	718,471	999,911	1,039,907	1,071,104	1,103,237	1,136,334
1,874,448	2,036,284	2,150,248	2,236,258	2,303,346	2,372,446	2,443,619
109,244	105,381	121,167	126,014	129,794	133,688	137,699
133,618	188,724	144,012	149,772	154,265	158,893	163,660
43,506	37,012	42,593	44,297	45,626	46,995	48,405
759,963	773,569	775,035	806,036	830,217	855,124	880,778
137,550	149,266	82,701	86,009	88,589	91,247	93,984
402,156	421,433	608,376	638,795	664,347	684,277	704,805
286,230	280,276	288,566	300,109	309,112	318,385	327,937
100,348	96,220	103,584	107,727	110,959	114,288	117,717
852,870	903,528	890,839	926,473	954,267	982,895	1,012,382
4,079,684	4,300,768	4,383,619	4,602,800	4,786,912	4,978,388	5,177,524
1,313,923	1,068,302	1,247,074	1,308,804	1,360,829	1,414,922	1,471,165
165,430	193,695	195,479	205,253	213,463	222,002	230,882
183,588	113,145	144,736	151,973	158,052	164,374	170,949
17,934,741	19,839,010	20,595,077	21,594,007	22,423,228	23,279,423	24,170,221
6,907,927	7,402,275	8,263,627	8,774,614	9,023,746	10,228,076	10,838,036
2,000,000	1,250,000	1,905,000	1,900,000	2,250,000	2,400,000	2,400,000
655,514	664,935	697,092	661,780	661,780	661,780	661,780
9,563,441	9,317,210	10,865,719	11,336,394	11,935,526	13,289,856	13,899,816
27,498,182	29,156,220	31,460,796	32,930,401	34,358,754	36,569,279	38,070,037
898,753	543,325	543,325	1,242,027	1,681,990	2,161,959	2,556,943
	-					-2,556,943
-	-	-				6,622,149
						6,622,149
.,202,024						9,517,509
						-2,895,360
	397,133 28,396,935 4,891,212 1,949,525 651,446 1,874,448 109,244 133,618 43,506 759,963 137,550 402,156 286,230 100,348 852,870 4,079,684 1,313,923 165,430 183,588 17,934,741 6,907,927 2,000,000 655,514 9,563,441 27,498,182	397,133         452,119           28,396,935         29,699,545           4,891,212         5,908,765           1,949,525         2,544,171           651,446         718,471           1,874,448         2,036,284           109,244         105,381           133,618         188,724           43,506         37,012           759,963         773,569           137,550         149,266           402,156         421,433           286,230         280,276           100,348         96,220           852,870         903,528           4,079,684         4,300,768           1,313,923         1,068,302           165,430         193,695           183,588         113,145           17,934,741         19,839,010           6,907,927         7,402,275           2,000,000         1,250,000           655,514         664,935           9,563,441         9,317,210           27,498,182         29,156,220           898,753         543,325           -434,228         -543,325           6,824,529         7,816,988	397,133         452,119         558,559           28,396,935         29,699,545         32,004,121           4,891,212         5,908,765         5,838,503           1,949,525         2,544,171         2,578,634           651,446         718,471         999,911           1,874,448         2,036,284         2,150,248           109,244         105,381         121,167           133,618         188,724         144,012           43,506         37,012         42,593           759,963         773,569         775,035           137,550         149,266         82,701           402,156         421,433         608,376           286,230         280,276         288,566           100,348         96,220         103,584           852,870         903,528         890,839           4,079,684         4,300,768         4,383,619           1,313,923         1,068,302         1,247,074           165,430         193,695         195,479           183,588         113,145         144,736           17,934,741         19,839,010         20,595,077           6,907,927         7,402,275         8,263,627	397,133         452,119         558,559         558,559           28,396,935         29,699,545         32,004,121         34,172,428           4,891,212         5,908,765         5,838,503         6,130,428           1,949,525         2,544,171         2,578,634         2,733,352           651,446         718,471         999,911         1,039,907           1,874,448         2,036,284         2,150,248         2,236,258           109,244         105,381         121,167         126,014           133,618         188,724         144,012         149,772           43,506         37,012         42,593         44,297           759,963         773,569         775,035         806,036           137,550         149,266         82,701         86,009           402,156         421,433         608,376         638,795           286,230         280,276         288,566         300,109           100,348         96,220         103,584         107,727           852,870         903,528         890,839         926,473           4,079,684         4,300,768         4,383,619         4,602,800           1,313,923         1,068,302         1,247,074 <td< td=""><td>397,133         452,119         558,559         558,559         558,559           28,396,935         29,699,545         32,004,121         34,172,428         36,040,744           4,891,212         5,908,765         5,838,503         6,130,428         6,344,993           1,949,525         2,544,171         2,578,634         2,733,352         2,897,353           651,446         718,471         999,911         1,039,907         1,071,104           1,874,448         2,036,284         2,150,248         2,236,258         2,303,346           109,244         105,381         121,167         126,014         129,794           133,618         188,724         144,012         149,772         154,265           43,506         37,012         42,593         44,297         45,626           759,963         773,569         775,035         806,036         830,217           137,550         149,266         82,701         86,009         88,589           402,156         421,433         608,376         638,795         664,347           286,230         280,276         288,566         300,109         309,112           100,348         96,220         103,584         107,727         110,959</td></td<> <td>397,133         452,119         558,559         558,559         558,559           28,396,935         29,699,545         32,004,121         34,172,428         36,040,744         38,731,238           4,891,212         5,908,765         5,838,503         6,130,428         6,344,993         6,567,068           1,949,525         2,544,171         2,578,634         2,733,352         2,897,353         3,071,194           651,446         718,471         999,911         1,039,907         1,071,104         1,103,237           1,874,448         2,036,284         2,150,248         2,236,258         2,303,346         2,372,446           109,244         105,381         121,167         126,014         129,794         133,688           133,618         188,724         144,012         149,772         154,265         158,893           43,506         37,012         42,593         44,297         45,626         46,995           759,963         773,569         775,035         806,036         830,217         855,124           402,156         421,433         608,376         638,795         664,347         684,277           286,230         280,276         288,566         300,109         309,112         318,385</td>	397,133         452,119         558,559         558,559         558,559           28,396,935         29,699,545         32,004,121         34,172,428         36,040,744           4,891,212         5,908,765         5,838,503         6,130,428         6,344,993           1,949,525         2,544,171         2,578,634         2,733,352         2,897,353           651,446         718,471         999,911         1,039,907         1,071,104           1,874,448         2,036,284         2,150,248         2,236,258         2,303,346           109,244         105,381         121,167         126,014         129,794           133,618         188,724         144,012         149,772         154,265           43,506         37,012         42,593         44,297         45,626           759,963         773,569         775,035         806,036         830,217           137,550         149,266         82,701         86,009         88,589           402,156         421,433         608,376         638,795         664,347           286,230         280,276         288,566         300,109         309,112           100,348         96,220         103,584         107,727         110,959	397,133         452,119         558,559         558,559         558,559           28,396,935         29,699,545         32,004,121         34,172,428         36,040,744         38,731,238           4,891,212         5,908,765         5,838,503         6,130,428         6,344,993         6,567,068           1,949,525         2,544,171         2,578,634         2,733,352         2,897,353         3,071,194           651,446         718,471         999,911         1,039,907         1,071,104         1,103,237           1,874,448         2,036,284         2,150,248         2,236,258         2,303,346         2,372,446           109,244         105,381         121,167         126,014         129,794         133,688           133,618         188,724         144,012         149,772         154,265         158,893           43,506         37,012         42,593         44,297         45,626         46,995           759,963         773,569         775,035         806,036         830,217         855,124           402,156         421,433         608,376         638,795         664,347         684,277           286,230         280,276         288,566         300,109         309,112         318,385

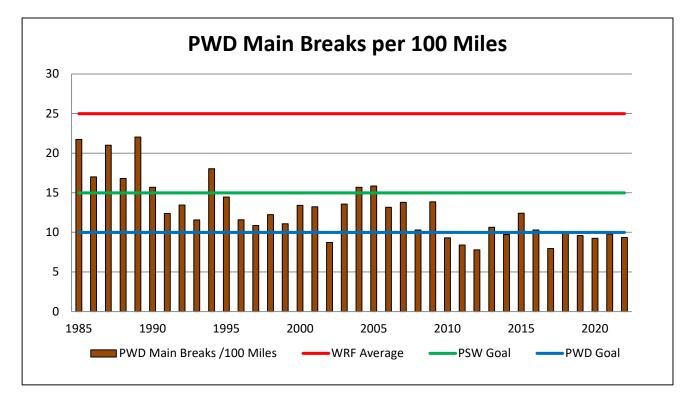
## Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$3,699,000

	<u>2024 Budget</u>	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
R&R Balance BOY	\$ 6,588,621	\$ 6,693,621	\$ 6,738,621	\$ 7,638,621	\$ 8,688,621
Contribution	\$ 1,905,000	\$ 1,900,000	\$ 2,250,000	\$ 2,400,000	\$ 2,400,000
Withdrawals	\$ (1,800,000)	\$ (1,855,000)	\$ (1,350,000)	\$ (1,350,000)	\$ (1,400,000)
R&R Balance EOY	\$ 6,693,621	\$ 6,738,621	\$ 7,638,621	\$ 8,688,621	\$ 9,688,621

## Water Main Renewals



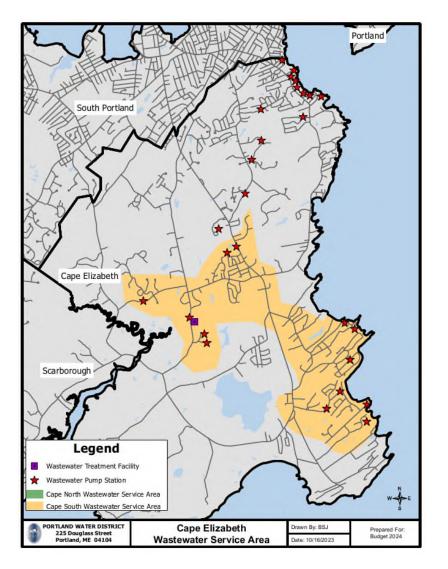
Our commitment to maintain aging water infrastructure includes replacing water mains. The 2024 budget continues this commitment with planned projects totaling \$9.4 million dollars. The projects will be funded with a withdrawal from the capital reserve (\$1 million), bond proceeds (\$6 million), and a Federal Grant/bond (\$2.4 million). The increased investment in main renewal has positively impacted the number of main breaks.



# Fund: Wastewater - Cape Elizabeth

# Background

The Portland Water District's charter authorizes PWD to provide wastewater treatment and collection system-interceptors service to the town. The town maintains most of the collection system but has contracted with PWD to maintain several pump stations within that system. PWD 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, PWD provides utility billing services.



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 \$2,278,121 on 2,450 Customers (avg. \$77.48/month)

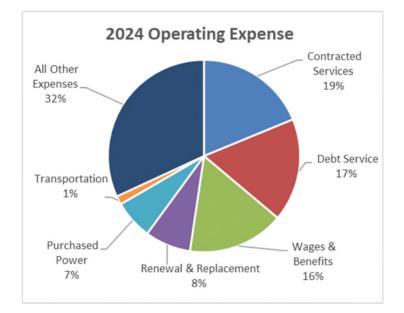
# Fund: Wastewater - Cape Elizabeth

#### **2024 Financial Summary**

The proposed assessment of \$2,390,220 is a 3.9% increase.

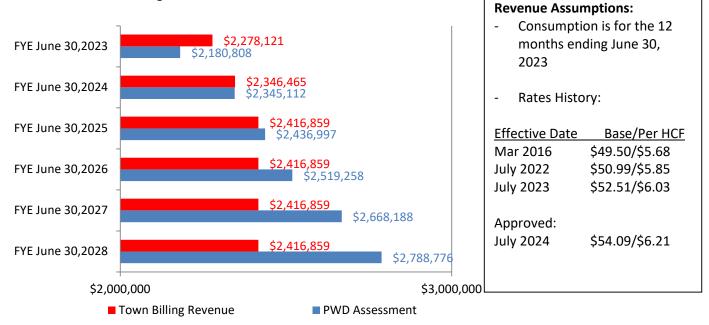
The proposed Operating Expense and Capital budgets are \$2,473,026 and \$320,000 respectively. The Operating Expense budget increased \$144,666 or 6.2%.

The Capital budget includes \$200,000 for aeration and clarifier upgrades at the Cape Elizabeth Wastewater Treatment Facility and \$60,000 for a replacement generator at Peabbles Point wastewater pump station.



#### **Assessment Compared to Ratepayers' Billing**

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

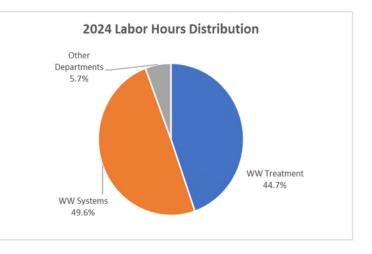


# **2024 Operating Expense Highlights**

**Salaries/Wages** – Salaries and wages have increased 2.5%, or \$6,886, to an amount of \$278,275. Regular wages increased an average of 5.0%, hours charged were down 2.0% (169 hours).

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 3.4% (\$4,801).

**Biosolids Disposal** – Following several years of dramatically increasing biosolids costs, related to legislative action limiting the options



available in Maine, costs have stabilized with a new biosolids management contract. The projected volume wet tons of biosolids processed is expected to increase 5.0% and the budgeted per unit cost of disposal will decrease 2.0%. Overall, the budget in Cape Elizabeth is anticipated to increase \$838 or 3.0%.

**Chemicals** – Sodium Bicarbonate is used to manage the effluent pH of the treatment plant. While an upgrade to the aeration system in future years will reduce reliance on this chemical, usage is projected to remain at current levels and the budget has increased by \$6,030 (32.6%) to \$24,510. Polymer use has increased as well. Overall, chemical costs have increased by 40.2%, or \$8,667.

**Contracted Services** – The budget increased 10.7% (\$44,940). Maintenance Services are up \$18.4k as to support both the treatment plant (\$9.0k) and pump stations/collection system (\$8.9k). Contracted Treatment Services are paid to the City of South Portland for the treatment of northern Cape Elizabeth flows. These costs increased \$15.0k as the South Portland Wastewater Treatment Plant projects increases in biosolids disposal, power and chemical expenses.

**Purchased Power** – Overall this category is up \$65,522 (63.8%). This was mostly driven by large increases in energy costs which increased \$34.0k or 70.1%. Transmission and Delivery was up \$6.7k (13.0%). In addition, this year's budget includes \$22.9k in expense related to renewable energy. This is offset by \$42.5k in renewal energy credits for a net gain in this fund of \$19.6k. In prior years the net gain was listed in the revenue section, last year the net gain was \$14.5k.

**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 \$26,420 or 4.4%.

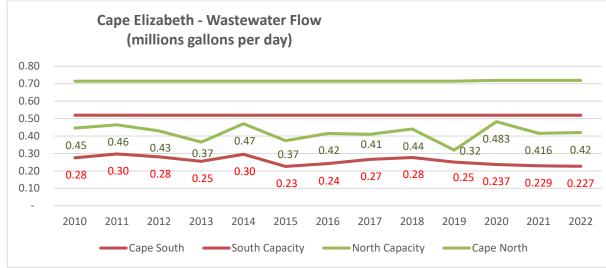
**Debt Service/Lease Expense** – This represents the annual principal and interest payments on bonds issued to finance capital projects. This cost decreased \$4,307 (1.0%) from the prior year budget to \$428,622. The small decrease was due to the delay in the issuance of debt what was originally planned to be issued in November 2023 to November 2024.

**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 \$190,763 will be made in 2024.

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff\$	Budget Diff %
Assessment Income	\$2,061,612	\$ 1,150,002	\$2,300,004	\$2,390,220	\$90,216	3.9%
Interest Income	11,644	15,235	13,842	40,361	26,519	191.6%
OtherIncome	10,572	10,657	14,514	42,445	27,931	<u>192.4</u> %
Total Revenue	2,083,828	1,175,894	2,328,360	2,473,026	144,666	6.2%
Salaries & Wages	243,177	127,475	271,389	278,275	6,886	2.5%
Employee Benefits	97,837	56,988	119,023	123,104	4,081	3.4%
Biosolids Disposal	23,291	12,711	28,400	29,238	838	3.0%
Chemicals	30,664	27,106	21,576	30,243	8,667	40.2%
Contracted Services	452,010	221,603	419,745	464,685	44,940	10.7%
Heat/Fuel Oil	20,461	14,501	24,825	18,915	(5,910)	-23.8%
Insurance	7,951	4,559	8,507	10,486	1,979	23.3%
Materials & Supplies	57,477	28,971	41,400	52,766	11,366	27.5%
Other Expense	730	5,780	750	750	-	0.0%
Purchased Power	95,719	55,356	99,638	163,160	63,522	63.8%
Regulatory/Taxes	1,406	149	1,600	1,875	275	17.2%
Tele/Other Utilties	16,438	7,083	19,256	15,555	(3,701)	-19.2%
Transportation	42,060	23,699	50,163	35,625	(14,538)	-29.0%
SS - Administration	237,104	124,357	258,462	270,358	11,896	4.6%
SS - Engineering Services	72,707	34,102	101,021	118,545	17,524	17.3%
SS - Environmental Services	37,617	18,853	36,704	32,921	(3,783)	-10.3%
SS - Wastewater Services	164,754	105,784	203,285	203,213	(72)	0.0%
SS - Water Services	5,014	3,194	3,072	3,927	855	<u>27.8</u> %
Operating Expense	1,606,417	872,271	1,708,816	1,853,641	144,825	8.5%
Debt Service & Lease Expense	373,549	205,127	432,929	428,622	(4,307)	-1.0%
Renewal & Replacement - Direct	145,000	77,500	155,000	155,000	-	0.0%
Renewal & Replace - Indirect	30,458	15,808	31,615	35,763	4,148	13.1%
Total Expense	2,155,424	1,170,706	2,328,360	2,473,026	144,666	6.2%
Current Year Surplus (Deficit)	(71,596)	5,188	-	-		
Prior Year Surplus	358,432	286,836	365,167	230,374		
Accumulated Surplus	286,836	292,024	365,167	230,374		

## **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. On the Town of Cape Elizabeth's behalf, 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; however, it is anticipated that the permit renewal may require further reductions in effluent nitrogen.



In 2022, flows remained nearly identical to the previous year with the flow in the Northern area averaging 0.420 mgd and the South Cape flow to the treatment plant averaging 0.227 mgd.

Parameter	Discussio	n			
Biological Oxygen Demand (BOD)		of organic material and the strength of pollution. The treatment noved 95% of the BOD; well above the required 85% removal.			
Total Suspended Solids (TSS)	strength c	uspended material in the incoming wastewater; also, the ollution. The treatment plant removed 96% of the TSS, well quired 85% removal.			
Total Residual Chlorine Fecal Coliform Bacteria	removed times. Th system ch Following	sly for disinfecting the treated effluent, chlorine must be ore the effluent is discharged. The permit limit was met at all / disinfection upgrade has eliminated the use of disinfection cals and the need to monitor chlorine residual. nfection, the fecal coliform level is monitored to confirm the			
	treatment	nt effluent was properly disinfected.			
Permit Violations	<u>13</u> <u>2</u> <u>1</u> 20 2022	The Discharge Permit was renewed in late 2016. A permit application was submitted and renewal of the permit is pending Maine DEP action. There was a single effluent permit violation in 2022, and improvement from 13 in 2021. The single violation related to a fecal coliform exceedance.			

#### Effluent Permit Requirements:

# **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. Following completion of this work, flows are currently being monitored as part of Maine DEP's required monitoring program with the anticipation that the CSO can be officially closed. Following pump capacity increases and the installation of a bypass system at the station, a more complete upgrade of the Ottawa Rd. Pump Station is expected in 2024. This upgrade will increase the performance and reliability of the pump station. The majority of pump stations include an emergency generator that provide reliability during power outages. Additional work performed by the Systems group is shown in the table below:

Parameter	2023 Actual to September	2024 Projected
Preventive Work Orders	1106	1200
Corrective Work Orders	54	50
Wet wells cleaned	58	65
Debris removed (ton)	145	160
Dry Weather Overflows	1	0

#### **2023 Other Highlights**

- With our asset management system, we continue to proactively manage maintenance. Our Maintenance and Operations Team has been systematically reviewing our systems and treatment assets to create a prioritized listing of equipment to refine our preventive maintenance program. This effort will continue through 2024.
- In preparation for a pending upgrade to the Ottawa Road Pump Station, and to improve resiliency of the station, a bypass connection was installed at the station.
- Radio network upgrades have been completed to maintain efficient monitoring of remote pump stations and the treatment plant.
- Legislative action that prohibits land application of biosolids due to PFAS concerns has created management challenges throughout Maine. A biosolids management plan began in 2022 and identified near, mid, and longer-range options for biosolids management that included possible regional efforts to economically manage biosolids in the future. A more detailed effort has continued in 2023. This includes a detailed review of nearly 30 technical responses to a Request for Information. The contract to manage current biosolids will provide some potential certainty in disposal and cost though 2027.

#### 2024 Work Plan

- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders. Efforts to refine the existing maintenance approach will continue.
- 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. This effort is required by Maine DEP's post construction monitoring to assess if the related combined sewer overflow can be eliminated. The pump station upgrade will provide additional operational resiliency.
- An upgrade to the aeration system and clarifiers will begin in 2025. This will, in part, increase the ability of the plant to reduce effluent nitrogen. This effort has been moved out due to workload and resource availability.
- A permit renewal was submitted and 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.

	Bond	Renewal and Replacement	Grand Total
Projects:	Bonu	Replacement	Granu Totai
424/3129/Cape Elizabeth WWTF- R&R		\$25,000	\$25,000
424/3188/Aeration and Clarification Upgrade	\$200,000		\$200,000
52/3130/Cape Elizabeth Pump Station R&R		\$35,000	\$35,000
52/3294/Peabble Cove Generator Replacement		\$60,000	\$60,000
Grand Total	\$200,000	\$120,000	\$320,000
Renewal and Replacement Fund:			
Reserve Balance, Beginning of Year		\$741,324	
Annual Contribution		\$155,000	
Projects		-\$120,000	_
Reserve Balance, End of Year		\$776,324	-

## **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

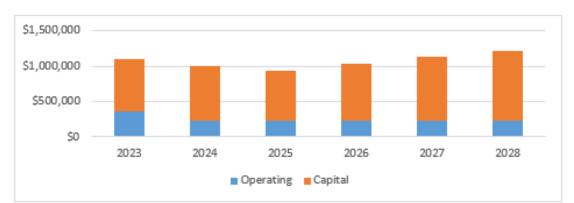
#### **Major Assumptions:**

The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$3.9 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 \$2,795,918 in 2028, a 17% increase over 2024 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 currently. R&R balance forecasted to meet target by the end of 2028.



#### **Reserve Fund Balances**

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

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
18%	19%	17%	19%	21%	26%	26%

#### Debt Service Ratio - Target: Greater or Equal to 125%

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
146%	143%	145%	136%	133%	124%	124%

# **Projections for Rate-Making Purposes (continued)**

## **Operating Fund:**

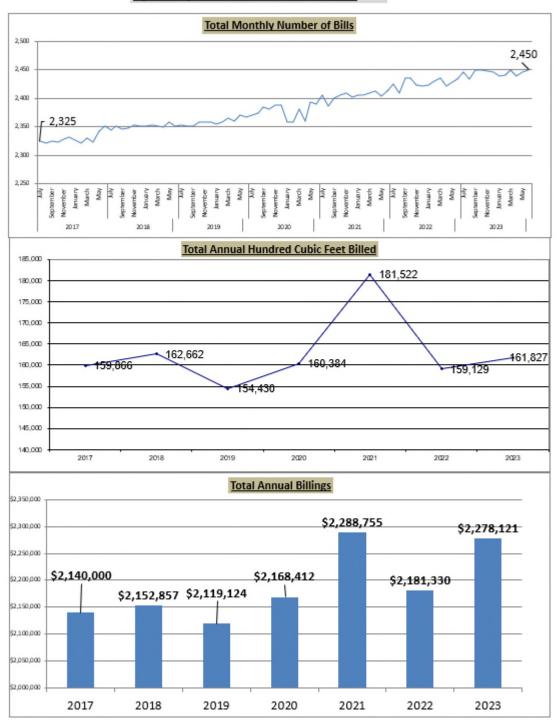
Operating Fund:							
•	2022 Actual	2023 Budget	2024 Budget	2025 Forecast 2	026 Forecast 2	2027 Forecast 2	028 Forecast
Revenues:							
Assessment Income	2,061,612	2,300,004	2,390,220	2,483,773	2,554,742	2,781,634	2,795,918
Interest Income	11,644	13,842	40,361	40,361	40,361	40,361	40,361
Other Income	10,572	14,514	42,445	42,445	42,445	42,445	42,445
Total Revenues	2,083,828	2,328,360	2,473,026	2,566,579	2,637,548	2,864,440	2,878,724
Operating Expenses:							
Salaries & Wages	243,177	271,389	278,275	292,189	302,416	313,001	323,956
Employee Benefits	97,837	119,023	123,104	130,490	138,319	146,618	155,415
Biosolids Disposal	23,291	28,400	29,238	30,700	32,235	33,847	35,539
Chemicals	30,664	28,400	30,243	31,453	32,235	33,369	34,370
Contracted Services	452,010	419,745	464,685	483,272	497,770	512,703	528,084
Heat/Fuel Oil	20,461	24,825	18,915	485,272	20,262	20,870	21,496
Insurance	7,951	8,507	10,486	10,905	11,232	11,569	11,916
Materials & Supplies	57,477	41,400	52,766	54,877	56,523	58,219	59,966
Other Expense	730	41,400	750	780	803	827	852
Purchased Power	95,719	99,638	163,160	171,318	178,171	183,516	189,021
Regulatory/Taxes	1,406	1,600	1,875	1,950	2,009	2,069	2,131
Tele/Other Utilties	16,438	1,000	1,875	1,950	16,662	17,162	17,677
	-						
Transportation SS - Administration	42,060	50,163	35,625	37,050	38,162	39,307	40,486
	237,104	258,462	270,358	283,876	295,231	307,040	319,322
SS - Engineering Services	72,707	101,021	118,545	124,413	129,358	134,500	139,846
SS - Environmental Services	37,617	36,704	32,921	34,567	35,950	37,388	38,884
SS - Wastewater Services	164,754	203,285	203,213	163,374	119,909	74,705	27,693
SS - Water Services	5,014	3,072	3,927 1,853,641	4,123	4,288	4,460	4,638
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Debt Service & Lease	373,549	432,929	428,622	497,129	547,587	755,006	749,168
Renewal & Replacement - Direct	145,000	155,000	155,000	155,000	155,000	155,000	155,000
Renewal & Replace - Indirect	30,458	31,615	35,763	23,264	23,264	23,264	23,264
Capital Finance Expense	549,007	619,544	619,385	675,393	725,851	933,270	927,432
Total Operating Expenses	2,155,424	2,328,360	2,473,026	2,566,579	2,637,548	2,864,440	2,878,724
Current Year Surplus(Deficit)	-71,596	0	0	0	0	0	0
Prior Year Surplus	358,432	365,167	230,374	230,374	230,374	230,374	230,374
Accumulated Surplus	286,836	365,167	230,374	230,374	230,374	230,374	230,374
Target Balance(25% of budget)	200,030	582,090	618,257	641,645	659,387	716,110	719,681
Above/(Below)		-		-		-485,736	-
Above/(below)		-216,923	-387,883	-411,271	-429,013	-465,/30	-489,307

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

	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
	<u>Budget</u>	<u>Forecast</u>	<u>Forecast</u>	<b>Forecast</b>	<b>Forecast</b>
R&R Balance BOY	\$ 741,324	\$ 776,324	\$ 711,324	\$ 806,324	\$ 901,324
Contribution	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000
Withdrawals	\$ (120,000)	\$ (220,000)	\$ (60,000)	\$ (60,000)	\$ (75,000)
R&R Balance EOY	\$ 776,324	\$ 711,324	\$ 806,324	\$ 901,324	\$ 981,324

## **Sewer Billing Statistics**

PWD 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.

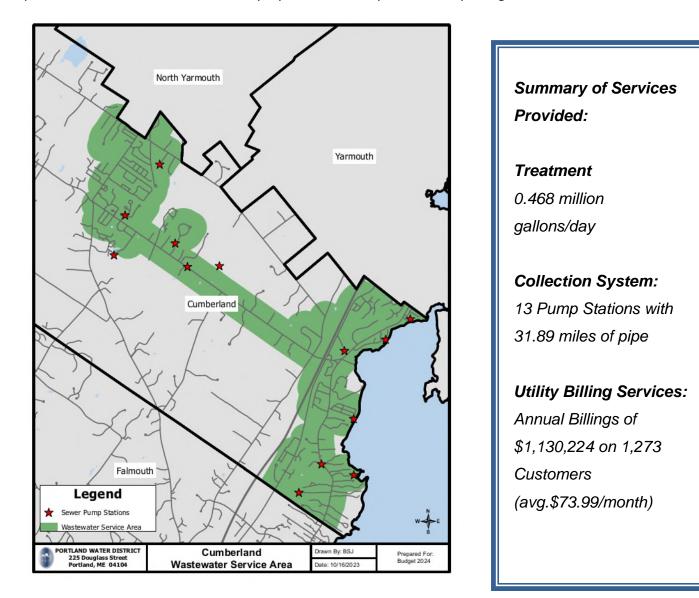




# Fund: Wastewater - Cumberland

## Background

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



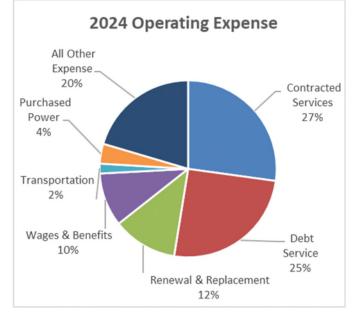
# Fund: Wastewater - Cumberland

## **2024 Financial Summary**

The proposed assessment of \$1,279,680 is an increase of \$94,776 or 8.0%.

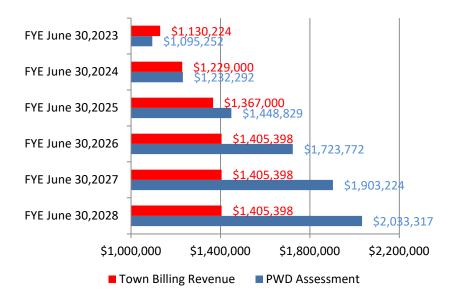
The proposed Operating Expense and Capital budgets are \$1,316,586 and \$1,730,000, respectively. The Operating Expense increase is 9.9% (\$118,848).

Cumberland's Capital plan consists of \$900,000 for the Tuttle Road force main replacement and \$800,000 for work at the Powell Road wastewater pump station.



# **Assessment Compared to Ratepayers' Billing**

The municipality's fiscal year end is June 30, while the PWD's is December 31. The chart below compares the cash as collected by PWD for sewer billings on their behalf and PWD's assessment for services rendered. The municipality may incur additional sewer-related costs. The municipality determines if there are adjustments to sewer billing rates. The Town has proposed 10% rate increase in 2023 and 2024 & expects additional increases in future years. Any shortfall will be paid from the Town's sewer surplus fund.



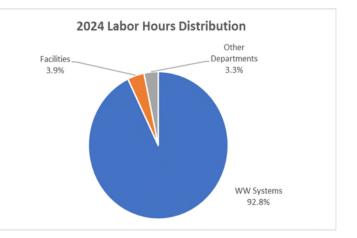
Revenue As	sumptions:
	ption is the 12 ending June 30,
- Rates As Effective Date:	ssumed: Base/Per HCF
Jul 2013 Sep 2013 Sep 2015 Sep 2016 Sep 2018 Oct 2023 Oct 2024	\$34.25/\$4.96 \$34.25/\$5.29 \$35.58/\$5.29 \$36.92/\$5.29 \$36.92/\$5.52 \$36.92/\$6.68 \$41.84/\$7.40

# **2024 Operating Expense Highlights**

Salaries/Wages – Salaries and wages have increased by 6.9%, or \$5,791, to \$89,144. Regular wages increased an average of 5.0%, hours charged were up 3.2% (82 hours).

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 6.9% (\$3,481).

**Contracted Services** – Overall Contracted



Services increased 22.3% (\$65,063) to a total of \$357,823. This category includes payments third party vendors for maintenance services, CCTV services and grease disposal, but by far the largest expense are payments to the Town of Falmouth for wastewater treatment and pumping services which was up \$53.8k in the 2024 Budget. Cumberland is assessed treatment costs based on the percentage of the total treatment plant flow contributed to the treatment plant. Approximately 25% of the treatment flow, and related costs, are attributed to Cumberland. Treatment expenses included increases in biosolids disposal, power and chemicals.

**Purchased Power** – Overall this category is up \$19,775 (70.9%). This was mostly driven by large increases in energy costs which increased \$9.2k or 83.0%. Transmission and Delivery was up \$2.5k (14.9%). In addition, this year's budget includes \$8.0k in expense related to renewable energy. This is offset by \$14.9k in renewal energy credits for a net gain in this fund of \$6.9k. In prior years the net gain was listed in the revenue section, last year the net gain was \$4.1k.

**Transportation** – This item decreased \$8.4k or 26.2%. This was mostly attributable to lower operating costs on equipment used in the area including the Vac-Truck used to remove grease at wastewater pump stations.

**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 \$18,578 or 8.2%.

**Debt Service** – Debt service expense increase 13.8% or \$40,533 due to increased debt service related to Falmouth's Upper Mill Creek project and PWD's Tuttle Road Force Main and Power Road Pump station projects

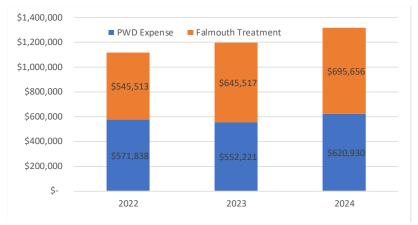
**Renewal and Replacement** – This is the annual contribution to a fund to finance smaller capital projects. A contribution of \$155,719 will be made in 2024, a decrease of \$25,864 from the previous year. Most of this decrease (\$27,500) is in the "Contracted" category and reflects changes in Cumberland's share of upcoming capital projects at the Town of Falmouth's Wastewater Treatment Facility.

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	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff\$	Diff %
Assessment Income	\$1,005,600	\$592,452	\$1,184,904	\$1,279,680	\$94,776	8.0%
Interest Income	6,873	7,266	8,700	21,976	13,276	152.6%
Other Income	3,719	3,428	4,134	14,930	10,796	<u>261.2</u> %
Tot al Revenue	1,016,192	603,146	1,197,738	1,316,586	118,848	9.9%
Salaries& Wages	96,503	47,093	83,353	89,144	5,791	6.9%
EmployeeBenefits	37,264	20,820	36,268	39,749	3,481	9.6%
Contracted Services	290,695	142,851	292,760	357,823	65,063	22.2%
Heat/Fuel Oil	-	117	100	100	-	0.0%
Insurance	3,501	3,219	3,899	4,182	283	7.3%
Materials& Supplies	21,316	20,452	18,250	18,250	-	0.0%
Purchased Power	31,832	17,622	27,889	47,664	19,775	70.9%
Tele/Other Utilties	1,898	1,127	2,391	2,025	(366)	- 15.3%
Transportation	35,479	19,253	32,114	23,688	(8,426)	-26.2%
SS - Administration	127,609	64,709	134,543	140,589	6,046	4.5%
SS - Engineering Services	35,130	16,256	46,402	54,309	7,907	17.0%
SS - Wastewater Services	49,836	22,084	42,963	47,060	4,097	9.5%
SS - Water Services	2,957	1,884	1,815	2,343	528	<u>29.1</u> %
Operating Expense	734,020	377,487	722,747	826,926	104,179	14.4%
Debt Service & Lease Expense	297,213	146,549	293,408	333,941	40,533	13.8%
Renewal & Replacement - Direct	40,000	20,000	40,000	40,000	-	0.0%
Renewal & Replace - Indirect	16,118	8,292	16,583	18,219	1,636	9.9%
R&R - Contracted	30,000	62,500	125,000	97,500	(27,500)	- <u>22.0</u> %
Tot al Expense	1,117,351	614,828	1,197,738	1,316,586	118,848	9.9%
Current Year Surplus(Deficit)	(101,159)	(11,682)	-	-		
Prior Year Surplus	161,938	60,779	69,976	11,327		
AccumulatedSurplus	60,779	49,097	69,976	11,327		

#### **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:

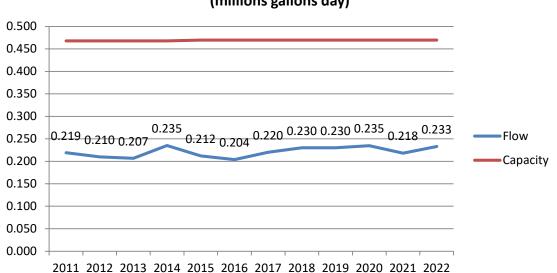


# **Operation Summary Cumberland**

**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, contractually 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
2022	0.233 mgd	0.913 mgd	25.5%
FWWTF Capacity	Cumberland Cap (30%)	% Capacity Used	Capacity Remaining

While seeing a very slight increase in 2022, the flow 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. The percentage of the treatment plant flow from Cumberland remained just above 25%.



#### Cumberland - Wastewater Flow (millions gallons day)

#### Wastewater Conveyance - collectors, interceptors and pumping stations

Parameter	2023 Actual to Sept	2024 Projected	
Preventive Work Orders	530	550	
Corrective Work Orders	22	20	
Wet wells cleaned	57	65	
Debris removed (tons)	162	175	
Dry Weather Overflows	0	0	

# **Operation Summary (continued)**

#### **2023 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.
- With our asset management system, we continue to proactively manage maintenance. Our Maintenance and Operations Team has been systematically reviewing our systems and treatment assets to create a prioritized listing of equipment to refine our preventive maintenance program. This effort will continue through 2024.
- 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 vactor truck and staffing.
- Staff remains responsive to operational and development needs in Cumberland.

#### 2024 Work Plan

- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders. Efforts to refine the existing maintenance approach will continue.
- 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.

	Bond	Renew al and Replacement	Grand Total
Projects:			
41/3136/Cumberland WW Pump Stations - R&R		\$30,000	\$30,000
41/3244/Pow ell Rd PS Conversion to Submersible PS	\$800,000		\$800,000
41/3290/Phase 1- Tuttle Road Force Main Replacement	\$900,000		\$900,000
Grand Total	\$1,700,000	\$30,000	\$1,730,000
Renewal and Replacement Fund:			
Reserve Balance, Beginning of Year		\$187,441	
Annual Contribution		\$40,000	1
Projects		-\$30,000	
Reserve Balance, End of Year		\$197,441	-

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. While currently negative, the balance is projected to become positive by the end of 2026.

	1
Balance 01/01/23	(\$26,087)
Contribution	125,000
Expenditures	(153,963)
2023 Ending Balance	(55,050)
Balance 01/01/24	(55,050)
Contribution	97,500
Expenditures	(98,001)
2024 Ending Balance	(55,551)

# **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:**

The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees. •
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year. •
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year • capital plan, which includes close to \$6.0 million of capital projects. 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 \$2,089,754 in 2028, a 63% increase over 2024 Budget, with the most significant cost change related to debt service issued to finance capital projects. Unexpected system repairs costs in 2022 caused the decline in the operating budget surplus. The funds currently meets its debt related ratio.



#### **Reserve Fund Balances**

Debt Ser	vice Ratio	– Target	: Greater o	or Equal t	o 125%	
<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2027</u>
129%	162%	147%	125%	119%	117%	115%

# **Projections for Rate-Making Purposes (continued)**

#### **Operating Fund:**

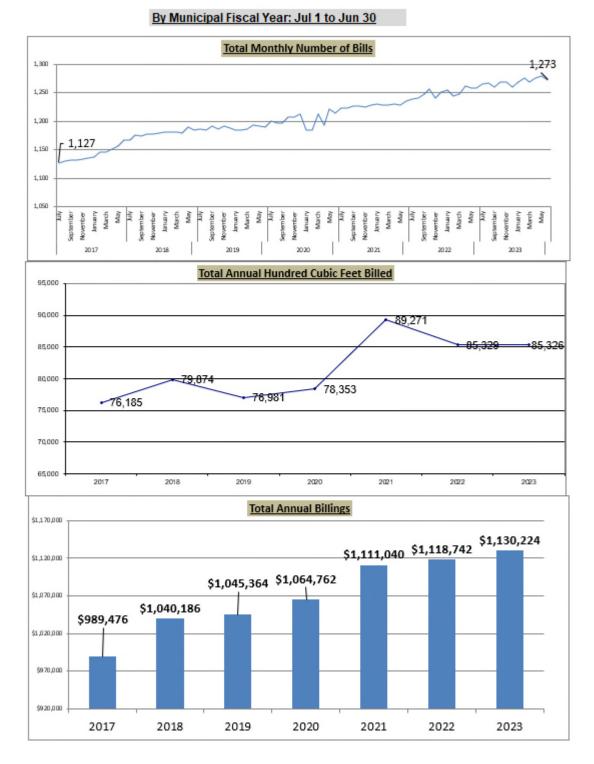
Revenues: Assessment Income Interest Income							
Interest Income	1,005,600	1,184,904	1,279,680	1,617,977	1,829,567	1,976,880	2,089,754
	6,873	8,700	21,976	21,976	21,976	21,976	21,976
Other Income	3,719	4,134	14,930	14,930	14,930	14,930	14,930
Total Revenues	1,016,192	1,197,738	1,316,586	1,654,883	1,866,473	2,013,786	2,126,660
Operating Expenses:							
Salaries & Wages	96,503	83,353	89,144	93,601	96,877	100,268	103,777
Employee Benefits	37,264	36,268	39,749	42,134	44,662	47,342	50,183
Contracted Services	290,695	292,760	357,823	372,136	383,300	394,799	406,643
Heat/Fuel Oil	0	100	100	104	107	110	113
Insurance	3,501	3,899	4,182	4,349	4,479	4,613	4,751
Materials & Supplies	21,316	18,250	18,250	18,980	19,549	20,135	20,739
Purchased Power	31,832	27,889	47,664	50,047	52,049	53,610	55,218
Tele/Other Utilties	1,898	2,391	2,025	2,106	2,169	2,234	2,301
Transportation	35,479	32,114	23,688	24,636	25,375	26,136	26,920
SS - Administration	127,609	134,543	140,589	147,618	153,523	159,664	166,051
SS - Engineering Services	35,130	46,402	54,309	56,997	59,263	61,619	64,068
SS - Wastewater Services	49,836	42,963	47,060	49,413	51,390	53,446	55,584
SS - Water Services	2,957	1,815	2,343	2,460	2,558	2,660	2,766
	734,020	722,747	826,926	864,581	895,301	926,636	959,114
Debt Service	297,213	293,408	333,941	634,583	815,453	931,431	1,011,827
Renewal & Replacement - Direct	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Renewal & Replace - Indirect/Contrac	46,118	141,583	115,719	115,719	115,719	115,719	115,719
Capital Finance Expense	383,331	474,991	489,660	790,302	971,172	1,087,150	1,167,546
Total Operating Expenses	1,117,351	1,197,738	1,316,586	1,654,883	1,866,473	2,013,786	2,126,660
Current Year Surplus(Deficit)	-101,159	0	0	0	0	0	0
Prior Year Surplus	161,938	69,976	11,327	11,327	11,327		11,327
Accumulated Surplus	60,779	69,976	11,327	11,327	11,327	-	11,327
Target Balance(25% of budget)	00,775	299,435	329,147	413,721	466,618	-	531,665
Above/(Below)		-229,459	-317,820	-402,394	-455,291	-492,120	-520,338

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

			, 0		
	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	
	<u>Budget</u>	<u>Forecast</u>	<u>Forecast</u>	<u>Forecast</u>	2028 Forecast
R&R Balance BOY	\$ 187,441	\$ 197,441	\$ 207,441	\$ 217,441	\$ 227,441
Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Withdrawals	\$ (30,000)	\$ (30,000)	\$ (30,000)	\$ (30,000)	\$ (20,000)
<b>R&amp;R Balance EOY</b>	\$ 197,441	\$ 207,441	\$ 217,441	\$ 227,441	\$ 247,441

#### **Sewer Billing Statistics**

PWD 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.

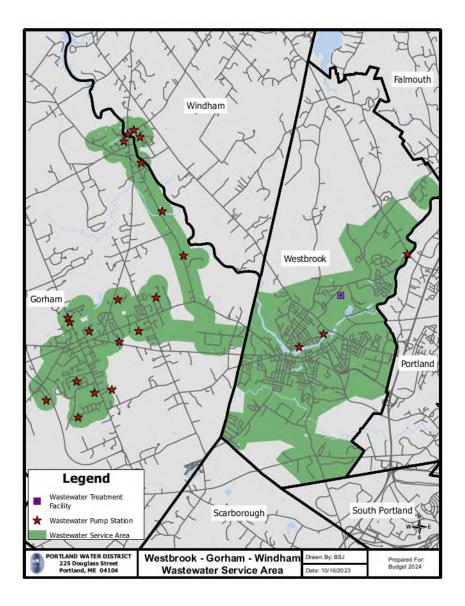


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# Fund: Wastewater - Gorham

#### Background

The Portland Water District's charter requires PWD to provide wastewater treatment and collection system-interceptors service to the town. By contract with the town, PWD 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, PWD 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 \$1,357,170 for 1,992

Customers (avg. \$56.78/month)

# Fund: Wastewater - Gorham

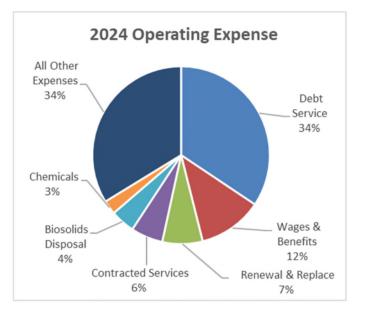
#### **2024 Financial Summary**

The proposed assessment is \$1,675,344; this is a 6.9% increase over the prior year.

The proposed Operating Expense and Capital budgets are \$1,735,323 and \$173,600, respectively.

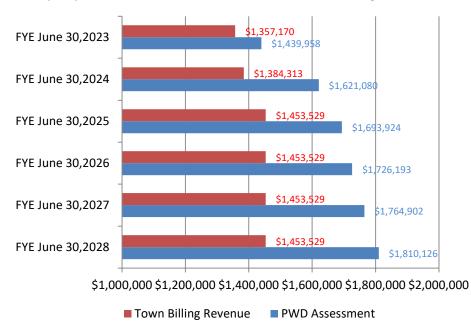
The Operating Expense budget increase is \$154,586 or 9.8%. Gorham's percentage of the wastewater flows decreased 0.5% to 14.0% in the Westbrook Joint account and decreased from 40.0% to 33.0% in the Little Falls Joint account.

The Capital budget includes \$123,200 for access road and paving at the Westbrook Regional Wastewater Facility.



#### **Assessment Compared to Ratepayers' Billing**

The municipality's fiscal year end is June 30, while PWD's is December 31. The chart below compares the cash as collected by PWD for sewer billings on their behalf and the PWD's assessment for services rendered. The municipality determines whether to increase the sewer billing rates.

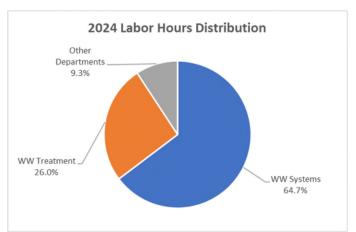


Revenue Assumptions:								
<ul> <li>Consumption is the 12 months ending June 30, 2023</li> </ul>								
- Rates Histo	ory:							
Effective Date	Base/Per HCF							
Nov 2006	\$13.74/6.29							
Apr 2021	\$14.39/\$6.64							
Apr 2022	\$15.04/\$6.99							
Apr 2023	\$15.69/\$7.34							
Approved:								
Apr 2024	\$16.19/\$7.84							

# 2024 Operating Expense Highlights

**Salaries/Wages** – Salaries and wages have increased by 1.9%, or \$2,461, to \$140,752. Regular wages increased an average of 5.0%, hours charged were down 0.2% (95 hours).

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 2.1% (\$1,275).



**Biosolids Disposal** – Following several years of dramatically increasing biosolids costs, related to legislative action limiting the options available in Maine, costs have stabilized with a new biosolids management contract. The projected volume wet tons of biosolids processed at the Westbrook Regional Wastewater Treatment Facility (WRWWTF) is expected to decrease 5.5% and the budgeted per unit cost of disposal will decrease 2.0%. Overall, the budget in Gorham is anticipated to decrease \$8,243 or 9.7%.

**Contracted Services** – Overall this category was up \$16,266 or 19.1%. This increase is mostly driven by higher maintenance needs at the WRWWTF (\$9.0k) and grease disposal at the wastewater pump stations (\$4.8k).

**Purchased Power** – Overall this category is up \$35,213 (65.9%). This was mostly driven by large increases in energy costs which increased \$19.6k or 73.6%. Transmission and Delivery was up \$2.4k (8.9%). In addition, this year's budget includes \$13.3k in expense related to renewable energy. This is offset by \$24.6k in renewal energy credits for a net gain in this fund of \$11.3k. In prior years the net gain was listed in the revenue section, last year the net gain was \$7.9k.

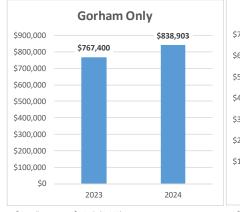
**Support Services** – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$36,030 or 9.4%.

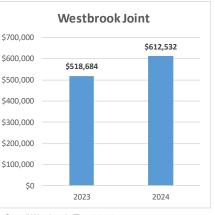
**Debt Service** - The annual principal and interest payments on bonds issued to finance capital projects. This item increased 13.9% (\$72.8k) mainly due to bond financing of the aeration system upgrade at the Westbrook Regional Wastewater Treatment Facility.

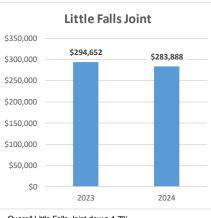
**Renewal & Replacement** - Dollars put aside to fund smaller capital projects. A contribution of \$127,327 will be made in 2024.

#### Budget by Fund – Wastewater, Gorham

	2022	2022	2022	2024	Dudant	Dudant
	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$1,313,100	\$783,408	\$1,566,816	\$1,675,344	\$108,528	6.9%
Interest Income	5,809	9.660	6,060	35,415	29,355	484.4%
Other Income	6,151	6,583	7,861	24,564	16,703	212.5%
Total Revenue	1,325,060	799,651	1,580,737	1,735,323	154,586	9.8%
Salaries & Wages	119,834	61,831	138,291	140,752	2,461	1.8%
Employee Benefits	48,316	27,603	61,128	62,403	1,275	2.1%
Biosolids Disposal	60,635	41,825	85,284	77,041	(8,243)	-9.7%
Chemicals	37,855	26,105	43,185	44,397	1,212	2.8%
Contracted Services	122,622	49,611	85,146	101,412	16,266	19.1%
Heat/Fuel Oil	9,018	5,115	11,193	9,792	(1,401)	-12.5%
Insurance	2,170	1,311	2,563	2,884	321	12.5%
Materials & Supplies	37,769	10,011	32,775	33,921	1,146	3.5%
Other Expense	399	165	868	970	102	11.8%
Purchased Power	53,009	33,999	53,445	88,658	35,213	65.9%
Regulatory/Taxes	1,440	187	935	914	(21)	-2.2%
Tele/Other Utilties	4,961	2,411	4,422	4,408	(14)	-0.3%
Transportation	30,735	17,470	28,960	23,305	(5,655)	-19.5%
SS - Administration	161,685	85,383	177,152	191,326	14,174	8.0%
SS - Engineering Services	65,560	32,008	91,520	115,082	23,562	25.7%
SS - Environmental Services	22,504	11,805	25,482	23,363	(2,119)	-8.3%
SS - Wastewater Services	74,420	45,377	87,520	87,055	(465)	-0.5%
SS - Water Services	4,744	3,023	2,915	3,793	878	<u>30.1</u> %
Operating Expense	857,676	455,240	932,784	1,011,476	78,692	8.4%
Debt Service & Lease Expense	521,077	251,362	523,708	596,520	72,812	13.9%
Renewal & Replacement - Direct	75,000	50,000	100,000	100,000	-	0.0%
Renewal & Replace - Indirect	23,055	12,122	24,245	27,327	3,082	<u>12.7</u> %
Total Expense	1,476,808	768,724	1,580,737	1,735,323	154,586	9.8%
Current Year Surplus (Deficit)	(151,748)	30,927	-	-		
Prior Year Surplus	245,925	94,177	169,258	101,941		
Accumulated Surplus	94,177	125,104	169,258	101,941		







- Overall costs up \$71.5k (9.3%)

- Operating Expense up \$68.5k (10.8%)

Overall Westbrook JT up 14.9%Gorham's share of all costs up \$93.8k (18.1%)

- Gorham's share of Debt Service up \$76.8k

- Overall Little Falls Joint dow n 1.7%

- Gorham's share dow n 3.7% (\$10.8k)

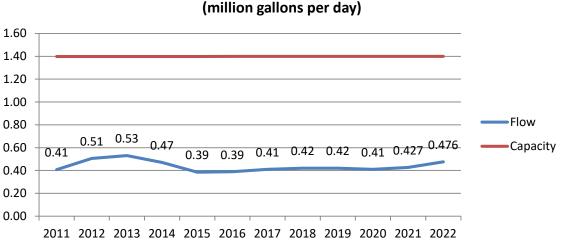
- Gorham's flow percentage dow n 7.0% (40.0% to 33.0%)

# **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	2022 Gorham Flow	Westbrook WWTF Flow	% Gorham Flow		
Total Gorham Flow	0.476 mgd	3.08 mgd	14.5%		
			<b>Capacity Remaining</b>		
WGWWTF	Gorham Capacity	2022 - % Capacity Used	Capacity Remaining		
WGWWTF Capacity	Gorham Capacity (30.8%)	2022 - % Capacity Used	Capacity Remaining		

While consistent with past years, Gorham's flow in 2022 did increase slightly by 0.050 mgd. The Town of Gorham utilized 34% of the allotted capacity at the treatment plant with 0.922 million gallons per day of capacity remaining at the treatment plant.



#### Gorham - Wastewater Flow (million gallons per day)

#### Wastewater Conveyance - interceptors and pumping stations

Parameter	2023 Actual to Sept	2024 Projected		
Preventive Work Orders	672	600		
Corrective Work Orders	27	25		
Wet wells cleaned	43	45		
Debris removed (tons)	95	100		
Dry Weather Overflows	1	0		

# **Operation Summary (continued)**

# **2023 Other Highlights**

- With our asset management system, we continue to proactively manage maintenance. Our Maintenance and Operations Team has been systematically reviewing our systems and treatment assets to create a prioritized listing of equipment to refine our preventive maintenance program. This effort will continue through 2024.
- Construction of the upgraded aeration system and secondary clarifiers continued through the year and expected to be completed by year's end.
- Following a failed legislative effort to reclassify the water quality designation of the Presumpscot River in 2022, a moratorium on increases or additional licensed discharges to the river was passed in 2023. This essentially caps the permitted capacity of the treatment plant at existing levels.
- Legislative action that prohibited land application of biosolids due to PFAS concerns has created management challenges throughout Maine. A biosolids management plan began in 2022 and identified near, mid, and longer-range options for biosolids management that included possible regional efforts to economically manage biosolids in the future. A more detailed effort has continued in 2023. This includes a detailed review of nearly 30 technical responses to a Request for Information. The contract to manage current biosolids will provide some potential certainty in disposal and cost though 2027.
- PWD continues to work with the Town to properly manage growth and the expansion of new systems infrastructure to properly support growth in the community.

# 2024 Work Plan

- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders. Efforts to refine the existing maintenance approach will continue.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce. Initial designs show a modernized layout that provides improved facilities that afford more privacy to employees.
- Wet wells are scheduled for cleaning on a quarterly basis unless experience dictates otherwise. Oils and grease remain challenges throughout PWD's service area.
- The Biosolids Management Plan findings will be shared with Maine DEP, Maine Legislative Committees, other utilities, and additional stakeholders as a solution to the current biosolids management challenges progress.
- The effluent permit renewal from Maine DEP for the regional treatment plant is anticipated in 2024.
- PWD has been discussing the treatment plant capacity allocated to the three communities that contribute to our treatment plants; Westbrook, Gorham, and Windham. With continued and planned growth, we expect that some communities will reach their allocations in the future. A study is planned to more clearly understanding the amount and timing for capacity increases, the work that will be required to accommodate additional loadings at the treatment plant, and how those costs will be allocated. While growth pressures are emerging, the existing treatment plant, and the plan to understand development needs, should allow for the needs of all communities to be served.

# **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.

	Renewal and		*Prorata share of Joint	
	Replacement	Grand Total	Project:	Total Cost
Projects:				
416/3132/Westbrook Gorham Windham WWTF R&R*	\$15,400	\$15,400	30.89	\$50,000
416/3190/Access Road and Parking Lot Resurfacing*	\$123,200	\$123,200	30.89	\$400,000
60/3137/Gorham WW Pump Station - R&R	\$35,000	\$35,000		
Grand Total	\$173,600	\$173,600		
Renewal and Replacement Fund:				
Reserve Balance, Beginning of Year	\$888,995	i		
Annual Contribution	\$100,000	)		
Projects	-\$173,600			
Reserve Balance, End of Year	\$815,395			

### **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:**

The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$6.0 million of capital projects. 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 \$1,830,330 in 2028, a 9.3% increase over 2024 Budget. Unexpected system repairs costs in 2023 caused the decline in the operating budget surplus. Over the next 5 year period, reserve balances will be used for capital projects. Debt ratios are close to the target amounts.



#### Reserve Fund Balances

Percent of Budget Dedicated to Debt Service – Target: Not to Exceed 35%           2022         2023         2024         2025         2026         2027         2028										
<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>			
35%	33%	34%	33%	33%	32%	31%	31%			

#### Debt Service Ratio - Target: Greater or Equal to 125%

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
121%	124%	121%	121%	121%	122%	121%	121%

# **Projections for Rate-Making Purposes (continued)**

#### **Operating Fund:**

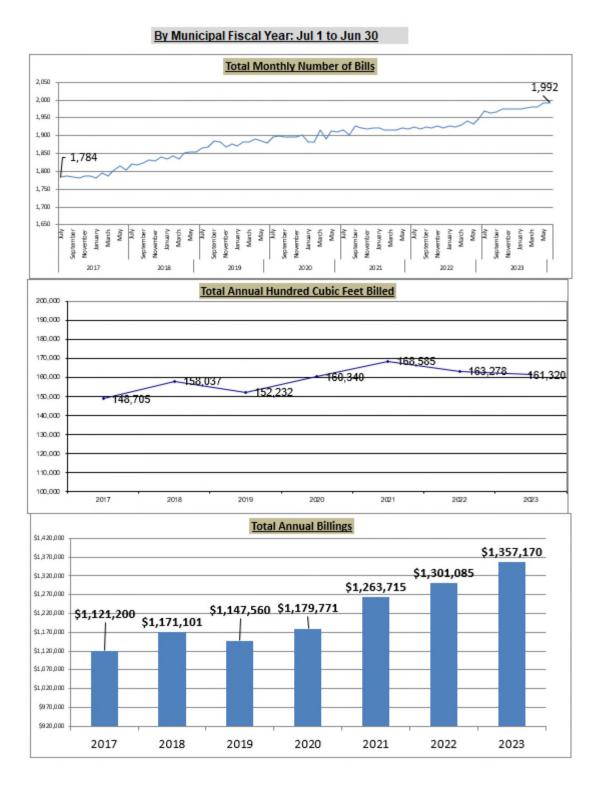
	2022 Actual	2023 Budget	2024 Budget	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
Revenues:							
Assessment Income	1,313,100	1,566,816	1,675,344	1,712,503			
Interest Income	5,809	6,060	35,415	35,415	35,415	35,415	35,415
Other Income	6,151	7,861	24,564	24,564	24,564	24,564	24,564
Total Revenues	1,325,060	1,580,737	1,735,323	1,772,482	1,799,861	1,849,900	1,890,309
Operating Expenses:							
Salaries & Wages	119,834	138,291	140,752	147,790	152,963	158,317	163,858
Employee Benefits	48,316	61,128	62,403	66,147	70,116	74,323	78,782
Biosolids Disposal	60,635	85,284	77,041	80,893	84,938	89,185	93,644
Chemicals	37,855	43,185	44,397	46,173	47,558	48,985	50,455
Contracted Services	122,622	85,146	101,412	105,468	108,632	111,891	115,248
Heat/Fuel Oil	9,018	11,193	9,792	10,184	10,490	10,805	11,129
Insurance	2,170	2,563	2,884	2,999	3,089	3,182	3,277
Materials & Supplies	37,769	32,775	33,921	35,278	36,336	37,426	38,549
Other Expense	399	868	970	1,009	1,039	1,070	1,102
Purchased Power	53,009	53,445	88,658	93,091	96,815	99,719	102,711
Regulatory/Taxes	1,440	935	914	951	980	1,009	1,039
Tele/Other Utilties	4,961	4,422	4,408	4,584	4,722	4,864	5,010
Transportation	30,735	28,960	23,305	24,237	24,964	25,713	26,484
SS - Administration	161,685	177,152	191,326	200,892	208,928	217,285	225,976
SS - Engineering Services	65,560	91,520	115,082	120,779	125,580	130,572	135,762
SS - Environmental Services	22,504	25,482	23,363	24,531	25,512	26,532	27,593
SS - Wastewater Services	74,420	87,520	87,055	91,408	95,064	98,867	102,822
SS - Water Services	4,744	2,915	3,793	3,983	4,142	4,308	4,480
	857,676	932,784	1,011,476	1,060,397	1,101,868	1,144,053	1,187,921
Debt Service	521,077	523,708	596,520	588,508	574,416	582,270	578,811
Renewal & Replacement - Direct	75,000	100,000	100,000	100,000	100,000	100,000	100,000
Renewal & Replace - Indirect	23,055	24,245	27,327	23,577	23,577	23,577	23,577
Capital Finance Expense	619,132	647,953	723,847	712,085	697,993	705,847	702,388
Total Operating Expenses	1,476,808	1,580,737	1,735,323	1,772,482	1,799,861	1,849,900	1,890,309
Current Year Surplus(Deficit)	-151,748	0	0	0	0	0	0
Prior Year Surplus	245,925	169,258	101,941	101,941	101,941	101,941	101,941
Accumulated Surplus	94,177	169,258	101,941	101,941	101,941	101,941	101,941
Target Balance(25% of budget)		395,184	433,831	443,121	449,965	462,475	472,577
Above/(Below)		-225,926	-331,890	-341,180	-348,024	-360,534	-370,636
		,>	,	,200		,	

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

	2	024 Budget	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
R&R Balance BOY	\$	888,995	\$ 815,395	\$ 625,215	\$ 630,155	\$ 514,975
Contribution	\$	100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Withdrawals	\$	(173,600)	\$ (290,180)	\$ (95,060)	\$ (215,180)	\$ (172,060)
R&R Balance EOY	\$	815,395	\$ 625,215	\$ 630,155	\$ 514,975	\$ 442,915

### **Sewer Billing Statistics**

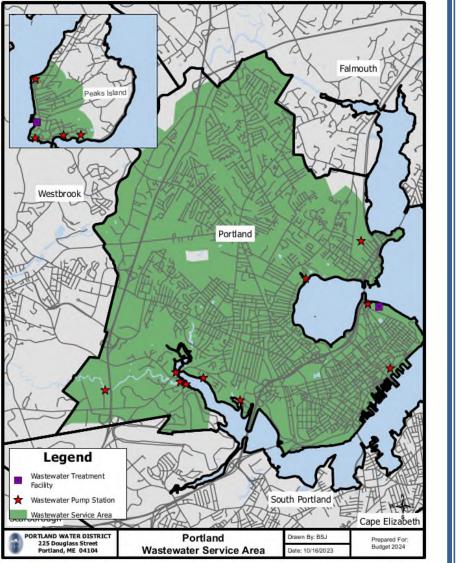
PWD provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water PWD's water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.



# Fund: Wastewater - Portland

### Background

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



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 \$28,592,594 on 17,313 Customers (avg. \$137.63/month)

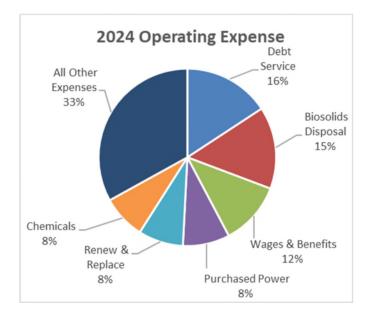
# Fund: Wastewater - Portland

# **2024 Financial Summary**

The city's assessment will increase 4.7%, or \$744,432, to \$16,543,176.

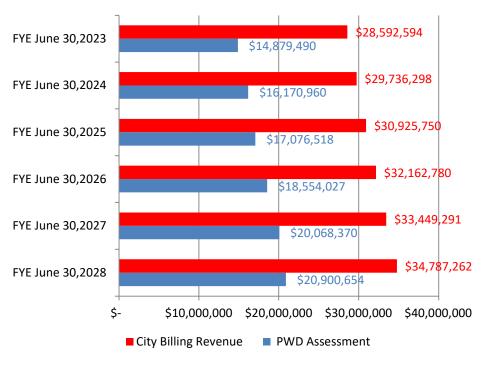
The proposed Operating Expense and Capital budgets are \$17,507,832 and \$19,930,000, respectively.

The Operating Expense budget is \$17,507,832 or 7.1%, higher than the previous year. Departmental expense increased by \$999,458 or 8.1%. Debt service decreased \$34,953 (1.3%) and renewal & replacement (direct and indirect) will increase \$199,503 to \$1,435,973.



# Assessment Compared to Ratepayers' Billing

The municipality's fiscal year end is June 30, while the PWD's is December 31. The chart below compares the sewer billing cash as collected by PWD on their behalf and PWD'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, 2023					
- Rates Assu	umed:				
Effective Date	Base/Per				
Date:					
Jul 1 2013	\$8.35				
Jul 1 2014	\$8.81				
Jul 1 2015	\$9.70				
Jan1 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				
Jul 1 2023	\$12.75				

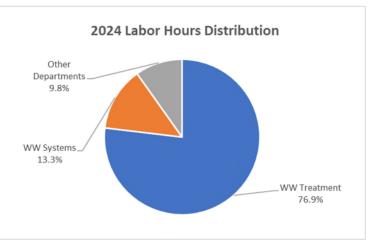
2024 to 2028.

87

Salaries/Wages – Salaries and wages have increased by 5.1%, or \$67,697, to \$1,407,236. Regular wages increased an average of 5.0%, hours charged were up 0.2% (93 hours).

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 6.6% (\$37,929).

**Biosolids Disposal** – Following several years of dramatically increasing biosolids costs,



related to legislative action limiting the options available in Maine, costs have stabilized with a new biosolids management contract. The projected volume wet tons of biosolids processed is expected to decrease 6.5% and the budgeted per unit cost of disposal will decrease 2.0%. Overall, the budget in Portland is anticipated to decrease \$205,932 or 7.3%.

**Chemicals** – Chemical expense rose 45.7% to a total of \$1,393,102. Chemical usage, with the exception of polymer, is expected to be relatively flat. The actual per unit costs of chemicals was much higher in 2023 than what was originally projected in the 2023 Budget due to spikes in energy and transportation costs. That combined with the annual anticipated increase for 2024 resulted in a large increase between budget years.

**Purchased Power** – Overall this category is up \$300,902 (25.3%). Energy costs decreased \$38.2k as savings from long term contracts for large facilities offset increased medium and small accounts. Transmission and Delivery was up \$81.9k (15.2%). In addition, this year's budget includes \$257k in expense related to renewable energy. This is offset by \$477k in renewal energy credits for a net gain in this fund of \$220k. In prior years the net gain was listed in the revenue section, last year the net gain was \$172k.

**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 \$151,398 or 4.0%.

**Debt Service** – This is the annual principal and interest payments on bonds issued to finance capital projects. The expense will decrease \$34,953 (1.3%).

**Renewal and Replacement** – This is the fund's annual contribution to finance smaller capital projects. A contribution of \$1,435,973 will be made in 2024.

#### Budget by Fund – Wastewater, Portland

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff <sup>\$</sup>	Diff %
Assessment Income	\$13,960,236	\$7,899,372	\$15,798,744	\$16,543,176	\$744,432	4.7%
Interest Income	60,005	101,307	83,224	247,603	164,379	197.5%
Other Income	629,500	198,802	461,856	717,053	255,197	<u>55.3</u> %
Total Revenue	14,649,741	8,199,481	16,343,824	17,507,832	1,164,008	7.1%
Salaries & Wages	1,212,901	590,078	1,339,539	1,407,236	67,697	5.1%
Employee Benefits	465,628	253,577	576,461	614,390	37,929	6.6%
Biosolids Disposal	1,939,066	1,280,101	2,828,072	2,622,140	(205,932)	-7.3%
Chemicals	949,132	558,721	955,826	1,393,102	437,276	45.7%
Contracted Services	774,830	495,199	818,502	934,581	116,079	14.2%
Heat/Fuel Oil	134,803	87,076	149,601	113,218	(36,383)	-24.3%
Insurance	39,281	21,896	42,502	50,360	7,858	18.5%
Materials & Supplies	503,244	152,320	340,048	405,025	64,977	19.1%
Other Expense	9,539	733	(12,870)	(11,100)	1,770	-13.8%
Purchased Power	1,086,079	540,216	1,191,571	1,492,473	300,902	25.3%
Regulatory/Taxes	41,484	2,552	38,580	44,530	5,950	15.4%
Tele/Other Utilties	202,197	90,831	157,540	214,538	56,998	36.2%
Transportation	63,799	25,640	72,612	65,551	(7,061)	-9.7%
SS - Administration	1,657,425	862,545	1,792,203	1,856,050	63,847	3.6%
SS - Engineering Services	429,246	210,298	610,313	728,324	118,011	19.3%
SS - Environmental Services	279,359	137,764	280,885	260,188	(20,697)	-7.4%
SS - Wastewater Services	1,035,370	576,531	1,102,328	1,084,572	(17,756)	-1.6%
SS - Water Services	48,949	31,139	30,071	38,064	7,993	<u>26.6</u> %
Operating Expense	10,872,332	5,917,217	12,313,784	13,313,242	999,458	8.1%
Debt Service & Lease Expense	2,504,165	1,351,292	2,793,570	2,758,617	(34,953)	-1.3%
Renewal & Replacement - Direct	1,000,000	500,000	1,000,000	1,180,000	180,000	18.0%
Renewal & Replace - Indirect	228,702	118,234	236,470	255,973	19,503	<u>8.2</u> %
Total Expense	14,605,199	7,886,743	16,343,824	17,507,832	1,164,008	7.1%
Current Year Surplus (Deficit)	44,542	312,738	-	-		
Transfer to R&R	(150,000)	-	-	-		
Return of WW Accumulated Surplus	(309,203)	-	-	-		
Prior Year Surplus	3,866,814	3,452,153	3,405,260	3,583,126		
Accumulated Surplus	3,452,153	3,764,891	3,405,260	3,583,126		

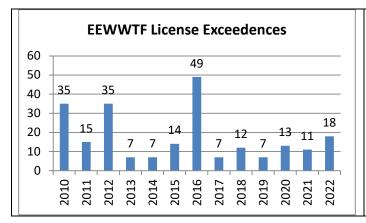
# **Operation Summary Portland**

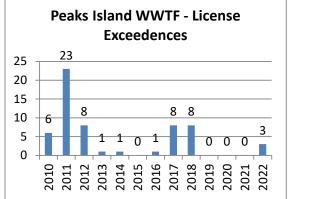
**Wastewater Treatment:** The Portland Water District owns, operates and maintains the interceptor and treatment facilities in the City of Portland. The largest facility, the East End WWTF is located off the Eastern Promenade while the Peaks Island facility is located by the ferry dock on the island.

EEWTF Parameter	Capacity	2022 Facility Avg	2022 - %
			Capacity Used
Flow (million gallons per day)	19.8 mgd	13.2 mgd	67%
Biosolids Removed (wet tons/month)	N/A	1,450 wt/month	

Parameter	Discussion
Biological Oxygen Demand	Measure of organic material and the strength of pollution. The treatment
(BOD)	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. Due to operational limitations related to
	the need to take secondary clarifier #3 out-of-service, negligible nitrogen
	reduction was affected in 2023.

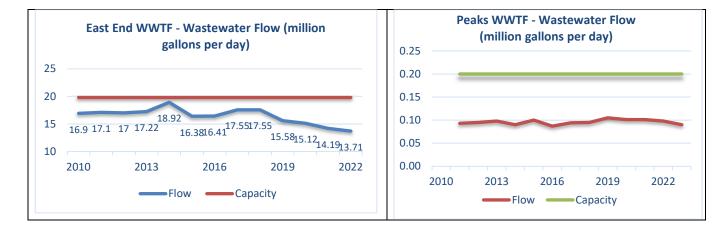
#### **Effluent Permit Requirements:**





# **Operation Summary (continued)**

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	2023 Actual to Sept	2024 Projected
Preventive Work Orders	513	550
Corrective Work Orders	52	50
Wet wells cleaned	13	15
Debris removed (tons)	33	45
Dry Weather Overflows	1	0

# **Operation Summary (continued)**

#### 2023 Other Highlights

- 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. We worked with the city to coordinate the release of flow from the new storage conduit on Baxter Blvd. to PWD's system.
- With our asset management system, we continue to proactively manage maintenance. Our Maintenance and Operations Team has been systematically reviewing our systems and treatment assets to create a prioritized listing of equipment to refine our preventive maintenance program. This effort will continue through 2024.
- An electrical distribution system upgrade, that included a new emergency generator was complete in 2023.
- Legislative action that prohibited land application of biosolids due to PFAS concerns has created management challenges throughout Maine. A biosolids management plan began in 2022 and identified near, mid, and longer-range options for biosolids management that included possible regional efforts to economically manage biosolids in the future. A more detailed effort has continued in 2023. This includes a detailed review of nearly 30 technical responses to a Request for Information. The contract to manage current biosolids will provide some potential certainty in disposal and cost though 2027.
- The dewatering system upgrade is underway in 2023. This will replace the current rotary press system.
- Design of secondary clarifier, gravity thickener, and plant water system upgrades were completed in 2023. The project will bid and construction will begin in late 2023.

#### 2024 Work Plan

- Final design of the biosolids dewatering project will continue in 2024.
- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders. Efforts to refine the existing maintenance approach will continue.
- The Fore River Pump Station pumping system will be upgraded to address ongoing challenges related to excessive vibration of the pumps.
- Construction on the secondary clarifiers, gravity thickeners, and plant water system will progress. The clarifiers should be upgraded by the end of the year.

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.

		<b>Bond Anticipation</b>	Renew al and	
	Bond	Note	Replacement	Grand Total
Projects:				
21/3020/Process Valve and Actuator Replacement			\$30,000	\$30,000
21/3133/East End WWTF R&R			\$230,000	\$230,000
21/3148/Return Sludge Piping Replacement	\$3,000,000			\$3,000,000
21/3150/HVAC Upgrades - Tunnel and Pump Gallery	\$100,000			\$100,000
21/3151/Influent Screen #2 and Headw orks Conveyors	\$1,250,000			\$1,250,000
21/3204/Dew atering System Upgrade/ Ordor control		\$11,000,000		\$11,000,000
21/3292/Entry Gate Replacement			\$100,000	\$100,000
3/3268/Portland Forcemain Eval /Condition Assessment			\$300,000	\$300,000
423/3131/Peaks Island R&R			\$20,000	\$20,000
423/3193/Decanter and Mixer Upgrade, Tanks A and B			\$50,000	\$50,000
423/3279/Stormw ater System Upgrades			\$25,000	\$25,000
70/3135/Portland WW Pump Stations - R&R			\$125,000	\$125,000
70/3205/Northeast PS Generator and Switchgear Replacement	\$1,300,000			\$1,300,000
70/3293/Fore River Pump Replacement Project	\$2,200,000			\$2,200,000
70/3295/Spare Pump Assembly Northeast PS			\$200,000	\$200,000
Grand Total	\$7,850,000	\$11,000,000	\$1,080,000	\$19,930,000

#### Renewal and Replacement Fund:

Reserve Balance, Beginning of Year	\$6,038,081
Annual Contribution	\$1,180,000
Projects	-\$1,080,000
Reserve Balance, End of Year	\$6,138,081

# **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.

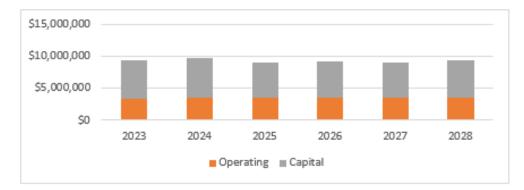
#### Major Assumptions:

The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$35 million of capital projects. 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 \$21,162,761 in 2028, an 28% increase over 2024 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%

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
18%	17%	16%	20%	25%	25%	24%

#### Debt Service Ratio - Target: Greater or Equal to 125%

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2027</u>
147%	144%	152%	124%	115%	122%	122%

# **Projections for Rate-Making Purposes (continued)**

### **Operating Fund:**

	2022 Actual	2023 Budget	2024 Budget	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
Revenues:							
Assessment Income	13,960,236	15,798,744	16,543,176	17,609,860	19,498,194	20,638,546	21,162,761
Interest Income	60,005	83,224	247,603	247,603	247,603	247,603	247,603
Other Income	629,500	461,856	717,053	717,053	717,053	717,053	717,053
Total Revenues	14,649,741	16,343,824	17,507,832	18,574,516	20,462,850	21,603,202	22,127,417
Operating Expenses:							
Salaries & Wages	1,212,901	1,339,539	1,407,236	1,477,598	1,529,314	1,582,840	1,638,239
Employee Benefits	465,628	576,461	614,390	651,253	690,328	731,748	775,653
Biosolids Disposal	1,939,066	2,828,072	2,622,140	2,753,247	2,890,909	3,035,454	3,187,227
Chemicals	949,132	955,826	1,393,103	1,448,827	1,492,292	1,537,061	1,583,173
Contracted Services	774,831	818,502	934,581	971,964	1,001,123	1,031,157	1,062,092
Heat/Fuel Oil	134,803	149,601	113,218	117,747	121,279	124,917	128,665
Insurance	39,281	42,502	50,360	52,374	53,945	55,563	57,230
Materials & Supplies	503,244	340,048	405,025	421,226	433,863	446,879	460,285
Other Expense	9,539	-12,870	-11,100	-11,544	-11,890	-12,247	-12,614
Purchased Power	1,086,079	1,191,571	1,492,473	1,567,097	1,629,781	1,678,674	1,729,034
Regulatory/Taxes	41,484	38,580	44,530	46,311	47,700	49,131	50,605
Tele/Other Utilties	202,197	72,612	214,538	223,120	229,814	236,708	243,809
Transportation	63,799	157,540	65,551	68,173	70,218	72,325	74,495
SS - Administration	1,657,425	1,792,203	1,856,050	1,948,853	2,026,807	2,107,879	2,192,194
SS - Engineering Services	429,246	610,313	728,324	764,376	794,760	826,352	859,199
SS - Environmental Services	279,359	280,885	260,188	273,197	284,125	295,490	307,310
SS - Wastewater Services	1,035,370	1,102,328	1,084,572	1,138,801	1,184,353	1,231,727	1,280,996
SS - Water Services	48,948	30,071	38,063	39,966	41,565	43,228	44,957
	10,872,332	12,313,784	13,313,242	13,952,586	14,510,286	15,074,886	15,662,549
Debt Service	2,504,165	2,793,570	2,758,617	3,734,980	5,165,614	5,341,366	5,277,918
Renewal & Replacement - Direct	1,000,000	1,000,000	1,180,000	700,000	600,000	1,000,000	1,000,000
Renewal & Replace - Indirect	228,702	236,470	255,973	186,950	186,950	186,950	186,950
Capital Finance Expense	3,732,867	4,030,040	4,194,590	4,621,930	5,952,564	6,528,316	6,464,868
Total Operating Expenses	14,605,199	16,343,824	17,507,832	18,574,516	20,462,850	21,603,202	22,127,417
Current Year Surplus(Deficit)	44,542	0	0	0	0	0	0
Transfer to Capital Reserve	-459,203						
Prior Year Surplus	3,866,814	3,405,260	3,583,126	3,583,126	3,583,126	3,583,126	3,583,126
Accumulated Surplus	3,452,153	3,405,260	3,583,126	3,583,126	3,583,126	3,583,126	3,583,126

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

	2024	2025	2026	2027	2028
	Budget	Forecast	Forecast	Forecast	Forecast
R&R Balance BOY	\$ 6,038,081	\$ 6,138,081	\$ 5,553,081	\$ 5,653,081	\$ 5,548,081
Contribution	\$ 1,180,000	\$ 700,000	\$ 600,000	\$ 1,000,000	\$ 1,000,000
Withdrawals	\$(1,080,000)	\$(1,285,000)	\$ (500,000)	\$(1,105,000)	\$ (730,000)
R&R Balance EOY	\$ 6,138,081	\$ 5,553,081	\$ 5,653,081	\$ 5,548,081	\$ 5,818,081

# East End Treatment Facility Secondary Clarifier and Primary Gallery Upgrade

A significant driver of Portland's increased assessment in the coming years is the debt service cost to finance the upgrade of the East End Treatment Facility Primary Clarifier and Primary Gallery. The three existing secondary clarifiers at the East End Wastewater Treatment Facility are beyond their useful life and have experienced several failures. Preliminary engineering work began in 2021 and the Board approved the project's construction contract in 2023. The multi-year plan includes almost \$1M of annual debt service costs starting in 2025.

#### CIP 2022, Project # 21/3152 – Primary Sludge Handling and Gallery

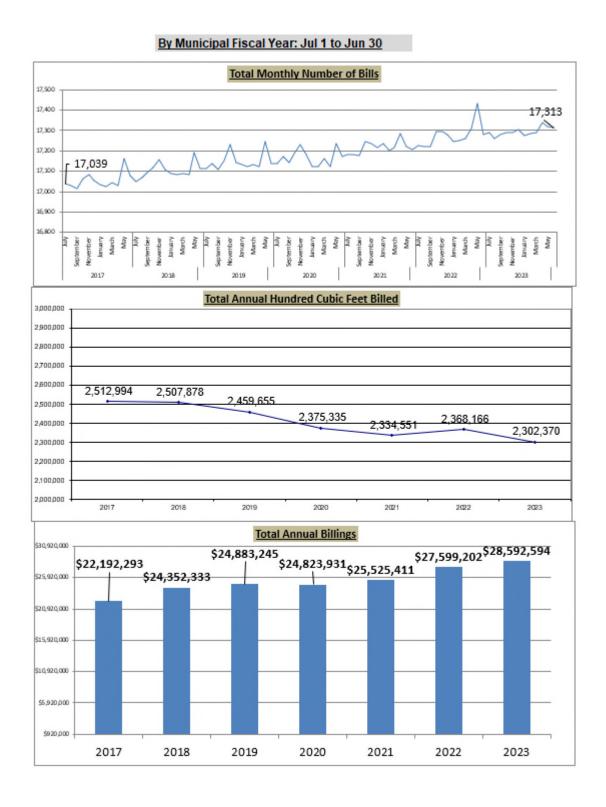
Upgrade Project. This project was under construction with a scheduled completion date of June 2025



Existing 45-year-old plant water system to be replaced as part of this project



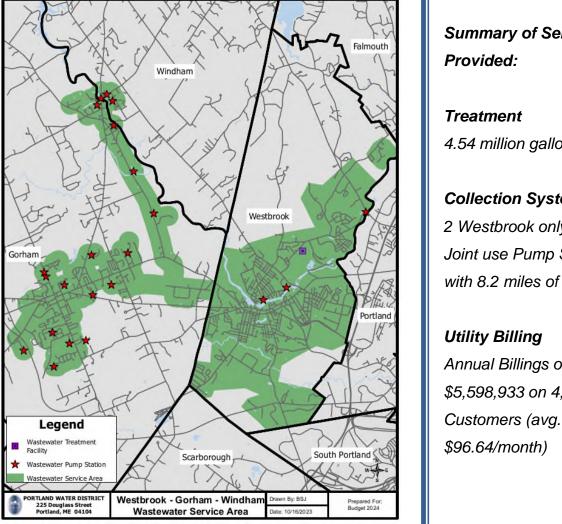
PWD provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District's water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.



# **Fund: Wastewater - Westbrook**

# Background

The Portland Water District's charter authorizes PWD 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 PWD's interceptor system. Additionally, by contract, PWD provides utility billing services.



Summary of Services 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 \$5,598,933 on 4,828

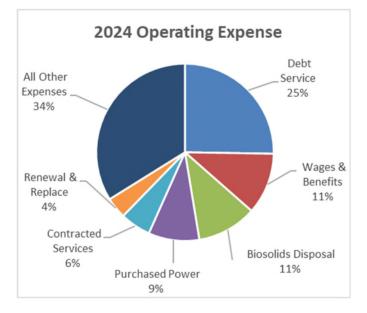
# **Fund: Wastewater - Westbrook**

#### **2024 Financial Summary**

The proposed assessment of \$3,995,964 represents a 7.3% increase over the previous year. This is an increase of \$272,868 over the previous year.

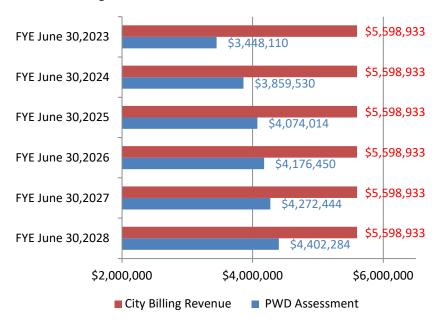
The proposed Operating Expense and Capital budgets are \$4,236,193 and \$639,700, respectively.

The Total Expense budget is \$399,048 higher (10.4%) than the previous year. Operating Expense increased by \$305,056 or 11.3%, Debt Service increased by 16.9% to \$1,070,089 and Renewal & Replacement (direct and indirect) funding decreased by \$60,567 from the previous year to \$163,626.



### **Assessment Compared to Ratepayers' Billing**

The municipality's fiscal year end is June 30, while PWD's is December 31. The chart below compares the sewer billing cash as collected by PWD on their behalf and PWD'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:**

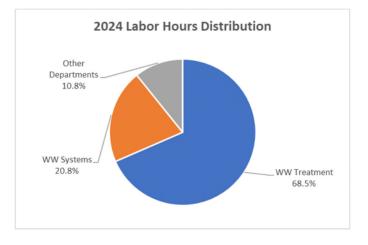
- Consumption assumed is based on consumption through June 30, 2023

- Rates Histo	ry:
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

**Salaries/Wages** – Salaries and wages have increased by 4.3%, or \$13,788, to \$330,837. Regular wages increased an average of 5.0%, hours charged were up 0.4% (36 hours).

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 5.7% (\$7,767).

**Biosolids Disposal** – Following several years of dramatically increasing biosolids costs, related to legislative action limiting the options available in



Maine, costs have stabilized with a new biosolids management contract. The projected volume wet tons of biosolids processed at the Westbrook Regional Wastewater Treatment Facility (WRWWTF) is expected to decrease 5.5% and the budgeted per unit cost of disposal will decrease 2.0%. Overall, the budget in Westbrook is anticipated to decrease \$28,873 or 5.9%.

**Contracted Services** – Overall this category was up \$53,898 or 29.6%. This increase is mostly driven by higher maintenance needs at the WRWWTF (\$46.4k). This includes annual maintenance on the new aeration system and work with the chemical piping system.

**Purchased Power** – Overall this category is up \$172,275 (78.1%). This was mostly driven by large increases in energy costs which increased \$103.8k or 82.5%. Transmission and Delivery was up \$12.4k (13.1%). In addition, this year's budget includes \$56.0k in expense related to renewable energy. This is offset by \$103.8k in renewal energy credits for a net gain in this fund of \$47.8k. In prior years the net gain was listed in the revenue section, last year the net gain was \$31.9k.

**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 \$61,833 or 6.6%.

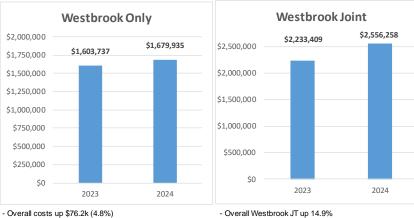
**Debt Service** – The annual principal and interest payments on bonds issued to finance capital projects. Increased 16.9% (\$154,559) mainly due to aeration bonds for the Westbrook Regional Wastewater Treatment Facility.

**Renewal & Replacement** - Dollars put aside to fund smaller capital projects. A contribution of \$163,626 will be made in 2024.

#### Budget by Fund – Wastewater, Westbrook



	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Assessment Income	\$3,173,124	\$1,861,548	\$3,723,096	\$3,995,964	\$272,868	7.3%
Interest Income	33,730	44,355	35,193	136,416	101,223	287.6%
Other Income	82,119	51,744	78,856	103,813	24,957	<u>31.6</u> %
Total Revenue	3,288,973	1,957,647	3,837,145	4,236,193	399,048	10.4%
Salaries & Wages	285,860	143,775	317,049	330,837	13,788	4.3%
Employee Benefits	112,034	59,963	137,395	145,162	7,767	5.7%
Biosolids Disposal	375,036	240,854	491,117	462,244	(28,873)	-5.9%
Chemicals	223,859	134,737	220,723	242,346	21,623	9.8%
Contracted Services	150,733	74,773	182,538	236,527	53,989	29.6%
Heat/Fuel Oil	39,543	25,494	46,484	41,779	(4,705)	-10.1%
Insurance	11,170	6,215	12,096	14,345	2,249	18.6%
Materials & Supplies	105,783	31,783	64,742	71,581	6,839	10.6%
Other Expense	2,779	1,286	4,272	5,050	778	18.2%
Purchased Power	236,560	148,186	220,599	392,874	172,275	78.1%
Regulatory/Taxes	5,582	1,077	5,386	5,481	95	1.8%
Tele/Other Utilties	39,510	24,369	35,398	35,280	(118)	-0.3%
Transportation	14,407	6,854	15,856	13,372	(2,484)	-15.7%
SS - Administration	399,075	205,267	425,711	460,488	34,777	8.2%
SS - Engineering Services	94,946	49,107	140,496	172,897	32,401	23.1%
SS - Environmental Services	113,804	56,266	115,112	105,635	(9,477)	-8.2%
SS - Wastewater Services	231,883	133,180	254,734	256,696	1,962	0.8%
SS - Water Services	12,553	7,990	7,714	9,884	2,170	<u>28.1</u> %
Operating Expense	2,455,117	1,351,176	2,697,422	3,002,478	305,056	11.3%
Debt Service & Lease Expense	914,661	441,247	915,530	1,070,089	154,559	16.9%
Renewal & Replacement - Direct	168,000	84,000	168,000	100,000	(68,000)	-40.5%
Renewal & Replace - Indirect	53,755	28,095	56,193	63,626	7,433	<u>13.2</u> %
Total Expense	3,591,533	1,904,518	3,837,145	4,236,193	399,048	10.4%
Current Year Surplus (Deficit)	(302,560)	53,129	-	-		
Prior Year Surplus	615,838	313,278	358,219	61,608		
Accumulated Surplus	313,278	366,407	358,219	61,608		



- Operating Expense up \$138.9k (11.8%)

- R&R w as reduced \$60.6k

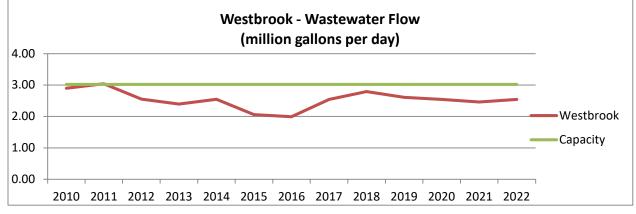
- Westbrook's share up 14.5% (\$322k)

- Westbrook's share of Debt Service up \$157k

# **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)	2022 Flow (mgd)	% of 2022 WWTF Flow	Reserved Capacity (mgd)	% of Capacity Used
Westbrook (66.6%)	2.54	84.3 %	3.023	84 %
Gorham (30.8%)	0.476	14.5 %	1.398	34 %
Windham (2.6%)	0.060	1.2 %	0.118	51 %
Total Plant Flow	3.075		4.54	68 %



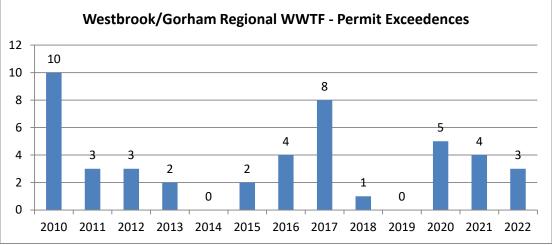
The following tables depict some of the key parameters that are monitored at the facility.

WGWTF Parameter		DEP Limit	2022 Facility Average			
Biosolids Removed (wet tons/month	ו)	N/A	339 wet ton/month			
Parameter	Discus	sion				
Biological Oxygen Demand (BOD)		ent plant removed 93	l and the strength of pollution. The 1% of the BOD, well above the required			
Total Suspended Solids (TSS)	treatm	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		•	ated effluent, chlorine must be removed rged. The permit limit was met at all			
Fecal Coliform Bacteria	Following disinfection with chlorine, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.					
Phosphorus	plant's quality The mo	effluent discharge. F concerns that might onitoring will likely cr	rement to monitor phosphorus in the Phosphorus can contribute to water include algae and low dissolved oxygen. eate a baseline for consideration if are established in the future.			

# **Operation Summary (continued)**

#### **Effluent Permit Requirements:**

The effluent permit was renewed in 2017. An application for renewal was submitted and the permit is pending from Maine DEP. The City of Westbrook is a joint permittee for their obligations under the CSO Long Term Control Plan. The Long-Term Control Plan will be completed in 2023 (the update was delayed at DEP's recommendation to ensure flow monitoring results could be used in preparing the update).



Wastewater Conveyance - interceptors and pumping stations

Parameter	2023 Actual to Sept	2024 Projected
Preventive Work Orders	225	250
Corrective Work Orders	32	20
Wet wells cleaned	2	3
Debris removed (tons)	7.7	10
Dry Weather Overflows	0	0

# **2023 Other Highlights**

- With our asset management system, we continue to proactively manage maintenance. Our Maintenance and Operations Team has been systematically reviewing our systems and treatment assets to create a prioritized listing of equipment to refine our preventive maintenance program. This effort will continue through 2024.
- Construction of the upgraded aeration system and secondary clarifiers continued through the year and expected to be completed by year's end.
- Following a failed legislative effort to reclassify the water quality designation of the Presumpscot River in 2022, a moratorium on increases or additional licensed discharges to the river was passed in 2023. This essentially caps the permitted capacity of the treatment plant at existing levels.
- Legislative action that prohibited land application of biosolids due to PFAS concerns has created management challenges throughout Maine. A biosolids management plan began in 2022 and identified near, mid, and longer-range options for biosolids management that included possible regional efforts to economically manage biosolids in the future. A more detailed effort has continued in 2023. This includes a detailed review of nearly 30 technical responses to a Request for Information. The contract to manage current biosolids will provide some potential certainty in disposal and cost though 2027.
- PWD continues to work with the Town to properly manage growth and the expansion of new systems infrastructure to properly support growth in the community.

The Combined Sewer Overflow Long Term Control Plan Update began in 2022. At the recommendation of Maine DEP, the schedule was extended to allow for additional flow monitoring for use in the plan development. Several significant rain events this year provided ample flow and the results are being used to calibrate the model. The draft report is expected this year. 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.

### 2024 Work Plan

- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders. Efforts to refine the existing maintenance approach will continue.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce. Initial designs show a modernized layout that provides improved facilities that afford more privacy to employees.
- The Biosolids Management Plan findings will be shared with Maine DEP, Maine Legislative Committees, other utilities, and additional stakeholders as a solution to the current biosolids management challenges progress.
- The effluent permit renewal from Maine DEP for the regional treatment plant is anticipated in 2024.
- PWD has been discussing the treatment plant capacity allocated to the three communities that contribute to our treatment plants; Westbrook, Gorham, and Windham. With continued and planned growth, we expect that some communities will reach their allocations in the future. A study is planned to more clearly understanding the amount and timing for capacity increases, the work that will be required to accommodate additional loadings at the treatment plant, and how those costs will be allocated. While growth pressures are emerging, the existing treatment plant, and the plan to understand development needs, should allow for the needs of all communities to be served.

# **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.

	Renew al and		*Prorata share of Joint	
	Replacement	Grand Total	Project:	<b>Total Cost</b>
Projects:				
3/3301/WWGWWTF Capacity Study	\$300,000	\$300,000		
411/3134/Westbrook WW Systems R&R	\$40,000	\$40,000		
416/3132/Westbrook Gorham Windham WWTF R&R	\$33,300	\$33,300	66.6%	\$50,000
416/3190/Access Road and Parking Lot Resurfacing	\$266,400	\$266,400	66.6%	\$400,000
Grand Total	\$639,700	\$639,700		
Renewal and Replacement Fund:				
Reserve Balance, Beginning of Year	\$3,745,300			
Annual Contribution	\$100,000			
Projects	-\$639,700			
Reserve Balance, End of Year	\$3,205,600	-		

#### **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.

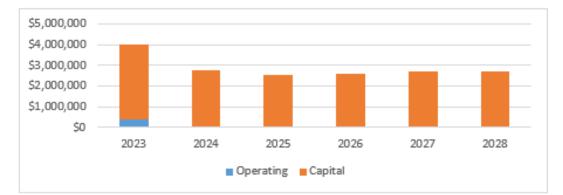
#### **Major Assumptions:**

The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$9.7 million of capital projects. 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 \$4,460,515 in 2028, a 11% increase over 2024 Budget.



#### **Reserve Fund Balances**

Percent	of Budget	Dedicated	to Debt	Service -	Target: Not	to Exceed 35%
<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>

24%	24%	25%	24%	22%	22%	21%

#### Debt Service Ratio - Target: Greater or Equal to 125%

	<u>2023</u>					<u>2028</u>
128%	124%	115%	118%	120%	119%	120%

# **Projections for Rate-Making Purposes (continued)** Operating Fund:

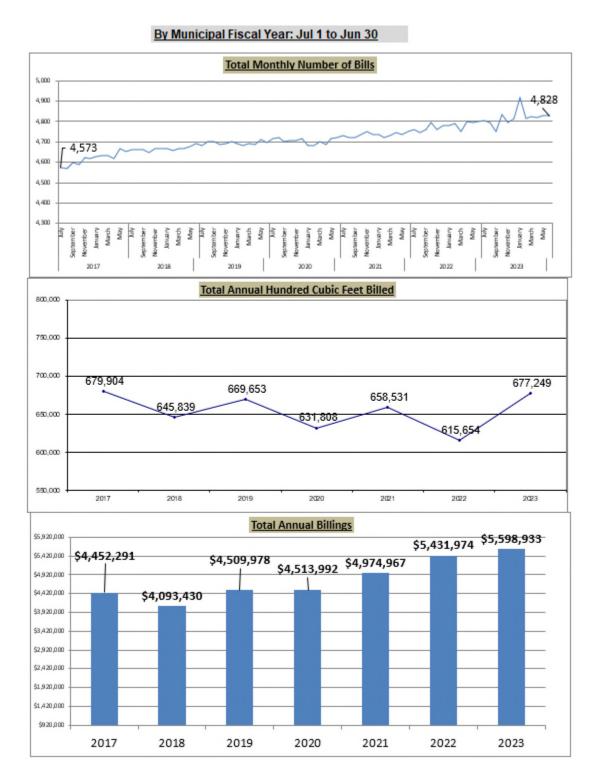
- per a	1						
	2022 Actual	2023 Budget	2024 Budget	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
Revenues:							
Assessment Income	3,173,124	3,723,096	3,995,964	4,152,064	4,200,835	4,344,052	4,460,515
Interest Income	33,730	35,193	136,416	136,416	136,416	136,416	136,416
Other Income	82,119	78,856	103,813	103,813	103,813	103,813	103,813
Total Revenues	3,288,973	3,837,145	4,236,193	4,392,293	4,441,064	4,584,281	4,700,744
Operating Expenses:							
Salaries & Wages	285,860	317,049	330,837	347,379	359,537	372,121	385,145
Employee Benefits	112,034	137,395	145,162	153,872	163,104	172,890	183,263
Biosolids Disposal	375,036	491,117	462,244	485,356	509,624	535,105	561,860
Chemicals	223,859	220,723	242,346	252,040	259,601	267,389	275,411
Contracted Services	150,733	182,538	236,527	245,988	253,368	260,969	268,798
Heat/Fuel Oil	39,543	46,484	41,779	43,450	44,754	46,097	47,480
Insurance	11,170	12,096	14,345	14,919	15,367	15,828	16,303
Materials & Supplies	105,783	64,742	71,581	74,444	76,677	78,977	81,346
Other Expense	2,779	4,272	5,050	5,252	5,410	5,572	5,739
Purchased Power	236,560	220,599	392,874	412,518	429,019	441,890	455,147
Regulatory/Taxes	5,582	5,386	5,481	5,700	5,871	6,047	6,228
Tele/Other Utilties	39,510	35,398	35,280	36,691	37,792	38,926	40,094
Transportation	14,407	15,856	13,372	13,907	14,324	14,754	15,197
SS - Administration	399,075	425,711	460,488	483,512	502,852	522,966	543,885
SS - Engineering Services	94,946	140,496	172,897	181,455	188,668	196,168	203,966
SS - Environmental Services	113,804	115,112	105,635	110,917	115,354	119,968	124,767
SS - Wastewater Services	231,883	254,734	256,696	269,531	280,312	291,524	303,185
SS - Water Services	12,553	7,714	9,884	10,378	10,793	11,225	11,674
	2,455,117	2,697,422	3,002,478	3,147,309	3,272,427	3,398,416	3,529,488
Debt Service	914,661	915,530	1,070,089	1,053,407	977,060	994,288	979,679
Renewal & Replacement - Direct	168,000	168,000	100,000	168,000	168,000	168,000	168,000
Renewal & Replace - Indirect	53,755	56,193	63,626	23,577	23,577	23,577	23,577
Capital Finance Expense	1,136,416	1,139,723	1,233,715	1,244,984	1,168,637	1,185,865	1,171,256
Total Operating Expenses	3,591,533	3,837,145	4,236,193	4,392,293	4,441,064	4,584,281	4,700,744
Current Year Surplus(Deficit)	-302,560	0	0	0	0	0	o
Prior Year Surplus	615,838	358,219	61,608	61,608	61,608	61,608	61,608
Accumulated Surplus	313,278	358,219	61,608	61,608	61,608	61,608	61,608
Target Balance(25% of budget)		959,286	1,059,048	1,098,073	1,110,266	1,146,070	1,175,186
Above/(Below)		-601,067	-997,440	-1,036,465	-1,048,658	-1,084,462	-1,113,578

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

	2024 2		2025	5 2026			2027		2028
	Budget		Forecast		Forecast		Forecast		Forecast
R&R Balance BOY	\$ 3,745,300	\$	3,185,600	\$	2,903,990	\$	2,882,120	\$	2,335,510
Contribution	\$ 100,000	\$	168,000	\$	168,000	\$	168,000	\$	(53,300)
Withdrawals	\$ (659,700)	\$	(449,610)	\$	(189,870)	\$	(714,610)	\$	(356,370)
R&R Balance EOY	\$ 3,185,600	\$	2,903,990	\$	2,882,120	\$	2,335,510	\$	1,925,840

# **Sewer Billing Statistics**

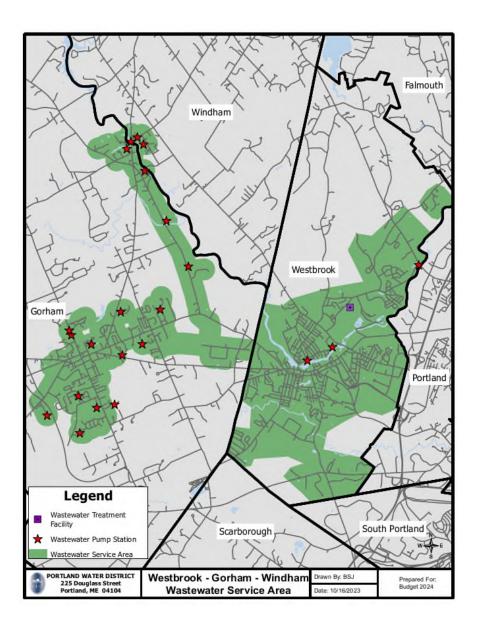
PWD provides sewer billing services for the municipality by contract. Sewer is billed based on water consumption and is included on Portland Water District's water bill. The municipality determines the sewer rate. Dollars collected are forwarded to the municipality weekly.



#### Fund: Wastewater - Windham

#### Background

The Portland Water District's charter authorizes PWD to provide wastewater treatment and collection system-interceptors service to the town. By contract with the town, PWD 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, PWD 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 \$349,302 with 60 Customers.

### Fund: Wastewater - Windham

#### **2024 Financial Summary**

The town's proposed assessment of \$808,488 represents a 56.7% increase over the previous assessment (\$292,680). The majority of increase is related to interest cost on the bond anticipation note financing the new North Windham treatment facility.

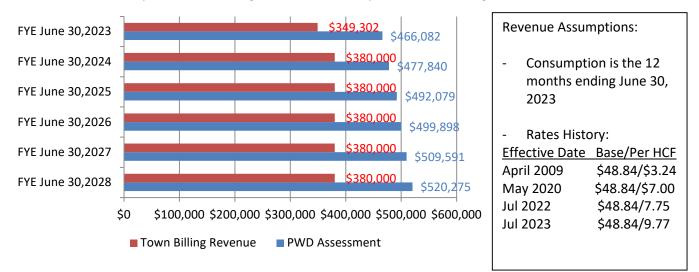
The proposed Operating Expense and Capital budgets are \$830,596 and \$10,031,700, respectively.

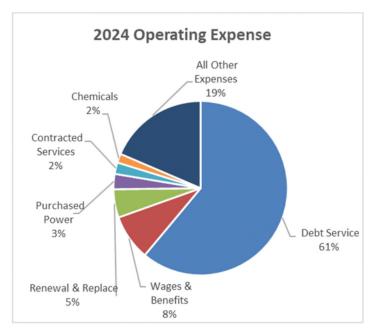
Operating Expense increased by 18.1% or \$42,860. Windham's share of the flow percentages used to determine the percent of costs for the Joint Westbrook and Little Falls systems remained lower due to a decrease in flow from the correctional center that resulted from system improvements.

The vast majority of the Capital Budget is the \$10 million budgeted for work on the North Windham wastewater treatment and collections systems.

#### **Assessment Compared to Ratepayers' Billing**

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



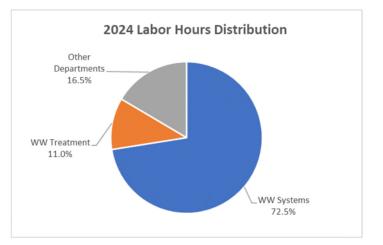


### 2024 Operating Expense Highlights

**Salaries/Wages** – Salaries and wages have increased by 22.2%, or \$8,766, to \$48,279. Regular wages increased an average of 5.0%, hours charged were up 18.3% (221 hours).

**Employee Benefits** – The benefit rate (including FICA) increased from 48.72% in 2023 to 49.39%, an increase of 0.67%. The amount of Employee Benefits expense increased 25.0% (\$4,435).

**Biosolids Disposal** – Following several years of dramatically increasing biosolids costs, related to legislative action limiting the options



available in Maine, costs have stabilized with a new biosolids management contract. The projected volume wet tons of biosolids processed at the Westbrook Regional Wastewater Treatment Facility (WRWWTF) is expected to decrease 5.5% and the budgeted per unit cost of disposal will decrease 2.0%. Overall, the budget in Windham is anticipated to decrease \$757 or 6.4%.

**Contracted Services** – Overall this category was up \$2,389 or 15.7%. This increase is mostly driven by higher maintenance needs at the WRWWTF (\$1.1k) and grease disposal at the wastewater pump stations (\$1.0k).

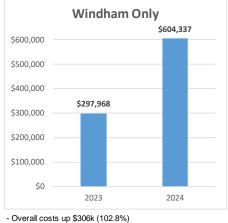
**Purchased Power** – Overall this category is up \$10,488 (81.0%). This was mostly driven by large increases in energy costs which increased \$5.4k or 92.1%. Transmission and Delivery was up \$1.6k (9.1%). In addition, this year's budget includes \$3.4k in expense related to renewable energy. This is offset by \$6.3k in renewal energy credits for a net gain in this fund of \$2.9k. In prior years the net gain was listed in the revenue section, last year the net gain was \$1.9k.

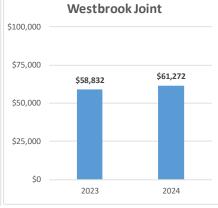
**Support Services** – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$19.6k or 19.3%. Much of the increase is increased support for large capital projects including the area.

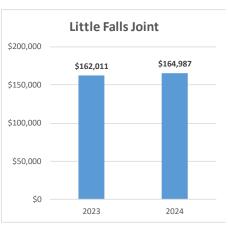
**Debt Service** - The annual principal and interest payments on bonds issued to finance capital projects. This budget rose \$267,461 (111.5%) as spending on the North Windham project ramps up.

**Renewal & Replacement** - Dollars put aside to fund capital projects. A contribution of \$43,714 will be made in 2024. This is a slight increase from the previous year.

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Assessment Income	\$518,412	\$257,904	\$515,808	\$808,488	\$292,680	56.7%
Interest Income	6,893	1,694	1,090	15,776	14,686	1347.3%
Other Income	1,587	1,587	1,912	6,336	4,424	<u>231.4</u> %
Total Revenue	526,892	261,185	518,810	830,600	311,790	60.1%
Salaries & Wages	33,599	13,571	39,513	48,279	8,766	22.2%
Employee Benefits	13,712	5,868	17,718	22,153	4,435	25.0%
Biosolids Disposal	13,474	5,769	11,763	11,006	(757)	-6.4%
Chemicals	12,534	7,288	12,570	13,902	1,332	10.6%
Contracted Services	7,716	6,550	15,262	17,651	2,389	15.7%
Heat/Fuel Oil	3,842	1,491	4,611	3,374	(1,237)	-26.8%
Insurance	1,441	636	1,393	1,541	148	10.6%
Materials & Supplies	8,760	3,889	8,736	8,864	128	1.5%
Other Expense	84	23	92	110	18	19.6%
Purchased Power	17,615	8,180	12,945	23,433	10,488	81.0%
Regulatory/Taxes	200	25	129	131	2	1.6%
Tele/Other Utilties	972	296	530	538	8	1.5%
Transportation	6,164	3,718	9,831	7,347	(2,484)	-25.3%
SS - Administration	43,708	24,317	51,033	59,192	8,159	16.0%
SS - Engineering Services	15,123	7,346	21,721	32,797	11,076	51.0%
SS - Environmental Services	4,783	1,780	3,948	3,670	(278)	-7.0%
SS - Wastewater Services	17,311	12,746	24,692	25,276	584	2.4%
SS - Water Services	485	307	296	379	83	<u>28.0</u> %
Operating Expense	201,523	103,800	236,783	279,643	42,860	18.1%
Debt Service & Lease Expense	202,656	100,072	239,778	507,239	267,461	111.5%
Renewal & Replacement - Direct	18,500	27,607	36,250	36,250	-	0.0%
Renewal & Replace - Indirect	5,443	3,002	5,999	7,464	1,465	<u>24.4</u> %
Total Expense	428,122	234,481	518,810	830,596	311,786	60.1%
Current Year Surplus (Deficit)	98,770	26,704	-	4		
Prior Year Surplus	67,194	165,964	162,223	196,743		
Accumulated Surplus	165,964	192,668	162,223	196,747		







- Overall costs up \$306k (102.8% - Debt Service was up \$271k

- Windham's share of Debt Service was down \$1.3K

- Overall Little Falls Joint dow n 1.7%

- Windham's share up 1.8% (\$3.0k)

- Windham's flow percentage w as up 7.0% (60% to 67%)

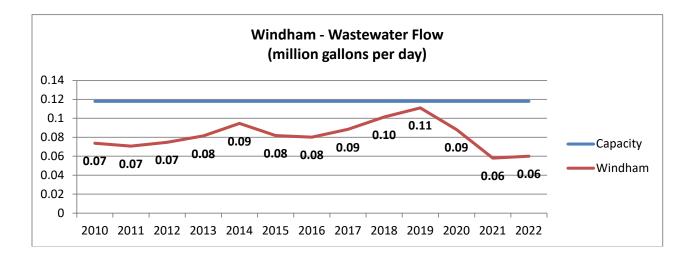
Overall Westbrook JT up 14.9%Windham's share up 4.1% (\$2.4k)

### **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	2022 Windham Flow	Westbrook WWTF Flow	% Windham Flow
Windham	0.060 mgd	3.07 mgd	2.0%
WGWWTF 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	2023 Actual to Sept	2024 Projected
Preventive Work Orders	20	25
Corrective Work Orders	3	5
Wet wells cleaned	9	15
Debris removed (tons)	7.14	10
Dry Weather Overflows	0	0

### **Operation Summary (continued)**

#### **2023 Other Highlights**

- Following the selection of a project delivery team that consisted of an engineering consultant and construction manager, detailed design has progressed and the initial construction of inlet sewers and the drip dispersal effluent system have begun. Major process equipment associated with the membrane treatment system have been purchased as well. Design continues on the remainder of the collection system and the treatment plant and will progress in the near future.
- As previously noted, the sewer work completed at the Correction Center has dramatically reduced wet weather infiltration, as can be seen by the decrease in annual flow from the Windham system.
- With our asset management system, we continue to proactively manage maintenance. Our Maintenance and Operations Team has been systematically reviewing our systems and treatment assets to create a prioritized listing of equipment to refine our preventive maintenance program. This effort will continue through 2024.
- Wet well and siphon cleaning were performed on a regular schedule.
- Following a failed legislative effort to reclassify the water quality designation of the Presumpscot River in 2022, a moratorium on increases or additional licensed discharges to the river was passed in 2023. This essentially caps the permitted capacity of the treatment plant at existing levels.
- Construction of the upgraded aeration system and secondary clarifiers continued through the year and expected to be completed by year's end.
- Legislative action that prohibits land application of biosolids due to PFAS concerns has created management challenges throughout Maine. A biosolids management plan began in 2022 and identified near, mid, and longer-range options for biosolids management that included possible regional efforts to economically manage biosolids in the future. A more detailed effort has continued in 2023. This includes a detailed review of nearly 30 technical responses to a Request for Information. The contract to manage current biosolids will provide some potential certainty in disposal and cost though 2027.

#### 2024 Work Plan

- Construction on the collection system and treatment plant will continue through the year.
- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders. Efforts to refine the existing maintenance approach will continue.
- A modernization of the treatment plant's locker rooms will be evaluated to better meet the needs of our changing workforce. Initial designs show a modernized layout that provides improved facilities that afford more privacy to employees.
- Wet wells are scheduled for cleaning on a quarterly basis unless experience dictates otherwise. Oils and grease remain challenges throughout PWD's service area.
- The Biosolids Management Plan findings will be shared with Maine DEP, Maine Legislative Committees, other utilities, and additional stakeholders as a solution to the current biosolids management challenges progress.
- The effluent permit renewal from Maine DEP for the regional treatment plant is anticipated in 2024.

### **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.

	Renewal and Replacement	Bond SRF	Grand Total	*Prorata share of Joint Project:	Total
Projects:					
180/3138/Windham- Little Falls WW System - R&R	\$20,000		\$20,000		
182/3241/North Windham WWTF		\$10,000,000	\$10,000,000		
416/3132/Westbrook Gorham Windham WWTF R&R	\$1,300		\$1,300	2.6%	\$5
416/3190/Access Road and Parking Lot Resurfacing	\$10,400		\$10,400	2.6%	\$40
Grand Total	\$31,700	\$10,000,000	\$10,031,700		
Renewal and Replacement Fund:					
Reserve Balance, Beginning of Year	\$405,193				
Annual Contribution	\$36,250				
Projects	-\$31,700				
Reserve Balance, End of Year	\$409,743	=			

#### **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:**

The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$6.7 million and \$38.5 million of capital projects in the South and North Windham systems, respectively. New debt typically assumes a 20-year life between 1% and 4.5% interest depending on funding source and year of financing. For the North Windham system, the bond term will be 30 years.

#### **Summary of Projection Impact:**

Assessment is projected to increase to \$2,861,490 in 2028. The significant increase reflects the costs related to the new North Windham treatment plant and related infrastructure.



#### **Ratios Only for the South Windham Fund:**

Percent of	of Budget	Dedicated	to Debt S	Service – Ta	arget: Not	to Exceed 35%
<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
42%	41%	37%	36%	34%	34%	33%

Debt Serv	vice Ratio	- Target:	Greater of	r Equal to	125%	
<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
112%	122%	123%	122%	122%	122%	122%

#### Reserve Fund Balances

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

	2022 Actual	2023 Budget	2024 Budget	2025 Forecast	2026 Forecast	2027 Forecast 2	2028 Forecas
Revenues:							
Assessment Income	518,412	515,808	808,488	999,673	1,835,795	2,815,060	2,861,490
Interest Income	6,893	1,090	15,776	15,776	15,776	15,776	15,776
Other Income	1,587	1,912	6,336	6,336	6,336	6,336	6,336
Total Revenues	526,892	518,810	830,600	1,021,785	1,857,907	2,837,172	2,883,602
Operating Expenses:							
Salaries & Wages	33,599	39,513	48,279	50,693	52,467	54,303	56,204
Employee Benefits	13,712	17,718	22,153	23,482	24,891	26,384	27,96
Biosolids Disposal	13,474	11,763	11,006	11,556	12,134	12,741	13,378
Chemicals	12,534	12,570	13,902	14,458	14,892	15,339	15,799
Contracted Services	7,716	15,262	17,651	18,357	18,908	19,475	20,059
Deferred Cost W/O	0	0	0	0	0	0	(
Facilities	0	0	0	0	0	0	0
Heat/Fuel Oil	3,842	4,611	3,374	3,509	3,614	3,722	3,834
Insurance	1,441	1,393	1,541	1,603	1,651	1,701	1,752
Materials & Supplies	8,760	8,736	8,864	9,219	9,496	9,781	10,074
Other Expense	84	92	110	114	675,123	900,121	936,125
Purchased Power	17,615	12,945	23,433	24,605	25,589	26,357	27,148
Regulatory/Taxes	200	129	131	136	140	144	148
Tele/Other Utilties	972	530	538	560	577	594	612
Transportation	6,164	9,831	7,347	7,641	7,870	8,106	8,349
SS - Administration	43,708	51,033	59,192	62,152	64,638	67,224	69,913
SS - Engineering Services	15,123	21,721	32,797	34,420	35,788	37,211	38,690
SS - Environmental Services	4,783	3,948	3,670	3,854	4,008	4,168	4,335
SS - Wastewater Services	17,311	24,692	25,276	26,540	27,602	28,706	29,854
SS - Water Services	485	296	379	398	414	431	448
	201,523	236,783	279,643	293,297	979,802	1,216,508	1,264,689
Debt Service	202,656	239,778	507,239	688,543	838,160	1,580,719	1,578,968
Renewal & Replacement - Direc	18,500	36,250	36,250	35,849	35,849	35,849	35,849
Renewal & Replace - Indirect	5,443	5,999	7,464	4,096	4,096	4,096	4,096
Capital Finance Expense	226,599	282,027	550,953	728,488	878,105	1,620,664	1,618,913
Total Operating Expenses	428,122	518,810	830,596	1,021,785	1,857,907	2,837,172	2,883,602
Current Year Surplus(Deficit)	98,770	0	4	0	0	0	(
Prior Year Surplus	67,194	49,808	196,743	196,747	196,747	196,747	196,747
Accumulated Surplus	165,964	49,808	196,747	196,747	196,747	196,747	196,74
Target Balance(25% of budget)	,	129,703	207,649	255,446	464,477	709,293	720,901
Above/(Below)		-79,895	-10,902	-58,699	-267,730	-512,546	-524,154

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

	2	024 Budget	20	25 Forecast	<u>20</u>	26 Forecast	202	7 Forecast	20	28 Forecast
R&R Balance BOY	\$	405,193	\$	390,243	\$	391,792	\$	402,441	\$	351,990
Contribution	\$	36,250	\$	35,849	\$	35,849	\$	35,849	\$	35,849
Withdrawals	\$	(51,200)	\$	(34,300)	\$	(25,200)	\$	(86,300)	\$	(86,300)
R&R Balance EOY	\$	390,243	\$	391,792	\$	402,441	\$	351,990	\$	301,539

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

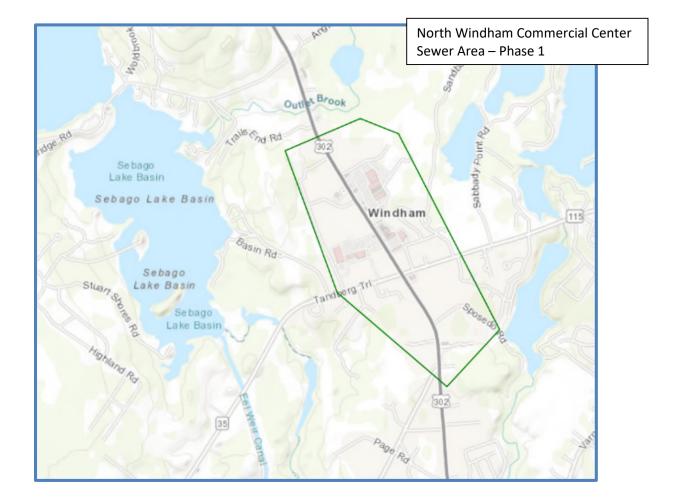
Revenues:         Interaction         Interact income         646,968         467,196         488,484         495,673         504,122         515,060         525,490           Interest income         1,587         1,912         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,204         B,301         13,374         13,611         11,512         11,513         11,537         11,537         11,537 <t< th=""><th>1</th><th>2022 Actual</th><th>2023 Budget</th><th>2024 Budget</th><th>2025 Forecast</th><th>2026 Forecast</th><th>2027 Forecast</th><th>2028 Forecast</th></t<>	1	2022 Actual	2023 Budget	2024 Budget	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
Interest Income         6,893         1,090         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776         15,776	Revenues:							
Other Income         1,587         1,912         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336         6,336	Assessment Income	464,968	467,196	488,484	495,673	504,122	515,060	525,490
Total Revenues         473,448         470,198         510,596         517,785         526,234         537,172         547,602           Operating Expenses: Salaries & Wages         33,599         39,513         48,279         50,693         52,467         54,303         56,204           Employee Benefits         13,171         17,718         22,153         23,482         24,891         26,384         27,967           Biosolids Disposal         13,474         11,763         11,006         11,556         12,134         12,741         13,378           Chemicals         12,534         12,574         15,262         17,651         18,357         18,908         19,475         20,059           Heat/Fuel Oil         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1541         1,603         1,651         1,711         121         125           Purchased Power         17,615         12,945         28,433         24,605         25,589         26,557         27,148           Regulatory/Taxes         200         129         131         136         140         144         148         148	Interest Income	6,893	1,090	15,776	15,776	15,776	15,776	15,776
Operating Expenses:         Solution         Operating Expenses:         Solution         Solution <th< td=""><td>Other Income</td><td>1,587</td><td>1,912</td><td>6,336</td><td>6,336</td><td>6,336</td><td>6,336</td><td>6,336</td></th<>	Other Income	1,587	1,912	6,336	6,336	6,336	6,336	6,336
Salaries & Wages         33,599         39,513         48,279         50,693         52,467         54,303         56,204           Employee Benefits         13,712         17,718         22,153         23,482         24,891         26,884         27,967           Biosolids Disposal         13,474         11,763         11,006         11,556         12,134         12,741         13,378           Chemicals         12,534         42,570         13,902         14,448         14,892         15,379           Contracted Services         7,716         15,262         17,651         18,357         18,908         19,475         20,059           Heat/Fuel OII         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1,541         1,603         1,651         1,701         1,752           Materials & Supplies         8,760         8,736         8,864         9,219         9,496         9,781         10,074           Other Expense         655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,65<	Total Revenues	473,448	470,198	510,596	517,785	526,234	537,172	547,602
Employee Benefits         13,712         17,718         22,153         23,482         24,891         26,384         27,967           Biosolids Disposal         13,474         11,763         11,006         11,556         12,134         12,741         13,378           Chemicals         12,534         12,570         13,902         14,445         14,489         15,339         15,739           Contracted Services         7,716         15,252         17,651         18,857         18,908         19,475         20,059           Heat/Fuel Oil         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1,541         1,603         1,651         1,701         1,752           Materials & Supplies         8,760         8,736         8,864         9,219         9,496         9,781         10,007           Transportation         6,164         9,831         7,347         7,641         17,8         144         148           Tele/Other Utilties         972         530         538         560         577         594         612           Transportation         6,164         9,831         7,347	Operating Expenses:							
Biosolids Disposal         13,474         11,763         11,006         11,556         12,134         12,741         13,378           Chemicals         12,534         12,570         13,902         14,458         14,892         15,339         15,799           Contracted Services         7,716         15,262         17,651         18,857         18,908         19,475         20,059           Heat/Fuel Oil         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1,541         1,603         1,651         1,701         1,752           Materials & Supplies         8,760         8,766         8,864         9,219         9,496         9,781         10,074           Other Expense         -655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,605         25,589         26,357         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           So - Administration         6,164         9,831         7,347         7,6	Salaries & Wages	33,599	39,513	48,279	50,693	52,467	54,303	56,204
Chemicals         12,534         12,570         13,902         14,458         14,892         15,339         15,799           Contracted Services         7,716         15,262         17,651         18,857         18,908         19,475         20,059           Heat/Fuel Oil         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1,541         1,603         1,651         1,701         1,752           Materials & Supplies         8,760         8,736         8,864         9,219         9,496         9,781         10,074           Other Expense         -655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,605         25,589         26,557         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           Tarsportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Engineering Services         15,123         21,721         32,797         34,420	Employee Benefits	13,712	17,718	22,153	23,482	24,891	26,384	27,967
Contracted Services         7,716         15,262         17,651         18,357         18,908         19,475         20,059           Heat/Fuel Oil         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1,541         1,603         1,651         1,701         1,752           Materials & Supplies         8,760         8,736         8,864         9,219         9,496         9,781         10,074           Other Expense         -655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,605         25,589         26,357         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           Tele/Other Utilties         972         530         538         560         577         594         612           Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Administration         43,708         51,033         59,192         62,152 <t< td=""><td>Biosolids Disposal</td><td>13,474</td><td>11,763</td><td>11,006</td><td>11,556</td><td>12,134</td><td>12,741</td><td>13,378</td></t<>	Biosolids Disposal	13,474	11,763	11,006	11,556	12,134	12,741	13,378
Heat/Fuel Oil         3,842         4,611         3,374         3,509         3,614         3,722         3,834           Insurance         1,441         1,393         1,541         1,603         1,651         1,701         1,752           Materials & Supplies         8,760         8,736         8,864         9,219         9,496         9,781         10,074           Other Expense         -655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,605         25,589         26,357         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           Tele/Other Util(ties         972         530         538         560         577         594         612           S - Administration         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Environmental Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           SS - Waster Services         17,311         24,692         25,276         26,540<	Chemicals	12,534	12,570	13,902	14,458	14,892	15,339	15,799
Insurance       1,441       1,393       1,541       1,603       1,651       1,701       1,752         Materials & Supplies       8,760       8,736       8,864       9,219       9,496       9,781       10,074         Other Expense       -655       92       110       114       117       121       125         Purchased Power       17,615       12,945       23,433       24,605       25,589       26,357       27,148         Regulatory/Taxes       200       129       131       136       140       144       148         Transportation       6,164       9,831       7,347       7,641       7,870       8,106       8,349         SS - Administration       43,708       51,033       59,192       62,152       64,638       67,224       69,913         SS - Engineering Services       15,123       21,721       32,797       34,420       35,788       37,211       38,690         SS - Water Services       17,311       24,692       25,276       26,540       27,502       28,706       29,854         SS - Water Services       193,026       191,166       187,239       184,543       181,493       180,719       178,968         Renewal & R	Contracted Services	7,716	15,262	17,651	18,357	18,908	19,475	20,059
Materials & Supplies         8,760         8,736         8,864         9,219         9,496         9,781         10,074           Other Expense        655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,605         25,589         26,357         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Engineering Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           SS - Environmental Services         4,783         3,948         3,670         3,854         4,008         4,168         4,335           S - Wastewater Services         17,311         24,692         25,276         26,540         27,602         28,706         29,844           SS - Wastewater Services         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replacem - Direct         18,500 <td>Heat/Fuel Oil</td> <td>3,842</td> <td>4,611</td> <td>3,374</td> <td>3,509</td> <td>3,614</td> <td>3,722</td> <td>3,834</td>	Heat/Fuel Oil	3,842	4,611	3,374	3,509	3,614	3,722	3,834
Other Expense         -655         92         110         114         117         121         125           Purchased Power         17,615         12,945         23,433         24,605         25,589         26,357         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           Tele/Other Utilities         972         530         558         560         577         594         612           Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           S5 - Engineering Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           S5 - Environmental Services         17,311         24,692         25,276         26,540         27,602         28,706         29,854           S5 - Water Services         173,11         24,692         25,276         26,540         27,602         28,706         29,854           S5 - Water Service         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replace - Indirect         5,443         5,999	Insurance	1,441	1,393	1,541	1,603	1,651	1,701	1,752
Purchased Power         17,615         12,945         23,433         24,605         25,589         26,357         27,148           Regulatory/Taxes         200         129         131         136         140         144         148           Tele/Other Utilities         972         530         538         560         577         594         612           Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Administration         43,708         51,033         59,192         62,152         64,638         67,224         69,913           SS - Engineering Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           SS - Wastewater Services         17,311         24,692         25,276         26,540         27,602         28,706         29,854           SS - Wastewater Services         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replace - Indirect         18,500         36,250         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849	Materials & Supplies	8,760	8,736	8,864	9,219	9,496	9,781	10,074
Regulatory/Taxes         200         129         131         136         140         144         148           Tele/Other Utilities         972         530         538         560         577         594         612           Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Engineering Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           SS - Environmental Services         4,783         3,948         3,670         3,854         4,008         4,168         4,335           SS - Wastewater Services         17,311         24,692         25,276         26,540         27,602         228,706         29,854           SS - Water Services         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replace - Indirect         5,443         5,999         7,464         4,096         4,096         4,096         4,096         4,096         4,096         4,096         218,913         174,102         128,913         1724,562         224,488         221,438         220,664         218,913         174,962	Other Expense	-655	92	110	114	117	121	125
Tele/Other Utilities         972         530         538         560         577         594         612           Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Administration         43,708         51,033         59,192         62,152         64,638         67,224         69,913           SS - Engineering Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           SS - Environmental Services         4,783         3,948         3,670         3,854         4,008         4,168         4,335           SS - Wastewater Services         17,311         24,692         25,276         26,540         27,602         28,706         29,854           SS - Water Services         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replacement - Direct         183,500         36,250         36,250         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849	Purchased Power	17,615	12,945	23,433	24,605	25,589	26,357	27,148
Transportation         6,164         9,831         7,347         7,641         7,870         8,106         8,349           SS - Administration         43,708         51,033         59,192         62,152         64,638         67,224         69,913           SS - Engineering Services         15,123         21,721         32,797         34,420         35,788         37,211         38,690           SS - Environmental Services         4,783         3,948         3,670         3,854         4,008         4,168         4,335           SS - Wastewater Services         17,311         24,692         25,276         26,540         27,602         28,706         29,854           SS - Water Services         485         296         379         398         414         431         448           200,784         236,783         279,643         293,297         304,796         316,508         328,689           Debt Service         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replace - Indirect         5,443         5,999         7,464         4,096         4,096         4,096         4,096           Capital Finance Expense         216,969	Regulatory/Taxes	200	129	131	136	140	144	148
SS - Administration       43,708       51,033       59,192       62,152       64,638       67,224       69,913         SS - Engineering Services       15,123       21,721       32,797       34,420       35,788       37,211       38,690         SS - Environmental Services       4,783       3,948       3,670       3,854       4,008       4,168       4,335         SS - Wastewater Services       17,311       24,692       25,276       26,540       27,602       28,706       29,854         SS - Water Services       193,026       191,166       187,239       184,543       181,493       180,719       178,968         Renewal & Replacement - Direct       18,500       36,250       36,250       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849       35,849 </td <td>Tele/Other Utilties</td> <td>972</td> <td>530</td> <td>538</td> <td>560</td> <td>577</td> <td>594</td> <td>612</td>	Tele/Other Utilties	972	530	538	560	577	594	612
SS - Engineering Services       15,123       21,721       32,797       34,420       35,788       37,211       38,690         SS - Environmental Services       4,783       3,948       3,670       3,854       4,008       4,168       4,335         SS - Wastewater Services       17,311       24,692       25,276       26,540       27,602       28,706       29,854         SS - Water Services       485       296       379       398       414       431       448         200,784       236,783       279,643       293,297       304,796       316,508       328,689         Debt Service       193,026       191,166       187,239       184,543       181,493       180,719       178,968         Renewal & Replacement - Direct       185,00       36,250       35,849       35,849       35,849       35,849         Capital Finance Expense       216,969       233,415       230,953       224,488       221,438       220,664       218,913         Total Operating Expenses       417,753       470,198       510,596       517,785       526,234       537,172       547,602         Current Year Surplus(Deficit)       55,695       0       0       0       0       0       0 <td< td=""><td>Transportation</td><td>6,164</td><td>9,831</td><td>7,347</td><td>7,641</td><td>7,870</td><td>8,106</td><td>8,349</td></td<>	Transportation	6,164	9,831	7,347	7,641	7,870	8,106	8,349
SS - Environmental Services       4,783       3,948       3,670       3,854       4,008       4,168       4,335         SS - Wastewater Services       17,311       24,692       25,276       26,540       27,602       28,706       29,854         SS - Water Services       485       296       379       398       414       431       448         200,784       236,783       279,643       293,297       304,796       316,508       328,689         Debt Service       193,026       191,166       187,239       184,543       181,493       180,719       178,968         Renewal & Replace - Indirect       5,443       5,999       7,464       4,096       4,096       4,096         Capital Finance Expense       216,969       233,415       230,953       224,488       221,438       220,664       218,913         Total Operating Expenses       417,753       470,198       510,596       517,785       526,234       537,172       547,602         Current Year Surplus(Deficit)       55,695       0       0       0       0       0       0       0         Prior Year Surplus       64,499       114,309       150,869       150,869       150,869       150,869       150,869	SS - Administration	43,708	51,033	59,192	62,152	64,638	67,224	69,913
SS - Wastewater Services         17,311         24,692         25,276         26,540         27,602         28,706         29,854           SS - Water Services         485         296         379         398         414         431         448           200,784         236,783         279,643         293,297         304,796         316,508         328,689           Debt Service         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replacement - Direct         18,500         36,250         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         <	SS - Engineering Services	15,123	21,721	32,797	34,420	35,788	37,211	38,690
SS - Water Services         485         296         379         398         414         431         448           200,784         236,783         279,643         293,297         304,796         316,508         328,689           Debt Service         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replacement - Direct         18,500         36,250         36,250         35,849         35,849         35,849         35,849           Capital Finance Expense         216,969         233,415         230,953         224,488         221,438         220,664         218,913           Total Operating Expenses         417,753         470,198         510,596         517,785         526,234         537,172         547,602           Current Year Surplus(Deficit)         55,695         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""><td>SS - Environmental Services</td><td>4,783</td><td>3,948</td><td>3,670</td><td>3,854</td><td>4,008</td><td>4,168</td><td>4,335</td></t<>	SS - Environmental Services	4,783	3,948	3,670	3,854	4,008	4,168	4,335
Debt Service         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replacement - Direct         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replace - Indirect         5,443         5,999         7,464         4,096         4,096         4,096         4,096           Capital Finance Expense         216,969         233,415         230,953         224,488         221,438         220,664         218,913           Total Operating Expenses         417,753         470,198         510,596         517,785         526,234         537,172         547,602           Current Year Surplus(Deficit)         55,695         0         0         0         0         0         0         0           Prior Year Surplus         64,499         114,309         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         15	SS - Wastewater Services	17,311	24,692	25,276	26,540	27,602	28,706	29,854
Debt Service         193,026         191,166         187,239         184,543         181,493         180,719         178,968           Renewal & Replacement - Direct         18,500         36,250         36,250         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849         35,849 <td< td=""><td>SS - Water Services</td><td>485</td><td>296</td><td>379</td><td>398</td><td>414</td><td>431</td><td>448</td></td<>	SS - Water Services	485	296	379	398	414	431	448
Renewal & Replacement - Direct         18,500         36,250         36,250         35,849         35,849         35,849           Renewal & Replace - Indirect         5,443         5,999         7,464         4,096         4,096         4,096           Capital Finance Expense         216,969         233,415         230,953         224,488         221,438         220,664         218,913           Total Operating Expenses         417,753         470,198         510,596         517,785         526,234         537,172         547,602           Current Year Surplus(Deficit)         55,695         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td></td> <td>200,784</td> <td>236,783</td> <td>279,643</td> <td>293,297</td> <td>304,796</td> <td>316,508</td> <td>328,689</td>		200,784	236,783	279,643	293,297	304,796	316,508	328,689
Renewal & Replace - Indirect         5,443         5,999         7,464         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096         4,096 <th< td=""><td>Debt Service</td><td>193,026</td><td>191,166</td><td>187,239</td><td>184,543</td><td>181,493</td><td>180,719</td><td>178,968</td></th<>	Debt Service	193,026	191,166	187,239	184,543	181,493	180,719	178,968
Capital Finance Expense         216,969         233,415         230,953         224,488         221,438         220,664         218,913           Total Operating Expenses         417,753         470,198         510,596         517,785         526,234         537,172         547,602           Current Year Surplus(Deficit)         55,695         0         0         0         0         0         0           Prior Year Surplus         64,499         114,309         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         136,901	Renewal & Replacement - Direct	18,500	36,250	36,250	35,849	35,849	35,849	35,849
Total Operating Expenses         417,753         470,198         510,596         517,785         526,234         537,172         547,602           Current Year Surplus(Deficit)         55,695         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Renewal & Replace - Indirect	5,443	5,999	7,464	4,096	4,096	4,096	4,096
Current Year Surplus(Deficit)         55,695         0         0         0         0         0         0           Prior Year Surplus         64,499         114,309         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869 </td <td>Capital Finance Expense</td> <td>216,969</td> <td>233,415</td> <td>230,953</td> <td>224,488</td> <td>221,438</td> <td>220,664</td> <td>218,913</td>	Capital Finance Expense	216,969	233,415	230,953	224,488	221,438	220,664	218,913
Prior Year Surplus         64,499         114,309         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869	Total Operating Expenses	417,753	470,198	510,596	517,785	526,234	537,172	547,602
Accumulated Surplus         120,194         114,309         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869         150,869 <td>Current Year Surplus(Deficit)</td> <td>55,695</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Current Year Surplus(Deficit)	55,695	0	0	0	0	0	0
Target Balance(25% of budget)         117,550         127,649         129,446         131,559         134,293         136,901	Prior Year Surplus	64,499	114,309	150,869	150,869	150,869	150,869	150,869
	Accumulated Surplus	120,194	114,309	150,869	150,869	150,869	150,869	150,869
	Target Balance(25% of budget)		117,550	127,649	129,446	131,559	134,293	136,901
			-3,241	23,220	21,423	19,310	16,576	-

### Town of Windham -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 polution and would allow for more sustainable growth opportunities (North Windham System).

Engineering Services has begun construction with an anticipated plant start date by early 2026.



### **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 almost \$39 million with source of funding as listed below:

530,000
000,000
700,000
000,000
250,000
480,000

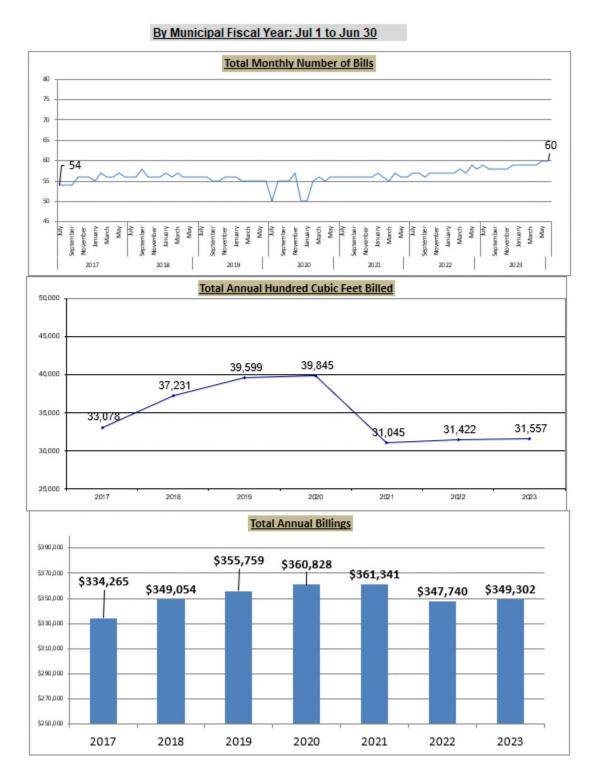
The State Revolving Loan fund has committed to providing more than \$2.2M of principal forgiveness on the 30-year bonds. The current interest rate on the bond is 2%. Costs during construction will be financed by a bond anticipation note (BAN) with an interest rate close to 2%. The BAN will be converted to a 30-year bond in 2026.

Assuming the funding sources above, the estimated annual North Windham fund costs are listed below.

I.	2024 Budget 2	025 Forecast 2	026 Forecast	2027 Forecast 2	028 Forecast
Revenues:					
Assessment Income	320,004	504,000	1,331,673	2,300,000	2,336,000
Interest Income	0	0	0	0	0
Total Revenues	320,004	504,000	1,331,673	2,300,000	2,336,000
Operating Expenses:					
Other Expense	0	0	675,006	900,000	936,000
Debt Service	320,000	504,000	656,667	1,400,000	1,400,000
Renewal & Replacement - Direct	0	0	0	0	0
Renewal & Replace - Indirect	0	0	0	0	0
Capital Finance Expense	320,000	504,000	656,667	1,400,000	1,400,000
Total Operating Expenses	320,000	504,000	1,331,673	2,300,000	2,336,000
Current Year Surplus(Deficit)	4	0	0	0	0
Prior Year Surplus	45,874	45,878	45,878	45,878	45,878
Accumulated Surplus	45,878	45,878	45,878	45,878	45,878

#### **Sewer Billing Statistics**

PWD 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.



### Falmouth Assessment and Scarborough and South Portland Contracted Services

#### Background

By contract, PWD 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, PWD 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, PWD will assess the town for debt service costs related to the bond that PWD issued on behalf of Falmouth. The debt and the related assets will be part of PWD's balance sheet but Falmouth will operate and maintain the assets.

#### **2024 Summary**

PWD is proposing the same assessment as last year, \$314,112 in Falmouth. Scarborough's and South Portland's annual assessment both increased by 5.0% and 3.5% respectfully.

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$314,112	\$157,056	\$314,112	\$314,112	\$0	0.0%
Interest Income	<u> </u>	<u>695</u>	<u>1,188</u>	<u>2,845</u>	1,657	<u>139.5</u> %
Total Revenue	315,030	157,751	315,300	316,957	1,657	0.5%
Operating Expense	14,389	7,825	18,447	17,756	(691)	-3.7%
Debt Service & Lease Expense	291,545	<u>140,049</u>	<u>289,586</u>	<u>287,036</u>	(2,550)	- <u>0.9</u> %
Total Expense	305,934	147,874	308,033	304,792	(3,241)	-1.1%
Current Year Surplus (Deficit)	9,096	9,877	7,267	12,165		
Prior Year Surplus	32,285	<u>41,381</u>	<u>37,780</u>	<u>52,330</u>		
Accumulated Surplus	41,381	51,258	45,047	64,495		
Scarborough:						
	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff <b>\$</b>	Budget Diff %
Contracted Billing Income	\$12,072	\$6,642	\$13,284	\$13,944	\$660	5.0%
Interest Income	58	<u>49</u>	<u>95</u>	<u>192</u>	<u>97</u>	<u>102.1</u> %
Total Revenue	12,130	6,691	13,379	14,136	757	5.7%
Operating Expense	4,018	2,512	2,535	3,403	868	34.2%
Debt Service & Lease Expense	6,313	3,127	6,253	6,596	343	5.5%
Renewal & Replace - Indirect	<u>5,197</u>	2,601	<u>5,200</u>	<u>5,603</u>	<u>403</u>	<u>7.8</u> %
Total Expense	15,528	8,240	13,988	15,602	1,614	11.5%
Total Expense Current Year Surplus (Deficit)	15,528 (3,398)	8,240 (1,549)	13,988 (609)	15,602 (1,466)	1,614	11.5%
•					1,614	11.5%
Current Year Surplus (Deficit)	(3,398)	(1,549)	(609)	(1,466)	1,614	11.5%
Current Year Surplus (Deficit) Prior Year Surplus Accumulated Surplus	(3,398) <u>8,365</u> 4,967	(1,549) <u>4,967</u> 3,418	(609) <u>6,255</u> 5,646	(1,466) <u>2,020</u> 554		
Current Year Surplus (Deficit) Prior Year Surplus	(3,398) <u>8,365</u>	(1,549) <u>4,967</u>	(609) <u>6,255</u>	(1,466) <u>2,020</u>	1,614 Budget Diff \$	11.5% Budget Diff %

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Contracted Billing Income	\$208,164	\$114,492	\$228,984	\$236,916	\$7,932	3.5%
Interest Income	<u>1.192</u>	<u>1.387</u>	<u>1.730</u>	<u>4.537</u>	<u>2.807</u>	162.3%
Total Revenue	209,356	115,879	230,714	241,453	10,739	4.7%
Operating Expense	138,639	83,175	154,794	160,564	5,770	3.7%
Debt Service & Lease Expense	48,121	24,004	46,861	46,955	94	0.2%
Renewal & Replace - Indirect	33,818	16,880	33,760	33,934	174	<u>0.5</u> %
Total Expense	220,578	124,059	235,415	241,453	6,038	2.6%
Current Year Surplus (Deficit)	(11,222)	(8,180)	(4,701)	-		
ABC Project Transfer	(115,000)	-	-	-		
Prior Year Surplus	148,142	21,920	11,418	12,234		
Accumulated Surplus	21,920	13,740	6,717	12,234		

### **Introduction**

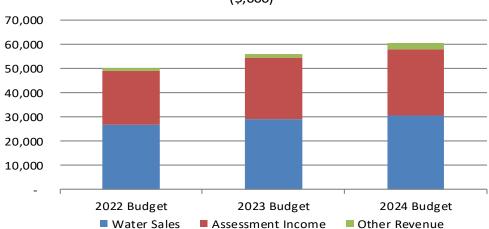
PWD receives revenue from two major sources: payments by individual customers for water services (Water Revenue, 50.7%) and payments from municipalities for wastewater services (Wastewater Assessments, 44.5%). Additional revenue comes from service fees and other sources. Water revenues in 2024 are projected to increase 6% from the 2023 budget. The increase in revenues reflects the impact of a proposed 6.4% average rate increase on January 1, 2024 and a 1% decrease in assumed metered water usage. Metered water revenue is dependent on weather conditions, so a conservative budget estimate is used. The Wastewater Assessments for Cape Elizabeth, Cumberland, Gorham, Westbrook, Windham and Portland increased to cover estimated 2024 costs.

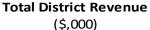
Contracted Billing Income (0.41% of budgeted revenue) is revenue paid by the City of South Portland and Town of Scarborough for wastewater billing services.

Interest Income has risen 230% over last years' budget due to higher projected investment income because of higher interest rates. See the interest income section for more info.

Other income (2.4% of budgeted revenue) is derived from other activities such as cross connection fees, leased property, customer connection and activation fees, jobbing surcharge, net energy billing credits and septage haulers fees, which are further detailed in this section.

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Diff \$	Diff %
Water Sales	27,780,678	13,305,112	29,043,602	30,779,641	\$1,736,039	6.0%
Assessment Income	22,346,196	12,701,742	25,403,484	27,006,984	1,603,500	6.3%
Contracted Billing Income	220,236	121,134	242,268	250,860	8,592	3.5%
Interest Income	346,246	442,428	354,946	1,171,042	816,096	229.9%
Other Income	<u>1,130,781</u>	<u>503,542</u>	<u>1,021,252</u>	<u>1,467,700</u>	446,448	<u>43.7%</u>
Total Revenues	\$51,824,137	\$27,073,958	\$56,065,552	\$60,676,227	\$4,610,675	8.2%





### Water Sales

Water sales consist of:

• <u>Metered Revenue</u> from residential, governmental, industrial, and commercial customers. Customers are billed a monthly minimum based on meter size, which includes one hundred cubic feet (HCF) of water (748 gallons). For amounts greater than 1 HCF, customers pay based on a four-tier declining block structure, where higher tiers of consumption cost incrementally less than lower tiers. Metered member rates effective January 1, 2024 are expected to be:

Monthly Member Water Rates:		
From	То	Rate
1 HCF	30 HCF	\$2.87
30 HCF	100 HCF	\$2.65
100 HCF	500 HCF	\$2.34
Greater than 500 HCF		\$1.35

- <u>Public Fire Protection</u> revenue comes from charges to municipalities for hydrants. Eleven communities pay a monthly fee based on the number of the hydrants in the community and a proportionate share of water system costs to ensure water is available to fight fires.
- <u>Private Fire Protection</u> revenue comes 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 a proportionate share of water system costs to ensure water is available to fight fires.
- <u>Other Water Revenue</u> such as interest on delinquent customer balances and customer penalties.

The 2024 Budget of \$30,779,641 reflects an assumed rate of usage calculated on subsequent pages with a proposed average rate adjustment of 6.4%.

Water Sales rates are normally adjusted annually. PWD had a 5.6% average rate adjustment on January 1, 2023. Prior to 2016, all water rate adjustments were subject to review and approval by the Maine Public Utilities Commission (PUC). Starting in 2016, the PUC authorized PWD's Board of Trustees to approve rate adjustments solely through their actions. The Board will continue to follow the same PUC public input process before authorizing rate changes.

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Diff \$	Diff %
Metered Revenue	24,826,406	11,745,749	25,907,750	27,489,462	1,581,712	6.1%
Public Fire Protection	1,555,148	818,921	1,644,768	1,738,188	93,420	5.7%
Private Fire Protection	1,274,493	679,543	1,359,084	1,459,188	100,104	7.4%
Other Water Revenue	124,631	<u>60,899</u>	132,000	<u>92,803</u>	(39,197)	-29.7%
Total Water Sales	\$27,780,678	\$13,305,112	\$29,043,602	\$30,779,641	1,736,039	6.0%

### Water Sales - Cost of Service Study

A cost of service study is completed every 10 years to compare the revenue generated by each metered 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. PWD'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.

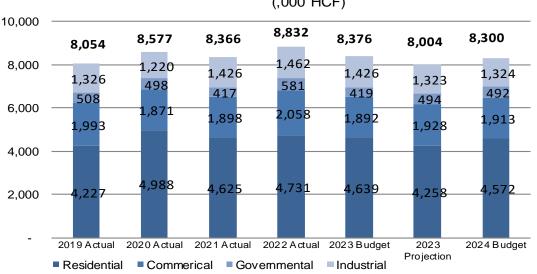
In general, PWD has followed the guidance in the AWWA's M1 Manual to develop the cost-of-service analysis for PWD.

The last cost of service 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. The increases are made through a combination of adjustments to base or meter charges and to the volumetric rates, including adjustments to each consumption tier or block.

Starting in 2024, but consistent with the previous policy of adjusting rates by class to align with costs of service, water rate increases will be adjusted resulting in relatively higher increases to the larger user base fixed rate and relatively lower increases to the variable consumption volume rates for larger customers. This will result in a more stable revenue stream from those customers

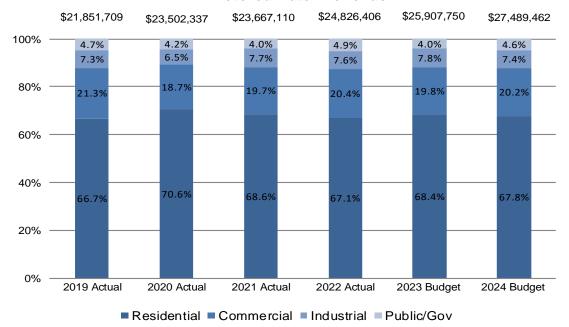
### Water Sales - Metered Revenue

Metered water revenue has risen from \$21.8 million in 2019 to the 2024 budgeted amount of \$27.5 million (25.8% increase). The projected increase in revenue in the 2024 Budget was a result of a 6.4% average rate increase and a 1% decrease in assumed metered water usage. PWD measures metered consumption and categorizes usage into 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. 2024 Budget (,000 HCF)

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

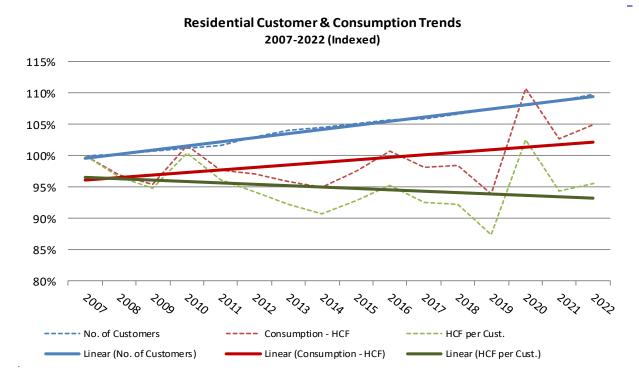


#### Metered Water Revenue

#### Residential

Residential consumption makes up about 55% of total metered consumption and generates roughly 68% of PWD's total metered water revenue. The two segments of residential consumption are monthly billed customers 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.

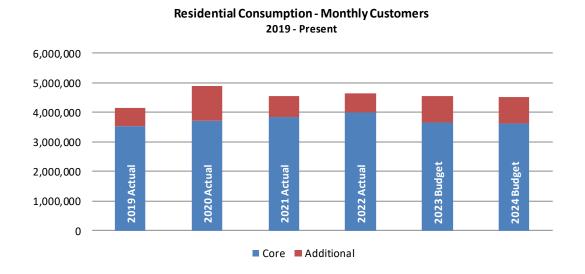
For monthly customers, consumption has been calculated by determining the core level of consumption, then estimating the amount of additional usage that largely occurs during the summer months. The monthly core level was reached by taking the average of the lowest three months of each year in the sample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



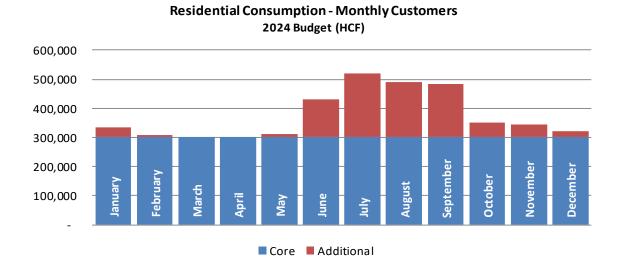
As shown above, overall consumption (red line) has been relatively flat over the last 10 years, even though the number of customers (blue) has been increasing. Therefore, the consumption per customer (green) is declining. These trends were taken into account when estimating the residential core usage for 2024.

PWD determined the additional usage by averaging the percentage of additional consumption over the core in the sample years. For the 2024 budget, the core consumption was approximately 3.63 million HCF (hundred cubic feet) and the additional usage was 24% of the core. This is in line with historical data.

### **Residential (continued)**



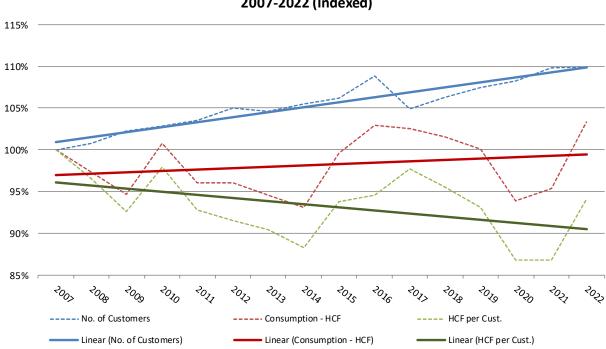
The monthly additional consumption was determined based on the average monthly consumption from a rolling three-year period ending December 2022. Approximately 82% of the additional consumption is used between the months of June through September.



Consumption by seasonal customers makes up only 1.41% of total residential consumption. Residential seasonal consumption for the budget was based on 2019 actual results and broken out by month with consideration of the three-year average from 2020-2022 and is approximately 65,447 HCF for the year.

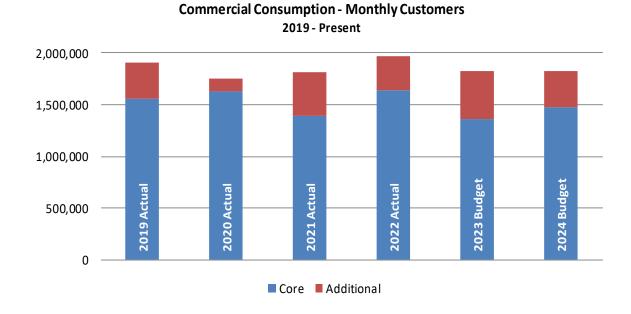
#### **Commercial**

For 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 with residential customers. Overall consumption dipped in 2020 due to the pandemic, but bounced back in 2021, 2022, and 2023.



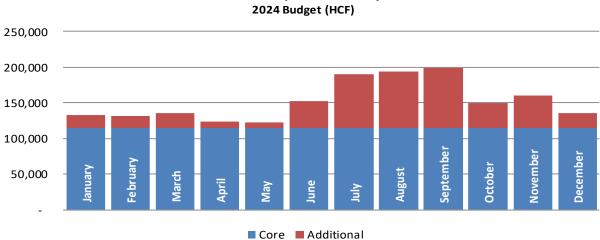
Commercial Customer & Consumption Trends 2007-2022 (Indexed)

Additional usage was determined by averaging the percentage of additional consumption over the core in the sample years. For the 2024 budget, the core consumption increased slightly from last year by 0.6% to 1.37 million HCF. The additional usage budgeted for 2024 is 33.2% of the core.



### **Commercial (continued)**

The monthly additional consumption is determined based on the average monthly consumption from a rolling three-year period ending December 2022. Approximately 61% of the additional consumption is used between the months of June through September.



**Commerical Consumption - Monthly Customers** 

Consumption by seasonal customers makes up only 4.3% of total commercial consumption. Commercial seasonal consumption for the budget was based on 2019 actual results as well as the three-year period from 2020-2022 and is approximately 85,000 HCF for the year.

#### Industrial

In 2022, approximately 93% of industrial usage has come from just four customers: Calpine, Texas Instruments, Sappi Fine Paper, and ON Semiconductor. PWD 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 1.32 million HCF for 2024.

#### Calpine

The Calpine power plant is PWD'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, which PWD has taken into consideration. Actual usage in 2023 as of September is projected to be well above the 2023 budget, but below 2022 actual since that was a high consumption year. PWD chose to average the last few years' usage which is about the same usage as 2023, 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 PWD is keeping their usage budget the same at 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. Production was downsized by shutting a paper machine recently. This impacted their usage in 2022 and 2023 YTD (through September). PWD reduced their estimated usage to 150,000 HCF from 200,000 for the 2024 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. PWD will keep them at the same 150,000 HCF.

#### **Public/Governmental**

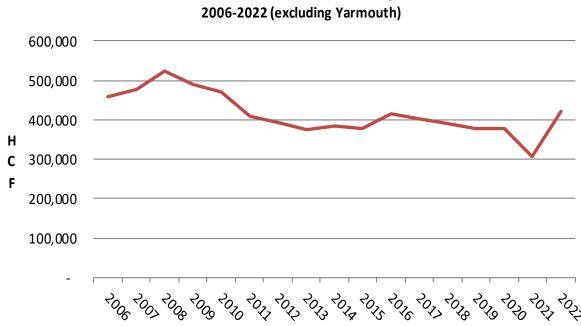
#### **Yarmouth Water District**

Approximately 28% 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 less efficient at producing power.

Wyman Power Plant ran consistently over 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. PWD is predicting that their usage will stay similar as the budget from the last two years, 130,000 HCF.

#### **Other Public/Governmental Customers**

Public/Governmental consumption has been in decline since the economic downturn of 2008. Government entities have sought out ways to decrease expenditures including their water and sewer bills. PWD used significantly more water due to an equipment breakdown in in 2022. This has skewed the results in 2022 and 2023. A fix is scheduled in 2024.



Public/Governmental Consumption 2006-2022 (excluding Yarmouth)

### Water Sales - Metered Revenue - Rates

### Water Rate Schedule

A 6.4% average rate adjustment is proposed to be implemented effective 1/1/2024. The Board of Trustees will review and approve any rate adjustment in November 2023.

Meter or Service Line	1/1/23	1/1/23 Non-	1/1/24 Proposed Member Rate	1/1/24 Proposed Non-
Size Private Fire Mont	Member Rate	member Rate	Member Rate	member Rate
		¢E OE	¢4.ce	<u>ФЕ 04</u>
2	\$4.40	\$5.05	\$4.65	\$5.34
3	9.84	11.29	10.40	11.93
4	17.54	20.17	18.54	21.32
6	41.92	48.18	44.30	50.92
8	70.17	80.66	74.16	85.24
10	109.61	126.13	115.84	133.29
12	157.83	181.52	166.79	191.83
16	280.59	322.7	296.53	341.03
Minimum Monthly	Charges			
5/8	\$10.87	\$12.51	\$11.49	\$13.22
3/4	12.81	14.72	13.54	15.56
1	16.63	19.14	17.57	20.23
1 1/2	29.54	33.96	31.22	35.89
2	44.23	50.85	52.90	60.81
3	80.26	92.27	95.99	110.35
4	120.81	138.92	144.48	166.14
6	233.42	268.42	279.16	321.02
8	368.53	423.82	440.75	506.87
10	533.61	613.66	638.18	733.91
12	706.37	812.30	844.79	971.48
Low income	2.72	3.14	2.87	3.32
Monthly Volume	<u>Charge</u>			
First 100 Cf	minimum	minimum	minimum	minimum
Next 2,900 Cf	\$2.72	\$3.14	\$2.87	\$3.32
Next 7,000 Cf	2.51	2.90	2.65	3.06
Next 40,000 Cf	2.21	2.53	2.34	2.67
Over 50,000 Cf	1.24	1.44	1.35	1.56

Typical Customer Increases	Member	Current	Proposed 6.4%	\$	%
Residential (per month)	.62" meter, 7 HCF	\$27.19	\$28.71	\$1.52	5.59%
Commercial (per month)	.62" meter, 40 HCF	114.85	121.22	6.37	5.55%
Small Industrial (per month)	2" meter, 1,300 HCF	2,174.81	2,337.63	162.82	7.49%
Large Industrial (per month)	8" meter, 56,000 HCF	70,327.11	76,570.48	6,243.37	8.88%
Sprinkler (per year)	6" meter	503.04	531.60	28.56	5.68%
Public Fire (per year)		1,644,768	1,738,188	93,420	5.68%
Seasonal (per year)	.62" meter	264.10	279.10	15.00	5.68%

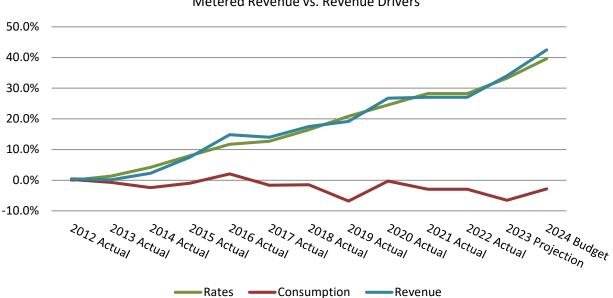
#### Water Sales - Metered Revenue - Rates

#### Water Rate Schedule (continue)

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

•	•	
Effective Date	Metered Rates	Public Fire Projection Rates
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
01/01/24	6.4% increase	5.7% 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 8.9% increase in water revenue from 2023 Projection to 2024 Budget was a result of 6.4% increase in metered rates as well as record low usage in 2023 due to significant rainfall.



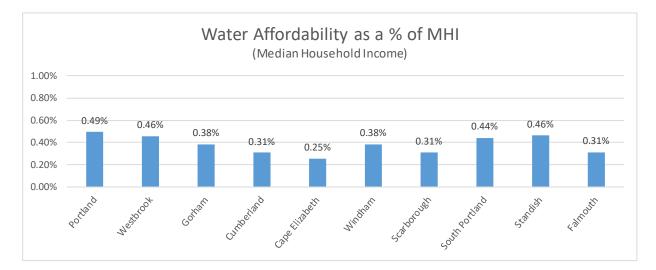
Cumulative Change in Metered Revenue Metered Revenue vs. Revenue Drivers

### Water Sales - Rate Affordability Study

The graph below shows water rates at PWD have been close to rate of inflation over the past 20 years with the most recent rate adjustments linked to much higher-than-normal inflation in the past three years and the need for additional funding for infrastructure improvements has been made. The CPI (consumer price index) had shot up in 2022 but has recently leveled off. The proposed budget has been gradually increased to cover expenses.



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 four to the median household income (MHI). From many studies and PWD's purposes, a factor of 2% and under MHI is considered affordable. Table below is based on current rates.

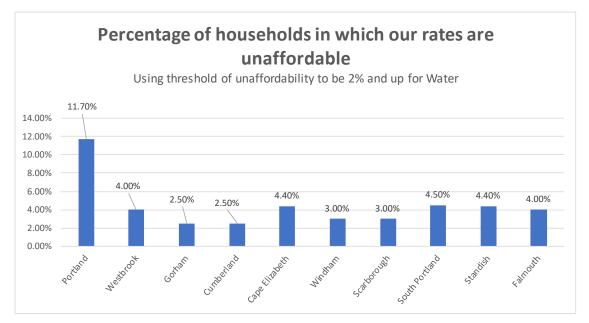


### Water Sales - Rate Affordability Study (continued)

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											
Household											
Income	Value	Annual Bil	l as Pe	centa	ge of H	ouseho	ld Inco	me by H	louseh	old Size	
		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		0.95%	1.53%	1.91%	2.48%	2.86%	3.24%	3.82%	4.20%	4.77%
40th											
Percentile	\$ 37,200		0.44%	0.70%	0.88%	1.14%	1.32%	1.49%	1.75%	1.93%	2.19%
Median	\$ 48,300		0.34%	0.54%	0.68%	0.88%	1.01%	1.15%	1.35%	1.49%	1.69%
60th											
Percentile	\$ 61,000		0.27%	0.43%	0.53%	0.70%	0.80%	0.91%	1.07%	1.18%	1.34%
80th											
Percentile	\$ 99,400		0.16%	0.26%	0.33%	0.43%	0.49%	0.56%	0.66%	0.72%	0.82%

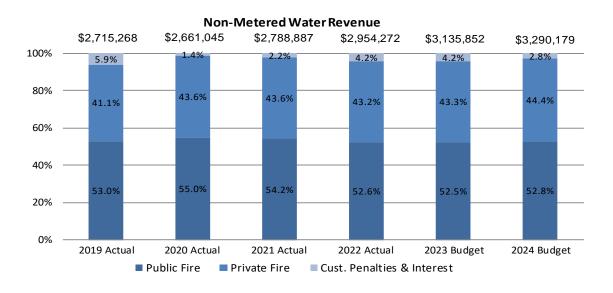
Using an alternative tool (Affordability Assessment Tool created by the University of North Carolina), an estimated number of households having unaffordable water bills was calculated. The tool uses information from the 2021 U.S. Census Bureau Website.



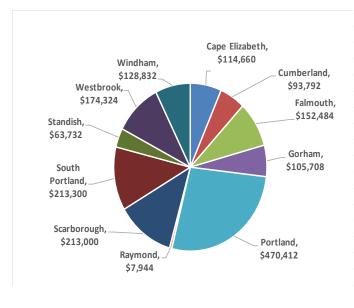
To assist low-income households, PWD offers 2 different programs. Qualifying households are given a \$8 discount on each month's bill. Customers can also participate in the 'conservation program' that provides and installs low flow devices to reduce the customer water consumption and ultimately their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

### Water Sales - Non-Metered Revenue

Non-metered water revenue has risen from \$2.7 million in 2019 to the budgeted amount of \$3.2 million (21.2%) for 2024.



### **Public Fire Protection Revenue**



## Private Fire Protection Revenue

Service Line			Number of
Size	Annual Fee		Customers
(inches)			
2	\$	55.80	367
3	\$	124.80	0
4	\$	222.48	268
6	\$	531.60	1345
8	\$	889.92	633
10	\$	1,390.08	37
12	\$	2,001.48	22
16	\$	3,558.36	1

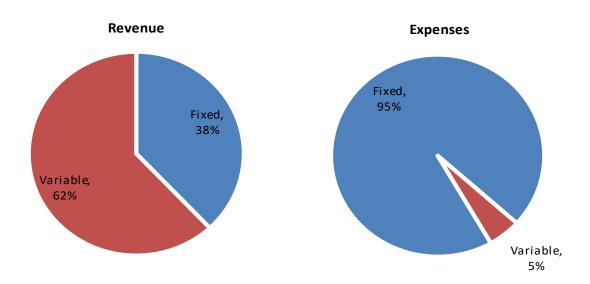
Allocated based on number of hydrants and inch feet of mains in each municipality.

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 PWD'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 PWD's expenses are fixed, largely infrastructure costs.



#### **Slow Customer Growth**

Population growth in the PWD's service area is lower than in other parts of the country and is not expected to increase much. Customers in 2022 total versus 2021 had been increased by an average of 0.97% due to Residential increasing by 512.

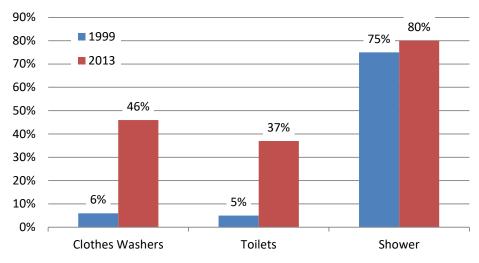
#### **Cost of Service Gap**

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)

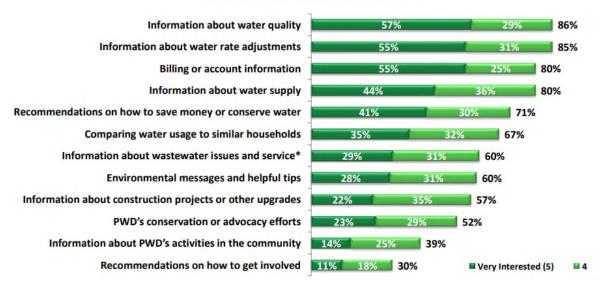
#### **Decline in Consumption**

There has been a nationwide trend in recent years toward lower consumption levels. This trend also appears in PWD'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.



**WRF Study - Household Conservation Efforts** 

A survey in 2023 to PWD customers asked "How interested are you in receiving the following info from PWD?" The graph below shows customers' responses to that question:



#### Interest in Information From PWD

### Wastewater Assessment & Contracted Billing Income

Wastewater Assessments are amounts payable by each municipality for wastewater services provided by PWD. The assessments cover the operating and debt service costs of operating wastewater facilities maintained by PWD. The assessments are billed in monthly installments. In 2024, the assessments for each municipality were increased excluding Falmouth and Windham (see table below).

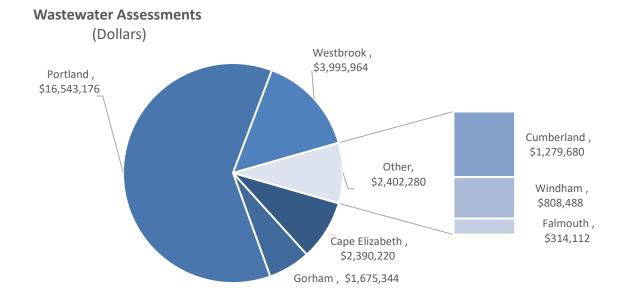
#### Wastewater Assessments

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Diff \$	Diff %
Cape Elizabeth	2,061,612	1,150,002	2,300,004	2,390,220	90,216	3.9%
Cumberland	1,005,600	592,452	1,184,904	1,279,680	94,776	8.0%
Falmouth	314,112	157,056	314,112	314,112	-	0.0%
Gorham	1,313,100	783,408	1,566,816	1,675,344	108,528	6.9%
Portland	13,960,236	7,899,372	15,798,744	16,543,176	744,432	4.7%
Westbrook	3,173,124	1,861,548	3,723,096	3,995,964	272,868	7.3%
Windham	518,412	257,904	515,808	808,488	292,680	<u>56.7</u> %
	\$22,346,196	\$12,701,742	\$25,403,484	\$27,006,984	\$ 1,603,500	6.3%

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. PWD only provides billing-related services for those communities.

#### **Contracted Billing Income**

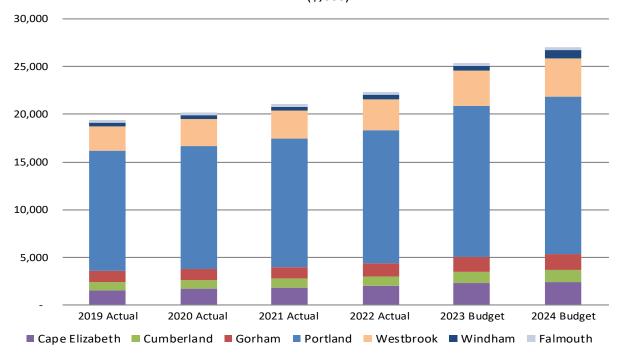
	2022	2023	2023	2024		
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Scarborough	12,072	6,642	13,284	13,944	660	5.0%
South Portland	208,164	114,492	228,984	236,916	7,932	<u>3.5</u> %
	\$220,236	\$121,134	\$242,268	\$250,860	\$ 8,592	3.5%



### Wastewater Assessments Revenue Trend

Wastewater assessments rose from \$19.45 million in 2019 to a budgeted \$27.01 million in 2024 (an increase of 39%). 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		
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 Actual	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		
2024 Budget	2,390,220	1,279,680	1,675,344	16,543,176	3,995,964	808,488	314,112	27,006,984		



Assessments by Fund (2019-Present) (\$,000)

### **Current Municipal Wastewater Rates**

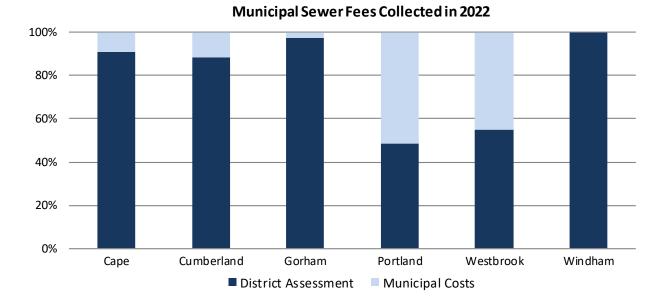
Wastewater rates are established by each municipality. The rates are designed to cover the municipal costs, including PWD's annual assessment. The table below indicates the municipal sewer fees for municipalities for whom the PWD provides billing services. These fees are included on the monthly bill, which includes PWD's water fees. Customers remit their payments for both water and sewer fees to the PWD. 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 PWD from these sewer fees.

#### Sewer Rates as of 10/1/2023

	Minimum HCF	Minimum Charge	Additional HCF
Cape Elizabeth	1	52.51	6.03
Cumberland	0	36.92	5.52
Gorham	1	15.69	7.34
South Portland	1	6.95	6.95
Portland	1	\$12.75	\$12.75
Westbrook	1	12.73	7.73
Windham	5	48.84	9.77

HCF= Hundred Cubic Feet (748 gallons)

The chart below indicates the percent of sewer fees collected in 2022 that the municipalities used to pay PWD's assessment and their internal costs. In 2022, Windham's sewer fees were less than the PWD's assessment by \$168,955. The shortfall was covered by the town's prior year surplus or general fund appropriation.



#### **Interest Income**

PWD'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 PWD's principal balances. The budgeted rate of return on investments was based on the current annual returns and cash balances as of May 2023. Rates of return have risen in the current year and PWD took that into account for 2024 while still being conservative using an average of 3%.

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 \$2,473 from that loan in 2024.

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Diff \$	Diff %
	Actual	Jan-Jun	Buuget	Buuger	Diri ş	
	<b>•</b> • • • • • • •	<b>•</b> • • • • • • • • • • • • • • • • • •	<b>•</b> • • • • • • • •	<b>•</b> • • • • • • • • • • • • • • • • • •	(00.007	000 70/
Water Fund	\$ 219,124	\$ 260,780	\$ 203,824	\$ 665,921	462,097	226.7%
	<b>E</b> . 1.					
Wastewater Operating						
Cape Elizabeth	11,644	15,235	13,842	40,361	26,519	191.6%
Cumberland	6,873	7,266	8,700	21,976	13,276	152.6%
Falmouth	918	695	1,188	2,845	1,657	139.5%
Gorham	5,809	9,660	6,060	35,415	29,355	484.4%
Portland	60,005	101,307	83,224	247,603	164,379	197.5%
Westbrook	33,730	44,355	35,193	136,416	101,223	287.6%
Windham	6,893	1,694	1,090	15,776	14,686	<u>1347.3%</u>
	125,872	180,212	149,297	500,392	351,095	235.2%
Contracted Billing:						
Scarborough	58	49	95	192	97	102.1%
South Portland	1,192	1,387	1,730	4,537	2,807	<u>162.3%</u>
	1,250	1,436	1,825	4,729	2,904	159.1%
Total	\$ 346,246	\$ 442,428	\$ 354,946	\$ 1,171,042	\$ 816,096	229.9%

### **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 Water Related Fees	<b>Revenue Description</b> Fees collected for meter replacement or damages and the inspection of water backflow devices.
Customer Connection Fees Customer Activation Fees	Application fees for new mains, services and meters. Fees for new account activations.
Jobbing Revenue	Revenue for work performed by PWD employees that is billable to outside parties.
Lease Revenue	Revenue from lessees for use of land or assets of the PWD.
Septage Hauler Fees	Fees from outside septage haulers for the treatment of wastewater delivered to PWD wastewater treatment facilities.
Net Energy Billing Credits	Credits earned from participating in a renewable energy program.
Wastewater Misc. Income	Treatment services provided at the Westbrook Regional Wastewater Treatment Facility for Portland's Riverside area per inter-municipal agreement.

Water Fund:	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Diff \$	Diff %
Water Related Fees	\$16,120	\$34,540	\$25,000	\$16,000	(\$9,000)	-36.0%
Customer Connection Fees	60,461	36,798	50,000	60,000	10,000	20.0%
Customer Activation Fee	75,730	35,026	95,000	76,000	(19,000)	-20.0%
Jobbing Surcharge	35,462	18,324	55,000	35,000	(20,000)	-36.4%
Lease Revenue	89,962	-	89,962	89,962	-	0.0%
Net Energy Billing Credits	49,532	47,003	67,817	198,859	131,042	193.2%
Miscellaneous Income	69,866	59,050	69,340	82,738	13,398	<u>19.3</u> %
Total Water Division	\$397,133	\$230,741	\$452,119	\$558,559	\$106,440	23.5%

Wastewater Funds:	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Diff \$	Diff %
Septage - Gorham	\$33	\$0	\$0	\$0	\$0	n/a
Septage - Portland	347,279	94,424	290,000	240,000	(50,000)	-17.2%
Septage - Westbrook	214	-	-	-	-	n/a
Septage - Windham	8	-	-	-	-	n/a
Net Energy Billing Credits	166,670	154,002	232,183	669,141	436,958	188.2%
Miscellaneous Income	219,444	24,375	46,950	-	(46,950)	-100.0%
Total Wastew ater Divisions	733,648	272,801	569,133	909,141	340,008	59.7%

#### **Fund Balance**

<u>Operating Fund Balance</u> 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). <u>Watershed Protection Land</u> funds was established from transfers from the Operating Fund Balances (<u>Watershed Reserve</u>) or net proceeds from land sales (<u>Land Cash Reserve</u>). Other Reserves consists of <u>Water Capital Reserve</u> for main renewal projects, <u>Water Rate Stabilization</u> to provide funds to mitigate future rate increases, Water Master Plan provides funding for ongoing infrastructure master plan and <u>Portland Wastewater</u> for Portland's share of expanding the treatment facility.

Many of the wastewater funds saw declines in 2023 due to higher-than-expected operating costs related to infrastructure repairs. No use of operating reserves is expected in 2024. The Water Protection Land Funds Reserve decreases related to purchase of watershed land easements. Water Capital Reserve change in 2024 reflects the 10% water revenue contribution offset by debt service payment and direct drawdown to pay for certain water main replacement projects. The Water Master Plan fund withdrawals is expected to pay for the first phase of the plan.

	Balance 01/01/23	Projected 2023	Balance 12/31/23	Budget 2024	Balance 12/31/24	Target Balance	Projection %
Water	\$7,289,054	(\$666,905)	\$6,622,149	-	\$6,622,149	\$7,865,199	21.0%
Cape Elizabeth	286,836	(56,462)	230,374	-	230,374	\$618,257	9.3%
Cumberland	60,779	(49,452)	11,327	-	11,327	\$329,147	0.9%
Gorham	94,177	7,764	101,941	-	101,941	\$433,831	5.9%
Portland	3,452,153	130,973	3,583,126	-	3,583,126	\$4,376,958	20.5%
Westbrook	313,278	(251,670)	61,608	-	61,608	\$105,905	14.5%
Windham	165,964	30,783	196,747		196,747	\$207,649	<u>23.7</u> %
	11,662,241	(854,969)	10,807,272	-	10,807,272	13,936,945	19.4%

Water & Wastewater Fund Operating Surpluses (Goal 25.0%)

#### Falmouth & Contracted Billing Operating Surpluses:

	Balance	Projected	Balance	Budget	Balance
	01/01/23	2023	12/31/23	2024	12/31/24
Falmouth	\$41,381	\$10,951	\$52,332	\$12,165	64,497
Scarborough	4,967	(\$2,947)	2,020	(1,466)	554
So. Portland	21,920	<u>(\$9,686)</u>	12,234		12,234
	\$68,268	(\$1,682)	\$66,586	\$10,699	77,285

#### Watershed Protection Land Funds (Goal 15.0%)

	Balance	Projected	Balance	Budget	Balance	Target	Projection
	01/01/23	2023	12/31/23	2024	12/31/24	Balance	%
Watershed Reserve	\$1,419,809	(\$52,000)	\$1,367,809	\$0	\$1,367,809	\$4,616,946	4.4%
Land Cash Reserve	530,905	(45,603)	485,302	(16,834)	468,468	*	
	\$1,950,714	(\$97,603)	\$1,853,111	(\$16,834)	\$1,836,277	\$4,616,946	6.0%

Other Reserves:

\* - Approximately \$160,000 of the balance is reserved for future debt service payments on the Tiger Hill Easement purchase

	Balance 01/01/23	Projected 2023	Balance 12/31/23	Budget 2024	Balance 12/31/24
Water Capital Reserve	\$1,444,181	(\$456,675)	\$987,506	(\$148,389)	\$839,117
Water Rate Stabilzation	\$300,000	\$0	\$300,000	\$0	\$300,000
Water Master Plan	\$944,548	(\$800,000)	\$144,548	(\$144,548)	\$0
Portland Wastew ater	\$103,996	\$10,000	\$113,996	\$12,000	\$113,996

**Fee Schedule for Non-Water Tariff Services** Proposed to be adopted by the Board of Trustees effective January 1, 2024. In red are changes.

Proposed to be adopt	Proposed to be adopted by the Board of Trustees effective January 1, 2024. In red are changes.								
A. Water	Description	Fee							
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 \$132/1000 gal to \$137/1000 gal. The fee for holding tank waste will increase from \$58/1000 gal to \$60/1000 gal.							
		The administration fee will increase from \$60/1000 gal to \$62/1000 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 -Othe	r The cost to investigate why a submeter cannot be read after the initial installation of meter/Encoder Receiver Transmitter (ERT).	Sub meter verification fee from \$19 to \$20							
5. Submeter Fees – Portland Only	Costs or replacing submeters for Portland residents.	Submeter Replacement ERT & Meter \$150 Submeter ERT Only Upgrade fee \$105							
6. Sewer Manhole/Mair 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)	Fees are per City's request.         These fees are to be determined at the time of Main         Extension Agreement development.							
C. General									
1. Purchases from Stock Room	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 are provided. PWD 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

## **2024 Financial Summary by Category**

	2023 Budget	2024 Budget	Diff \$	Diff %
Salaries & Wages	\$14,521,475	\$14,807,506	\$286,031	2.0%
Employee Benefits	6,612,066	6,865,956	\$253,890	3.8%
Biosolids Disposal	3,444,636	3,201,668	-\$242,968	-7.1%
Chemicals	1,974,650	2,726,202	\$751,552	38.1%
Contracted Services	5,308,612	5,880,841	\$572,229	10.8%
Heat/Fuel Oil	502,143	403,490	-\$98,653	-19.6%
Insurance	291,901	324,792	\$32,891	11.3%
Materials & Supplies	1,997,802	2,000,480	\$2,678	0.1%
Other Expense	723,479	672,939	-\$50,540	-7.0%
Purchased Pow er	2,101,222	2,941,373	\$840,151	40.0%
Regulatory/Taxes	329,406	344,496	\$15,090	4.6%
Tele/Other Utilties	453,184	516,099	\$62,915	13.9%
Transportation	1,332,618	1,275,299	-\$57,319	-4.3%
Dept Expense	39,593,194	41,961,141	2,367,947	6.0%
Trans Offset	(966,072)	(896,935)	\$69,137	-7.2%
Fund Expense	38,627,122	41,064,206	2,437,084	6.3%

## **2024 Financial Summary by Department**

	Number of Employees	2023 Budget	Number of Employees	2024 Budget	Budget Diff \$	Budget Diff %
Water Services	56	\$10,578,947	56	\$11,075,470	\$496,523	4.7%
Wastewater Services	39	13,845,033	39	14,804,746	959,713	6.9%
Environmental Services	16	2,600,070	15	2,560,113	(39,957)	-1.5%
Engineering Services	33	5,083,882	36	5,379,840	295,958	5.8%
Administration	44	7,188,767	43	7,368,187	179,420	2.5%
Non-Departmental	<u>0</u>	296,495	<u>0</u>	772,785	476,290	<u>160.6%</u>
	188	39,593,194	189	41,961,141	2,367,947	6.0%

## **Departmental Expense by Category**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
660111 - SALARIES/WAGES NON-UNION	\$5,309,396	\$2,733,528	\$5,874,272	\$6,126,610	\$252,338	4.3%
660112 - WAGES/OVERTIME NON-UNION	91	182	1,174	1,224	50	4.3%
660121 - WAGES/REGULAR UNION	6,510,069	3,437,247	7,293,757	7,665,158	371,401	5.1%
660122 - WAGES/OVERTIME UNION	607,140	344,931	664,671	720,391	55,720	8.4%
660123 - WAGES/DOUBLETIME UNION	97,155	41,104	104,695	100,446	(4,249)	-4.1%
660124 - WAGES/STANDBY TIME UNION	208,868	116,298	239,366	247,421	8,055	3.4%
660125 - OPEN POSITIONS	-	-	-	(320,445)	(320,445)	n/a
660126 - SHIFT DIFF - NIGHT	1,307	2,379	4,380	4,380	-	0.0%
660131 - WAGES - REGULAR - TEMPS	60,192	48,740	228,960	235,321	6,361	2.8%
660132 - WAGES - OVERTIME- TEMPS	70	261	-	-	-	n/a
660136 - CONTRACTED - TEMP	98,123	36,151	83,200	-	(83,200)	-100.0%
66014 - VACATION ACCRUAL	44,983	-	-	-	-	n/a
660141 - TRUSTEES COMPENSATION	21,100	11,000	27,000	27,000	-	0.0%
66015 - SICKTIME ACCRUAL	22,606	-	-	-	-	n/a
Salaries & Wages Total	12,981,101	6,771,819	14,521,475	14,807,506	286,031	2.0%

#### Salaries/Wages:

Labor rates for all employees were assumed to be 5% higher than the rates used in the 2023 Budget.

Combined, the two regular labor accounts (660111 & 660121) increased \$623,739 (4.7%). Total hours decreased 12,606 (2.9%) due to the recognition of 5 vacant positions annually for 10,400 hours as well as eliminating an agency temp position. 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 3.9% of total labor in 2023 to 3.8% in 2024.

Budgeted hours for overtime/double-time stayed relatively flat (0.8%) while standby went down by 76 hours (1.1%).

PWD's overall regular (non-temporary) headcount increased by 1 to 189. Asset Engineering added 3 positions after the decrease of one position in both Water Resources and Senior Management.

	2023	2024	
Positions	Budget	Budget	Change
Full Time	187	186	-1
Part Time	<u>1</u>	<u>3</u>	<u>2</u>
Total	188	189	1

The Human Resources section has additional details.

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
660401 - FICA - EMPLOYERS' SHARE	\$980,555	\$522,280	\$1,104,518	\$1,132,779	\$28,261	2.6%
660405 - SAFETY/WHY PROGRAM ITEMS	20,332	9,176	42,045	41,206	(839)	-2.0%
660408 - PROGRAMS ADMINISTRATION	275	-	-	275	275	n/a
660411 - MEALS ALLOWANCE	14,165	6,830	14,220	14,300	80	0.6%
660413 - PWD TRAINING PROGRAM	1,854	87	-	-	-	n/a
6604151 - FIELD UNIFORMS	1,200	-	1,200	1,200	-	0.0%
660418 - STIPENDS	9,330	13,200	10,200	13,000	2,800	27.5%
660419 - EMPLOY EE BENEFTS-MISC OTH	88,291	27,129	32,000	30,900	(1,100)	-3.4%
660423 - JURY DUTY REIMBURSEMENT	(194)	(97)	-	-	-	n/a
660424 - SIGNING BONUS	8,000	8,500	-	9,000	9,000	n/a
660491 - FRINGE BENEFITS-REG/SAL	4,291,721	2,516,399	5,407,883	5,623,296	215,413	4.0%
Employee Benefits Total	5,415,530	3,103,504	6,612,066	6,865,956	253,890	3.8%

#### **Employee Benefits:**

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 PWD'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 2024 Budget, the percentage was 41.74%, which is an increase from 2023's percentage of 41.07% due to benefit costs related to a higher pension contribution and match to the new 457 plan as well as miscellaneous employee benefits.

The Human Resource section has additional details.

#### **Biosolids Disposal:**

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
663571 - BIOSOLIDS DISPOSAL	2,411,502	1,581,260	3,444,636	3,201,668	(242,968)	-7.1%
Biosolids Disposal Total	2,411,502	1,581,260	3,444,636	3,201,668	(242,968)	-7.1%

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)	2023	2024	Change	%	2023 % Solids	2024 % Solids
Portland (East End)	19,871	18,585	(1,286)	-6.5%	21.0%	21.0%
Westbrook	4,142	3,914	(228)	-5.5%	21.0%	21.0%
Cape Elizabeth	200	210	10	5.0%	21.0%	21.0%
Peaks Island	<u>45</u>	<u>39</u>	( <u>6</u> )	<u>-13.3%</u>	21.0%	21.0%
Total	24,258	22,748	(1,510)	-6.2%		

The budget assumes a disposal rate of \$139.23/wet ton, that is a 1.95% decrease over the 2023 Budget assumption of \$142. The small change in per unit cost is due to the significant raising of rates in the past few years which have flattened.

## **Chemicals:**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
66181 - AMMONIA	\$33,552	\$16,368	\$32,160	\$53,564	\$21,404	66.6%
661811 - SODIUM BICARBONATE	30,738	34,026	24,759	31,100	6,341	25.6%
661812 - SODIUM BISULFITE	130,982	130,291	184,537	200,027	15,490	8.4%
66182 - CAUSTIC SODA	125,810	57,902	138,143	189,720	51,577	37.3%
66183 - FLUORINE COMPOUND	57,144	37,306	63,520	71,236	7,716	12.1%
66184 - ZINC ORTHOPHOSPHATE	119,249	74,436	131,250	177,592	46,342	35.3%
66185 - SODIUM HYPOCHLORITE	764,649	417,934	863,420	1,194,537	331,117	38.3%
66189 - POLYMER	563,749	326,946	441,618	709,796	268,178	60.7%
661892 - LIQUID OXYGEN (LOX)	69,679	36,782	76,005	84,192	8,187	10.8%
661899 - OTHER CHEMICALS	11,024	6,768	19,238	14,438	(4,800)	-25.0%
Chemicals Total	1,906,577	1,138,759	1,974,650	2,726,202	751,552	38.1%

Chemicals are primarily used at PWD's two water and four wastewater treatment facilities. The budget increase above was driven solely by increases in price per unit (see chart below). Actual unit prices will be known in December. Volumes used were adjusted up or down depending upon historic usage or operational changes.

The 2024 Budget assumes a 10% increase in the per unit price of each chemical above the current price. However, the bids received for 2023 exceed budget estimates by 15% to 40%. This was due to inflationary factors particularly those involving energy which impacts both production and transportation costs.

	2023 Ass	umption	2024 Ass	umption	% Change		Change in
	Units	Per Unit	Units	Per Unit	Units	Per Unit	Budget \$
Water Treatment (Ozone)							
Ammonia	16,000	\$2.01	18,757	\$2.86	17.2%	42.3%	21,404
Caustic Soda	87,200	\$1.47	87,200	\$2.02	0.0%	37.4%	47,960
Fluorine Compound	18,800	\$3.34	19,459	\$3.63	3.5%	8.7%	10,412
Liquid Oxygen	124,700	\$0.61	122,267	\$0.68	-2.0%	11.6%	8,187
Sodium Hypochlorite	145,000	\$1.95	145,886	\$2.97	0.6%	52.3%	159,632
Zinc Orthophosphate	17,500	\$7.50	17,500	\$10.15	0.0%	35.3%	46,342
							293,937
East End WWTF							
Polymer	219,500	\$1.50	300,300	\$1.82	36.8%	21.3%	217,296
Sodium Bisulfite	72,000	\$2.17	67,000	\$2.48	-6.9%	14.3%	9,920
Sodium Hypochlorite	230,600	\$1.95	221,450	\$2.97	-4.0%	52.3%	208,037
							435,253
Westbrook WWTF							
Polymer	71,300	\$1.50	85,000	\$1.82	19.2%	21.3%	47,750
Sodium Bisulfite	8,788	\$3.22	8,936	\$3.79	1.7%	17.7%	5,570
Sodium Hypochlorite	65,329	\$1.95	33,650	\$2.97	-48.5%	52.3%	<u>(27,451)</u>
							\$25,869

## **Contracted Services:**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
662063 - COPIER MAINTENANCE/TONER	\$14,814	\$9,633	\$15,000	\$15,000	\$0	0.0%
6631 - ENGINEERING SERVICES	64,568	21,802	151,000	85,000	(66,000)	-43.7%
6632 - ACCOUNTING SERVICES	38,500	32,000	39,000	54,000	15,000	38.5%
66331 - LEGAL - LABOR RELATIONS	124,554	14,620	68,000	68,000	-	0.0%
66333 - BOND COUNSEL	17,734	-	7,500	7,500	-	0.0%
66339 - LEGAL - OTHER	1,314	25,400	34,500	24,500	(10,000)	-29.0%
663521 - TRAFFIC CONTROL	163,329	88,954	152,800	154,950	2,150	1.4%
6635221 - PAVING - MINOR REPAIR	436,217	341,725	526,000	526,000	-	0.0%
663523 - SIDEWALK	44,444	4,516	18,500	18,500	-	0.0%
663524 - STREET OPENING	47,265	15,294	63,600	63,600	-	0.0%
663525 - CONTRACTOR CONSTRUCTION	778,237	275,582	763,000	774,400	11,400	1.5%
66353 - REPAIR SERVICES	212,949	173,113	206,400	301,650	95,250	46.1%
66354 - MAINTENANCE SERVICES	940,123	533,187	903,289	1,056,054	152,765	16.9%
663542 - LARGE METER TESTING	3,579	8,932	12,500	12,500	-	0.0%
663543 - CSO FLOW MONITORING	173,466	28,167	154,000	154,500	500	0.3%
663544 - MAINT SERVICES - CCTV	41,318	583	61,250	61,250	-	0.0%
663545 - RADIO SERVICING AND EQUIP	1,831	1,098	3,000	3,000	-	0.0%
663546 - MAINTENANCE - SNOW REMOVL	131,288	81,545	157,953	164,433	6,480	4.1%
663547 - WASTE SLUDGE TRANSPORT	42,988	16,469	42,500	46,400	3,900	9.2%
663551 - LAB ANALYSIS		20,339		,		
	51,130	20,339	41,285	60,045	18,760	45.4%
663553 - PHOTOGRAPHY SERVICES	600		1,500	1,500	-	0.0%
663561 - COMPUTER LICENSES	99,020	50,218	166,677	118,606	(48,071)	-28.8%
	608,399	286,505	441,975	595,805	153,830	34.8%
663563 - COMPUTER CONSULTING/OTHER	15,678	8,811	30,600	30,600	-	0.0%
663572 - GRIT & SCREENS DISPOSAL	61,432	24,093	58,500	69,000	10,500	17.9%
663573 - GREASE DISPOSAL	78,442	32,668	34,200	59,300	25,100	73.4%
663574 - DISPOSAL SERVICES	35,074	16,435	43,030	45,130	2,100	4.9%
6635801 - EMPLOYEE HEALTH SERVICES	9,772	4,862	10,000	10,000	-	0.0%
663581 - UTILITY BILLING PRINTING	70,236	64,887	103,600	86,000	(17,600)	-17.0%
663582 - PAYMENT PROCESSING	125,601	61,745	125,700	131,550	5,850	4.7%
663583 - RECEIVABLE COLLECTIONS	4,978	877	6,500	3,000	(3,500)	-53.8%
663584 - BANK SERVICE CHARGES	19,563	10,000	20,400	20,000	(400)	-2.0%
663585 - TREATMENT CONTRACT SERVIC	522,103	278,300	556,600	636,550	79,950	14.4%
6635851 - WW DEWATERING SERVICES	5,180	3,086	7,878	8,786	908	11.5%
6635852 - WW DEWATERING SRVS CREDIT	(5,180)	(3,086)	(4,300)	(5,300)	(1,000)	23.3%
663587 - COURIER SERVICES	22,662	10,503	22,070	22,070	-	0.0%
663588 - EQUIPMENT MAINTENANCE	6,878	4,069	16,300	13,400	(2,900)	-17.8%
663592 - RECRUITING SERVICES	3,110	18,729	6,000	15,000	9,000	150.0%
663594 - DIGSAFE	38,193	33,361	46,500	61,900	15,400	33.1%
663595 - OUTPLACEMENT SERVICES	4,593	7,490	500	500	-	0.0%
663598 - HR CONSULTANT SERVICES	7,451	3,874	15,000	15,000	-	0.0%
6635984 - LANGUAGE INTERPRETATION	446	348	400	500	100	25.0%
6635985 - VEHICLE FLEET GPS SERVICE	38,574	-	26,000	28,000	2,000	7.7%
663599 - MISC OTHER SERVICES	38,301	44,941	72,465	88,304	15,839	21.9%
6636 - TECHNICAL SERVICES	47,343	16,343	79,440	59,350	(20,090)	-25.3%
66361 - SEBAGO CLEAN WATERS	-	-	-	60,000	60,000	n/a
			_	17,000	17,000	n/a
66362 - LAKES ENVIRONMENTAL ASSOC 66363 - CUMB COUNTY SOIL & WATER	-	-		38,008	38,008	n/a

**Contracted Services**, which had a budget increase of \$572,229 or 10.8%, covers a large variety of services provided by outside vendors. The budgeted expenditures for 2024 were \$5.8 million. Budget changes of note include:

**6631** -- Engineering Services (down \$66,000 or 43.7%) – This decrease is because, in 2023, we budgeted towards efforts to comply with a regulation on lead and copper in water systems. As the year went on, PWD has been completing the program internally, therefore eliminating this budget line.

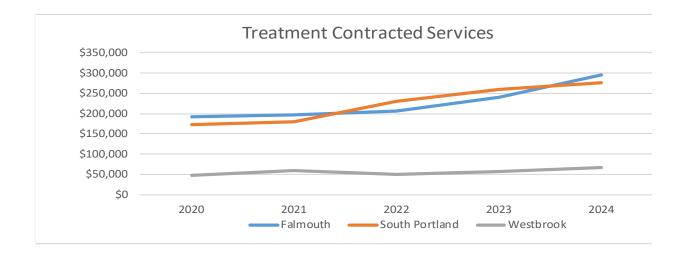
**66353 – Repair Services (up \$95,250 or 46.1%)** – All departments have raised their repair budgets to be more in line with actuals.

**66354** – **Maintenance Services (up \$152,765 or 16.9%)** – Wastewater treatment facility in Westbrook has increased their budgets for maintenance of assets as well as the water treatment plant in Standish, both bringing budgets up to cover historical costs.

**66361** – **Sebago Clean Waters (new \$60,000)** – This funding provides direct financial support for Sebago Clean Waters, a third-party non-profit group supporting PWD's watershed protection efforts. This is a new item in the budget starting this year.

**663562 – Computer Maintenance (up \$153,830 or 34.8%)** – Information services increased their budget for software and the related support for these services.

**663585 - Treatment Contracted Services (up \$79,950 or 14.4%)** – This item was budgeted for \$636,550 in 2024. South Portland and Falmouth treat the wastewater flows from Cape Elizabeth and Cumberland, respectively. PWD 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.



## **Heat/Fuel Oil:**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
66161 - HEATING OIL	\$124,803	\$106,545	\$172,661	\$124,798	(\$47,863)	-27.7%
661621 - PIPELINE DELIVERED PROPAN	162,438	98,535	166,212	129,430	(36,782)	-22.1%
661622 - CONTAINER DELIVERED	111,049	51,709	116,220	113,212	(3,008)	-2.6%
66165 - DIESEL OIL	221	-	-	-	-	n/a
66166 - UNLEADED GAS	31,467	5,559	47,050	36,050	(11,000)	-23.4%
Heat/Fuel Oil Total	429,977	262,349	502,143	403,490	(98,653)	-19.6%

The first three accounts in this category (66161 to 661622) involve fuel used for facilities' heat or backup generators. Unleaded Gas (66166) is for PWD vehicles that fuel up at remote locations and for the boat used in the PWD's Sebago Lake monitoring efforts. Heating Oil and Propane Gas costs have decreased as the per unit cost of energy types are down around 29%.

	2023 Assumption		2024 Ass	umption	% Change	
	Units	Per Unit	Units	Per Unit	Units	Per Unit
Heating Oil:						
Water Treatment/Ozone Plant	30,846	\$3.80	30,490	\$2.69	-1.2%	-29.2%
Westbrook WWTF	7,831	\$3.80	8,500	\$2.69	8.5%	-29.2%
Cape Elizabeth WWTF	3,200	\$3.80	3,604	\$2.64	12.6%	-30.5%
Peaks Island WWTF	2,200	\$4.80	2,200	\$3.69	0.0%	-23.1%
Water - Throttling Valve Building	<u>781</u>	\$3.80	<u>820</u>	\$2.78	5.0%	-26.8%
	44,858	\$3.85	45,614	\$2.74	1.7%	-28.9%

#### **Insurance**:

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
6656 - VEHICLE INSURANCE	\$26,086	\$13,846	\$28,745	\$29,354	\$609	2.1%
6657 - GEN LIABILITY INSURANCE	77,157	41,181	84,850	87,303	2,453	2.9%
66591 - DAMAGES AND CLAIMS	-	7,113	-	-	-	n/a
66592 - DAMAGES & CLAIMS-GOODWILL	9,670	-	6,000	6,000	-	0.0%
66593 - UMBRELLA INSURANCE COVER	7,718	4,107	8,497	8,708	211	2.5%
66594 - PROFESSION/CRIME BONDING	45,031	26,511	47,664	57,565	9,901	20.8%
66599 - PROPERTY & BOILER INSUR	108,895	62,039	116,145	135,862	19,717	17.0%
Insurance Total	274,557	154,796	291,901	324,792	32,891	11.3%

Insurance costs include premiums paid on coverage for PWD property as well as small claims paid directly to outside parties. PWD's asset values have grown in the last year, therefore we have increased the insurance coverage in each category.

#### **Materials & Supplies:**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
6619 - ASSET PURCHASES	\$298,333	\$86,256	\$292,710	\$300,435	\$7,725	2.6%
662012 - CRUSHED GRAVEL	-	988	1.750	1.750	-	0.0%
662014 - CRUSHED STONE	253	369	750	750	-	0.0%
662015 - LOAM	350	-	-	-	-	n/a
662017 - SAND AND SALT	3,306	-	3,500	3,500	-	0.0%
662018 - BANKRUN GRAVEL	623	342	1,500	1,000	(500)	-33.3%
662019 - GRAVEL - TYPE A (DOT)	1,674	860	1,500	1,500	-	0.0%
66202 - TOOLS	49,498	41,887	51,400	55,125	3,725	7.2%
66203 - VENDOR PURCHASED SUPPLIES	680,473	267,847	471,668	553,135	81,467	17.3%
662041 - MATERIALS INVENTORY	317,940	175,588	249,130	257,121	7,991	3.2%
662042 - SUPPLIES INVENTORY	120,692	79,553	110,000	118,200	8,200	7.5%
66204201 - INVENTORY - QPR	62	-	1,400	750	(650)	-46.4%
66204202 - INVENTORY - BNKRUN GRAVEL	18,965	5,722	17,000	17,000	-	0.0%
66204203 - INVENTORY - CRUSHD GRAVEL	6,825	2,597	14,250	11,000	(3,250)	-22.8%
66204204 - INVENTORY - CRUSHED STONE	3,133	234	2,250	2,250	-	0.0%
66204205 - INVENTORY - LOAM	4,074	1,193	1,250	1,250	-	0.0%
66204206 - INVENTORY - TYPE A GRAVEL	37,634	14,268	31,500	31,500	-	0.0%
662043 - TOOL INVENTORY	95,459	81,603	94,975	96,175	1,200	1.3%
66204301 - INVENTORY - TONER	1,148	1,229	2,450	2,450	-	0.0%
66204302 - INVENTORY - PAPER	1,860	1,767	4,300	4,300	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	11,385	7,810	13,588	9,925	(3,663)	-27.0%
662044 - METER INVENTORY	259	(6,498)	5,750	5,750	-	0.0%
662046 - HYDRANT INVENTORY	30,481	33,390	59,750	61,000	1,250	2.1%
662047 - GARAGE INVENTORY	14,938	9,442	15,600	11,900	(3,700)	-23.7%
66204701 - INVENTORY - UNLEADED GAS	154,947	80,654	186,415	144,266	(42,149)	-22.6%
66204702 - INVENTORY - DIESEL	61,218	35,586	84,835	57,696	(27,139)	-32.0%
66204703 - INVENTORY - TIRES	15,067	6,100	15,000	13,000	(2,000)	-13.3%
66205 - CONSUMABLE SUPPLIES	96,366	49,251	97,550	96,075	(1,475)	-1.5%
66206 - COMPUTER RELATED EQUIP	86,589	28,161	98,031	62,577	(35,454)	-36.2%
66207 - EQUIPMENT PARTS	160,519	24,100	67,000	78,100	11,100	16.6%
Materials & Supplies Total	2,274,071	1,030,299	1,996,802	1,999,480	2,678	0.1%

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 PWD assets. The 2024 Budget increased \$2,678 or 0.1% because the cost of vendor purchased supplies have increased. This is mostly offset by vehicle fuel price per unit that decreased 25.5% and 13.7% (see below), as well as a lower predicted usage by about 10%.

The assumptions for vehicle fuel were:

	2023 Ass	sumption	2024 As	sumption	% Change	
Fuel Type	Units	Per Unit	Units	Per Unit	Units	Per Unit
Diesel	23,500	\$3.61	21,448	\$2.69	-8.7%	-25.5%
Unleaded Gas	60,920	\$3.06	54,646	\$2.64	<u>-10.3%</u>	-13.7%
	84,420		76,094		-9.9%	

#### **Other Expense:**

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
66411 - INTERNAL RENTAL CHARGES	\$51.030	\$25,515	\$51,030	\$53,600	\$2.570	5.0%
6642 - EQUIPMENT RENT	7,023	7,672	21,300	21,900	600	2.8%
66601 - PUBLIC RELATIONS	5.669	1.831	7.950	5,950	(2,000)	-25.2%
66609 - OTHER ADVERTISING	13,267	5,423	10,850	12,450	1,600	14.7%
6675111 - INSTATE TRAINING/CONF	113,418	74,152	114,400	123,170	8,770	7.7%
6675112 - OUT OF STATE TRAINING/CON	57.951	39.305	68.950	92,450	23,500	34.1%
6675121 - IN STATE CONFERENCES	190	-	-	-	-	n/a
667513 - DUES	79,763	40,322	93,753	85,883	(7,870)	-8.4%
667514 - PROFESSIONAL LICENSES	9,466	5,976	15,955	11,305	(4,650)	-29.1%
667515 - PERIODICAL SUBSCRIPTIONS	5,706	4,243	7,825	7,095	(730)	-9.3%
667517 - PLANT OPER LICENSE FEES	-	-	150	150	-	0.0%
667521 - POSTAGE - THIRD PARTY	199,232	108,200	225,000	207,000	(18,000)	-8.0%
667522 - POSTAGE - INTERNAL	17,405	8,533	17,725	17,350	(375)	-2.1%
667523 - POSTAGE - EXPRESS DELIVER	1,462	638	2,025	1,975	(50)	-2.5%
667531 - PRINTING COSTS	50,954	24,817	71,696	67,871	(3,825)	-5.3%
667532 - PHOTOCOPYING COSTS	-	(80)	-	-	-	n/a
667533 - FORMS STOCK	969	962	1,600	1,700	100	6.3%
667552 - SAFETY TRAINING	3,680	1,487	6,350	12,250	5,900	92.9%
667553 - DOT SUBSTANCE ABUSE	2,440	1,315	3,000	3,000	-	0.0%
667554 - EPA / OSHA COMPLIANCE	235	927	-	-	-	n/a
667555 - SAFETY EXPENSES	34,155	11,786	43,220	41,720	(1,500)	-3.5%
667556 - FREIGHT CHARGES (STOCK)	21	8	2,500	-	(2,500)	-100.0%
667561 - WATERSHED GRANTS/SUPPORT	33,532	51,609	48,300	33,900	(14,400)	-29.8%
6675611 - GRANTS - PASS-THROUGH	25,210	-	-	-	-	n/a
667581 - ANNUAL LAND CONTRIB CAPE	-	4,000	-	-	-	n/a
667591 - UNIFORMS	1,955	3,348	2,300	2,250	(50)	-2.2%
667592 - FOOD SUPPLIES	8,406	4,772	8,730	9,410	680	7.8%
667593 - VENDOR INTEREST CHARGES	(10,841)	-	(4,500)	(4,500)	-	0.0%
667598 - GEN MANAGER CONTINGENCY	55,179	-	48,000	35,000	(13,000)	-27.1%
6675981 - GEN MNG - TRUSTEES	17,455	7,144	16,750	22,750	6,000	35.8%
6675982 - GEN MNG - COMMUNITY	13,098	14,139	33,500	37,000	3,500	10.4%
667599 - OTHER MISCELLANEOUS	61,776	11,991	2,550	5,050	2,500	98.0%
6676 - EXPENSE OFFSET	(165,332)	(112,786)	(214,430)	(251,740)	(37,310)	17.4%
6706 - AMORT OF U P ACQ ADJUSTS	17,000	8,500	17,000	17,000		0.0%
Other Expense Total	711,474	355,747	723,479	672,939	(50,540)	-7.0%

Other expenses include training & conferences (\$215,620, up \$32,270 or 17%) offset by postage (\$226,325 down \$18,425 or 8%). Also watershed grants/support is down \$14k because support to the Lakes Environmental Association was moved up to contracted services (66362) and the general manager contingency (down \$13k).

The largest Expense Offset (6676) is made of engineering expenses transferred to capital projects specifically for main renewals, which was predicted to increase.

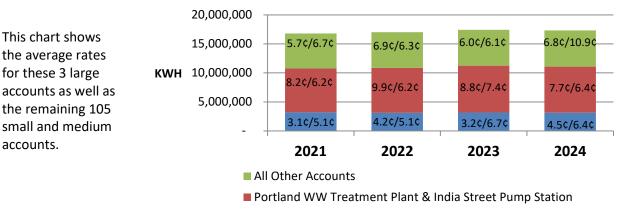
	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
66151 - POWER - LARGE ENERGY	\$645,925	\$320,056	\$803,539	\$706,035	(\$97,504)	-12.1%
66152 - POWER - LARGE T&D	524,314	223,226	559,998	673,376	113,378	20.2%
66153 - POWER - MEDIUM ENERGY	319,672	212,143	317,349	569,799	252,450	79.5%
66154 - POWER - MEDIUM T&D	273,694	143,178	277,572	312,572	35,000	12.6%
66155 - POWER - SMALL ENERGY	53,272	33,725	57,813	108,478	50,665	87.6%
66156 - POWER - SMALL T&D	84,854	50,133	93,051	111,213	18,162	19.5%
66157 - POWER - OTHER CHARGES	-	24	-	-	-	n/a
66158 - LOAD RESPONSE	(8,715)	(9,346)	(8,100)	(8,100)	-	0.0%
661510 - RENEW ENERGY EXPENSE	101,427	58,620	-	460,000	460,000	n/a
661511 - RENEW ENERGY FEES	5,739	-	-	8,000	8,000	n/a
Purchased Power Total	2,000,182	1,031,758	2,101,222	2,941,373	840,151	40.0%

#### **Purchased Power:**

Electricity is delivered through the Central Maine Power transmission & distribution (T&D) system. The average 2024 rate per kwh ranges from \$0.060 to \$0.112. Large energy contracts with fixed rates are partially or fully locked in through the end of 2024 and the small/medium accounts are locked in through 2025.

PWD takes a number of steps to reduce its electricity costs including:

- Sponsors solar development generating net energy bill credits of \$400,000, the costs above at \$468,000 net with \$868,000 in revenue.
- Utilizes a special electricity rate at the India Street/Marginal Way location saving an estimated \$80,000 annually
- Participates in two emergency electricity grid load response programs saving \$8,100
- Contracts for energy through a flexible volume and price contract estimated to save \$50,000
- Monitors grid demand and reduces its system load on peak day and therefore reducing it demand charges.



Electricity Usage by Contract and Average T&D/Energy Rate

Water Treatment Plant

#### 2022 2023 2023 2024 Budget Budget Jan-Jun Diff \$ Actual Budget Budget Diff % 667516 - PERMITS \$40,062 \$5,264 \$35,361 \$42,061 \$6,700 18.9% 667518 - REGULATORY REQUIRED FEES 13,290 1,261 14,650 100 0.7% 14,550 670821 - STANDISH REAL ESTATE TAX 52,489 26,701 55,200 55,500 300 0.5% 670822 - OTHER R/E TAX(NON-STANDI) 8,478 5,465 8,820 9,260 440 5.0% 670823 - PUC ASSESSMENT 133,860 127,376 122,000 127,500 5,500 4.5% 670824 - ME DRINKING WTR PROGRAM 85,471 82,475 85,525 3,050 3.7% -670825 - PUC PUBLIC ADVOCATE 4,822 -11,000 10,000 (1,000)-9.1% 338,472 166,067 344,496 15,090 Regulatory/Taxes Total 329,406 4.6%

#### **Regulatory/Taxes:**

PWD pays real estate taxes to the Town of Standish (670821) & Towns of Windham and Gorham (670822). PWD also pays annual assessments to the Maine Public Utility Commission (PUC) and the Maine Drinking Water Program which have been raised a few thousand each. The PUC fee is based on each utility's revenues and time spent on matters related to each industry sector.

#### **Telephone/Other Utilities:**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
66101 - WATER	\$150,554	\$73,295	\$98,383	\$150,374	\$51,991	52.8%
66102 - WASTEWATER	83,167	39,874	96,117	97,009	892	0.9%
66103 - STORMWATER CHARGES	36,786	17,910	38,756	40,005	1,249	3.2%
66111 - TELEPHONE LINES	36,704	14,174	31,370	32,920	1,550	4.9%
66112 - DATA LINES	174,457	73,310	145,214	160,932	15,718	10.8%
66113 - CELLULAR PHONES	37,346	19,297	43,344	34,859	(8,485)	-19.6%
Tele/Other Utilties Total	519,013	237,861	453,184	516,099	62,915	13.9%

The category is up \$62,915 (13.9%) in 2024. A large part of the increase is associated with high water usage at the East End Wastewater Facility since the water re-use system has been down.

#### **Transportation:**

	2022 Actual	2023 Jan-Jun	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
66501 - TRANSPORTATION - INTERNAL	\$684,464	\$340,443	\$761,212	\$734,241	(\$26,971)	-3.5%
665018 - TRANS - LAKE BOAT	7,500	3,750	7,500	7,500	-	0.0%
665019 - TRANS INTERNAL INACTIVE	535,396	252,468	498,716	463,423	(35,293)	-7.1%
66502 - TRANSPORTATION - EXTERNAL	44,814	12,679	42,490	44,000	1,510	3.6%
66503 - MILEAGE REIMBURSEMENT	12,080	13,865	22,650	26,085	3,435	15.2%
66504 - MTA TRANS-PASS TOLL FEES	-	15	50	50	-	0.0%
Transportation Total	1,284,254	623,219	1,332,618	1,275,299	-57,319	-4.3%

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 decreased in 2024 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 PWD business.

## Water Services - Purpose Statement

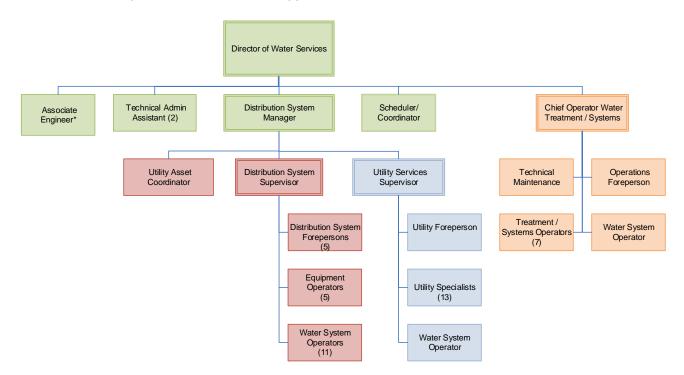
To operate and maintain water system infrastructure including the treatment, water storage, and distribution systems.

## **Core Services**

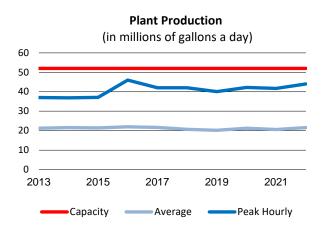
Water Operations is responsible for operating and maintaining the Sebago Lake and Steep Falls Well water treatment and water distribution systems by providing the following services:

- 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).

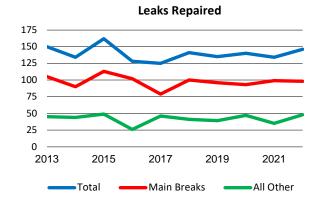
Water Operations has a five-person group (Administration Group- A1; green in organization chart) that directs, oversees and provides administrative support.

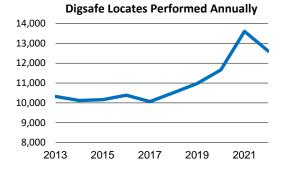


## **Key Statistics**



Water Supply	Surface – 99%
	Groundwater -1%
Water Treatment	Ozone, Ultraviolet,
	Chloramination,
	Corrosion Control,
	Fluoridation
Water Mains	1020 miles
Valves	12,274
Hydrants	5,250
Service Lines	57,489
Water Storage	10 (+2 non-active)
<b>Booster Stations</b>	6
Backflow Devices	8,216





- 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 PWD's assets.

2022 Actual	2023 Projected	2024 Goal
Actual	Tojected	Goui
100%	100%	100%
		> 0.50 mg/l
0.	-	2 0.50 mg/1
0	T	T
9.3	<10	<10
460	425	425
150	100	100
\$1,280	\$1,392	\$1,476
\$359	\$400	\$464
11.8%	12.0%	12.0%
108	80	80
	Actual 100% 0.71 mg/l 0 9.3 460 150 \$1,280 \$359	Actual     Projected       100%     100%       0.71 mg/l     0.50 mg/l       0     1       9.3     <10

## **Accomplishments**

#### Water Field (A2 and A6)

- Water operations staffing levels returned to near normal levels in 2023. All positions were filled and remained consistently occupied throughout the year, despite several retirements and promotions. PWD saw an increase in applicants with experience and who hold an active Commercial Driver's License (CDL) B license. PWD now offers a CDL bonus of \$2,500 to new hires. PWD was spending over \$6,400 per employee to obtain the license and it could take 6-12 months before they were fully licensed. Being able to hire capable drivers was a significant boost and helps tremendously with training. A water system operator also cannot fully be on call until they hold the CDL license.
- A career ladder was developed for the Water System Operator position whereby an operator can
  effectively move up within the role with training, developing experience within all of water field,
  and by acquiring water licenses. There are three levels, and in the first year PWD had two water
  system operators move up a level. PWD anticipate 5-6 more to follow suit at the beginning of 2024.
  The career ladder is helping to develop more experienced operators in less time while greatly
  improving employee retention.
- PWD installed 1,150 ft. of 6 inch temporary water main in an effort to prepare for a main replacement project. The original ductile iron main was installed in 2000 on Piper Rd., Scarborough and failing. Repairs to the main significantly impacts the Piper Shores Retirement Facilities. Installing temporary water during the project would help keep domestic water and fire protection active to the entire site. This would also allow minimal disruptions while the 500 ft. of water main is replaced by Grondin Corp.



## Past Accomplishments (continued)

#### Water Field (A2 and A6 continued)

• A2 installed two water valves with the assistance of Lionel Plante Associates (LPA) on Great Diamond Island (GDI). The crews were able to get each of these valves installed in two separate shutdowns. These valves were installed ahead of the renewal of the two 8 inch 1955 & 1956 cast iron submarine mains that currently run under the sandbar. The main renewal project is slated to start in September 2023. R.E. Coleman is the contractor for the pipe work and has subcontracted LPA for all earthwork on the renewal.



• In September, operations teamed up to replace the 16 inch valves and bypass valves at the Yarmouth Vault facility. The 10 inch meter is tested and calibrated annually to ensure accurate usage billed to Yarmouth. The buterfly valves no longer operated to shut down and change the meter. Modifications needed to be made to change from butterfly valves to gate valves. Gate valves will provide more durability in this application but space was limited.



## **Accomplishments (continued)**

## Water Field (A2 and A6 continued)

- A new dedicated service was installed for the large meter testing bench that will provide adequate flow to test PWD's large meters. The minimum of 500 GPM required for testing meters >2 inch can now be achieved. A new software program was also installed to help facilitate the results and calibrations of the large meters.
- A6 purchased fine new line locators to replace the current units that have become obsolete and nonservicable. The utility specialists average over 12,000 locates per year and violations are typically less than 10 per year. Having the most up to date locators helps cut down on mismarks which could result in costly repairs or violations.



Vivax-Metrotech vLoc3-Pro

## 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
- In 2023, PWD purchased two switchgear breakers to ensure that a spare is available for each type and size at the SLWTF is available in the event of a failure. As these breakers were from the original 1994 construction of the plant, new units were no longer available. The breakers purchased were reconditioned and were tested.



## Accomplishments (continued)

#### Water Plant/Systems (A3)

- Operators noted 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 worked with the
  valve manufacturer to ensure the valves are operating properly. In 2023, a significant amount of
  maintenance was performed on the air supply system that provides the force to operate the
  valves. Staff also replaced the position indicators, that inform the SCADA system of the current
  position of the valves.
- 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
- Continued to develop emergency pumper locations, to provide redundant pumping capability for each boosted-pressure zone

## **2024 Projects and Initiatives**

#### Water Field (A2 and A6)

- Extended 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 inch 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. PWD targets 1-3 a year.
- Assisted in the LCRR requirements to identify undocumented services



- Small meter bid and AMI/AMR review
- Employee training and development will be a focus in 2024 as the operations team experience significant turnover in the last couple years.

## 2024 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.
- Identifying critical assets, ensuring proper maintenance is performed, and planning for asset replacement has become a greater focus for the Treatment/Systems area; needs identified in 2023 resulted in an increase of the SLWTF's Capital plan for 2024
- The HVAC systems at the SLWTF are near the end of their service line. The last of the original 1994 control systems were replaced in 2023. In 2024, Staff will begin to replace many of the 14 heating and cooling coils throughout the facility. In addition, there are 16 exhaust fans that are reaching their end of expected services. Due to the total expense anticipated to exceed \$200,000, these will be replaced over a couple years as part of the Capital Improvements Plan.

Examples of SLWTF HVAC Systems



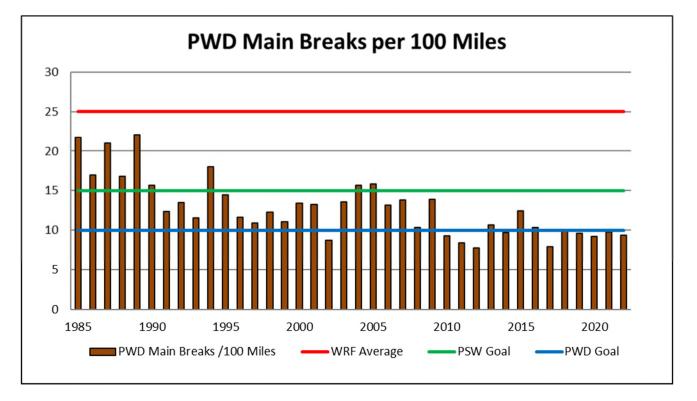
• The SLWTF has one electrical service feedline from the transformer. The feedline is original to the SLWTF, and according to industry standard it has an expected life of approximately 30 yrs. Plans are being developed to determine options to prepare for its end of service life.

The Treatment/Systems area continues to experience changes in staff. Of the 11 employees, there are only 5 employees with greater than 5 years of experience, and 5 with less than one year. A significant amount of time in the next couple years will be dedicated to training the new employees on operation of processes, as well as helping them obtain the required license certifications for their positions.

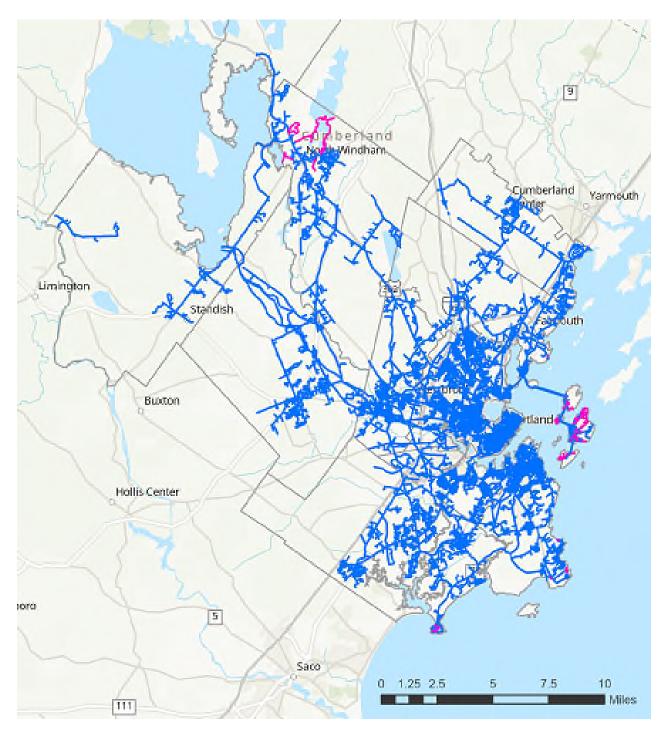
A key determinant of Water Services budget is the number of water main breaks. Main breaks occur for a number of reasons, including age, pressure surges, and cold weather. The long-term trend indicates a declining number of leaks partially due to the capital investments made in prior years.

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, Sebago Lake and Steep Falls Well. Water is delivered through more than 1,000 miles of mains (see map - blue lines are year-round and pink are seasonal mains). The system has over 5,200 hydrants, 57,000 service pipes and 10 tank/standpipes.

## **Financial Overview**

The Water Services Budget for 2024 has increased 4.7% for a total of \$496,523. The majority of the increases are in the areas of salaries, wages and benefits, along with increases in chemicals, contracted services, and power.

A1 – The Water Administration area increased 20.4% or \$130,528 due to increases in salaries, wages, employee benefits and training.

A2 – The Water Transmission & Distribution budget has decreased 3.4% or \$166,191. There is a 1.57% increase to the operational budget due to increasing costs for materials, paving, traffic control, and inventory supplies, but an overall decrease due to accounting for vacant positions throughout the year. The water system operator position tends to see high turnover due to retirements, promotions, and employees moving over to A6.

**A3** - A3 has a budget increase of 14.4% or \$439,144. The most significant increases were in water treatment chemicals (\$282,140), power (\$78,784), and contracted services (\$68,262) while fuel oil actually decreased almost \$36,000.

Product	% Increase	\$ Increase
Sodium Hydroxide	53.2%	\$150,531
Caustic Soda	37.4%	\$47,960
Zinc Orthophosphate	35.3%	\$46,342
Ammonia	66.6%	\$21,404
Liquid Oxygen	10.8%	\$8,187
Fluoride	12.3%	\$7,716
Fuel Oil	-29.9%	-\$35,883

Salary and wages increased 3.2% and employee benefits will increase 4.2% with these line items pushing the budget up another \$44,850.

**A6** – The Utility Services 2024 budget is expecting an increase of \$101,908 or 4.62%. Increasing costs for materials and supplies as well as transportation to complete work on the islands accounts for a large portion of the increases. A6 is also replacing five more locators in 2024 which should be the last ones to replace.

## Water Services: Total

## **Financial Summary:**

•	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Sub-Group:						
A1 - Water Administration	569,550	350,855	638,702	769,230	130,528	20.4%
A2 - Wtr Transmission/Distrib	4,480,569	2,412,509	4,887,077	4,720,886	(166,191)	-3.4%
A3 - Water Treatment	2,762,722	1,457,436	3,043,414	3,482,558	439,144	14.4%
A6 - Water Utility Services	1,704,583	958,146	2,009,754	2,102,796	93,042	4.6%
Grand Total	9,517,424	5,178,946	10,578,947	11,075,470	496,523	4.7%
Expense Type:						
Salaries & Wages	3,597,860	1,959,921	4,065,536	4,106,610	41,074	1.0%
Employee Benefits	1,395,184	849,913	1,717,021	1,753,212	36,191	2.1%
Chemicals	651,141	384,803	717,771	999,911	282,140	39.3%
Contracted Services	1,718,721	847,165	1,783,838	1,862,100	78,262	4.4%
Heat/Fuel Oil	109,365	85,121	151,712	115,512	(36,200)	-23.9%
Insurance	31,172	17,017	33,800	36,148	2,348	6.9%
Materials & Supplies	657,903	387,283	678,259	689,997	11,738	1.7%
Other Expense	63,439	38,581	78,186	81,546	3,360	4.3%
Purchased Power	374,312	173,741	416,513	495,297	78,784	18.9%
Regulatory/Taxes	1,110	600	781	781	-	0.0%
Tele/Other Utilties	95,304	40,239	90,235	96,381	6,146	6.8%
Transportation	821,913	394,562	845,295	837,975	(7,320)	-0.9%
Grand Total	9,517,424	5,178,946	10,578,947	11,075,470	496,523	4.7%
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

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Salaries & Wages			Junger	Judget		
660111 - SALARIES/WAGES NON-UNION	\$643,025	\$337,261	\$695,111	\$722,544	\$27,433	3.9%
660121 - WAGES/REGULAR UNION	2,296,235	1,276,603	2,628,974	2,716,732	87,758	3.3%
660122 - WAGES/OVERTIME UNION	398,951	231,245	433,032	469,593	36,561	8.4%
660123 - WAGES/DOUBLETIME UNION	54,977	22,138	59,350	55,813	(3,537)	-6.0%
660124 - WAGES/STANDBY TIME UNION	139,148	78,434	160,479	165,421	4,942	3.1%
660125 - OPEN POSITIONS	-	-	-	(114,483)	(114,483)	n/a
660126 - SHIFT DIFF - NIGHT	635	1,032	2,190	2,190	-	0.0%
660131 - WAGES - REGULAR - TEMPS	5,466	10,743	86,400	88,800	2.400	2.8%
660132 - WAGES - OVERTIME- TEMPS	-	210	-	-	-	n/a
660136 - CONTRACTED - TEMP	5,846	2,255	-	_	-	n/a
66014 - VACATION ACCRUAL	33,727	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	19,850	-	-	-	-	n/a
Salaries & Wages Total	3,597,860	1,959,921	4,065,536	4,106,610	41,074	1.0%
Employee Benefits	0,001,000	1,000,021	4,000,000	4,100,010	+1,014	1.070
660401 - FICA - EMPLOYERS' SHARE	273,141	152,433	311,008	314,155	3,147	1.0%
660405 - SAFETY/WHY PROGRAM ITEMS	9,146	3,702	16,795	16,431	(364)	-2.2%
660411 - MEALS ALLOWANCE	13.630	6,590	13,570	13,570	-	0.0%
660418 - STIPENDS	3,230	6,400	3,800	6,000	2,200	57.9%
660419 - EMPLOY EE BENEFTS-MISC OTH	30.391	10,019	6,700	6,200	(500)	-7.5%
660424 - SIGNING BONUS	8,000	8,500	-	9,000	9,000	n/a
660491 - FRINGE BENEFITS-REG/SAL	1,057,645	662,269	1,365,148	1,387,856	22,708	1.7%
Employee Benefits Total	1,395,184	849,913	1,717,021	1,753,212	36,191	2.1%
Chemicals	,, -	,	, ,-	, ,	, -	
66181 - AMMONIA	33,552	16,368	32,160	53,564	21,404	66.6%
66182 - CAUSTIC SODA	112,923	51,927	128,478	176,438	47,960	37.3%
66183 - FLUORINE COMPOUND	57,144	37,306	63,520	71,236	7,716	12.1%
66184 - ZINC ORTHOPHOSPHATE	119,249	74,436	131,250	177,592	46,342	35.3%
66185 - SODIUM HY POCHLORITE	257,110	167,983	286,358	436,889	150,531	52.6%
661892 - LIQUID OXY GEN (LOX)	69,679	36,782	76,005	84,192	8,187	10.8%
661899 - OTHER CHEMICALS	1,484	-	-	-	-	n/a
Chemicals Total	651,141	384,803	717,771	999,911	282,140	39.3%
Contracted Services						
6631 - ENGINEERING SERVICES	7,632	645	6,000	6,000	-	0.0%
663521 - TRAFFIC CONTROL	160,118	88,502	152,000	154,000	2,000	1.3%
6635221 - PAVING - MINOR REPAIR	436,217	338,216	526,000	526,000	-	0.0%
663523 - SIDEWALK	44,444	4,516	18,500	18,500	-	0.0%
663524 - STREET OPENING	47,265	15,194	63,600	63,600	-	0.0%
663525 - CONTRACTOR CONSTRUCTION	726,008	254,347	706,000	712,400	6,400	0.9%
66353 - REPAIR SERVICES	32,752	21,924	20,500	46,500	26,000	126.8%
66354 - MAINTENANCE SERVICES	159,830	57,351	158,675	195,026	36,351	22.9%
663542 - LARGE METER TESTING	3,579	8,932	12,500	12,500	-	0.0%
663546 - MAINTENANCE - SNOW REMOVL	54,212	28,300	58,110	58,110	-	0.0%
663561 - COMPUTER LICENSES	26,117	12,367	30,603	36,514	5,911	19.3%
663574 - DISPOSAL SERVICES	5,108	2,356	5,290	5,290	-	0.0%
663587 - COURIER SERVICES	2,266	1,106	2,760	2,760	-	0.0%
663588 - EQUIPMENT MAINTENANCE	4,517	4,069	14,800	11,900	(2,900)	-19.6%
663592 - RECRUITING SERVICES	-	8,341	-	3,500	3,500	n/a
663594 - DIGSAFE	1,500	1,000	1,500	2,500	1,000	66.7%
6635982 - TREE TRIMMING / REMOVAL	-	-	6,000	6,000	-	0.0%
663599 - MISC OTHER SERVICES	7,154	-	1,000	1,000	-	0.0%
Contracted Services Total	1,718,721	847,165	1,783,838	1,862,100	78,262	4.4%

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Heat/Fuel Oil						
66161 - HEATING OIL	\$79,807	\$70,342	\$120,183	\$84,300	(\$35,883)	-29.9%
661622 - CONTAINER DELIVERED	29,527	14,779	31,529	31,212	(317)	-1.0%
66166 - UNLEADED GAS	31	-	-	-	-	n/a
Heat/Fuel Oil Total	109,365	85,121	151,712	115,512	(36,200)	-23.9%
Insurance						
66592 - DAMAGES & CLAIMS-GOODWILL	130	-	-	-	-	n/a
66599 - PROPERTY & BOILER INSUR	31,042	17,017	33,800	36,148	2,348	6.9%
Insurance Total	31,172	17,017	33,800	36,148	2,348	6.9%
Materials & Supplies						
6619 - ASSET PURCHASES	52,712	12,967	80,860	80,035	(825)	-1.0%
662012 - CRUSHED GRAVEL	-	988	1,750	1,750	-	0.0%
662014 - CRUSHED STONE	253	369	750	750	-	0.0%
662017 - SAND AND SALT	3,306	-	3,500	3,500	-	0.0%
662018 - BANKRUN GRAVEL	623	342	1,500	1,000	(500)	-33.3%
662019 - GRAVEL - TYPEA (DOT)	878	860	1,500	1,500	-	0.0%
66202 - TOOLS	24,503	23,618	26,500	31,550	5,050	19.1%
66203 - VENDOR PURCHASED SUPPLIES	161,604	71,981	91,544	104,794	13,250	14.5%
662041 - MATERIALS INVENTORY	181,556	114,065	191,480	189,680	(1,800)	-0.9%
662042 - SUPPLIES INVENTORY	51,009	36,125	50,900	57,700	6,800	13.4%
66204201 - INVENTORY - QPR	62	-	1,400	750	(650)	-46.4%
66204202 - INVENTORY - BNKRUN GRAVEL	18,965	5,722	17,000	17,000	-	0.0%
66204203 - INVENTORY - CRUSHD GRAVEL	6,825	2,597	14,250	11,000	(3,250)	-22.8%
66204204 - INVENTORY - CRUSHED STONE	3,133	234	2,250	2,250	-	0.0%
66204205 - INVENTORY - LOAM	4,074	1,193	1,250	1,250	-	0.0%
66204206 - INVENTORY - TYPE A GRAVEL	37,634	14,268	31,500	31,500	-	0.0%
662043 - TOOL INVENTORY	66,410	62,700	64,200	67,700	3,500	5.5%
66204301 - INVENTORY - TONER	644	-	-	-	-	n/a
66204302 - INVENTORY - PAPER	47	-	-	-	-	n/a
66204303 - INVENTORY-COMPUTER EQUIP	919	962	1,100	2,000	900	81.8%
662044 - METER INVENTORY	(614)	(1,371)	5,750	5,750	-	0.0%
662046 - HYDRANT INVENTORY	33,575	35,490	59,750	61,000	1,250	2.1%
662047 - GARAGE INVENTORY	3,550	2,560	3,750	3,750	-	0.0%
66205 - CONSUMABLE SUPPLIES	1,686	1,220	4,550	4,225	(325)	-7.1%
66206 - COMPUTER RELATED EQUIP	4,549	391	21,225	9,563	(11,662)	-54.9%
Materials & Supplies Total	657,903	387,283	678,259	689,997	11,738	1.7%

	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff\$	Budget Diff %
6642 - EQUIPMENT RENT						_
6675111 - INSTATE TRAINING/CONF	\$58,992	\$34,176	\$49,000	\$52,000	\$3,000	6.1%
6675112 - OUT OF STATE TRAINING/CON	330	7,414	11,000	15,000	4,000	36.4%
667513 - DUES	1,000	106	1,150	1,150	-	0.0%
667514 - PROFESSIONAL LICENSES	2,668	1,042	3,200	3,000	(200)	-6.3%
667515 - PERIODICAL SUBSCRIPTIONS	120	1,150	120	120	-	0.0%
667521 - POSTAGE - THIRD PARTY	45	-	3,725	3,725	-	0.0%
667522 - POSTAGE - INTERNAL	58	7	250	250		0.0%
667523 - POSTAGE - EXPRESS DELIVER	26	14	200	200	-	0.0%
667531 - PRINTING COSTS	1,804	3,185	8,071	5,871	(2,200)	-27.3%
667555 - SAFETY EXPENSES	3,287	-	12,720	12,720	-	0.0%
667592 - FOOD SUPPLIES	2,540	2,142	460	1,460	1,000	217.4%
667599 - OTHER MISCELLANEOUS	13,888	1,285	-	1,500	1,500	n/a
6676 - EXPENSE OFFSET	(26,460)	(13,230)	(26,460)	(27,800)	(1,340)	5.1%
Other Expense Total	63,439	38,581	78,186	81,546	3,360	4.3%
Purchased Power	,	;			-,	
66151 - POWER - LARGE ENERGY	161,734	76,179	210,622	199,298	(11,324)	-5.4%
66152 - POWER - LARGE T&D	109,953	46,847	100,149	140,265	40,116	40.1%
66153 - POWER - MEDIUM ENERGY	34,918	16,430	33,511	62,177	28,666	85.5%
66154 - POWER - MEDIUM T&D	43,765	20,309	46,803	53,269	6,466	13.8%
66155 - POWER - SMALL ENERGY	11,950	9,091	12,177	22,872	10,695	87.8%
66156 - POWER - SMALL T&D	19,818	13,314	20,851	25,016	4,165	20.0%
66158 - LOAD RESPONSE	(7,825)	(8,429)	(7,600)	(7,600)	-	0.0%
Purchased Power Total	374,312	173,741	416,513	495,297	78,784	18.9%
Regulatory/Taxes						
667516 - PERMITS	600	600	781	781	•	0.0%
667518 - REGULATORY REQUIRED FEES	510	-	-	-	-	n/a
Regulatory/Taxes Total	1,110	600	781	781	-	0.0%
Tele/Other Utilties						
66101 - WATER	3,037	1,358	4,200	4,200	•	0.0%
66102 - WASTEWATER	14,971	6,322	14,200	14,971	771	5.4%
66103 - STORMWATER CHARGES	72	(1,080)	-	-	•	n/a
66111 - TELEPHONE LINES	6,309	2,642	4,920	4,920	-	0.0%
66112 - DATA LINES	59,481	26,057	50,940	62,060	11,120	21.8%
66113 - CELLULAR PHONES	11,434	4,939	15,975	10,230	(5,745)	-36.0%
Tele/Other Utilties Total	95,304	40,239	90,235	96,381	6,146	6.8%
Transportation						
66501 - TRANSPORTATION - INTERNAL	483,484	228,344	505,120	521,140	16,020	3.2%
665019 - TRANS INTERNAL INACTIVE	315,227	155,894	312,775	288,485	(24,290)	-7.8%
66502 - TRANSPORTATION - EXTERNAL	21,383	5,582	23,250	21,400	(1,850)	-8.0%
66503 - MILEAGE REIMBURSEMENT	1,819	4,742	4,150	6,950	2,800	67.5%
Transportation Total	821,913	394,562	845,295	837,975	(7,320)	-0.9%
Grand Total	9,517,424	5,178,946	10,578,947	11,075,470	496,523	4.7%

# Water Services: Water Administration (A1)

## **Financial Summary:**

Colum n1	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
					·	
Expense Type:						
Salaries & Wages	\$384,723	\$228,147	\$422,806	\$504,914	\$82,108	19.4%
Employee Benefits	174,917	111,575	203,296	246,226	42,930	21.1%
Materials & Supplies	2,008	452	1,650	1,550	(100)	-6.1%
Other Expense	4,943	9,403	6,980	11,030	4,050	58.0%
Tele/Other Utilties	2,954	915	3,720	3,810	90	2.4%
Transportation	5	362	250	1,700	1,450	580.0%
Grand Total	569,550	350,855	638,702	769,230	130,528	20.4%
Programs:						
98 - TRAINING	\$21,207	\$16,778	\$29,997	\$34,985	\$4,988	16.6%
99 - ADMINISTRATION	548,343	334,077	608,705	734,245	125,540	20.6%
Grand Total	569,550	350,855	638,702	769,230	130,528	20.4%
Funds:						
20 - WATER GENERAL	\$569,550	\$350,855	\$638,702	\$769,230	\$130,528	20.4%
Grand Total	569,550	350,855	638,702	769,230	130,528	20.4%
Headcount:						
Full Time	5	5	5	6	1	20.0%
Part Time	0	0	0	0	0	n/a
Total	5	5	5	6	1	20.0%

## Water Services: Water Transmission/Distribution (A2)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$1,400,133	\$792,082	\$1,594,481	\$1,472,432	(\$122,049)	-7.7%
Employee Benefits	528,148	341,490	653,532	603,996	(49,536)	-7.6%
Contracted Services	1,445,072	719,962	1,490,350	1,500,850	10,500	0.7%
Insurance	130	-	-	-	-	n/a
Materials & Supplies	439,415	244,392	452,950	460,325	7,375	1.6%
Other Expense	64,089	30,502	50,350	53,100	2,750	5.5%
Tele/Other Utilties	13,359	4,082	10,680	13,700	3,020	28.3%
Transportation	590,223	280,000	634,734	616,483	(18,251)	-2.9%
Grand Total	4,480,569	2,412,509	4,887,077	4,720,886	(166,191)	-3.4%
Programs:						
1 - SEASONAL WATER SUPPLY	\$136,657	\$68,020	\$143,206	\$161,144	\$17,938	12.5%
10 - GENERAL DISTRIBUTION	225,148	162,592	292,239	308,063	15,824	5.4%
11 - DISTRIB VALVE MAINTENAN	1,697,951	944,260	1,796,872	1,859,328	62,456	3.5%
12 - PAVING BOX WORK	627,536	310,630	764,217	749,315	(14,902)	-1.9%
17 - HYDRANT REPAIR	193,767	118,745	211,348	236,140	24,792	11.7%
18 - LAKE SYSTEM MAINTENAN	1,782	-	-	1,457	1,457	n/a
2 - METER READING	1,495	1,877	991	550	(441)	-44.5%
20 - METER REPAIR/TESTING	12,342	6,657	-	9,849	9,849	n/a
4 - CONTRACTOR REL PROJ	488,259	185,069	504,519	501,957	(2,562)	-0.5%
14 - WW PUMPING	5,582	1,937	7,583	2,938	(4,645)	-61.3%
45 - WW TREATMENT	-	506	879	225	(654)	-74.4%
90 - VEHICLES	41,928	30,849	49,466	52,208	2,742	5.5%
91 - SNOW REMOVAL	3,682	19,299	30,022	25,632	(4,390)	-14.6%
92 - BULK MATERIALS ADJUSTN	-	-	2,500	2,500	-	0.0%
98 - TRAINING	105,436	100,783	136,131	132,021	(4,110)	-3.0%
99 - ADMINISTRATION	938,955	461,285	947,104	677,559	(269,545)	-28.5%
Grand Total	4,480,569	2,412,509	4,887,077	4,720,886	(166,191)	-3.4%
Funds:						
10 - GENERAL	\$57,960	\$56,831	\$79,488	\$87,689	\$8,201	10.3%
20 - WATER GENERAL	4,405,182	2,352,235	4,784,294	4,606,688	(177,606)	-3.7%
30 - WATER STANDISH	11,845	999	14,833	23,346	8,513	57.4%
53 - WW CUMBERLAND	5,582	-	4,992	2,938	(2,054)	-41.1%
57 - WW PORTLAND	-	506	2,137	225	(1,912)	-89.5%
61 - WW GORHAM	-	1,937	-	-	-	n/a
62 - WW WESTBROOK	-	-	1,000	-	(1,000)	-100.0%
	_	-	333	-	(333)	-100.0%
64 - WW JOINT WESTBROOK				1 200 000		
64 - WW JOINT WESTBROOK Grand Total	4,480,569	2,412.509	4,887.077	4,720.886	(166.191)	-3.4%
	4,480,569	2,412,509	4,887,077	4,720,886	(166,191)	-3.4%
Grand Total	4,480,569	2,412,509	4,887,077	4,720,886	(166,191)	-3.4%
Grand Total Headcount:			· ·			
Grand Total	<b>4,480,569</b> 24 0	<b>2,412,509</b> 24 0	<b>4,887,077</b> 24 0	<b>4,720,886</b>	(166,191) -1 0	-3.4% -12.5% n/a

# Water Services: Water Treatment (A3)

## Financial Summary:

	2022	2023	2023	2024	Budget	Budge
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$836,809	\$410,485	\$887,820	\$916,610	\$28,790	3.2%
Employee Benefits	311,593	164,198	382,892	398,958	16,066	4.2%
Chemicals	651,141	384,803	717,771	999,911	282,140	39.3%
Contracted Services	258,027	109,112	261,688	329,950	68,262	26.1%
Heat/Fuel Oil	109,365	85,121	151,712	115,512	(36,200)	-23.9%
Insurance	31,042	17,017	33,800	36,148	2,348	6.9%
Materials & Supplies	114,654	76,004	105,349	104,524	(825)	-0.8%
Other Expense	(17,531)	(10,019)	(7,440)	(8,680)	(1,240)	16.7%
Purchased Pow er	374,312	173,741	416,513	495,297	78,784	18.9%
Regulatory/Taxes	1,110	600	781	781	-	0.0%
Tele/Other Utilties	54,630	26,999	54,940	56,071	1,131	2.1%
Transportation	37,570	19,375	37,588	37,476	(112)	-0.3%
Grand Total	2,762,722	1,457,436	3,043,414	3,482,558	439,144	14.4%
Programs:						
1 - SEASONAL WATER SUPPLY	\$84	\$151	\$1,574	\$1,645	\$71	4.5%
11 - DISTRIB VALVE MAINTENANCE	253	2,747	2,378	2,481	103	4.3%
12 - PAVING BOX WORK	-	445	983	1,026	43	4.4%
17 - HYDRANT REPAIR	-	-	670	697	27	4.0%
18 - LAKE SYSTEM MAINTENANCE	205,289	108,312	116,300	156,406	40,106	34.5%
2 - METER READING	-	-	158	164	6	3.8%
24 - OPERATIONS	280,388	152,505	344,383	356,746	12,363	3.6%
25 - WATER STORAGE	53,868	18,301	59,042	59,093	51	0.1%
28 - MONITORING	372	2,551	188	196	8	4.3%
34 - DISTRIBUTION MAINTENANCE	43,006	19,504	78,842	90,727	11,885	15.1%
45 - WW TREATMENT	-	-	108	113	5	4.6%
6 - WATER TREATMENT	1,798,772	956,782	2,121,822	2,488,678	366,856	17.3%
94 - TECHNOLOGY TEAMS	187	-	841	880	39	4.6%
98 - TRAINING	82,212	42,335	46,625	47,604	979	2.1%
99 - ADMINISTRATION	298,290	153,803	269,500	276,102	6,602	2.4%
Grand Total	2,762,722	1,457,436	3,043,414	3,482,558	439,144	14.4%
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20 - WATER GENERAL	\$2,705,197	\$1,425,865	\$2,979,434	\$3,412,625	\$433,191	14.5%
	57,528	31,571	63,872	69,820	5,948	9.3%
57 - WW PORTLAND		-	108	113 3 492 559	5	4.6%
Grand Total	2,762,722	1,457,436	3,043,414	3,482,558	439,144	14.4%
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: Utility Services (A6)

## **Financial Summary:**

	2022	2023	2023	2024	Budget	Budge
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$976,195	\$529,206	\$1,160,429	\$1,212,654	\$52,225	4.5%
Employee Benefits	380,525	232,650	477,301	504,032	26,731	5.6%
Contracted Services	15,622	18,092	31,800	31,300	(500)	-1.6%
Materials & Supplies	101,827	66,436	118,310	123,598	5,288	4.5%
Other Expense	11,937	8,696	28,296	26,096	(2,200)	-7.8%
Tele/Other Utilties	24,361	8,242	20,895	22,800	1,905	9.1%
Transportation	194,115	94,824	172,723	182,316	9,593	5.6%
Grand Total	1,704,583	958,146	2,009,754	2,102,796	93,042	4.6%
		· · ·			· · ·	
Programs:						
1 - SEASONAL WATER SUPPLY	\$34,712	\$3,141	\$59,077	\$55,135	(\$3,942)	-6.7%
10 - GENERAL DISTRIBUTION	62,976	72,241	79,499	95,408	15,909	20.0%
11 - DISTRIB VALVE MAINTENANCE	7,495	2,472	12,986	14,088	1,102	8.5%
12 - PAVING BOX WORK	4,615	289	4,130	5,578	1,448	35.1%
14 - DISTRIBUTION FLUSHING	84,222	28,771	111,953	104,825	(7,128)	-6.4%
15 - DIGSAFE LOCATES	308,452	154,963	313,284	336,282	22,998	7.3%
16 - CROSS CONNECTION	13,122	10,278	31,445	24,820	(6,625)	-21.19
17 - HYDRANT REPAIR	86,071	28,721	196,591	193,333	(3,258)	-1.7%
19 - WINTER HY DRANT PUMP	20,082	34,615	76,197	56,666	(19,531)	-25.69
2 - METER READING	17,454	11,546	90,545	70,141	(20,404)	-22.5
20 - METER REPAIR/TESTING	260,963	160,131	140,888	179,384	38,496	27.3%
21 - LARGE METER TESTING	4,651	11,017	28,503	28,069	(434)	-1.5%
26 - SUBMETERS	4,001	11,017	1,643	1,470	(173)	-10.59
3 - LEAK SURVEYS	49,033	-	7,421		16,283	219.4
31 - VEHICLE CLEANING	49,033 3,168	39,492	4,208	23,704	•	3.6%
		2,943		4,358	150 232	
7 - GENERAL INVESTIGATION	107,553	62,365	239,676	239,908		0.1%
76 - COLLECTION	3,479	645	23,102	10,891	(12,211)	-52.99
90 - VEHICLES	6,838	3,751	3,009	4,136	1,127	37.5%
94 - TECHNOLOGY TEAMS	5,489	8,036	1,873	1,960	87	4.6%
98 - TRAINING	60,297	63,890	108,121	111,414	3,293	3.0%
99 - ADMINISTRATION	563,911	258,839	475,603	541,226	65,623	13.8%
Grand Total	1,704,583	958,146	2,009,754	2,102,796	93,042	4.6%
Funds:						
10 - GENERAL	\$279,102	\$178,486	\$199,710	\$226,838	\$27,128	13.6%
20 - WATER GENERAL	1,405,182	776,823	1,802,106	1,866,190	64,084	3.6%
30 - WATER STANDISH	5,087	2,465	6,295	6,126	(169)	-2.7%
51 - WW CAPE ELIZABETH	-	-	235	245	10	4.3%
53 - WW CAPE ELZABETH 53 - WW CUMBERLAND	- 6,266	-	235	245 245	10	4.3%
55 - WW WINDHAM LF	2,346	371	-	1,960	1,960	4.3% n/a
57 - WW PORTLAND	2,340	371	- 468	245	(223)	-47.69
	-	-			. ,	
59 - WW SOUTH PORTLAND 51 - WW GORHAM	-	-	235	245	10	4.3%
	6,439	-	235	457	222	94.5%
62 - WW WESTBROOK	164 1,704,583	-	235	245	10	4.3%
Grand Total	1,704,583	958,146	2,009,754	2,102,796	93,042	4.6%
Headcount:						
Full-Time	16	16	16	16	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	16	16	16	16	0	0.0%

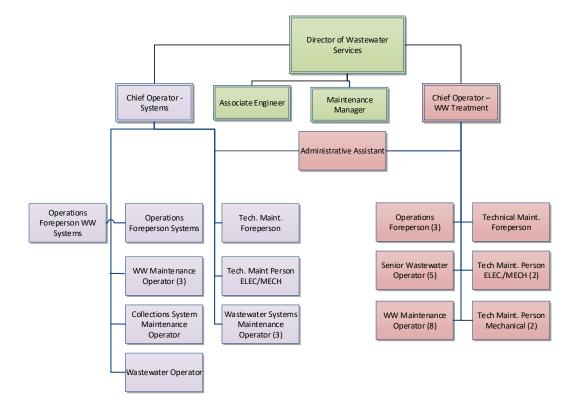
#### Wastewater Services – Purpose Statement

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 Casco Bay

## **Core Services**

PWD'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 PWD 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). The operation and maintenance staff of 23 are directly responsible for the operation and maintenance of PWD's 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 PWD's 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**

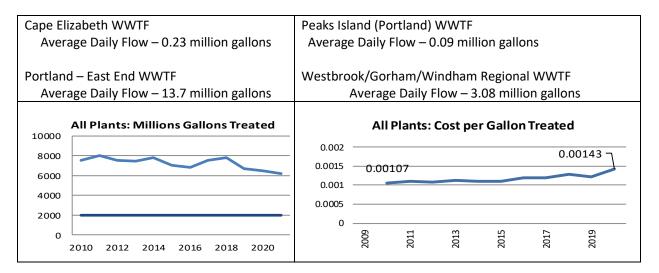
#### Wastewater Services Group Facts

- 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.
- PWD's 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 PWD's 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 COVID-19 have decreased these opportunities. PWD hopes 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 PWD's adaptive management approach. Staff at the facilities 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 an estimated 60% of the biosolids in Maine have caused landfill capacity and operational challenges.
  - Cost related to biosolids management have nearly doubled in the past several 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.
  - In 2023, the Biosolids Master Planning effort continued with a Request for Information for technologies and parties interested in providing solutions. The effort will develop a possible scope, budget, siting requirements, and permitting opportunities for a regional biosolids management system.
  - The East End and Westbrook/Gorham/Windham facilities' dewatering systems are under review to determine possible upgrades. The upgrades will increase processing capacity, further reduce the volume of biosolids, and prepare PWD for future biosolids management options.
  - PWD partnered with Maine DEP in testing the influent and effluent at PWD's wastewater treatment plants in late 2022. This 10-month program was part of a state-wide effort required by 2022 legislative actions. PWD has been included in a continued effort to further characterize PFAS sources and discharges to the sewer system from residential, commercial, and industrial sources.
- 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) since July of 2020.
  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.
- 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. PWD received only a few odor complaints in 2023.

#### **Wastewater Treatment Facilities – 2022 Flow Summary**



## **Performance Benchmarks**

	2023 Projected	2024 Goal
Wastewater Systems		
Corporate Goal 2 – Environmental Stewardship		
Wet wells cleaned	196	>125
Feet of pipe cleaned*	21,548	>20,000
Feet of pipe televised*	25,000	>30,000
Dry weather overflows	3	0
Corporate Goal 3 - Reliable & Sustainable Service		
Corrective Maintenance tasks (Systems)	192	<200
Corporate Goal 4 – High Value		
Preventive Work Orders (Systems)	3,187	3,300
Treatment Operations		
Corporate Goal 2 – Environmental Stewardship		
Total license excursions	26	0
Corporate Goal 3 - Reliable & Sustainable Service		
Biosolids removed (wet tons)	23,000	24,000
% BOD removed	94	>85
% suspended solids removed	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.

## **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 Renewal permit applications were submitted to Maine DEP. It is expected that effluent limits related to nitrogen or phosphorus may be a topic of interest, either from DEP, EPA or various water quality stakeholders.
- Westbrook/Gorham/Windham Regional WWTF upgrades
  - The aeration system and clarifiers are being upgraded. While disruptive to daily operation, the project will be completed by the end of 2023. Effluent quality and some ability to manage nutrients to some degree are anticipated.
  - Following a failed legislative effort to reclassify the water quality designation of the Presumpscot River in 2022, a moratorium on increases or additional licensed discharges to the river was passed in 2023. This essentially caps the permitted capacity of the treatment plant at existing levels.
  - PWD has been discussing the capacity allocated to the three communities that contribute to Westbrook/Gorham/Windham WWTF. With continued and planned growth, PWD expects that some communities will reach their allocations in the future. A study is planned to more clearly understanding the amount and timing for capacity increases, the work that will be required to accommodate additional loadings at facility, and how those costs will be allocated. While growth pressures are emerging, the facility, and the plan to understand development needs, should allow for the needs of all communities to be served.
- Improvements to Pump Station reliability
  - PWD monitors all systems through a SCADA computer system. Treatment plants can be remotely operated from the East End WWTF, the Westbrook/Gorham Regional WWTF, or the Douglass St. office during emergencies using the SCADA system. In 2020, wastewater staff took over daily alarm monitoring and dispatch responsibilities as part of PWD's 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 three generators per year at its pump stations. The majority of pump stations that require emergency generators have been upgraded or have had generators installed during construction as part of PWD's new infrastructure standards. Bypass connections are also installed to allow the stations to be serviced by a portable pumping unit, if needed.

## Accomplishments (continued)

- 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 PWD's 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 force main upgrades have been completed. With the number of pump stations in PWD's service area, these efforts are nearly continuous.

## **2024 Projects and Initiatives**

#### **B1 – Administration**

- PWD continue to monitor changing regulations related to phosphorus, nitrogen, and high flow management. With the renewal of permits at the treatment plants, PWD will monitor efforts that could affect the next series of permit renewals in the coming year.
- 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 being updated. The planning effort was extended, at Maine DEP's request, to continue to monitor sewer flows during wet weather. The excessive rain in the Spring of 2023 provided ample flow and the plan should be completed in 2023. 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 EAM 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. PWD's Maintenance and Operations Team has been systematically reviewing PWD's systems and treatment assets to create a prioritized listing of equipment to refine PWD's preventive maintenance program. This effort will continue through 2024.

## **2024 Projects and Initiatives**

• Legislative action that prohibited land application of biosolids due to PFAS concerns has created management challenges throughout Maine. A biosolids management plan began in 2022 and identified near, mid, and longer-range options for biosolids management that included possible regional efforts to economically manage biosolids in the future. A more detailed effort has continued in 2023. This includes a detailed review of nearly 30 technical responses to a Request for Information. The contract to manage current biosolids will provide some potential certainty in disposal and cost though 2027.

#### **B3, L9 – Operations**

- Wastewater treatment facility operators continue to focus on effluent compliance including
  making process control adjustments to the operation of the facility as needed, most recently in
  efforts to manage effluent nitrogen from the Cape Elizabeth, Peaks Island, and East End WWTFs.
  Facility 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.

### **Corporate Goal – Reliability**

#### **B1 – Administration**

• The move towards more proactive maintenance and operations is a priority. This includes input to system design to ensure redundance and resilience are considered during design and operations planning.

#### **B3, L9 - Operations**

- The Maintenance Manager (Planning and Scheduling) is helping to further refine the preventive maintenance program as the EAM system is implemented. The review and criticality rating of all wastewater equipment will be completed by the end of 2023. This prioritized review will identify the most important equipment and allow resources to be applied to those areas that are more critical to successful performance.
- 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. PWD completed assessment of PWD's entire buried sewer infrastructure at the end of 2018.

## **Corporate Goal – Reliability (continued)**

#### **B3, L9 – Operations (continued)**

• A comprehensive evaluation of the HVAC and electrical systems at each facility 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 have been completed.

### **Corporate Goal – Affordability**

#### **B1 – Administration**

• Improved reliance on established operating parameters, Standard Operating Procedures (SOPs), and preventive maintenance continue to improve performance and reliability

#### **B3, L9 - Operations**

- Managed 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. (dewatering, odor control, disinfection, aeration, etc.) and rely on process data to manage the processes.
- Continue to implement and regularly communicate process control measures in the operation of wastewater treatment facilities.
- 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. A regional solution will be considered as the economic, siting, and permitting needs are developed.

### **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 Maine DEP and trade association 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 PWD's facilities and systems. Renewed emphasis on this goal has occurred in 2023 and will shape future projects, operations and maintenance, and staffing.

## **Corporate Goal – Environment (continued)**

#### B3, L9 – Operations(continued)

- Through process control enhancements at the Peaks Island and Cape Elizabeth WWTFs, these facilities are managing effluent nitrogen levels. With the upgraded aeration system and the requirement for a "nutrient optimization approach" at the East End WWTF, 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 facility performance, enhance wet weather performance, and possibly reduce effluent nitrogen discharges.
- 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 PWD'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 PWD's employees near chemical storage facilities and other identified areas, an investment in forced air personal respirator systems was made in 2019. This has enhanced PWD's ability to safely handle chemicals, implement a painting and maintenance program in 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 PWD's employees.

### **Financial Overview**

The Wastewater Services Group continues to operate with a goal of delivering effective services at reasonable costs to its member communities. Overall, the 2024 budget total includes an increase of \$959,713 to \$14,804,746. This is a 6.9% increase from the 2023 budget.

**Salaries/Wages:** Overall budgeted staffing have remained consistent. Maintenance support for all facilities continues to come from the central treatment maintenance group at the East End WWTF with these efforts coordinated through PWD's Maintenance Manager. The scheduling of employees at facilities has been adjusted to increase the presence at PWD's facilities during normal working hours. Retirements and attrition have increased the number of open positions and PWD is regularly working to fill these roles. Overall, this category has increased by \$82,188 or 2.8%.

**Biosolids Disposal**: Following several years of dramatically increasing biosolids costs, related to legislative action limiting the options available in Maine, costs have stabilized with a new biosolids management contract. In fact, budgeted costs have decreased -7.1% or \$242,968 to a budgeted amount of \$3,201,668. The performance of the dewatering systems has helped to reduce overall disposal costs.

**Chemicals:** Overall, the chemical costs are expected to increase by 37.9% or \$474,212. The total budgeted amount is \$1,723,991. While sodium hypochlorite use is expected to decrease at the Westbrook/Gorham/Windham facility due to the new aeration system, the 10% increased cost for sodium hypochlorite, polymer, and caustic soda have resulted in increased costs. Chemical use is estimated based on past performance adjusted for anticipated conditions.

**Contracted Services:** Contracted services include the costs of the Falmouth and South Portland facilities 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 \$296,675, or 16.9%, to a total of \$2,055,288.

**Heat/Fuel Oil:** The budget decreased by 21%, or \$49,636, to \$187,178 based on past use and the energy market prices for oil and propane are down about 20%.

**Purchased Power:** Purchased Power increased 15.6%, or \$241,394, to \$1,847,481 due to increases in the electricity rates and the cost of delivery in the medium and small accounts partially offset by saving on long term contracts at the large facilities. These costs are allocated based on the percentage of the total flow from the community at the facility.

# Wastewater Services: Total

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Sub-Group:						
B1 - Wastew ater Administration	\$397,472	\$242,244	\$461,839	\$477,222	\$15,383	3.3%
B3 - Wastew ater Treatment	8,779,075	4,956,180	10,187,724	10,893,903	706,179	6.9%
L9 - Wastew ater Systems	3,073,455	1,604,167	3,195,470	3,433,621	238,151	7.5%
Grand Total	12,250,002	6,802,591	13,845,033	14,804,746	959,713	6.9%
Expense Type:						
Salaries & Wages	\$2,659,882	\$1,362,414	\$2,984,571	\$3,066,759	\$82,188	2.8%
Employee Benefits	1,069,631	612,213	1,339,801	1,392,064	52,263	3.9%
Biosolids Disposal	2,411,502	1,581,260	3,444,636	3,201,668	(242,968)	-7.1%
Chemicals	1,252,049	753,956	1,249,779	1,723,991	474,212	37.9%
Contracted Services	1,732,877	977,099	1,758,613	2,055,288	296,675	16.9%
Heat/Fuel Oil	207,670	133,795	236,814	187,178	(49,636)	-21.0%
Insurance	65,513	37,834	70,959	83,798	12,839	18.1%
Materials & Supplies	737,609	266,303	521,102	602,483	81,381	15.6%
Other Expense	69,767	44,793	60,130	57,550	(2,580)	-4.3%
Purchased Pow er	1,438,200	757,477	1,606,087	1,847,481	241,394	15.0%
Regulatory/Taxes	50,112	3,992	46,630	52,930	6,300	13.5%
Tele/Other Utilties	280,467	134,993	233,453	289,279	55,826	23.9%
Transportation	274,724	136,464	292,458	244,277	(48,181)	-16.5%
Grand Total	12,250,002	6,802,591	13,845,033	14,804,746	959,713	6.9%
Headcount:						
	20	20	20	20	0	0.00/
Full Time	39	39	39	39	0	0.0%
Part Time	0 39	0 <b>39</b>	0 <b>39</b>	0 39	0	n/a <b>0.0%</b>
Total	39	39	39	39	U	0.0%

	2022 Actual	Jan-Jun	2023	2024	Budget	Budget
		2023	Budget	Budget	Diff \$	Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$435,770	\$241,735	\$486,161	\$502,237	\$16,076	3.3%
660121 - WAGES/REGULAR UNION	1,935,170	963,652	2,187,512	2,294,615	107,103	4.9%
660122 - WAGES/OVERTIME UNION	169,842	94,836	175,153	190,063	14,910	8.5%
660123 - WAGES/DOUBLETIME UNION	40,612	18,050	42,710	40,876	(1,834)	-4.3%
660124 - WAGES/STANDBY TIME UNION	68,270	36,402	77,885	80,700	2,815	3.6%
660125 - OPEN POSITIONS	-	-	-	(57,242)	(57,242)	n/a
660126 - SHIFT DIFF - NIGHT	672	1,347	2,190	2,190	(07,242)	0.0%
660131 - WAGES - REGULAR - TEMPS	072	6,392	12,960	13,320	360	2.8%
66014 - VACATION ACCRUAL	20,490	0,392	12,900	13,320	300	2.0% n/a
66015 - SICKTIME ACCRUAL	(10,944)	-	-	-	-	n/a
Salaries & Wages Total	2,659,882	1,362,414	2,984,571	3,066,759	- 82,188	2.8%
Employee Benefits	2,039,002	1,302,414	2,304,371	3,000,739	02,100	2.0 /0
660401 - FICA - EMPLOYERS' SHARE	201,609	105,351	228,320	234,606	6,286	2.8%
660405 - SAFETY/WHY PROGRAM ITEMS	3,878	2,635	8,000	8,340	340	4.3%
660411 - MEALS ALLOWANCE	320	220	450	530	80	17.8%
660418 - STIPENDS	2,500	2,700	2,600	2,800	200	7.7%
660419 - EMPLOY EE BENEFTS-MISC OTH	8,991	6,776	2,400	2,200	(200)	-8.3%
660491 - FRINGE BENEFITS-REG/SAL	852,332	494,530	1,098,031	1,143,588	45,557	4.1%
Employee Benefits Total	1,069,631	612,213	1,339,801	1,392,064	52,263	3.9%
Biosolids Disposal						
663571 - BIOSOLIDS DISPOSAL	2,411,502	1,581,260	3,444,636	3,201,668	(242,968)	-7.1%
Biosolids Disposal Total	2,411,502	1,581,260	3,444,636	3,201,668	(242,968)	-7.1%
Chemicals						
661811 - SODIUM BICARBONATE	30,738	34,026	24,759	31,100	6,341	25.6%
661812 - SODIUM BISULFITE	130,982	130,291	184,537	200,027	15,490	8.4%
66182 - CAUSTIC SODA	12,887	5,975	9,665	13,282	3,617	37.4%
66185 - SODIUM HY POCHLORITE	507,539	249,951	577,062	757,648	180,586	31.3%
66189 - POLYMER	563,749	326,946	441,618	709,796	268,178	60.7%
661899 - OTHER CHEMICALS	6,154	6,768	12,138	12,138	-	0.0%
Chemicals Total	1,252,049	753,956	1,249,779	1,723,991	474,212	37.9%
Contracted Services						
6631 - ENGINEERING SERVICES	40,817	18,165	65,000	69,000	4,000	6.2%
663521 - TRAFFIC CONTROL	436	452	800	950	150	18.8%
663525 - CONTRACTOR CONSTRUCTION	52,035	21,236	57,000	62,000	5,000	8.8%
66353 - REPAIR SERVICES	165,902	140,773	166,500	229,750	63,250	38.0%
66354 - MAINTENANCE SERVICES	427,127	335,003	424,458	502,592	78,134	18.4%
663543 - CSO FLOW MONITORING	173,466	28,167	154,000	154,500	500	0.3%
663544 - MAINT SERVICES - CCTV	41,318	583	61,250	61,250	-	0.0%
663546 - MAINTENANCE - SNOW REMOVL	51,430	33,759	62,843	58,773	(4,070)	-6.5%
663547 - WASTE SLUDGE TRANSPORT	42,988	16,469	42,500	46,400	3,900	9.2%
663551 - LAB ANALYSIS	1,299	6,393	3,200	7,160	3,960	123.8%
663561 - COMPUTER LICENSES						123.8%
	41,154	19,385	49,224	58,642	9,418	
	420	-	-	375	375	n/a
663572 - GRIT & SCREENS DISPOSAL	61,432	24,093	58,500	69,000	10,500	17.9%
663573 - GREASE DISPOSAL	78,442	32,668	34,200	59,300	25,100	73.4%
663574 - DISPOSAL SERVICES	15,019	6,101	13,440	15,440	2,000	14.9%
663585 - TREATMENT CONTRACT SERVIC	522,103	278,300	556,600	636,550	79,950	14.4%
6635851 - WW DEWATERING SERVICES	5,180	3,086	7,878	8,786	908	11.5%
6635852 - WW DEWATERING SRVS CREDIT	(5,180)	(3,086)	(4,300)	(5,300)	(1,000)	23.3%
663587 - COURIER SERVICES	4,532	2,211	5,520	5,520	-	0.0%
663592 - RECRUITING SERVICES	-	8,318	-	5,000	5,000	n/a
663599 - MISC OTHER SERVICES	12,656	5,023	-	9,600	9,600	n/a
Contracted Services Total	1,732,877	977,099	1,758,613	2,055,288	296,675	16.9%

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Heat/Fuel Oil						
66161 - HEATING OIL	\$44,996	\$36,203	\$52,478	\$40,498	(\$11,980)	-22.8%
661621 - PIPELINE DELIVERED PROPAN	89,203	62,862	106,107	72,630	(33,477)	-31.6%
661622 - CONTAINER DELIVERED	73,021	34,730	77,679	73,500	(4,179)	-5.4%
66166 - UNLEADED GAS	450	-	550	550	-	0.0%
Heat/Fuel Oil Total	207,670	133,795	236,814	187,178	(49,636)	-21.0%
Insurance						
66599 - PROPERTY & BOILER INSUR	65,513	37,834	70,959	83,798	12,839	18.1%
Insurance Total	65,513	37,834	70,959	83,798	12,839	18.1%
Materials & Supplies						
6619 - ASSET PURCHASES	176,715	41,683	139,000	152,600	13,600	9.8%
66202 - TOOLS	14,551	9,082	15,200	12,875	(2,325)	-15.3%
66203 - VENDOR PURCHASED SUPPLIES	222,510	78,653	177,414	228,041	50,627	28.5%
662041 - MATERIALS INVENTORY	83,233	57,305	50,350	60,291	9,941	19.7%
662042 - SUPPLIES INVENTORY	54,054	34,953	43,075	45,625	2,550	5.9%
662043 - TOOL INVENTORY	17,134	12,566	18,825	17,475	(1,350)	-7.2%
66204303 - INVENTORY-COMPUTER EQUIP	764	778	500	500	-	0.0%
662047 - GARAGE INVENTORY	4,584	1,330	2,325	1,875	(450)	-19.4%
66205 - CONSUMABLE SUPPLIES	-	5,720	400	1,050	650	162.5%
66206 - COMPUTER RELATED EQUIP	3,545	52	7,013	4,051	(2,962)	-42.2%
66207 - EQUIPMENT PARTS	160,519	24,182	67,000	78,100	11,100	16.6%
Materials & Supplies Total	737,609	266,303	521,102	602,483	81,381	15.6%
Other Expense						
6642 - EQUIPMENT RENT	1,883	4,748	2,750	5,750	3,000	109.1%
66609 - OTHER ADVERTISING	2,616	-	350	350	-	0.0%
6675111 - INSTATE TRAINING/CONF	15,040	13,818	24,300	25,800	1,500	6.2%
6675112 - OUT OF STATE TRAINING/CON	14,664	5,621	15,500	13,500	(2,000)	-12.9%
667513 - DUES	12,259	10,069	12,300	12,200	(100)	-0.8%
667514 - PROFESSIONAL LICENSES	2,184	3,327	2,600	2,100	(500)	-19.2%
667515 - PERIODICAL SUBSCRIPTIONS	295	295	450	450	-	0.0%
667517 - PLANT OPER LICENSE FEES	-	-	150	150	-	0.0%
667521 - POSTAGE - THIRD PARTY	232	116	75	75	-	0.0%
667522 - POSTAGE - INTERNAL	6	1	100	100	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	335	137	175	175	-	0.0%
667533 - FORMS STOCK	-	-	750	750	-	0.0%
667552 - SAFETY TRAINING	1,340	-	1,600	1,600	-	0.0%
667555 - SAFETY EXPENSES	22,730	7,485	22,900	19,800	(3,100)	-13.5%
667592 - FOOD SUPPLIES	383	272	700	550	(150)	-21.4%
667599 - OTHER MISCELLANEOUS	20,370	11,189	-	-	-	n/a
6676 - EXPENSE OFFSET	(24,570)	(12,285)	(24,570)	(25,800)	(1,230)	5.0%
Other Expense Total	69,767	44,793	60,130	57,550	(2,580)	-4.3%

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Purchased Power						
66151 - POWER - LARGE ENERGY	\$484,191	\$243,877	\$592,917	\$506,737	(\$86,180)	-14.5%
66152 - POWER - LARGE T&D	414,361	176,378	459,849	533,111	73,262	15.9%
66153 - POWER - MEDIUM ENERGY	238,461	171,222	235,727	418,494	182,767	77.5%
66154 - POWER - MEDIUM T&D	202,473	109,850	207,827	228,491	20,664	9.9%
66155 - POWER - SMALL ENERGY	38,453	22,694	42,408	79,724	37,316	88.0%
66156 - POWER - SMALL T&D	61,150	34,349	67,859	81,424	13,565	20.0%
66158 - LOAD RESPONSE	(890)	(893)	(500)	(500)	-	0.0%
Purchased Power Total	1,438,200	757,477	1,606,087	1,847,481	241,394	15.0%
Regulatory/Taxes						
667516 - PERMITS	37,331	2,731	32,080	38,280	6,200	19.3%
667518 - REGULATORY REQUIRED FEES	12,780	1,261	14,550	14,650	100	0.7%
Regulatory/Taxes Total	50,112	3,992	46,630	52,930	6,300	13.5%
Tele/Other Utilties						
66101 - WATER	143,328	69,968	88,818	140,791	51,973	58.5%
66102 - WASTEWATER	61,974	31,089	74,417	74,538	121	0.2%
66103 - STORMWATER CHARGES	20,967	10,845	22,186	22,900	714	3.2%
66111 - TELEPHONE LINES	4,485	1,725	4,140	4,140	-	0.0%
66112 - DATA LINES	43,240	17,288	36,132	39,576	3,444	9.5%
66113 - CELLULAR PHONES	6,472	4,078	7,760	7,334	(426)	-5.5%
Tele/Other Utilties Total	280,467	134,993	233,453	289,279	55,826	23.9%
Transportation						
66501 - TRANSPORTATION - INTERNAL	159,198	83,934	197,467	145,989	(51,478)	-26.1%
665019 - TRANS INTERNAL INACTIVE	92,405	44,705	78,426	77,693	(733)	-0.9%
66502 - TRANSPORTATION - EXTERNAL	21,152	5,756	14,540	17,800	3,260	22.4%
66503 - MILEAGE REIMBURSEMENT	1,970	2,068	2,025	2,795	770	38.0%
Transportation Total	274,724	136,464	292,458	244,277	(48,181)	-16.5%
Grand Total	12,250,002	6,802,591	13,845,033	14,804,746	959,713	6.9%

# Wastewater Services: Wastewater Administration (B1)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$256,772	\$150,686	\$292,448	\$299,998	\$7,550	2.6%
Employee Benefits	115,690	70,863	144,475	150,727	6,252	4.3%
Contracted Services	9	23	500	-	(500)	-100.0%
Materials & Supplies	317	827	1,050	1,363	313	29.8%
Other Expense	22,655	17,193	21,250	21,100	(150)	-0.7%
Tele/Other Utilties	1,522	1,138	1,416	2,934	1,518	107.2%
Transportation	506	1,514	700	1,100	400	57.1%
Grand Total	397,472	242,244	461,839	477,222	15,383	3.3%
Programs:						
98 - TRAINING	\$22,576	\$12,429	\$25,727	\$26,237	\$510	2.0%
99 - ADMINISTRATION	374,896	229,815	436,112	450,985	14,873	3.4%
Grand Total	397,472	242,244	461,839	477,222	15,383	3.3%
Funds:						
50 - WASTEWATER GENERA	\$397,475	\$242,406	\$461,839	\$477,222	\$15,383	3.3%
Grand Total	397,472	242,244	461,839	477,222	15,383	3.3%
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 Facilitys (B3)

	2022	2023	2023	2024	Budget	Budget
Expense Type:	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Salaries & Wages	\$1,547,329	\$755,496	\$1,725,442	\$1,755,384	\$29,942	1.7%
Employee Benefits	605,281	332,120	753,826	775,012	21,186	2.8%
Biosolids Disposal	2,411,502	1,581,260	3,444,636	3,201,668	(242,968)	-7.1%
Chemicals	1,245,895	747,188	1,237,641	1,711,853	474,212	38.3%
Contracted Services	879,357	626,012	1,040,088	1,217,688	177,600	17.1%
Heat/Fuel Oil	183,895	121,244	210,945	164,848	(46,097)	-21.9%
Insurance	,	-	37,693	-	( , ,	-21.9% 15.2%
Materials & Supplies	34,565 547,721	18,875 165,993	376,936	43,413	5,720 76,455	20.3%
••	,	· ·	,	453,391	,	
Other Expense	30,810	20,108	17,780	18,350	570	3.2%
Purchased Pow er	944,706	447,607	1,072,889	1,216,408	143,519	13.4%
Regulatory/Taxes	49,562	3,992	44,430	50,730	6,300	14.2%
Tele/Other Utilties	213,414	98,431	146,905	203,565	56,660	38.6%
Transportation	85,037	37,854	78,513	81,593	3,080	3.9%
Grand Total	8,779,075	4,956,180	10,187,724	10,893,903	706,179	6.9%
-						
Programs:	<b>*</b> ~ · · <b>~</b>	<b>*</b> • • • •	<b>*</b> • • • • •	<b>*</b> ~ ~~~		0 <b>-</b> 00/
44 - WW PUMPING	\$6,487	\$9,949	\$8,102	\$6,000	(\$2,102)	-25.9%
45 - WW TREATMENT	8,234,320	4,627,155	9,585,845	10,351,771	765,926	8.0%
98 - TRAINING	103,143	48,622	123,568	117,147	(6,421)	-5.2%
99 - ADMINISTRATION	435,125	270,453	470,209	418,985	(51,224)	-10.9%
Grand Total	8,779,075	4,956,180	10,187,724	10,893,903	706,179	6.9%
Funds:	<b>•</b>	<b>.</b>	<b>.</b>	<b>*</b>	( <b>* *</b> ·)	
50 - WASTEWATER GENERAL	\$537,493	\$319,237	\$593,777	\$536,132	(\$57,645)	-9.7%
51 - WW CAPE ELIZABETH	565,408	342,680	687,303	748,651	61,348	8.9%
53 - WW CUMBERLAND	150	162	-	-	-	n/a
57 - WW PORTLAND	5,959,830	3,359,689	6,965,550	7,510,866	545,316	7.8%
62 - WW WESTBROOK	469	162	920	550	(370)	-40.2%
64 - WW JOINT WESTBROOK	1,477,564	832,692	1,639,576	1,790,359	150,783	9.2%
65 - WW JOINT LF	230	333	-	-	-	n/a
66 - WW PEAKS ISLAND	237,956	102,521	300,598	307,345	6,747	2.2%
Grand Total	8,779,078	4,956,342	10,187,724	10,893,903	706,179	6.9%
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)

	2022	2024	2023	2024	Budget	Budget
Expanse Type	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type: Salaries & Wages	\$855,782	\$456,232	\$966,681	\$1,011,377	\$44,696	4.6%
Employee Benefits	348,660	209,232	441,500	466,325	24,825	5.6%
Chemicals	6,154	6,768	12,138	12,138	24,025	0.0%
Contracted Services	853,510	351,063	718,025	837,600	119,575	16.7%
Heat/Fuel Oil	23,775	12,551		·		-13.7%
			25,869	22,330	(3,539)	21.4%
Insurance	30,947	18,959	33,266	40,385	7,119	
Materials & Supplies	189,571	99,483	143,116	147,729	4,613	3.2%
Other Expense	16,301	7,491	21,100	18,100	(3,000)	-14.2%
Purchased Pow er	493,495	309,870	533,198	631,073	97,875	18.4%
Regulatory/Taxes	549	-	2,200	2,200	-	0.0%
Tele/Other Utilties	65,530	35,423	85,132	82,780	(2,352)	-2.8%
Transportation	189,181	97,096	213,245	161,584	(51,661)	-24.2%
Grand Total	3,073,455	1,604,167	3,195,470	3,433,621	238,151	7.5%
Programs:						
41 - PRETREATMENT	\$15,223	\$5,282	\$37,103	\$32,834	(\$4,269)	-11.5%
44 - WW PUMPING	2,209,687	1,155,314	2,257,911	2,423,627	165,716	7.3%
45 - WW TREATMENT	247,140	133,874	284,500	334,706	50,206	17.6%
46 - CSO'S	540	326	204,000	-		n/a
63 - SAMPLE ANALYSIS	682	-	-	_	_	n/a
90 - VEHICLES	28,280	12,481	36,111	27,611	(8,500)	-23.5%
95 - DOUGLASS STREET	23,230	10,803	25,502	26,845	1,343	5.3%
98 - TRAINING	43,280	33,016	76,486	20,045 86,958	10,472	13.7%
		-		•		
99 - ADMINISTRATION Grand Total	505,393	253,072	477,857	501,040	23,183	4.9%
Grand Total	3,073,455	1,604,167	3,195,470	3,433,621	238,151	7.5%
Funds:						
10 - GENERAL	\$35,642	\$17,046	\$36,677	\$37,062	\$385	1.0%
20 - WATER GENERAL	3,052	3,283	4,694	4,465	(229)	-4.9%
50 - WASTEWATER GENERAL	598,218	313,762	620,090	645,994	25,904	4.2%
51 - WW CAPE ELIZABETH	444,466	215,438	386,145	416,349	30,204	7.8%
53 - WW CUMBERLAND	489,452	263,256	479,610	558,130	78,520	16.4%
55 - WW WINDHAM LF	27,123	16,714	44,328	44,521	193	0.4%
57 - WW PORTLAND	815,550	417,142	886,448	909,451	23,003	2.6%
61 - WW GORHAM	257,815	111,934	226,090	243,834	23,003	7.8%
62 - WW WESTBROOK	167,212		183,717	243,034		12.7%
		80,695			23,295	
64 - WW JOINT WESTBROOK	125,631	101,514	155,639	197,198	41,559	26.7%
	46,710	30,073	86,974	84,605	(2,369)	-2.7%
66 - WW PEAKS ISLAND	61,940	35,254	85,058	85,000	(58)	-0.1%
67 - WW NORTH WINDHAM	685	162	-	-	- 238,151	n/a
Grand Total	3,073,458	1,604,329	3,195,470	3,433,621	238,151	7.5%
Headcount:						
	13	13	13	13	0	0.0%
<b>Headcount:</b> Full-Time Part-Time	13 0	13 0	13 0	13 0	0 0	0.0% n/a

## **Environmental Services**

## **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 five core areas of focus. Divided into two groups:

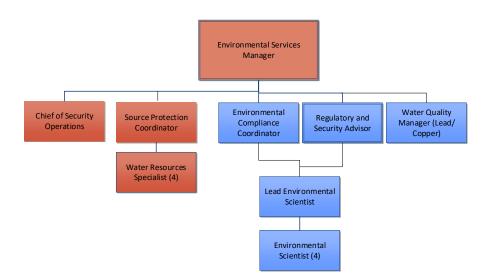
#### Water Resources Group (A5; red in the organization chart)

- 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; works with watershed land trusts to help landowners seeking to conserve their land in perpetuity; and supports education and outreach activities related to water quality.
- The Security Group provides daily protection of Sebago Lake by patrolling Lower Bay, enforcing the rules of access to the Sebago Lake Land Reserve, and partnering with first responders to react to land and water incidents.

#### Water Quality Group (L6; blue in organization chart)

- Environmental Laboratories ensure the proper collection, analysis and reporting of water, wastewater and biosolids samples for compliance purposes and to support the effective functioning of water and wastewater operations.
- The Environmental Compliance Section is responsible for ensuring PWD meets all requirements of several regulatory programs including the Industrial Pretreatment Programs (IPT) on the wastewater side and of the Total Coliform Rule (TCR) on the water side of our business. The IPT programs are designed to ensure discharges from industrial users do not impact District operations or pollute the Presumpscot River or Casco Bay and the TCR requires monitoring of our water distribution system to protect our customers from waterborne disease.
- The Lead and Copper Program is organized to comply with the new Lead and Copper Rule Revisions (LCRR) which require an intensive effort to identify and replace lead service line components if they exist. This includes inventory of service line materials, water testing, customer communications, and reporting.

195

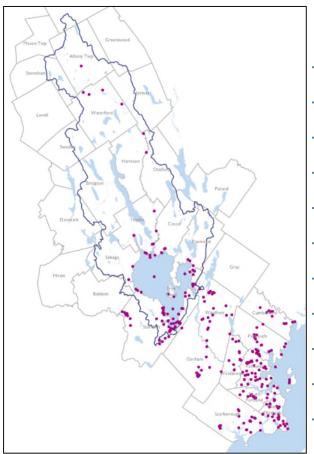




Flint Mountain Wilderness Preserve Albany Township

Thanks to the hard work of PWD's Water Resources staff, Finance staff, Corporate Counsel, and Right-of-Way Agent, and to the diligence of our Sebago Clean Waters partners, another 295 acres of watershed forest was conserved in Albany Twp in 2023. The land, known as Flint Mountain Wilderness Preserve, will be managed as "forever-wild" by the Mahoosuc Land Trust, which holds the easement. The land was acquired for a bargain price from the generous property owner. This new preserve is adjacent to Flint Farm, another property that PWD helped conserve in 2013. Together these properties make up almost 500 acres of forest for people to enjoy. Most importantly for our customers, the land will also provide natural water treatment for Sebago Lake in perpetuity.

## **Key Statistics**





TCR Sample Locations: 47

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

## **Performance Benchmarks**

Annual Program Metrics – Environmental Services	2022 Actual	2023 Projected	2024 Projected
% Verified - Water Quality Inquiries	32	30	25
Shore Land Zone Inspections	479	450	450
Watershed Properties Improved or Recommendations Made	31	25	20
Lower Bay Water Violations	104	250	200
Land Reserve Visitors	34,000 (est.)	34,500	34,500
Land Reserve Violations	583	550	500
Accredited Laboratory Methods	31	31	31
Outreach Events and Presentations	13	18	15
Industrial Pretreatment Notices of Violation Issued	50	50	50
LCRR Inventory Service Line Records % Reviewed	18%	95%	100%

## **Environmental Services by the Numbers:**

#### Source Protection 2000-2023:

- Completed more than **11,480** watershed inspections.
- Provided Lakescaping Reports to **599** watershed property owners.
- Financially supported water quality-related improvements on 298 properties.
- Awarded more than **\$323,089** in Lakescaping Grants which, when combined with matching funds, resulted in more than **\$1,472,284** in improvements to the shoreland zone of Sebago Lake.
- Maintained **10** ongoing lake and watershed monitoring programs.
- Responded to **590** complaints, **321** of which prevented or mitigated environmental violations and/or pollution.
- Contributed more than **\$1,477,817** to assist in the conservation by area land trusts of **13,986** acres of land in the watershed.

### Water Resources Security 2005-2023:

- 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 **2,351** warnings for violation of water contact regulations
- Recorded more than **259,175** day-use visits to the Sebago Lake Land Reserve.
- Issued more than **4,937** warnings for violation of Land Reserve Rules.

## By the Numbers (continued)

### **Environmental Laboratories 2000-2023:**

- Consistently analyzed laboratory performance testing samples to maintain accreditation; presently accredited for 17 methods at the East End laboratory and 14 methods at Sebago Lake
- 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 PWD staff in all departments
- Consolidated laboratory operations at the East End laboratory in 2023

### **Environmental Compliance Programs:**

- 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 Industrial Pretreatment (IPT) industries
- Managed all aspects of the Portland and Westbrook-Gorham IPT programs since 2018
- Migrated IPT processes to the EAM asset management database
- 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 three outreach events to connect to industrial pretreatment customers

#### Lead and Copper Program 2022-2023:

- Researched service line materials on 16,000 PWD service cards covering 13 communities
- Identified and logged pipe material on over 1,400 private service lines during routine field work
- Uploaded service line inventory data for over 13,000 private services into PWD's asset database
- Received a State Service Line Inventory Grant for \$125,000
- Applied for DWSRF Lead Service Line Replacement Funds and approved to receive 9 million dollars for qualified projects

## **Budget Year 2023 Highlights:**

- Completed Phase IV of the Sebago Lake Watershed Improvement Project utilizing federal 319 grant funds to address eroding sites around Sebago Lake, thus reducing the input of phosphorus and protecting water quality. Major water quality improvements were installed at the Standish Boat Launch and O-At-Ka in 2023
- Continued management of nearly 2,500 acres of watershed protection forestland around the Lower Bay of Sebago Lake
- Helped conserve four new watershed properties, bringing the total number of acres conserved since 2000 up to 13,986 acres; closings on another 1,666 acres expected later in 2023
- Continued implementation of a living shoreline to stabilize the beach 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 fifth annual Woodland Owner Appreciation Day providing a chance for watershed woodland owners to meet with natural resources professionals to help them meet forest management goals
- Created and distributed two issues of the Sebago In Depth newsletter
- Continued the partnership with Cumberland County Soil & Water Conservation District (CCSWCD) to deliver the District's WaterWays lessons in area schools
- Utilized federal RCPP funding to finance the Sebago Clean Waters partnership; served as fiscal agent
- Completed annual updates to the PWD Incident Management Plan
- Provided laboratory support to the Maine Healthy Beach Program by testing East End beach for bacteria throughout the summer
- Saw the retirement of the Industrial Pretreatment Supervisor and created the new Environmental Compliance Coordinator role to replace the position
- Renewed or extended all expiring IPT permits on time; in 2023, 45% of IPT permits expired and were extended or renewed
- Issued permits to one new industrial user (Nova Seafood) in the Portland program
- Hosted laboratory staff from Allagash Brewing to share experiences with wastewater treatment
- Submitted laboratory generated drinking water compliance data via the new Compliance Monitoring Data Portal (CMDP) as prescribed by the Maine Drinking Water Program
- Hired two Environmental Scientists (ES1) to return laboratory group to full staff
- Re-organized lab schedules and procedures making East End the center of laboratory operations to improve training and build cohesion
- Applied for DWSRF Lead Service Line Replacement Funds and was approved to receive \$9 million dollars for qualified projects
- Investigating private unknown service line material in coordination with the required water meter exchange and testing program

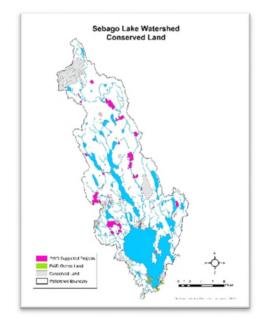
## **2023 Environmental Services Highlights**



As part of an ongoing partnership with the Sebago Lake State Park, a state-of-the-art shoreline stabilization and beach aggradation project was installed on one of the most seriously eroding beaches on Sebago Lake.



Co-hosted the fifth 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.



Helped conserve four new watershed properties totaling 358 acres. Four additional properties are expected to close by 2024.



As part of the Phase IV Federal Clean Water Act 319 grant, partnered with the Town of Standish to install a vegetated buffer at the Standish Boat Launch.

201

202



Added Nova Seafood to the regulated IPT industries in Portland.



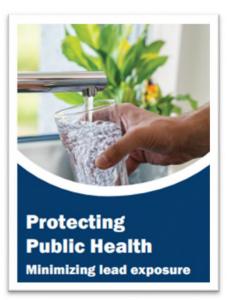
Redesigned the floating sign platform at the apex of the 3,000' No Trespassing zone. This redesign proved to be more stable in rough, storm-driven waves.



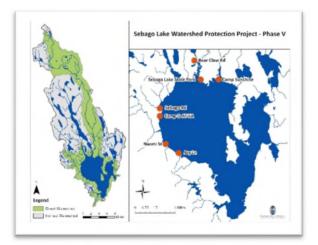
Distributed 300 rain barrels to continue the District's long-running rain barrel program.



Continued partnership with CCSWCD to deliver the District's WaterWays lessons to students.



Created a new lead informational brochure and updated PWD's lead webpage.



Awarded a \$156,000 Federal Clean Water Act Section 319 grant which will address erosion and other water quality threats in the Sebago Lake Watershed.

#### Departmental Expenses – Environmental Services

203



Inspected over 1400 private service lines for lead.

	3 Atlantia
ANE Stig Alar	my Mrs Patrick Mur
une totos I Ma	the
IME RABERT HALE	40.
SERVICE RECORD	HENEWAL RECORD
KIND OF PIPE Galv. L.L	KIND OF PIPE 'Cop.
SIZE OF PIPE 34" 34	SIZE OF PIPE 3 4"
MAIN TO STOP	MAIN TO STOP 13'
STOP TO ST. LINE	STOP TO ST. LINE 7'
ST. LINE TO BUILDING	ST. LINE TO BUILDING
TOTAL LENGTH 266 27	TOTAL LENGTH

Examined 16,000 old PWD service card records to identify water service line pipe material.



Completed another round of lead and copper testing which confirmed our corrosion control strategy continues to be effective.



Hired two scientists to bring the laboratory group to full staffing and re-organized lab schedules and procedures, making East End the center of laboratory operations, to improve training and build cohesion.

## **2024 Projects and Initiatives**

### **Source Protection**

- Began implementation of Sebago Lake Phase V Watershed Improvement Project; PWD has received preliminary approval for \$156,000 in federal 319 grant funding to improve eroding sites around Sebago Lake
- Continued supporting the land conservation efforts of Sebago Clean Waters, including negotiations with the Natural Resources Conservation Service (NRCS) and accomplishing Regional Conservation Partnership Program (RCPP) deliverables including forest conservation
- Worked with a forester to manage PWD-owned watershed forests using the new Forest Management Plan to help guide operations and land management; goals for 2024 include blowdown management and management of invasive species
- 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 key 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 Department of Health and Human Services (DHHS) data quality requirements in each PWD laboratory for accreditation, ethics, and data integrity
- Continue training new science staff in regulatory requirements, chemical hygiene, and laboratory analytical techniques
- Respond promptly to customer water quality inquiries and coordinate response with Customer Service and Water Operations
- 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 PWD staff to improve data quality and understanding of water quality issues
- Represent PWD 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

### **Environmental Compliance Programs**

- Continue managing all aspects of the Westbrook-Gorham and Portland pretreatment programs
- Renew all expiring Industrial Pretreatment permits
- Provide periodic reports of IPT activity to the cities of Portland and Westbrook and the Town of Gorham

# 2024 Projects and Initiatives (cont'd)

- Continue periodic issues of the e-mail Industrial Pretreatment News to assist industries with compliance
- Collaborate with the City of Portland on a program for breweries and other alcoholic beverage producers
- Continue active membership in the MeWEA Industrial Pretreatment Committee
- Train one environmental scientist to provide weekly support to the IPT programs and involve all scientists in some way
- Train all four environmental scientists and deploy them to manage PWD's water distribution system monitoring (TCR) program

### **Lower Bay Security**

- 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
- Upgrade the District's Kubota side-by-side UTV with all-season track making this piece of equipment usable during the winter months while patrolling the Sebago Lake Land reserve
- Install more of the redesigned floating No Trespassing signs delineating the 3,000' restriction zone

### Lead & Copper Program

- Prepare sampling lists for all elementary schools and licensed childcare facilities served by PWD
- Prepare outreach materials for schools and childcare facilities
- Plan for LCRR compliance monitoring, tier sites and analyses
- Investigate remaining unknown private services via the required water meter testing program
- Coordinate service line replacement for any found lead or galvanized requiring replacement
- Load service line inventory data lists from 13 communities into the PWD asset database
- Create a required public facing Service Line Inventory for the PWD website
- Complete the LCRR Inventory following the EPA's template as required by the DWP and submit by Oct 16, 2024

2024 Proposed	Туре	Recipient	Supports this Environmenta Services Section				
\$16,750	Lakescaping Grants	Watershed property owners, businesses	Source Protection				
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.							
\$1,000	Monitoring Equipment Support	Watershed Lake Associations	Source Protection				
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.							
\$1,250	Lake Protection Support	Maine Lakes Society	Source Protection				
	on of \$1,000 to Maine Lakes Soc	Maine Lakes Society iety to support their operations and cy benefits all surface supplies inclu	d \$250 to support their annual				
	on of \$1,000 to Maine Lakes Soc	iety to support their operations and	d \$250 to support their annual				
A contribution \$1,250 A contribution	on of \$1,000 to Maine Lakes Soc conference. Their advoca Lake Protection Support of \$1,000 to Lake Stewards of I heir outreach raises awareness	iety to support their operations and cy benefits all surface supplies inclu	d \$250 to support their annual uding PWD. Source Protection and \$250 to support their annuc on, particularly invasive aquatic				
A contribution \$1,250 A contribution	on of \$1,000 to Maine Lakes Soc conference. Their advoca Lake Protection Support of \$1,000 to Lake Stewards of I heir outreach raises awareness	iety to support their operations and cy benefits all surface supplies inclu Lake Stewards of Maine Maine to support their operations a statewide to issues of lake protectio	d \$250 to support their annual uding PWD. Source Protection and \$250 to support their annuc on, particularly invasive aquation s on request. Environmental Education &				
A contribution \$1,250 A contribution conference. T \$1,000 RWPA works	on of \$1,000 to Maine Lakes Soc conference. Their advoca Lake Protection Support of \$1,000 to Lake Stewards of I heir outreach raises awareness plants. They conduct train Watershed Organization Support on invasive plant control, BMP i ol) projects in the indirect water	iety to support their operations and cy benefits all surface supplies inclu Lake Stewards of Maine Maine to support their operations a statewide to issues of lake protections ing at PWD and for PWD employees Raymond Waterways Protective	d \$250 to support their annual uding PWD. Source Protection and \$250 to support their annua on, particularly invasive aquatic s on request. Environmental Education & Outreach, Source Protection a newsletter. They work on 319 matching financial support from				

2024 Grants to Watershed Partners (Continued)								
2024 Proposed	Type Recipient		Type Recipient		Type Recipient		Supports this Environmental Services Section	
\$1,750	Land Trust Support	Western Foothills Land Trust	Source Protection					
The mission of the Western Foothills Land Trust (MFLT) is to conserve land in the towns of Otisfield, Norway, Bethe 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.								
\$1,750	Land Trust Support	Mahoosuc Land Trust	Source Protection					
	g others. Because the MLT se		wns of Norway, Waterford, and Albany e Sebago Lake watershed, helping them to er supply. Source Protection					
Westbrook,	and Windham. As they work r water supply is better prote pas Maine Water Conference	to conserve land in parts of t	the towns of Gorham, Gray, Standish, the watershed towns of Windham and ards of the Sebago to the Sea Trail that Environmental Education & Outreach					
5000	Support	o Maine Mitchell Center						
	he conference also provides a		uring the District's name on promotional ne colleges and universities to conduct					
\$26,500	Т	otal Grant Support to Water	shed Partners					

## **Industrial Pretreatment Programs**

*PWD laboratory staff touring the Allagash facility* 

Allagash Brewing Company is located on Industrial Way in Portland. They brew and bottle a variety of Belgian-style beers. The 2023 production is forecast to be 130,000 barrels, making Allagash the largest brewery in Portland.

Like any brewery, the process at Allagash has the potential to produce high-strength BOD wastewater. Allagash side-streams solids for beneficial reuse, removing these materials from the wastewater effluent. Alternating brewing and cleaning cycles can result in pH swings. Allagash mitigates for swings by pretreating wastewater via an equalization tank and pH adjustment by chemical injection.

#### Industrial Pretreatment Program For the Year Ending December 31, 2022

<u>Revenue</u>	<u>Gorham</u> 2,282	Portland 337,553	Westbrook 22,318	<u>Windham</u> -
	<u>Gorham</u>	Portland	Westbrook	<u>Windham</u>
Expense				
Salaries & Wages	6,269	47,135	19,508	1,546
Benefits	2,883	21,586	8,872	714
Transportation	91	1,059	670	13
Contracted Services	957	11,317	4,433	476
Other Expense	<u>167</u>	<u>1,932</u>	<u>662</u>	<u>33</u>
	10,367	83,029	34,145	2,782
2022 Net Income	(8,085)	254,524	(11,827)	(2,782)
2021 Net Income 2020 Net Income	(15,014) (16,403)	244,075 206,722	(12,070) (15,457)	(1,929) (1,734)
2020 1100 11001110	(,)	200,122	(,)	(1,101)

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.

## **Financial Overview:**

#### **A5: Water Resources Section**

The 2024 A5 budget has an increase of \$8,568 dollars or 0.6% over the 2023 budget.

- We eliminated the Education and Outreach Section of Water Resources. Some initiatives and duties are now coordinated by the Source Protection Coordinator. Others are modified, outsourced, or led by other departments. The outreach budget has been reduced by \$4,647.
- The in-school education program (WaterWays) is being carried out by subcontracting with Cumberland County Soil and Water Conservation District. This and other changes result in a reduction of the education budget by \$43,644.
- PWD budgeted \$60,000 for operations support for Sebago Clean Waters. As the RCPP award moves into the third, fourth, and fifth years, the dollar amount available from the federal award for supporting Sebago Clean Waters staff tapers off. There is other funding from foundations and other sources and more will be pursued, but this base of support from PWD will be key to leveraging those other sources and ensuring the organization is sustainable going forward.
- The 2024 fuel budget for the new patrol boat has been reduced by \$10,000. The reduction comes as a result of the new boat not using as much fuel as previously estimated.

### **L6: Water Quality Section**

The 2024 L6 budget has a decrease of \$48,525. This is a reduction of 3.9% from the 2024 budget.

- PWD removed \$75,000 in Engineering Services from the Lead and Copper Program. The inventory will be completed in 2024 without the need to contract for engineering services.
- PWD dismantled the ICP instrument that has historically been used to test metal analysis on water and wastewater samples in-house. Instead, this work will be done via outside laboratories, allowing for reducing/eliminating several budget items, most notably the service contract for the instrument. Maintenance Services are reduced \$10,460.
- Based on permit cycle, more testing for wastewater Whole Effluent Toxicity and other parameters is included in this budget, resulting in a \$12,800 increase in the Laboratory Analysis budget.
- The labs have a 2-year accreditation cycle and 2024 is an off-year, resulting in a \$3,900 reduction in the Professional Licenses budget.

# **Environmental Services: Total**

	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff\$	Budget Diff %
Sub-Group:						
A5 - Water Resources	\$ 1,117,642	\$591,993	\$ 1,37 1,0 16	\$ 1,379,584	\$8,568	0.6%
L6 - Water/WW Laboratory	985,311	527,807	1,229,054	1,180,529	(48,525)	-3.9%
Grand Total	2,102,953	1,119,799	2,600,070	2,560,113	(39,957)	-1.5%
Expense Type:						
Salaries & Wages	\$ 1,132,035	\$607,639	\$ 1,295,748	\$ 1,259,643	(\$36,105)	-2.8%
Employee Benefits	467,647	272,142	603,126	592,581	(10,545)	-1.7%
Chemicals	3,387	0	7,100	2,300	(4,800)	-67.6%
Contracted Services	154,397	46,898	262,541	298,209	35,668	13.6%
Heat/Fuel Oil	24,253	3,060	37,012	28,500	(8,512)	-23.0%
Insurance	4,834	3,071	3,212	6,445	3,233	100.7%
Materials & Supplies	118,957	53,145	128,260	131,238	2,978	2.3%
Other Expense	133,391	98,001	193,293	168,775	(24,518)	-12.7%
Purchased Power	3,292	2,156	4,920	5,860	940	19.1%
Tele/Other Utilties	5,743	5,053	6,955	7,983	1,028	14.8%
Transportation	55,018	28,634	57,903	58,579	676	1.2%
Grand Total	2,102,953	1,119,799	2,600,070	2,560,113	(39,957)	-1.5%
Headcount:						
FullTime	15	15	15	14	(1)	-6.7%
Part Time	1	1	1	1	0	0.0%
Total	16	16	16	15	(1)	-6.3%

# **Environmental Services: Total**

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$529,625	\$296,210	\$613,964	\$560,793	(\$53,171)	-8.7%
660121 - WAGES/REGULAR UNION	515,517	277,827	582,377	596,412	14,035	2.4%
660122 - WAGES/OVERTIME UNION	17,543	5,389	21,503	21,708	205	1.0%
660123 - WAGES/DOUBLETIME UNION	1,181	562	1,584	2,289	705	44.5%
660131 - WAGES - REGULAR - TEMPS	54,727	27,601	76,320	78,441	2,121	2.8%
660132 - WAGES - OVERTIME- TEMPS	70	51	-	-	-	n/a
660136 - CONTRACTED - TEMP	1,691	-	-	-	-	n/a
66014 - VACATION ACCRUAL	21,524	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	(9,843)	-	-	-	-	n/a
Salaries & Wages Total	1,132,035	607,639	1,295,748	1,259,643	(36,105)	-2.8%
Employee Benefits	, ,			, ,		
660401 - FICA - EMPLOYERS' SHARE	84,692	47,999	99,121	96,366	(2,755)	-2.8%
660405 - SAFETY/WHY PROGRAM ITEM	1,195	220	3,790	3,865	75	2.0%
6604151 - FIELD UNIFORMS	1,200	-	1,200	1,200	-	0.0%
660418 - STIPENDS	1,400	1,300	1,600	1,700	100	6.3%
660419 - EMPLOY EE BENEFTS-MISC OTH	10,392	1,883	6,100	6,400	300	4.9%
660423 - JURY DUTY REIMBURSEMENT	(32)	-	-	-	-	n/a
660491 - FRINGE BENEFITS-REG/SAL	368,801	220,740	491,315	483,050	(8,265)	-1.7%
Employee Benefits Total	467,647	272,142	603,126	592,581	(10,545)	-1.7%
Chemicals	,	,		,	(10,010)	
661899 - OTHER CHEMICALS	3,387	-	7,100	2,300	(4,800)	-67.6%
Chemicals Total	3,387	-	7,100	2,300	(4,800)	-67.6%
Contracted Services	,		,			
6631 - ENGINEERING SERVICES	-	-	75,000	-	(75,000)	-100.0%
66353 - REPAIR SERVICES	-	621	1,900	1,900	-	0.0%
66354 - MAINTENANCE SERVICES	42,126	9,258	48,956	47,336	(1,620)	-3.3%
663546 - MAINTENANCE - SNOW REMOV	6,083	3,250	12,000	12,550	550	4.6%
663551 - LAB ANALYSIS	49,831	13,946	38,085	52,885	14,800	38.9%
663553 - PHOTOGRAPHY SERVICES	600	-	1,500	1,500	-	0.0%
663561 - COMPUTER LICENSES	-	-	500	500	-	0.0%
663562 - COMPUTER MAINTENANCE	-	-	-	1,920	1,920	n/a
663574 - DISPOSAL SERVICES	5,811	2,276	5,900	6,000	100	1.7%
663587 - COURIER SERVICES	2,266	1,106	2,760	2.760	-	0.0%
663592 - RECRUITING SERVICES	-	99	-	-	-	n/a
663599 - MISC OTHER SERVICES	1,800	-	1,500	1,500	-	0.0%
6636 - TECHNICAL SERVICES	45,879	16,343	74,440	54,350	(20,090)	-27.0%
66361 - SEBAGO CLEAN WATERS	-,	-	-	60,000	60,000	n/a
66362 - LAKES ENVIRONMENTAL ASSO	-	-	-	17,000	17,000	n/a
66363 - CUMB COUNTY SOIL & WATER	-	-	-	38,008	38,008	n/a
Contracted Services Total	154,397	46,898	262,541	298,209	35,668	13.6%
Heat/Fuel Oil	- ,	- ,	- ,-	,	,	
661622 - CONTAINER DELIVERED	8,500	2,201	7,012	8,500	1,488	21.2%
66165 - DIESEL OIL	221	_,	-	-	-	n/a
66166 - UNLEADED GAS	15,532	859	30,000	20,000	(10,000)	-33.3%
Heat/Fuel Oil Total	24,253	3,060	37,012	28,500	(8,512)	-23.0%
Insurance	,	-,	. ,	-,	(-,)	
66599 - PROPERTY & BOILER INSUR	4,834	3,071	3,212	6,445	3,233	100.7%
Insurance Total	4,834	3,071	3,212	6,445	3,233	100.7%
	,	-,	-,=-=	-,	,	

	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Materials & Supplies	Adtui	2020	Buuget	Buuget	Diriy	Bill 70
6619 - ASSET PURCHASES	\$2,577	\$2,705	\$12,700	\$14,000	\$1,300	10.2%
					\$1,300	
66202 - TOOLS	302	1,655	2,200	2,200	-	0.0%
66203 - VENDOR PURCHASED SUPPLIES	17,403	4,112	14,250	21,250	7,000	49.1%
662042 - SUPPLIES INVENTORY	263	696	1,700	1,700	-	0.0%
662043 - TOOL INVENTORY	448	149	1,650	1,650	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	1,582	2,003	2,750	1,500	(1,250)	-45.5%
66205 - CONSUMABLE SUPPLIES	92,930	41,775	87,850	86,100	(1,750)	-2.0%
66206 - COMPUTER RELATED EQUIP	3,388	41,773	4,160	1,838	(1,750)	-55.8%
663564 - COMPUTER-RELATED EQUIP	65	-	1,000	1,000	- (2,322)	0.0%
Materials & Supplies Total	118,957	53,145	128,260	131,238	2,978	2.3%
Other Expense	110,337	55,145	120,200	131,230	2,570	2.070
66411 - INTERNAL RENTAL CHARGES	51,030	25,515	51,030	53,600	2,570	5.0%
6642 - EQUIPMENT RENT	-	-	300	300	-	0.0%
66601 - PUBLIC RELATIONS	1,240	1,250	4,700	2,200	(2,500)	-53.2%
66609 - OTHER ADVERTISING	2,963	1,571	5,000	3,100	(1,900)	-38.0%
6675111 - INSTATE TRAINING/CONF	2,807	2,575	4,300	3,800	(500)	-11.6%
6675112 - OUT OF STATE TRAINING/CON	454	2,210	5,450	5,950	500	9.2%
667513 - DUES	18,570	22,117	21,788	20,845	(943)	-4.3%
667514 - PROFESSIONAL LICENSES	815	225	5,175	1,425	(3,750)	-72.5%
667515 - PERIODICAL SUBSCRIPTIONS	575	126	580	430	(150)	-25.9%
667521 - POSTAGE - THIRD PARTY	866	1,644	4,100	4,100	-	0.0%
667522 - POSTAGE - INTERNAL	734	59	1,150	1,025	(125)	-10.9%
667523 - POSTAGE - EXPRESS DELIVER	17	100	150	300	150	100.0%
667531 - PRINTING COSTS	13,254	11,711	34,700	31,100	(3,600)	-10.4%
667561 - WATERSHED GRANTS/SUPPORT	33,532	24,149	48,300	33,900	(14,400)	-29.8%
667591 - UNIFORMS	1,955	3,348	2,300	2,250	(50)	-2.2%
667592 - FOOD SUPPLIES	1,221	1,048	4,170	4,350	180	4.3%
667599 - OTHER MISCELLANEOUS	3,359	353	100	100	-	0.0%
Other Expense Total	133,391	98,001	193,293	168,775	(24,518)	-12.7%
	4 007	0.40	0.400	0.057	4 4 0 5	50.00/
66155 - POWER - SMALL ENERGY 66156 - POWER - SMALL T&D	1,397	948	2,132	3,257	1,125	52.8%
Purchased Power Total	1,894	1,209 <b>2,156</b>	2,788	2,603 5,860	(185) <b>940</b>	-6.6% <b>19.1%</b>
Tele/Other Utilties	3,292	2,130	4,920	5,000	940	19.1%
66101 - WATER	142	75	365	383	18	4.9%
66111 - TELEPHONE LINES	210	1,781	350	1,900	1,550	442.9%
66112 - DATA LINES	407	82	540	540	-	0.0%
66113 - CELLULAR PHONES	4,983	3,115	5,700	5,160	(540)	-9.5%
Tele/Other Utilities Total	5,743	5,053	6,955	7,983	1,028	14.8%
Transportation	-, -	-,	-,	,	,	
66501 - TRANSPORTATION - INTERNAL	4,970	6,771	13,792	22,529	8,737	63.3%
665018 - TRANS - LAKE BOAT	7,500	3,750	7,500	7,500	-	0.0%
665019 - TRANS INTERNAL INACTIVE	37,170	13,730	26,821	18,460	(8,361)	-31.2%
66503 - MILEAGE REIMBURSEMENT	5,379	4,382	9,790	10,090	300	3.1%
Transportation Total	55,018	28,634	57,903	58,579	676	1.2%
Grand Total	2,102,953	1,119,799	2,600,070	2,560,113	(39,957)	-1.5%

# **Environmental Services: Water Resources Section (A5)**

Financial Summary.	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:	Aoruan	Carroan	Budgot	Baagot	Birty	
Salaries & Wages	\$623,641	\$331,258	\$697,201	\$647,377	(\$49,824)	-7.1%
Employee Benefits	246,099	137,336	315,373	294,789	(20,584)	-6.5%
Contracted Services	79,339	30,029	115,446	221,854	106,408	92.2%
Heat/Fuel Oil	24,253	3,060	37,012	28,500	(8,512)	-23.0%
Insurance	4,834	3,000	37,012	6,445	3,233	100.7%
	-					9.9%
Materials & Supplies	23,647	8,167	33,960	37,338	3,378	
Other Expense	58,412	47,882	106,945	83,995	(22,950)	-21.5%
Purchased Power	3,292	2,156	4,920	5,860	940	19.1%
Tele/Other Utilties	4,353	4,013	5,095	6,663	1,568	30.8%
Transportation	49,773	25,021	51,852	46,763	(5,089)	-9.8%
Grand Total	1,117,642	591,993	1,371,016	1,379,584	8 <i>,</i> 568	0.6%
_						
Programs:				****	404 757	<b>0</b> 4 60(
28 - MONITORING	\$267,700	\$135,453	\$268,556	\$353,313	\$84,757	31.6%
29 - WATERSHED GRANT	17,489	7,675	35,276	41,278	6,002	17.0%
32 - LEAD/COPPER COMPLIANC		590	0	0	0	n/a
41 - PRETREATMENT	3,901	6,328	6,753	24,695	17,942	265.7%
56 - TECH OPS SUPPORT	45,118	20,404	82,326	88,373	6,047	7.3%
78 - EDUCATION	76,541	52,483	132,145	88,501	(43,644)	-33.0%
82 - LAKE SECURITY - LAND	152,114	85,978	176,154	191,997	15,843	9.0%
83 - CUSTOMER OUTREACH	98,608	72,344	177,145	172,498	(4,647)	-2.6%
84 - LAKE SECURITY - WATER	62,992	20,087	81,631	80,918	(713)	-0.9%
98 - TRAINING	16,017	22,532	36,944	34,426	(2,518)	-6.8%
99 - ADMINISTRATION	377,165	168,119	374,086	303,585	(70,501)	-18.8%
Grand Total	1,117,642	591,993	1,371,016	1,379,584	8,568	0.6%
Funds:						
10 - GENERAL	\$289 <i>,</i> 535	\$135,215	\$282,389	\$227,977	(\$54,412)	-19.3%
20 - WATER GENERAL	823,959	450,773	1,081,874	1,126,912	45,038	4.2%
50 - WASTEWATER GENERAL	3,228	6,157	4,221	22,050	17,829	422.4%
57 - WW PORTLAND	933	442	1,688	1,764	76	4.5%
62 - WW WESTBROOK	3	215	844	881	37	4.4%
Grand Total	1,117,645	592,155	1,371,016	1,379,584	8,568	0.6%
Headcount:						
Full-Time	8	7	7	6	(1)	-14.3%
Part-Time	1	1	1	1	0	0.0%
Total	9	8	8	7	(1)	-12.5%

# Environmental Services: Water Quality Section (L6)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$508,394	\$276,382	\$598,547	\$612,266	\$13,719	2.3%
Employee Benefits	221,549	134,806	287,753	297,792	10,039	3.5%
Chemicals	3,387	-	7,100	2,300	(4,800)	-67.6%
Contracted Services	75,057	16,870	147,095	76,355	(70,740)	-48.1%
Materials & Supplies	95,310	44,978	94,300	93,900	(400)	-0.4%
Other Expense	74,979	50,118	86,348	84,780	(1,568)	-1.8%
Tele/Other Utilties	1,390	1,040	1,860	1,320	(540)	-29.0%
Transportation	5,245	3,613	6,051	11,816	5,765	95.3%
Grand Total	985,311	527,807	1,229,054	1,180,529	(48,525)	-3.9%
Programs:						
28 - MONITORING	\$291	\$0	\$0	\$0	\$0	n/a
32 - LEAD/COPPER COMPLIANCE	202	29,742	184,755	107,729	(77,026)	-41.7%
41 - PRETREATMENT	111,203	47,652	156,524	142,589	(13,935)	-8.9%
56 - TECH OPS SUPPORT	310,113	148,432	103,011	164,035	61,024	59.2%
63 - SAMPLEANALYSIS	153,779	52,584	358,172	370,234	12,062	3.4%
78 - EDUCATION	91	-	640	305	(335)	-52.3%
98 - TRAINING	51,487	28,025	37,398	35,975	(1,423)	-3.8%
99 - ADMINISTRATION	358,145	221,372	388,554	359,662	(28,892)	-7.4%
Grand Total	985,311	527,807	1,229,054	1,180,529	(48,525)	-3.9%
Funds:						
10 - GENERAL	\$356,073	\$208,938	\$342,097	\$302,451	(\$39,646)	-11.6%
20 - WATER GENERAL	256,203	153,347	453,481	462,335	8,854	2.0%
50 - WASTEWATER GENERAL	260,352	127,977	305,489	285,385	(20,104)	-6.6%
51 - WW CAPE ELIZABETH	4,071	728	2,985	5,116	2,131	71.4%
55 - WW WINDHAM LF	1,706	536	447	3,456	3,009	673.2%
57 - WW PORTLAND	68,523	20,821	80,259	80,229	(30)	0.0%
61 - WW GORHAM	4,586	5,105	8,638	6,974	(1,664)	-19.3%
62 - WW WESTBROOK	16,826	8,672	23,308	25,315	2,007	8.6%
64 - WW JOINT WESTBROOK	14,630	2,399	10,215	6,222	(3,993)	-39.1%
66 - WW PEAKS ISLAND	2,313	903	2,135	3,046	911	42.7%
67 - WW NORTH WINDHAM	60	162	-	-	-	n/a
Grand Total	985,314	527,969	1,229,054	1,180,529	(48,525)	-3.9%
Headcount:						
Full-Time	7	8	8	8	0	0.0%
				-	-	
Part-Time	0	0	0	0	0	n/a

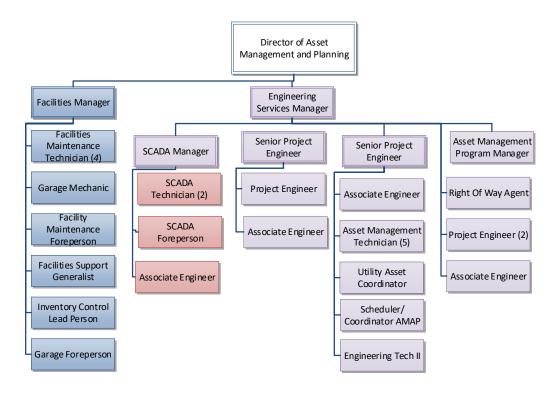
### **Engineering Services - Purpose Statement**

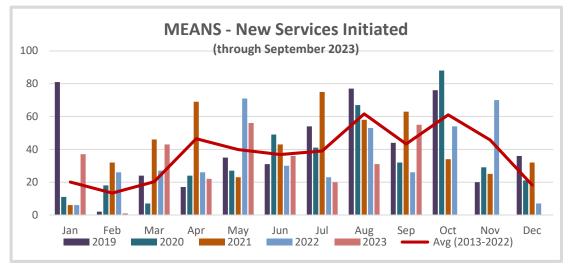
To provide direct and supported design and construction of water, wastewater and administrative infrastructure and support an asset management approach to infrastructure acquisition and maintenance

## Core Services

Engineering Services is responsible for providing engineering and facilities maintenance services to internal and external customers. They are responsible for the following services:

- Manage planning and design of developer-installed water and sewer infrastructure and management of field and facilities assets
- Support 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; provide facility support services including garage, structural maintenance and stock room services (Facility Services Group-C1; blue in organization chart).
- Provide 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**

Graphs shows the variations of work load between years that generally starts to increase in March and peaks in October. Because the work is dependent on customer's requests, there are significant variances between the monthly number of new services initiated, which is a challenge for resource allocation.

Assets in the Asset	Facilities	140
Information	Facility Processes & Systems	1,338
Management System (AIM)	Equipment/Components	12,333
	Vehicles/Heavy Equipment	118
	Water Service Association Assets (meters, backflows, etc.)	291,091
	Water Field Assets	51,880
	Sewer Field Assets	7,112
	Real Estate Interests	3,218
	Total Assets	367,230

### **Performance Benchmarks**

Goal – Reliable & Sustainable Service	2022 Actual	2023 Budget	2024 Budget
Leaks per 100 miles of main	9.3	<10	<10
Main Renewals, feet	16,300	19,700	21,000
Main Extensions, feet	11,720	26,000	24,000
Goal – High Value			
New Water Services	419	450	450
Goal – High Performance and Supportive Work			
Environment			
Employee Training Hours	45	80	80

## **Accomplishments**

- Procured the first phase of the water and wastewater master plan, machine learning (AI) supported analysis of Likelihood of Failure (LOF) for water main assets
- Provided project management, coordination and design support related to design and construction of new wastewater collection and treatment infrastructure system in North Windham
- Managed construction of the East End Wastewater Treatment Facility (EEWWTF) medium voltage power distribution system to address resiliency and reliability issues
- Completed land acquisition and supported construction for the Windham water storage tank replacement project
- Supported design and construction of piping and power upgrades to the Steep Falls Water Treatment Facility
- Continued rollout and development of the computerized maintenance management system (CMMS) software, EAM (Central Square), as part of Asset Management effort
- Worked with water and wastewater operations and environmental services staff to improve asset data
- Managed design/installation of 3.2 miles of water main renewals and more than 1 mile of extensions

## **2024 Projects and Initiatives**

## **Goals - Reliability and Sustainable Service**

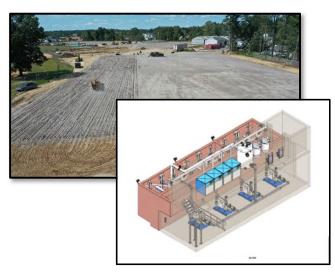
- Manage and support design and construction of new North Windham wastewater collection and treatment system using a Construction Manager at Risk (CMAR), a form of design build
- Manage and support vertical asset upgrade projects: EEWWTF clarifier and primary gallery upgrade, Windham Water Storage Tank, etc.
- Manage and support Water Main Business Risk Exposure project and resulting water main prioritization
- Improve water main replacement programs and manage design and delivery of projects.
- Continue to lead and support implementation of Central Square EAM CMMS software and alignment of corporate asset management efforts.
- Continue to work with Operations, and Environmental Services to improve AIM data and configure CMMS.
- Manage facilities projects including electrical, HVAC and roof upgrades.
- Provide core support of asset management and CMMS implementation.

### **Goal – High Performance and Supportive Work Environment**

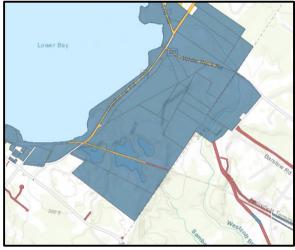
- Maintain an average of 80 hours of training per employee.
- Continue to support ongoing workplace safety management and training.

### **2023 Highlights**

Managed and supported North Windham sewer system design and construction.



Continued development of core Asset Management CMMS platform – 3,200 Real Estate assets added



#### Managed Douglass St Roof replacement



Manage and support the EEWWTF Medium Voltage Power Distribution Upgrade





Managed and supported electrical and process upgrades to the Steep Falls Treatment Facility

Managed and supported Windham Storage tank replacement project – water main installation and initiation of tank construction



Managed design and construction of twin submarine main replacement between Great and Little Diamond Islands

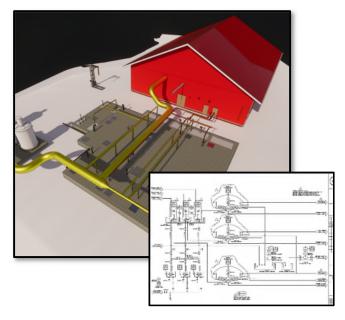


### **2024 Projects and Initiatives**

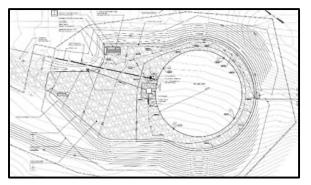
Douglass Street Facility – Complete the last phase of Roof.



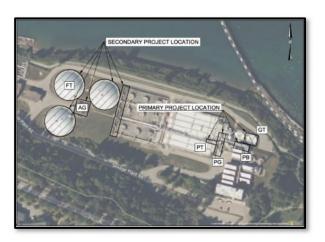
North Windham's Sewer - Construction of Collection, Treatment and Disposal infrastructure.



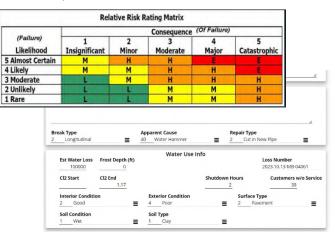
Manage and support construction of Windham Storage Tank replacement project.



Manage and support construction of EEWWTF Secondary Clarifier & Primary Gallery upgrade.



Manage and support initial phase of renewed Master Planning effort – Water Main Business Risk Exposure analysis. Continue integration and alignment of asset management attributes in CMMS system.



Lead program to prioritize, design and construct water main replacement program.



## **Financial Overview**

The Engineering Services 2023 budget request is \$5,379,840 which is \$295,960 or 5.8% 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 \$90,400 or 4.1%. In addition to Salary & Wage increases, the difference reflected higher budgeted Contracted Services and Purchased Power costs up 16.9% and 69.2% to \$434,270 and \$124,740 respectively.

**E2** - Asset Engineering's budget increased by \$185,750 or 7.9%. Much of the increase is reflected in the Salary & Wage and Employee Benefits which includes changes in technical staffing. Two positions were reduced to part-time, while an Associate Engineering was added. An Asset Management Tech position was converted from a contract position to a budgeted position. The position supports master planning and asset management documentation efforts.

**E7** - SCADA Services' budget increased \$19,825 or 3.9% primarily attributed to Salary & Wage/Employee Benefit increases.

# **Engineering Services – Total**

	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Sub-Group:	Actual	2023	Buuyet	Budget	ЪШφ	70
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C1 - Facilities Services	\$2,154,063	\$1,051,918	\$2,214,737	\$2,305,124	\$90,387	4.1%
E2 - Asset Engineering	2,089,571	1,045,309	2,361,156	2,546,902	185,746	7.9%
E7 - Scada Services Group	509,188	245,030	507,989	527,814	19,825	3.9%
Grand Total	4,752,821	2,342,258	5,083,882	5,379,840	295,958	5.8%
Expense Type:						
Salaries & Wages	2,250,625	1,176,739	2,548,257	2,701,350	153,093	6.0%
Employee Benefits	987,960	558,542	1,188,653	1,317,446	128,793	10.8%
Contracted Services	504,779	182,362	455,820	519,820	64,000	14.0%
Heat/Fuel Oil	88,689	40,373	76,605	72,300	(4,305)	-5.6%
Insurance	38,611	20,633	42,442	44,485	2,043	4.8%
Materials & Supplies	644,219	286,410	596,222	526,362	(69,860)	-11.7%
Other Expense	(53,306)	(61,032)	(114,395)	(143,485)	(29,090)	25.4%
Purchased Pow er	77,212	39,764	73,702	124,735	51,033	69.2%
Regulatory/Taxes	2,131	1,933	2,500	3,000	500	20.0%
Tele/Other Utilties	100,444	42,780	98,287	99,736	1,449	1.5%
Transportation	111,458	53,753	115,789	114,091	(1,698)	-1.5%
Grand Total	4,752,821	2,342,258	5,083,882	5,379,840	295,958	5.8%
Headcount:						
Full Time	32	33	33	34	1	3.0%
Part Time	0	0	0	2	2	n/a
Total	32	33	33	36	3	9.1%

# **Engineering Services – Total**

	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$1,196,451	\$620,237	\$1,349,660	\$1,543,604	\$193,944	14.4%
660121 - WAGES/REGULAR UNION	980,787	509,801	1,047,209	1,158,194	110,985	10.6%
660122 - WAGES/OVERTIME UNION	10,204	8,512	13,172	16,714	3,542	26.9%
660123 - WAGES/DOUBLETIME UNION	371	266	734	1,138	404	55.0%
660124 - WAGES/STANDBY TIME UNION	1,450	1,463	1,002	1,300	298	29.7%
660125 - OPEN POSITIONS	-	-	-	(74,360)	(74,360)	n/a
660131 - WAGES - REGULAR - TEMPS	-	4,004	53,280	54,760	1,480	2.8%
660136 - CONTRACTED - TEMP	48,923	32,456	83,200	-	(83,200)	-100.0%
66014 - VACATION ACCRUAL	(19,378)	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	31,817	-	-	-	-	n/a
Salaries & Wages Total	2,250,625	1,176,739	2,548,257	2,701,350	153,093	6.0%
Employee Benefits						
660401 - FICA - EMIPLOYERS' SHARE	173,056	88,259	188,578	206,657	18,079	9.6%
660405 - SAFETY/WHY PROGRAM ITEMS	3,209	1,592	7,425	5,725	(1,700)	-22.9%
660411 - MEALS ALLOWANCE	80	20	100	100	-	0.0%
660413 - PWD TRAINING PROGRAM	281	87	-	-	-	n/a
660418 - STIPENDS	1,800	2,300	2,000	2,300	300	15.0%
660419 - EMPLOYEE BENEFTS-MISC OTH	13,122	4,177	6,200	5,900	(300)	-4.8%
660491 - FRINGE BENEFITS-REG/SAL	796,412	462,108	984,350	1,096,764	112,414	11.4%
Employee Benefits Total	987,960	558,542	1,188,653	1,317,446	128,793	10.8%
Contracted Services						
6631 - ENGINEERING SERVICES	16,119	2,667	5,000	10,000	5,000	100.0%
663521 - TRAFFIC CONTROL	2,775	-	-	-	-	n/a
6635221 - PAVING - MINOR REPAIR	-	3,509	-	-	-	n/a
663524 - STREET OPENING	-	100	-	-	-	n/a
663525 - CONTRACTOR CONSTRUCTION	194	-	-	-	-	n/a
663526 - INSPECTION SERVICES	2,036	-	-	-	-	n/a
66353 - REPAIR SERVICES	14,294	9,796	17,500	23,500	6,000	34.3%
66354 - MAINTENANCE SERVICES	311,039	131,574	271,200	311,100	39,900	14.7%
663546 - MAINTENANCE - SNOW REMOVL	19,562	16,236	25,000	35,000	10,000	40.0%
663561 - COMPUTER LICENSES	23,796	7,205	22,350	22,950	600	2.7%
663562 - COMPUTER MAINTENANCE	63,622	-	54,000	54,000	-	0.0%
663563 - COMPUTER CONSULTING/OTHER	-	-	600	600	-	0.0%
663574 - DISPOSAL SERVICES	9,136	5,702	18,400	18,400	-	0.0%
663587 - COURIER SERVICES	9,087	4,154	8,270	8,270	-	0.0%
663592 - RECRUITING SERVICES	245	1,048	-	500	500	n/a
6635985 - VEHICLE FLEET GPS SERVICE	38,574	-	26,000	28,000	2,000	7.7%
663599 - MISC OTHER SERVICES	(6,704)	371	2,500	2,500	-	0.0%
6636 - TECHNICAL SERVICES	1,003	-	5,000	5,000	-	0.0%
Contracted Services Total	504,779	182,362	455,820	519,820	64,000	14.0%
Heat/Fuel Oil						
661621 - PIPELINE DELIVERED PROPAN	73,235	35,673	60,105	56,800	(3,305)	-5.5%
66166 - UNLEADED GAS	15,454	4,700	16,500	15,500	(1,000)	-6.1%
Heat/Fuel Oil Total	88,689	40,373	76,605	72,300	(4,305)	-5.6%

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Colum n1	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Insurance						
6656 - VEHICLE INSURANCE	\$26,086	\$13,846	\$28,745	\$29,354	\$609	2.1%
66593 - UMBRELLA INSURANCE COVER	5,017	2,670	5,523	5,660	137	2.5%
66599 - PROPERTY & BOILER INSUR	7,507	4,118	8,174	9,471	1,297	15.9%
Insurance Total	38,611	20,633	42,442	44,485	2,043	4.8%
Materials & Supplies						
6619 - ASSET PURCHASES	36,492	27,996	45,800	40,800	(5,000)	-10.9%
662015 - LOAM	350	-	-	-	-	n/a
662019 - GRAVEL - TYPE A (DOT)	796	-	-	-	-	n/a
66202 - TOOLS	9,899	7,402	7,000	8,000	1,000	14.3%
66203 - VENDOR PURCHASED SUPPLIES	276,374	109,410	185,650	195,300	9,650	5.2%
662041 - MATERIALS INVENTORY	53,123	4,218	7,300	7,150	(150)	-2.1%
662042 - SUPPLIES INVENTORY	13,124	6,380	11,325	10,125	(1,200)	-10.6%
662043 - TOOL INVENTORY	2,974	5,149	8,850	7,450	(1,400)	-15.8%
66204301 - INVENTORY - TONER	80	619	-	-	-	n/a
66204302 - INVENTORY - PAPER	116	154	-	-	-	n/a
66204303 - INVENTORY-COMPUTER EQUIP	5,397	2,203	1,700	1,700	-	0.0%
662044 - METER INVENTORY	872	(5,127)	-	-	-	n/a
662046 - HYDRANT INVENTORY	(3,095)	(2,100)	-	-	-	n/a
662047 - GARAGE INVENTORY	6,733	5,521	9,425	6,175	(3,250)	-34.5%
66204701 - INVENTORY - UNLEADED GAS	154,947	80,654	186,415	144,266	(42,149)	-22.6%
66204702 - INVENTORY - DIESEL	61,218	35,586	84,835	57,696	(27,139)	-32.0%
66204703 - INVENTORY - TIRES	15,067	6,100	15,000	13,000	(2,000)	-13.3%
66205 - CONSUMABLE SUPPLIES	76	-	2,250	2,200	(50)	-2.2%
66206 - COMPUTER RELATED EQUIP	9,674	2,243	30,672	32,500	1,828	6.0%
Materials & Supplies Total	644,219	286,410	596,222	526,362	(69,860)	-11.7%
Other Expense 6642 - EQUIPMENT RENT			3,500	3,500		0.0%
66609 - OTHER ADV ERTISING	- 999	-	3,500	3,300	-	0.0% n/a
6675111 - INSTATE TRAINING/CONF	999 25,955	- 15,946	- 15,500	- 22,500	- 7.000	45.2%
6675112 - OUT OF STATE TRAINING/CON	17,690	6,495	14,000	15,500	1,500	10.7%
6675121 - IN STATE CONFERENCES	190	0,495	14,000	13,300	1,500	n/a
667513 - DUES	588	779	3,000	3,000	-	0.0%
667514 - PROFESSIONAL LICENSES	1,642	788	3,880	3,680	(200)	-5.2%
667515 - PERIODICAL SUBSCRIPTIONS	-	139	800	800	-	0.0%
667521 - POSTAGE - THIRD PARTY	-	28	-	-	-	n/a
667522 - POSTAGE - INTERNAL	264	13	325	325	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	1,040	315	1,100	950	(150)	-13.6%
667552 - SAFETY TRAINING	131	-	750	750	-	0.0%
667555 - SAFETY EXPENSES	494	718	2,500	2,500	-	0.0%
667556 - FREIGHT CHARGES (STOCK)	21	8	2,500	-	(2,500)	-100.0%
667592 - FOOD SUPPLIES	232	321	100	100	(_,000)	0.0%
667599 - OTHER MISCELLANEOUS	11,750	691	1,050	1,050	-	0.0%
6676 - EXPENSE OFFSET	(114,302)	(87,271)	(163,400)	(198,140)	(34,740)	21.3%
Other Expense Total	(53,306)	(61,032)	(114,395)	(143,485)	(29,090)	25.4%
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	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff%
Purchased Power						
66153 - POWER - MEDIUM ENERGY	\$46,292	\$24,491	\$48,111	\$89,128	\$41,017	85.3%
66154 - POWER - MEDIUM T&D	27,457	13,020	22,942	30,812	7,870	34.3%
66155 - POWER - SMALL ENERGY	1,472	992	1,096	2,625	1,529	139.5%
66156 - POWER - SMALL T&D	1,991	1,261	1,553	2,170	617	39.7%
Purchased Power Total	77,212	39,764	73,702	124,735	51,033	69.2%
Regulatory/Taxes	-	-	-	-	-	n/a
667516 - PERMITS	2,131	1,933	2,500	3,000	500	20.0%
Regulatory/Taxes Total	2,131	1,933	2,500	3,000	500	20.0%
Tele/Other Utilties	-	-	-	-	-	n/a
66101 - WATER	4,046	1,895	5,000	5,000	-	0.0%
66102 - WASTEWATER	6,222	2,463	7,500	7,500	-	0.0%
66103 - STORMWATER CHARGES	15,747	8,146	16,570	17,105	535	3.2%
66111 - TELEPHONE LINES	25,700	8,026	21,960	21,960	-	0.0%
66112 - DATA LINES	42,588	19,088	40,762	41,616	854	2.1%
66113 - CELLULAR PHONES	6,141	3,163	6,495	6,555	60	0.9%
Tele/Other Utilties Total	100,444	42,780	98,287	99,736	1,449	1.5%
Transportation	-	-	-	-	-	n/a
66501 - TRANSPORTATION - INTERNAL	26,530	15,974	33,882	33,536	(346)	-1.0%
665019 - TRANS INTERNAL INACTIVE	82,802	35,576	75,307	73,905	(1,402)	-1.9%
66502 - TRANSPORTATION - EXTERNAL	1,460	1,034	3,850	3,950	100	2.6%
66503 - MILEAGE REIMBURSEMENT	667	1,169	2,750	2,700	(50)	-1.8%
Transportation Total	111,458	53,753	115,789	114,091	(1,698)	-1.5%
Grand Total	4,752,821	2,342,258	5,083,882	5,379,840	295,958	5.8%

# **Engineering Services - Facilities Services (C1)**

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$594,232	\$304,490	\$649,984	\$680,832	\$30,848	4.7%
Employee Benefits	261,382	150,494	311,168	328,369	17,201	5.5%
Contracted Services	404,536	172,042	371,370	434,270	62,900	16.9%
Heat/Fuel Oil	88,689	40,373	76,605	72,300	(4,305)	-5.6%
Insurance	38,611	20,633	42,442	44,485	2,043	4.8%
Materials & Supplies	550,018	265,077	546,492	472,687	(73,805)	-13.5%
Other Expense	(9,148)	(11,363)	(11,325)	(7,975)	3,350	-29.6%
Purchased Pow er	77,212	39,764	73,702	124,735	51,033	69.2%
Regulatory/Taxes	2,129	1,933	2,500	3,000	500	20.0%
Tele/Other Utilties	81,446	36,963	80,646	81,541	895	1.1%
Transportation	64,956	31,511	71,153	70,880	(273)	-0.4%
Grand Total	2,154,063	1,051,918	2,214,737	2,305,124	90,387	4.1%
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Programs:						
23 - STOCKROOM OPERATIONS	\$106,278	\$56,677	\$143,034	\$146,929	\$3,895	2.7%
24 - OPERATIONS	6,369	3,698	23,204	-	(23,204)	-100.0%
30 - MAINTENANCE	215,377	131,177	265,180	312,940	47,760	18.0%
55 - PROF OPS SUPPORT	81,116	44,522	99,252	98,332	(920)	-0.9%
90 - VEHICLES	725,227	335,396	776,653	687,769	(88,884)	-11.4%
93 - STOCKROOM SCRAP	22,103	345	-	-	-	n/a
95 - DOUGLASS STREET	721,869	356,663	688,686	815,478	126,792	18.4%
98 - TRAINING	60,021	37,091	53,815	65,260	11,445	21.3%
99 - ADMINISTRATION	215,704	86,351	164,913	178,416	13,503	8.2%
Grand Total	2,154,063	1,051,918	2,214,737	2,305,124	90,387	4.1%
Funds:						
10 - GENERAL	1,722,102	815,663	1,684,067	1,746,923	62,856	3.7%
20 - WATER GENERAL	330,231	181,669	369,788	376,872	7,084	1.9%
30 - WATER STANDISH	795	662	2,900	3,407	507	17.5%
51 - WW CAPE ELIZABETH	28,614	12,868	26,207	27,841	1,634	6.2%
53 - WW CUMBERLAND	9,277	3,599	10,058	10,993	935	9.3%
55 - WW WINDHAM LF	674	362	500	6,638	6,138	1227.6%
57 - WW PORTLAND	36,178	26,835	65,451	61,662	-3,789	-5.8%
61 - WW GORHAM	10,070	3,785	9,519	12,416	2,897	30.4%
62 - WW WESTBROOK	2,498	877	11,573	8,466	-3,107	-26.8%
64 - WW JOINT WESTBROOK	10,692	5,217	19,169	18,038	-1,131	-5.9%
65 - WW JOINT LF	461	312	1,542	1,800	258	16.7%
66 - WW PEAKS ISLAND	2,508	2,015	13,963	30,068	16,105	115.3%
Grand Total	2,154,066	1,052,080	2,214,737	2,305,124	90,387	4.1%
Headcount:						0.000
Full Time	10	10	10	10	0	0.0%
Part Time	0	0	0	0	0	0.0%

# **Engineering Services - Asset Engineering Services (E2)**

	2022	2023 Jan-	2023	2024	Budget	Budget
	Actual	Jun	Budget	Budget	Diff \$	Diff %
Expense Type:	<b>.</b>		<b>•</b> · · · · · · · ·	<b>•</b> · = • · • • ·	• · · · · ·	
Salaries & Wages	\$1,394,624	\$727,450	\$1,611,914	\$1,721,801	\$109,887	6.8%
Employee Benefits	611,031	338,355	738,868	842,792	103,924	14.1%
Contracted Services	72,765	4,699	66,450	66,950	500	0.8%
Materials & Supplies	27,187	17,149	26,505	32,250	5,745	21.7%
Other Expense	(45,038)	(55,186)	(114,020)	(146,260)	(32,240)	28.3%
Regulatory/Taxes	2	-	-	-	-	n/a
Tele/Other Utilties	9,295	3,749	11,986	11,820	(166)	-1.4%
Transportation	19,705	9,093	19,453	17,549	(1,904)	-9.8%
Grand Total	2,089,571	1,045,309	2,361,156	2,546,902	185,746	7.9%
Programs:						
57 - MEANS COORDINATION	\$519,660	\$307,727	\$463,382	\$521,318	\$57,936	12.5%
59 - LAND MATTERS	62,054	24,889	38,678	62,177	23,499	60.8%
79 - AMAP SERVICES	331,977	194,601	610,458	662,018	51,560	8.4%
81 - INSTRUMENTATION & CON	3,326	451	50,963	64,466	13,503	26.5%
94 - TECHNOLOGY TEAMS	261,579	141,515	416,093	440,766	24,673	5.9%
98 - TRAINING	70,076	63,341	104,336	115,418	11,082	10.6%
99 - ADMINISTRATION	840,898	312,786	677,246	680,739	3,493	0.5%
Grand Total	2,089,571	1,045,309	2,361,156	2,546,902	185,746	7.9%
Funds:						
10 - GENERAL	\$1,348,573	\$693,099	\$1,074,569	\$1,295,863	\$221,294	20.6%
20 - WATER GENERAL	631,054	298,981	960,663	842,593	(118,070)	-12.3%
50 - WASTEWATER GENERAL	16,425	4,065	325,924	408,446	82,522	25.3%
51 - WW CAPE ELIZABETH	16,335	667	-	-	-	n/a
53 - WW CUMBERLAND	3	1,582	-	-	-	n/a
55 - WW WINDHAM LF	1,149	530	-	-	-	n/a
57 - WW PORTLAND	59,061	47,099	-	-	-	n/a
62 - WW WESTBROOK	714	291	-	-	-	n/a
64 - WW JOINT WESTBROOK	15,177	420	-	-	-	n/a
66 - WW PEAKS ISLAND	1,109	162	-	-	-	n/a
67 - WW NORTH WINDHAM	3	196	-	-	-	n/a
Grand Total	2,089,574	1,045,471	2,361,156	2,546,902	185,746	7.9%
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Headcount:						
Full-Time	18	19	19	20	2	10.5%
Part-Time	0	0	0	2	2	n/a
Total	18	19	19	22	3	15.8%

# **Engineering Services - SCADA Services Group (E7)**

Column1	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$261,769	\$144,798	\$286,359	\$298,717	\$12,358	4.3%
Employee Benefits	115,547	69,693	138,617	146,285	7,668	5.5%
Contracted Services	27,479	5,621	18,000	18,600	600	3.3%
Materials & Supplies	67,014	4,183	23,225	21,425	(1,800)	-7.8%
Other Expense	880	5,517	10,950	10,750	(200)	-1.8%
Tele/Other Utilties	9,703	2,068	5,655	6,375	720	12.7%
Transportation	26,797	13,149	25,183	25,662	479	1.9%
Grand Total	509,188	245,030	507,989	527,814	19,825	3.9%
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Programs: 81 - INSTRUMENTATION & CON	\$283,148	\$150,767	\$293,779	\$311,936	\$18,157	6.2%
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94 - TECHNOLOGY TEAMS	46,109	30,407	61,727	60,093	(1,634)	-2.6%
96 - PANDEMIC COSTS	-	-	-	-	-	n/a
98 - TRAINING	18,028	8,906	26,209	26,974	765	2.9%
99 - ADMINISTRATION	161,903	54,951	126,274	128,811	2,537	2.0%
Grand Total	509,188	245,030	507,989	527,814	19,825	3.9%
Funds:						
10 - GENERAL	\$226,043	\$94,425	\$214,210	\$215,878	\$1,668	0.8%
20 - WATER GENERAL	70,781	61,610	103,771	108,229	4,458	4.3%
50 - WASTEWATER GENERAL	33,959	5,155	111,121	120,723	9,602	8.6%
51 - WW CAPE ELIZABETH	23,839	10,933	450	450	-	0.0%
53 - WW CUMBERLAND	5.679	3,437	900	900	-	0.0%
55 - WW WINDHAM LF	3	208	200	200	-	0.0%
57 - WW PORTLAND	105,944	49,825	75,387	79,234	3,847	5.1%
61 - WW GORHAM	8,754	3,795	450	450	-	0.0%
62 - WW WESTBROOK	15,169	10,170	450	450	-	0.0%
64 - WW JOINT WESTBROOK	13,607	3,759	500	500	-	0.0%
65 - WW JOINT LF	1,772	429	-	-	-	n/a
66 - WW PEAKS ISLAND	3,674	3,228	550	800	250	45.5%
Grand Total	509,191	245,192	507,989	527,814	19,825	3.9%
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 - Purpose Statement

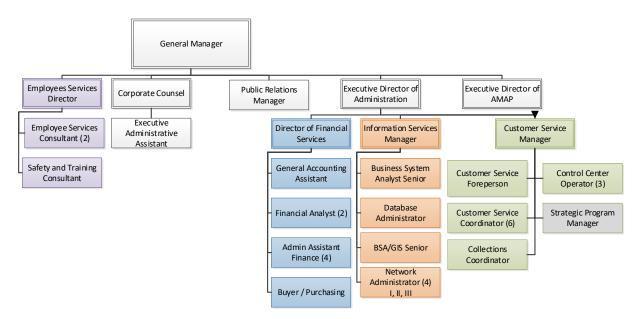
To provide support services to internal and external customers

### **Core Services**

Administrative Services provides support services to internal and external customers by offering the following services:

- External customer call center and billing services (Customer Services Group- F1; green in the organization chart).
- Computer systems and related technology support and maintenance services (Information Services Group G1; orange in the organization chart).
- Financial transaction processing, accounting, and information services (Financial Services Group H1; blue in the organization chart).
- Employee development, services, benefits and management services (Employee Services Group – I1; purple in the organization chart).

PWD has a six-person group (Executive Group – J1; white in the organization chart) that directs, oversees and provides administrative support for PWD.



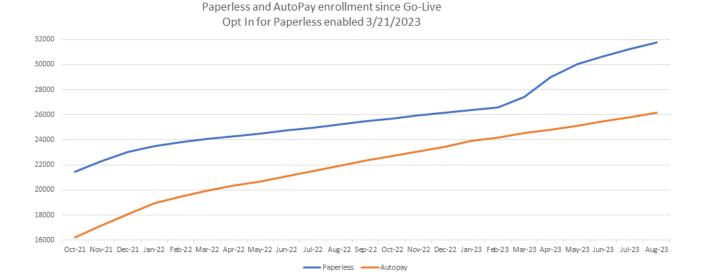
The Control Center reduced its business hours to 6:00 a.m. to 4:30 p.m. in 2023, resulting in the need for one less Control Center Operator. After hours calls, including emergency calls, are now directed to the Sebago Lake Water Treatment Facility. Financial Services is processing bill payments in-house resulting in one additional Administrative Assistant position. The Strategic Program Manager reports to the Executive Director of Administration (grey box) again after temporarily being assigned to report directly to the General Manager to support the Cayenta Customer Information System/Billing project. The position replaces the Customer Service Program Manager position. The costs associated with the positions were included in the Customer Service area costs.

## Accomplishments and 2024 Projects and Initiatives

### **Customer Services**

#### **2023 Accomplishments:**

- Customer Services enhanced the collections process to have more contact with customers who are struggling with overdue balances. This occurred through the following activities:
  - Outgoing calls to all delinquent customers prior to premise visits
  - Proactively contacting all delinquent customers to advise them of the Maine Water Assistance Program; the program provided over \$250,000 of financial assistance to customers.
  - Initiating a second proactive correspondence to all Lifeline customers encouraging them to apply for the Maine Water Assistance Program funds; if they were approved for lifeline services, they are eligible for assistance even if they did not have overdue balances
- Continued training on the new systems, Cayenta and Lucity EAM, within the department as well as participated in meetings with departments outside of Customer Services regarding process and flow of information
  - Included feedback from end users on process flow to enhance ease and functionality of the system
  - Identified areas where error trapping is needed to ensure consistent, accurate handling of data accounts
- Increased cross training with external departments to broaden knowledge
- Reduced meter reading times in multiple cycles
- Continued focus on meeting service level and rate change objectives
- Participated in New England Water Works' Customer Service Committee efforts to develop customer service-related training
- Received an overall customer satisfaction rating of 96% on the 2023 Customer Satisfaction Survey



### **Customer Service (continued)**

#### **2024 Projects and Initiatives:**

#### Goal 1 – Public Health and Safety

Protect public health and safety by providing services that meet or exceed federal, state and local health, and safety standards.

Department Goal: Continue support and involvement with Lead and Copper Revised Rule (LCRR)

- Assisted with development and delivery of lead and LCRR information to PWD's customers
- Assisted with scheduling and coordination for lead review in unknown service material locations

#### Goal 3 – Reliable & Sustainable Service

Provide services in a manner that is reliable and sustainable, so customers can depend on them.

Department Goals: Improve customer outreach and notification efforts by using preferred methods of contact. Support and assist with the meter and meter reading system project. Implement refreshed branding on Customer Services materials. Support and assist with the PWD website upgrades.

#### Goal 4 – High Value

Provide high value services, which requires engaging and understanding customer needs and priorities; balancing competing goals with the cost of services with customers' ability to pay.

Department Goal: Provide a thorough review of the current metering and meter reading process

- Improve efficiency in meter reading routing
- Create predetermined read plans by cycle and day of cycle

Department Goal: Explore the possibility of providing summary billing for Commercial accounts

#### Goal 5 – High-Performance and Supportive Work Environment

Maintain a safe work atmosphere that values diversity and inclusiveness, collaboration, engagement, and respect, while embracing continuous improvement and efficiency.

Department Goals: Upgrade to a newer version of Cayenta at the appropriate time and explore testing options for future upgrades.

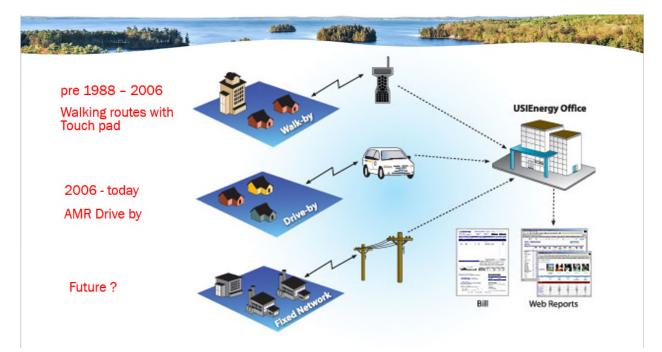
#### **Customer Service Monthly Key Metrics**

<u>Metric</u>	GOAL
Response Time	82% of calls answered within 1 minute
Average Handled Time	4 minutes or less
Read Days	75% of reads captured between 28-33 days
MPUC Disputes	
Surveys	average rating of 1 (highest score available)

### **Customer Service (continued)**

#### **2024 Projects and Initiatives:**

In 2023, Customer Service, Information Services and Water Services began the process of reviewing the meters and the meter reading system to determine a long-term strategy to replace the systems. Currently, the system is an automatic meter reading (AMR) drive by system. Will explore the option of adding an advanced meter infrastructure. The project is included in the five-year capital plan with an estimated cost of \$15 million, but this is an old estimate that needs to be updated.



### **Information Services**

#### **2023 Accomplishments**

#### System Security

- Cybersecurity training for end users
- Cybersecurity standards development
- Implementation of two-factor authentication
- 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
- Expansion of Wi-Fi capabilities at East End Treatment Plant
- Deployment of iPads for mobile work management
- Update disaster recovery documentation
- Deployment of a new user provisioning software
- Upgrade WAN Backbone

#### **Process Improvements:**

- Rollout of Microsoft Teams to increase collaboration across the organization (chat, video chat, online meetings, document collaboration)
- Develop a written procedure on internal incident response and incident review (hot wash)
- Allocate additional time for staff development and training
- Laptop rollout to all end users
- Establish Service Level Agreements (SLA's)
- Backup plan documentation
- Updated 3-year IT Plan
- Created Information Services Service Catalog
- EAM support and build out

#### **Key Statistics:**

Device Maintained	699		
Physical Servers	25	Phone Switches	12
Virtual Servers	112	Desk Phones	180
Laptops	195	Smart Phones	16
PC's	10	Software Packages	70
Firewall	12	iPads	72
Switches	90	Printers/Scanner	20
Routers	8	Copiers	9

## **Information Services (continued)**

2024 Projects and Initiatives

#### Goal 3 – Reliable & Sustainable Service

Provide services in a manner that is reliable and sustainable, so customers can depend on them.

**Departmental Goal:** Improve the reliability and security of the Administrative Network **Objectives:** Maintain and improve PWD's information system security by:

- Conducting an annual cybersecurity audit
- Providing cybersecurity training for end users
- Enhancing cybersecurity posture with the continued implementation of modern authentication
- Upgrading core data network new additional firewalls
- Data historian and client upgrade

• Spec, sourcing, acquiring and configuring servers, firewalls and switchgear for an ICS network

**Objective:** Use lifecycle 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 PWD's operation during a crisis by:

- Updating the backup plan and disaster recovery documentation
- Work with departments across the company to review "what if" scenarios related to a cyber incident payroll down, unable to bill customers, etc.

Objective: Increase efficiencies of work processes across the organization

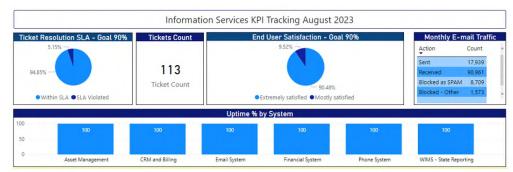
- Rollout PowerBI for advance metric reporting and data analysis
- Migration to a hybrid on-site/cloud-based email delivery system
- Reduce paper-based processes and migrate to digital where possible

#### Goal 5 – High-Performance and Supportive Work Environment

Maintain a safe work atmosphere that values diversity and inclusiveness, collaboration, engagement, and respect, while embracing continuous improvement and efficiency.

**Departmental Goal/Objectives:** Provide and maintain the technology that enhances productive work including:

- Continued iPad rollout with Mobile Device Management
- Support and build out Asset Management System and CRM System



### **Financial Services**

#### **2023 Accomplishments**

- 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 PWD.

#### **2024 Projects and Initiatives**

#### Goal 1 – Public Health and Safety

Protect public health and safety by providing services that meet or exceed federal, state and local health, and safety standards.

**Departmental Goal:** Support the administration of the Regional Conservation Partnership Program (RCPP) and the 319 Grant(s) relating to Watershed Protection. In addition, working with the multiple sources of Federal funding with regard to the North Windham Wastewater Treatment project.

**Objective**: Reviewing and submitting grant reimbursement requests as well as review compliance with the grant requirements

#### Goal 4 – High Value

Provide high value services, which requires engaging and understanding customer needs and priorities; balancing competing goals with the cost of services with customers' ability to pay.

**Departmental Goal:** Support the financial processes with PWD to ensure the appropriate and efficient use of resources as the accuracy of financial reporting and customer account activity.

#### **Objectives:**

- Refine 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 Cayenta.
- Work with Power BI to create a Financial Services Dashboard.
- Look for opportunities to receive consolidated electronic utility bill payments from large local businesses or governments with multiple utility accounts.
- Apply 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.
- Reviewing the job responsibilities of the Financial Analysts to determine the most effective split of responsibilities to ensure the best support to the organization particularly with the large ongoing capital projects.

## **2024 Projects and Initiatives**

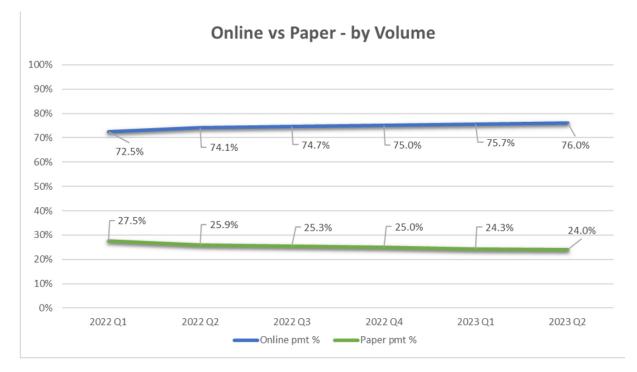
### **Financial Services (continued)**

- Review the current pronouncements from the Government Accounting Standards Board (GASB) to ensure full compliance with any new Statements when completing the 2023 Annual Comprehensive Financial Report.
- Complete a plan for the long-term future of the current financial software.



#### **On-line Payment and Paperless**

Customer continue to migrate to receiving their monthly utility bill and making their payments electronically. Electronic billing saves on mailing and printing costs (reflected in the Customer Service's budget) which is partially offset by higher electronic payments transaction fees (reflected in the Financial Service's budget).



### **Employee Services**

### 2023 Accomplishments

### Recruitment and Retention:

One of the biggest challenges for the Employees Services Department and PWD has been a significant tightening of the labor market. Prior to 2021, the number of positions that PWD posted annually was 35. In 2021, this increased to 50 (up 43%), and in 2022 it was 66 (another 32% increase). From January 1, 2023, through September 1, 2023, PWD posted 35 positions. Employees Services estimate that PWD will post 50 positions by year end. While not as high as in 2022, it is still an increase of 43% over the past average number of annual job postings.

The vacancies that are created and then filled by new employees generate their own set of challenges, from advertising, onboarding, and training. PWD will need to focus on the hiring process, broadening it to include a proactive approach to diversity, equity, and inclusion. PWD will need to continue to create career ladders for stability and retention, and stay current with compensation and other strategies as they relate to successfully onboarding and training new employees, including outreach to students to create an awareness of PWD as a future employer.

An area that PWD has always done well is with internal promotions. As of September 1, 2023, PWD has promoted 25 employees to new positions.

#### **Compensation:**

As part of PWD's compensation system for non-union employees, Employees Services is working on a system to adjust an employee's salary in relation to the calculated median for their position based on accomplishments. This will help to incentivize performance and provide a path for employees to advance.

Career Ladders, where applicable, create upward mobility and retention for union positions. PWD has successfully introduced three new career ladders for union positions in 2023: Water Systems Operator position (The position has assisted in stabilizing the workforce, which has witnessed high turnover for the past two years), Facilities Technician, and the Fleet Technician. These career ladders are in addition to the ones already created for the SCADA Technicians, and for the Environmental Scientist positions.

#### **Retirement Planning:**

The Principal has provided on-site individual counseling sessions for PWD employees. PWD has representatives from the Social Security Administration provide group educational sessions on understanding Social Security and Medicare. PWD continues to discuss adjusting the COLA for pension recipients and has explored the Maine Public Employee Retirement System (Maine PERS) as a defined benefit option. Employees Services is preparing for the implementation of the requirements of Retirement 2.0.

#### Student Outreach Program:

With the pandemic declared over by the government in May, PWD has resumed student outreach efforts. Employee representatives attended the Portland Arts and Technology High School (PATHS) job fair. PATHS is greater Portland's Career and Technical Education (CTE) high school. CTE schools offer hands on, technical, and career focused education. Students attend PATHS from 14 area high schools.

### **Employee Services**

#### **2023 Accomplishments**

#### Student Outreach Program (continued):

PWD sent representatives to the Region 10 Technical High School job fair, and the South Portland High School fair, which is a multi-school job fair with over 500 students in attendance. Shannon Johnson from Employee Services has served an important role on the Steering Committee for the New England Water Works Association (NEWWA) Waterworks Committee, which continues its efforts to work in areas of student outreach for the New England area. PWD sent people to the Water Treatment Technology Information night at Southern Maine Community College (SMMC). This fall, PWD people will be attending Saint Joseph's College Mercy week for student outreach.

#### **Benefit Plans:**

PWD has receive a flat renewal for its health, life and disability plans for 2024. In accordance with the one year remaining on the Union contract, PWD will continue to offer the multiple health insurance plans as agreed in the contract. There is 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 \$2,500 plan. In addition to the wider plan offerings, the employee contribution formula has been changed as agreed upon in the new union contract.

#### Safety:

Some of the most significant changes for safety in 2023 were the acquisition of quality, inclement weather equipment for field workers, including heavy duty rain gear that is wind and waterproof; waterproof gloves and new safety glasses; high visibility, UV protective T-shirts that have a Class 3 ANSI rating and are moisture wicking and have UV protection; and sun hats that are worn over hard hats and protect skin from harmful sun exposure.

The Maine Municipal Association (MMA) Online University has been enhanced for usability, including the inclusion of pre-approved safety courses for water and wastewater licenses. SDS labeling information has been updated and made available with a QR code. Eric Sawyer from Employees Services Department created a new process for fall protection inspection tags, which now includes the inspection date on a colored band. Safety assets have been updated in EAM. This allows for setting up recurring work orders for fall protection equipment and a process to indicate if equipment has received the required annual inspection. Eric Sawyer has also become an NSC certified instructor of First Aid, CPR and AED so that this training may now be offered in-house.

#### Union:

PWD will begin negotiations with the Union in the summer of 2023 for the next three year contract cycle. Union stewards met with PWD representatives through July 2023, at which time the Union Business Agent requested that the meetings be discontinued. During the meetings with the stewards, the group discussed career ladders, staffing needs, how compensation studies work, Earned Paid Leave banks versus administering separate vacation and sick time banks, different types of retirement plans, the challenges of job vacancies and communication.

### **Employee Services**

#### **2023 Accomplishments**

#### Worker's Compensation:

PWD's mod rate was 0.86 in 2023, but it will drop to .68 effective January 1, 2024. This is the result of lower claims and an extensive safety program. PWD's mod rate dropped to very low levels for five years in a row and 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, PWD's 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 there was a serious injury that resulted in significant lost time and impacted the mod rate, which rose to 1.13 in 2021. In 2022, the mod rate dropped back down to .86 and stayed at .86 in 2023, but will again drop to .68 in 2024. PWD 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.

PWD is revising the safety incentive for employees. It will now be based on the mod rate. The revised program will be implemented in January 2024.



#### 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

#### **2024 Projects and Initiatives**

- For safety training in 2024, PWD anticipates offering all of the Bureau of Labor Standards required safety training, and in addition will offer hands-on fire extinguisher, Confined Space, CPR, AED, First Aid and Safe Driving training.
- As a department, PWD's focus for 2024 will be on the hiring process to ensure equity, diversity and inclusion in all hiring decisions
- PWD will explore possible Human Resource Information Systems (HRIS) to increase efficiency and to be less reliant on paper processes.
- Career Ladders will continue to be explored and implemented.
- PWD will increase student outreach efforts, explore the possibility of internships, and reach out to other under-represented groups in Maine to diversify PWD's applicant pools.

### **Executive Group**

#### **2023 Accomplishments**

#### **Corporate Counsel**

- Monitored legislation at the state and federal levels, and prepared testimony for presentation to state legislators on several 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 major procurement projects including the North Windham wastewater project, North Windham Water Tank Storage Project and East End clarifier project.
- Worked on various real estate transactions related to development, and specifically assisted in resolving easement and other legal issues related to 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 PWD's insurer, determining whether PWD is liable for the claim and reviewing denial letters.

#### **Public Relations**

- Initiated a refreshed logo and branding initiative. PWD modernize the PWD heritage logo and gave it a fresh look that is consistent with tradition, but able to be used more easily with electronic and digital communications. After receiving feedback from all levels of the organization, the refreshed logo was finalized and a new brand style guide was created to provide direction and guidance to ensure that the PWD branding is used consistently across all communications. The intent is to transition in a cost-effective way to the refreshed logo and brand, beginning with PWD's digital, online, and electronic presence and a public announcement in 2023.
- Produced publications, engaged in communications activities, and administered community relations programs: Annual Water Quality Report, Comprehensive Financial Report, E-News, bill stuffers, water bottle filling station grants and scholarship programs, etc.
- Continued to oversee 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.

#### **Public Relations**

- Conducted a Customer Perception Survey and disseminated the information to internal and external audiences. The purpose of the survey is to measure how PWD does to meet the needs of customers, measure the level of satisfaction among customers, and to gain more insight and understanding into customer perceptions and values and interest in various services.
- The Public Relations and Communications Manager, Michelle Clements, was appointed to a three-year term on the American Water Works Association's (AWWA) Public Affairs Council (PAC). The PAC is one of six AWWA councils that support the Association's Strategic Plan. The Councils include volunteers from the water sector who work with AWWA staff in the fields of public information, science and technology, education, government affairs and other key areas of involvement. The PAC's work largely supports AWWA's core principal of "strengthening public trust."
- Explored various platform options and upgrades to the www.pwd.org website. Selected a platform and initiated a website upgrade project.
- Published a national, multi-page article, From Crisis to Collaboration Partnership, about how PWD is helping with disease surveillance through wastewater testing in the Water Environment Federation's (PWDF) Water Environment and Technology Magazine (PWD&T).

#### **2024 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**

- Continue to serve on the AWWA's Public Affairs Council and attend and participate in the meetings and council work
- Complete the upgrade to the www.pwd.org web site
- Continue to implement the refreshed logo and steward in the new branding across platforms

## **Financial Overview**

The Administrative Services 2024 budget is \$7,368,187, which is \$179,420 or 2.5% higher than last year. The number of employees in the area is 43, one less than last year.

Customer Service (F1) Group (\$1,889,410 request; \$78,343 or 4.3% higher)

- Salaries/Wages and Benefits increased by \$85,463, or 6.6%. Staffing levela remained the same. A higher paid foreperson position was created, partially offset by eliminating a customer service coordinator. The Salaries/Wages pay increase is based on an assumed 4% increase along with a 4% increase in benefit costs.
- All Other Expenses decreases by \$7,120 or 1.3%. Significant variances include a higher assessment for DigSafe services (\$14,400 or 32% higher) and training (\$20,000 higher) offset by lower utility bill printing and postage (\$33,000 or 11% lower).

Information Service (G1) Group (\$1,552,677 request; \$116,477 or 8.1% higher)

- Salaries/Wages and Benefits increased by \$39,267 or 3.7%. Staffing level remained the same. The Salaries/Wages pay increase is based on an assumed 4% increase along with a 4% increase in benefit costs.
- Contracted Services increased by \$95,210 or 28.8%. Additional costs for software to protect the system (virus protection \$32,000 and two-factor authentication \$13,000); new Microsoft Teams software (\$15,000) and higher Cayenta software costs (\$16,000).

Financial Services (H1) Group (\$1,161,556 request; \$56,827 or 5.1% higher)

- Salaries/Wages and Benefits increased by \$35,437 or 4.1%. Staffing levels remained the same. Salaries/Wages pay increase is based on an assumed 4% increase along with a 4% increase in benefit costs.
- Contracted Services increased by \$21,585 or 9.7%, reflects higher costs for audit services (\$15,000 or 39% higher) and payment processing (\$5,900 or 4.7%). The audit service contract expired in 2022 and PWD will be seeking bids. Payment processing reflects the continued migration to electronic payments.

Employee Service (I1) Group (\$697,884 request; \$31,325 or 4.7% higher)

- Salaries/Wages and Benefits increased by \$24,382 or 4.5%. Staffing level remained the same. The Salaries/Wages pay increase is based on an assumed 4% increase along with a 4% increase in benefit costs.
- Other Expenses increased by \$6,943 or 31.6% due to higher safety program costs.
- Executive (J1) Group (\$2,066,660 request; \$103,522 or 4.8% lower)
  - Salaries/Wages and Benefits decreased by \$91,580 or 5.6%. One work force management position was eliminated (Customer Service Program Manager position). It is assumed one position on average in the Administration Area will be vacant due to staff turnover.
  - All Other Expenses decreased by \$11,972 or 2.3%.

# Administrative Services - Total

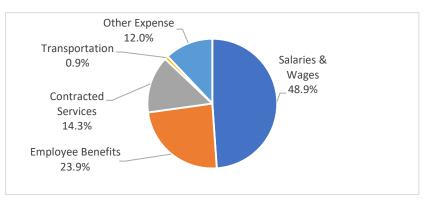
	2022	Jan-Jun	2023	2024	Budget	Budget
	Actual	2023	Budget	Budget	Diff \$	Diff %
Sub-Group:						
F1 - Customer Service	\$1,639,467	\$924,958	\$1,811,067	\$1,889,410	\$78,343	4.3%
G1 - Information Services	1,466,869	739,763	1,436,200	1,552,677	116,477	8.1%
H1 - Financial Services	981,501	587,037	1,104,729	1,161,556	56,827	5.1%
11 - Employee Services	670,463	309,103	666,559	697,884	31,325	4.7%
J1 - Bot & Senior Management	1,914,286	863,391	2,170,212	2,066,660	(103,552)	-4.8%
Grand Total	6,672,586	3,424,253	7,188,767	7,368,187	179,420	2.5%
Expense Type:						
Salaries & Wages	\$3,340,699	\$1,665,106	\$3,627,363	\$3,673,144	\$45,781	1.3%
Employee Benefits	1,495,108	810,694	1,763,465	1,810,653	47,188	2.7%
Contracted Services	1,072,733	611,005	1,047,800	1,145,424	97,624	9.3%
Insurance	134,429	76,241	141,488	153,916	12,428	8.8%
Materials & Supplies	115,448	37,160	73,959	50,400	(23,559)	-31.9%
Other Expense	455,974	199,444	489,265	491,553	2,288	0.5%
Tele/Other Utilties	37,055	14,796	24,254	22,720	(1,534)	-6.3%
Transportation	21,141	9,807	21,173	20,377	(796)	-3.8%
Grand Total	6,672,586	3,424,253	7,188,767	7,368,187	179,420	2.5%
Headcount:						
Full Time	44	44	44	43	-1	-2.3%
Part Time	0	0	0	0	0	n/a
Total	44	44	44	43	(1)	-2.3%

	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$2,504,524	\$1,238,085	\$2,729,376	\$2,797,432	\$68,056	2.5%
660112 - WAGES/OVERTIME NON-UNION	φ <u>2</u> ,30 <del>4</del> ,324 91	182	1,174	1,224	φ00,050 50	4.3%
660121 - WAGES/REGULAR UNION	782,360	409,364	847,685	899,205	51,520	6.1%
660122 - WAGES/NEGOLAR UNION	10,600	4,949	21,811	22,313	502	2.3%
660123 - WAGES/DOUBLETIME UNION	10,000	4,949	317	330	13	4.1%
660125 - OPEN POSITIONS	15	-	-	(74,360)	(74,360)	n/a
660136 - CONTRACTED - TEMP	41,663	1,440	-	-	(74,300)	n/a
66014 - VACATION ACCRUAL	(11,380)	-	-	-	-	n/a
660141 - TRUSTEES COMPENSATION					-	0.0%
	21,100	11,000	27,000	27,000	-	
66015 - SICKTIME ACCRUAL	(8,274)	-	-	-	-	n/a
Salaries & Wages Total Employee Benefits	3,340,699	1,665,106	3,627,363	3,673,144	45,781	1.3%
660401 - FICA - EMPLOYERS' SHARE	248,057	128,238	277,491	280,995	3,504	1.3%
660405 - SAFETY/WHY PROGRAM ITEMS		1,027	•		3,504 810	
	2,905		6,035	6,845		13.4%
660411 - MEALS ALLOWANCE	135	-	100	100	-	0.0%
660418 - STIPENDS	400	500	200	200	-	0.0%
660419 - EMPLOY EE BENEFTS-MISC OTH	27,080	4,177	10,600	10,475	(125)	-1.2%
660491 - FRINGE BENEFITS-REG/SAL	1,216,531	676,752	1,469,039	1,512,038	42,999	2.9%
Employee Benefits Total Contracted Services	1,495,108	810,694	1,763,465	1,810,653	47,188	2.7%
662063 - COPIER MAINTENANCE/TONER	14,814	9,633	15,000	15,000	-	0.0%
6632 - ACCOUNTING SERVICES	38,500	32,000	39,000	54,000	15,000	38.5%
66331 - LEGAL - LABOR RELATIONS	124,554	14,620	68,000	68,000	13,000	0.0%
66333 - BOND COUNSEL	17,734	-	7,500	7,500	-	0.0%
66339 - LEGAL - OTHER						
663545 - RADIO SERVICING AND EQUIP	1,314 1,831	25,400 1,098	34,500 3,000	24,500 3,000	(10,000)	-29.0% 0.0%
663561 - COMPUTER LICENSES					-	
663562 - COMPUTER MAINTENANCE	7,952	11,262	64,000	-	(64,000)	39.1%
663563 - COMPUTER CONSULTING/OTHER	544,358	286,505	387,975	539,510	151,535	
6635801 - EMPLOYEE HEALTH SERVICES	15,678	8,811	30,000	30,000 10,000	-	0.0%
663581 - UTILITY BILLING PRINTING	9,772	4,862	10,000			0.0%
663582 - PAYMENT PROCESSING	70,236	64,887	103,600	86,000	(17,600)	-17.0%
663583 - RECEIVABLE COLLECTIONS	125,601	61,745	125,700	131,550	5,850	4.7%
663584 - BANK SERVICE CHARGES	4,978	877	6,500	3,000	(3,500) (400)	-53.8% -2.0%
	19,563	10,000	20,400	20,000	、	
663587 - COURIER SERVICES	4,510	1,927	2,760	2,760	-	0.0%
	-		1,500	1,500	-	0.0%
663592 - RECRUITING SERVICES	2,865	923	6,000	6,000	-	0.0%
663594 - DIGSAFE	36,693	32,361	45,000	59,400	14,400	32.0%
663595 - OUTPLACEMENT SERVICES	-	-	500	500	-	0.0%
663598 - HR CONSULTANT SERVICES	7,451	3,874	15,000	15,000	-	0.0%
	446	348	400	500	100	25.0%
663599 - MISC OTHER SERVICES	23,883	39,872	61,465	67,704	6,239	10.2%
Contracted Services Total	1,072,733	611,005	1,047,800	1,145,424	97,624	9.3%
Insurance 6657 - GEN LIABILITY INSURANCE	77 167	41,181	84,850	87 202	2,453	2.9%
66592 - DAMAGES & CLAIMS-GOODWILL	77,157			87,303	•	
	9,540	7,113	6,000	6,000	- 74	0.0%
	2,701	1,438	2,974	3,048	74	2.5%
66594 - PROFESSION/CRIME BONDING	45,031	26,511	47,664	57,565	9,901	20.8%
Insurance Total	134,429	76,241	141,488	153,916	12,428	8.8%

	2022 Actual	Jan-Jun 2023	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Materials & Supplies						
6619 - ASSET PURCHASES	\$29,838	\$905	\$14,350	\$13,000	(\$1,350)	-9.4%
66203 - VENDOR PURCHASED SUPPLIES	2,825	3,819	3,310	4,250	940	28.4%
662042 - SUPPLIES INVENTORY	2,270	1,399	3,000	3,050	50	1.7%
662043 - TOOL INVENTORY	8,493	1,038	1,450	1,900	450	31.0%
66204302 - INVENTORY - PAPER	2,122	2,142	6,450	6,450	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	2,723	1,865	7,838	4,525	(3,313)	-42.3%
66205 - CONSUMABLE SUPPLIES	1,745	568	2,600	2,600	-	0.0%
66206 - COMPUTER RELATED EQUIP	65,433	25,424	34,961	14,625	(20,336)	-58.2%
Materials & Supplies Total	115,448	37,160	73,959	50,400	(23,559)	-31.9%
Other Expense						
66601 - PUBLIC RELATIONS	4,429	581	3,250	3,750	500	15.4%
66609 - OTHER ADVERTISING	6,689	3,851	5,500	9,000	3,500	63.6%
6675111 - INSTATE TRAINING/CONF	10,624	7,637	21,300	19,070	(2,230)	-10.5%
6675112 - OUT OF STATE TRAINING/CON	24,814	17,565	23,000	42,500	19,500	84.8%
667513 - DUES	47,346	7,251	55,515	48,688	(6,827)	-12.3%
667514 - PROFESSIONAL LICENSES	2,157	594	1,100	1,100	-	0.0%
667515 - PERIODICAL SUBSCRIPTIONS	4,717	2,533	5,875	5,295	(580)	-9.9%
667521 - POSTAGE - THIRD PARTY	198,088	106,413	217,100	199,100	(18,000)	-8.3%
667522 - POSTAGE - INTERNAL	16,388	8,525	16,300	16,000	(300)	-1.8%
667531 - PRINTING COSTS	36,865	10,883	29,775	31,850	2,075	7.0%
667552 - SAFETY TRAINING	55	1,487	4,000	9,900	5,900	147.5%
667553 - DOT SUBSTANCE ABUSE	2,440	1,315	3,000	3,000	-	0.0%
667555 - SAFETY EXPENSES	9,797	3,533	5,000	6,600	1,600	32.0%
667592 - FOOD SUPPLIES	4,030	989	3,300	2,950	(350)	-10.6%
667593 - VENDOR INTEREST CHARGES	(10,841)	-	(4,500)	(4,500)	-	0.0%
667598 - GEN MANAGER CONTINGENCY	55,179	-	48,000	35,000	(13,000)	-27.1%
6675981 - GEN MNG - TRUSTEES	17,455	7,144	16,750	22,750	6,000	35.8%
6675982 - GEN MNG - COMMUNITY	13,098	14,139	33,500	37,000	3,500	10.4%
667599 - OTHER MISCELLANEOUS	12,644	5,004	1,500	2,500	1,000	66.7%
Other Expense Total	455,974	199,444	489,265	491,553	2,288	0.5%
Tele/Other Utilties						
66112 - DATA LINES	28,741	10,794	16,840	17,140	300	1.8%
66113 - CELLULAR PHONES	8,315	4,002	7,414	5,580	(1,834)	-24.7%
Tele/Other Utilties Total	37,055	14,796	24,254	22,720	(1,534)	-6.3%
Transportation						
66501 - TRANSPORTATION - INTERNAL	10,283	5,420	10,951	11,047	96	0.9%
665019 - TRANS INTERNAL INACTIVE	7,793	2,562	5,387	4,880	(507)	-9.4%
66502 - TRANSPORTATION - EXTERNAL	820	307	850	850	-	0.0%
66503 - MILEAGE REIMBURSEMENT	2,245	1,518	3,985	3,600	(385)	-9.7%
Transportation Total	21,141	9,807	21,173	20,377	(796)	-3.8%
Grand Total	6,672,586	3,424,253	7,188,767	7,368,187	179,420	2.5%

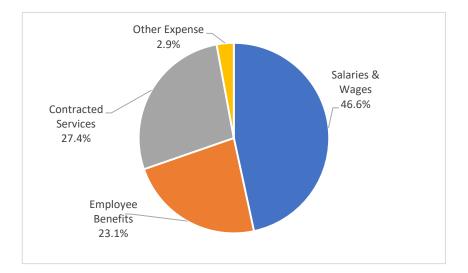
# Administrative Services: Customer Services (F1)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$829,003	\$420,521	\$870,727	\$923,658	\$52,931	6.1%
Employee Benefits	350,408	205,877	419,334	451,866	32,532	7.8%
Contracted Services	240,717	170,181	273,000	269,604	(3,396)	-1.2%
Materials & Supplies	5,683	2,740	12,038	9,225	(2,813)	-23.4%
Other Expense	190,468	116,204	215,150	216,150	1,000	0.5%
Tele/Other Utilties	4,368	1,165	3,480	1,980	(1,500)	-43.1%
Transportation	18,820	8,270	17,338	16,927	(411)	-2.4%
Grand Total	1,639,467	924,958	1,811,067	1,889,410	78,343	4.3%
Programs:	<b>A</b> AA4 <b>-</b>	<b>A-</b> 4 <b>-</b> 4 <b>-</b>		<b>*</b> ***	<b>*</b> ***	
74 - CONTROL CENTER	\$221,794	\$74,998	\$179,632	\$200,080	\$20,448	11.4%
76 - COLLECTION	47,774	22,419	62,557	60,892	(1,665)	-2.7%
77 - BILLING	338,288	172,328	413,282	380,299	(32,983)	-8.0%
80 - METER READING	88,733	45,309	69,217	71,934	2,717	3.9%
98 - TRAINING	42,252	20,901	128,498	152,206	23,708	18.5%
99 - ADMINISTRATION	900,627	589,003	957,881	1,023,999	66,118	6.9%
Grand Total	1,639,467	924,958	1,811,067	1,889,410	78,343	4.3%
_						
Funds:	<b>•</b> • <b>•</b> • • • • • • • • • • • • • • •	<b>*</b> ***	<b>*</b> · <b>-</b> · <b>* -</b> · <b>*</b>	<b>•</b> · • • • • • • • •	<b>*</b>	
10 - GENERAL	\$1,591,331	\$902,701	\$1,748,510	\$1,825,314	\$76,804	4.4%
20 - WATER GENERAL	29,454	13,270	17,368	17,436	68	0.4%
30 - WATER STANDISH	1,209	600	2,279	2,296	17	0.7%
51 - WW CAPE ELIZABETH	1,269	613	2,947	3,140	193	6.5%
53 - WW CUMBERLAND	255	465	1,229	1,369	140	11.4%
54 - WW FALMOUTH	964	531	1,732	1,772	40	2.3%
57 - WW PORTLAND	7,605	3,806	18,184	18,783	599	3.3%
59 - WW SOUTH PORTLAND	3,158	1,872	8,277	8,416	139	1.7%
61 - WW GORHAM	1,075	698	3,169	3,244	75	2.4%
62 - WW WESTBROOK	3,178	2,022	7,372	7,640	268	3.6%
Grand Total	1,639,470	925,120	1,811,067	1,889,410	78,343	4.3%
Haadaaunt						
Headcount: Full-Time	14	13	13	13	0	0.0%
Part-Time	0	0	0	0	0	0.0%
Total	14	-	13	13		0.0%
	14	13	13	13	U	0.0 /0



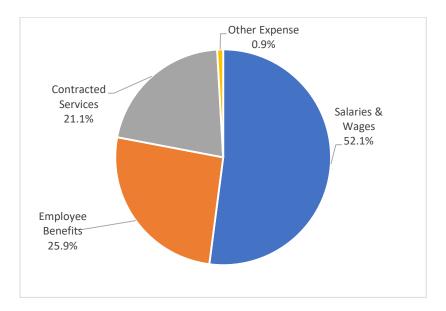
# Administrative Services: Information Services (G1)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$650,080	\$336,338	\$700,274	\$723,798	\$23,524	3.4%
Employee Benefits	301,828	164,183	342,501	358,244	15,743	4.6%
Contracted Services	403,077	196,821	330,150	425,360	95,210	28.8%
Materials & Supplies	90,327	27,331	43,450	28,450	(15,000)	-34.5%
Other Expense	10,450	9,146	10,825	8,825	(2,000)	-18.5%
Tele/Other Utilties	10,240	5,558	8,000	7,000	(1,000)	-12.5%
Transportation	867	386	1,000	1,000	-	0.0%
Grand Total	1,466,869	739,763	1,436,200	1,552,677	116,477	8.1%
Programs:						
98 - TRAINING	\$33,721	\$37,141	\$49,055	\$48,588	(\$467)	-1.0%
99 - ADM INISTRATION	1,433,149	702,622	1,387,145	1,504,089	116,944	8.4%
Grand Total	1,466,869	739,763	1,436,200	1,552,677	116,477	8.1%
Funds:						
10 - GENERAL	\$1,466,872	\$739,925	\$1,436,200	\$ 1,552,677	\$ 116,477	8.1%
Grand Total	1,466,872	739,925	1,436,200	1,552,677	116,477	8.1%
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%



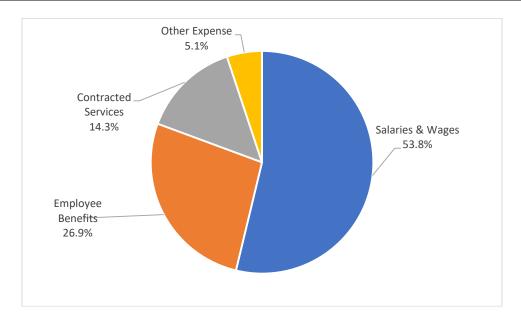
# Administrative Services: Financial Services (H1)

	2022 2023 2023 2024		2024	Budget	Budget	
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$521,249	\$289,000	\$584,562	\$604,662	\$20,100	3.4%
Employee Benefits	234,202	141,900	285,877	301,214	15,337	5.4%
Contracted Services	222,397	145,669	223,675	245,260	21,585	9.7%
Materials & Supplies	4,417	3,492	5,310	4,800	(510)	-9.6%
Other Expense	(825)	6,975	5,020	5,320	300	6.0%
Transportation	62	-	285	300	15	5.3%
Grand Total	981,501	587,037	1,104,729	1,161,556	56,827	5.1%
Programs:						
29 - WATERSHED GRANT	\$5,972	\$811	\$8,502	\$7,418	(\$1,084)	-12.7%
77 - BILLING	168,649	92,382	238,868	206,589	(32,279)	-13.5%
98 - TRAINING	18,964	8,995	35,902	37,239	1,337	3.7%
99 - ADMINISTRATION	787,917	484,849	821,457	910,310	88,853	10.8%
Grand Total	981,501	587,037	1,104,729	1,161,556	56,827	5.1%
Funds:						
10 - GENERAL	\$905,138	\$541,297	\$1,000,915	\$1,059,854	\$58,939	5.9%
20 - WATER GENERAL	76,370	46,063	103,814	101,702	(2,112)	-2.0%
Grand Total	981,504	587,199	1,104,729	1,161,556	56,827	5.1%
Headcount:						
Full-Time	8	9	9	9	0	0.0%
Part-Time	0	0	0	0	0	0
Total	8	9	9	9	0	0.0%



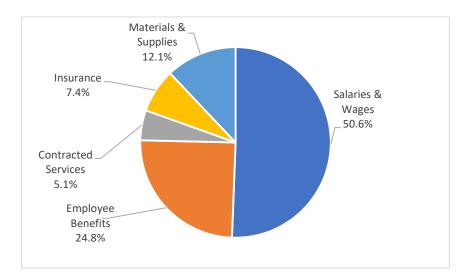
# Administrative Services: Employee Services (I1)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$340,109	\$180,099	\$360,527	\$375,253	\$14,726	4.1%
Employee Benefits	154,810	88,850	177,842	187,498	9,656	5.4%
Contracted Services	146,980	24,025	99,500	99,500	-	0.0%
Materials & Supplies	1,745	1,530	4,000	4,000	-	0.0%
Other Expense	23,750	12,379	22,000	28,943	6,943	31.6%
Tele/Other Utilties	3,017	1,573	2,340	2,340	-	0.0%
Transportation	52	647	350	350	-	0.0%
Grand Total	670,463	309,103	666,559	697,884	31,325	4.7%
Programs:						
98 - TRAINING	\$13,162	\$ 12,874	\$25,573	\$26,782	\$ 1,209	4.7%
99 - ADM INISTRATION	657,300	296,230	640,986	671,102	30,116	4.7%
Grand Total	670,463	309,103	666,559	697,884	31,325	4.7%
Funds:						
10 - GENERAL	\$670,466	\$309,265	\$666,559	\$697,884	\$31,325	4.7%
Grand Total	670,466	309,265	666,559	697,884	31,325	4.7%
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 (J1)

	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Expense Type:						
Salaries& Wages	\$1,000,259	\$439,149	\$1,111,273	\$1,045,773	(\$65,500)	-5.9%
EmployeeBenefits	453,860	209,883	537,911	511,831	(26,080)	-4.8%
ContractedServices	59,561	74,308	121,475	105,700	(15,775)	-13.0%
Insurance	134,429	76,241	141,488	153,916	12,428	8.8%
Materials & Supplies	13,276	2,067	9,161	3,925	(5,236)	-57.2%
Other Expense	232,131	54,739	236,270	232,315	(3,955)	-1.7%
Tele/Other Utilties	19,429	6,500	10,434	11,400	966	9.3%
Transportation	1,341	503	2,200	1,800	(400)	-18.2%
Grand Total	1,914,286	863,391	2,170,212	2,066,660	(103,552)	-4.8%
Programs:						
29 - WATERSHED GRANT	\$333	\$0	\$4,857	\$0	(\$4,857)	-100.0%
5 - PUBLIC RELATIONS	210,680	124,658	231,623	260,360	28,737	12.4%
98 - TRAINING	59,846	20,620	74,465	72,300	(2,165)	-2.9%
99 - ADMINISTRATION	1,643,426	718,113	1,859,267	1,734,000	(125,267)	-6.7%
Grand Total	1,914,286	863,391	2,170,212	2,066,660	(103,552)	-4.8%
Funds:						
10 - GENERAL	\$1,865,974	\$858,961	\$2,108,855	\$2,019,160	(\$89,695)	-4.3%
20 - WATER GENERAL	47,570	2,980	61,357	47,500	(13,857)	-22.6%
50 - WASTEWATER GENERAL	751	252	-	-	-	n/a
67 - WWNORTH WINDHAM	3	1,847	-	-	-	n/a
Grand Total	1,914,289	863,553	2,170,212	2,066,660	(103,552)	-4.8%
Headcount:						
Full-Time	10	10	10	9	(1)	-10.0%
Part-Time	0	0	0	0	0	0
Total	10	10	10	9	(1)	- 10 . 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.

6	2022	2023	2023	2024	Budget	Budget
	Actual	Jan-Jun	Budget	Budget	Diff \$	Diff %
Contracted Services						
663595 - OUTPLACEMENT SERVICES	\$4,593	\$7,490	\$0	\$0	\$0	n/a
Contracted Services Total	4,593	7,490	-	-	-	n/a
Other Expense						
667561-WATERSHED GRANTS/SUPPORT	-	27,460	-	-	-	n/a
6675611- GRANTS - PASS-THROUGH	25,210	-	-	-	-	n/a
6706 - AMORT OF UP ACQ ADJUSTS	17,000	8,500	17,000	17,000	-	0.0%
Other Expense Total	42,210	35,960	17,000	17,000	-	0.0%
Purchased Power						
661510 - RENEW ENERGY EXPENSE	101,427	58,620	-	460,000	460,000	n/a
661511-RENEW ENERGY FEES	5,739	-	-	8,000	8,000	n/a
Purchased Power Total	107,166	58,620	-	468,000	468,000	n/a
Regulatory/Taxes						
670821- STANDISH REAL ESTATE TAX	52,489	26,701	55,200	55,500	300	0.5%
670822 - OTHER R/E TAX(NON-STANDI)	8,478	5,465	8,820	9,260	440	5.0%
670823 - PUC ASSESSMENT	133,860	127,376	122,000	127,500	5,500	4.5%
670824 - ME DRINKING WTR PROGRAM	85,471	-	82,475	85,525	3,050	3.7%
670825 - PUC PUBLIC ADVOCATE	4,822	-	11,000	10,000	(1,000)	-9.1%
Regulatory/Taxes Total	285,120	159,542	279,495	287,785	8,290	3.0%
Grand Total	439,089	261,612	296,495	772,785	476,290	160.6%

This year PWD broke out the budget for renewable energy expenses (661510 & 661511) versus showing them as net revenue (\$300,000) in the 2023 budget. This year PWD is predicting a net revenue of \$400,000 which is made up of \$868,000 in revenue offset by the \$468,000 expenses above.

PWD 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).

PWD also pays annual assessments to the Maine 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 which has increased this year by 4.5%. The assessment from the Drinking Water Program (670824 – ME Drinking WTR Program) is based on population served which also increased this budget.

### **Lead**

New federal rules are requiring public utilities to assess and determine if service lines on the private side are made of lead, expand public education, update PWD's sampling plan and develop lead sampling plans for schools and childcare facilities. Customer Service and Information Service personnel are on a team working to comply with the new rule. Fortunately, the preliminary findings indicate PWD has a minimal amount of lead in its system.



## **Introduction**

The total salaries, wages, and benefits budget for 2024 is \$22,504,781. This is 2.4% higher than the 2023 budget.

## Total Labor & Benefits (O&M and Capital):

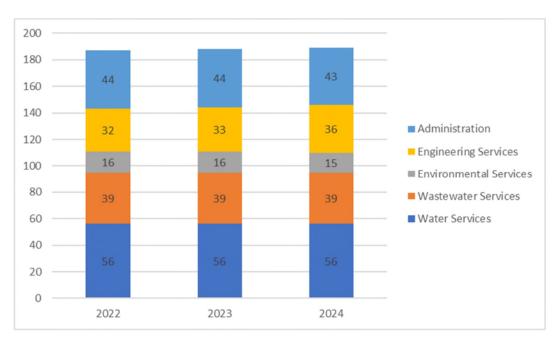
	2022 Actual	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages	\$13,276,588	\$15,118,222	\$15,388,484	\$270,262	1.8%
Employee Benefits	5,480,452	6,862,447	<u>7,116,297</u>	<u>253,850</u>	<u>3.7%</u>
	18,757,040	21,980,669	22,504,781	524,112	2.4%

Labor hours are recorded by specific water and wastewater operating funds and capital projects. Benefits are allocated based on the labor dollars to the funds. It is estimated that PWD will allocate \$831,319 in labor/benefits to capital projects in 2024; which is \$15,809 (1.9%) lower than the 2023 budget.

	2022 Actual	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Operations & Maintenance	\$18,396,631	\$21,133,541	\$21,673,462	\$539,921	2.6%
Capital	360,409	847,128	831,319	(15,809)	-1.9%
	18,757,040	21,980,669	22,504,781	524,112	2.4%

### **Total Employee Positions:**

Total authorized positions are 189 in the 2024 Budget, but authorized FTEs remain unchanged at 206. This was an increase of one (1) position from the 2023 Budget of 188. FTEs remained the same because a full-time position was reassigned to part-time and other hours were shifted.



## **Salary Costs**

The Budget for total labor costs will increase by 1.8% (\$270,262).

Labor rates for all employees are assumed to be 4.0% higher than the current 2023 pay rates.

Overall hours budgeted decreased 2.9% (12,606 hours) mostly due to the recognition of open positions caused by employee turnover and the elimination of an agency temp position.

Operating labor will increase 2.0% while capital labor will decrease 2.6%, as the percent of labor dedicated to capital decreases from 3.9% to 3.8%.

## Total Labor (O&M and Capital) by Type:

	2022	2023	2024	Budget	Budget
	Actual	Budget	Budget	Diff \$	Diff %
Regular (Hourly & Salary)	\$12,116,790	\$13,666,534	\$13,964,576	\$298,042	2.2%
Overtime	665,391	757,424	801,181	43,757	5.8%
Doubletime	104,492	111,358	108,605	-2,753	-2.5%
Standby	208,869	239,366	247,421	8,055	3.4%
Shift Differential	1,561	4,380	4,380	<u>0</u>	<u>n/a</u>
Premium Time/Standby	980,313	1,112,528	1,161,587	49,059	4.4%
Trustee Compensation	21,100	27,000	27,000	0	0.0%
District Employed Temps	60,262	228,960	235,321	6,361	2.8%
Agency Temps	98,123	83,200	<u>0</u>	-83,200	<u>n/a</u>
Temporary Employees	158,385	312,160	235,321	-76,839	-24.6%
Total Labor Cost	13,276,588	15,118,222	15,388,484	270,262	1.8%

## **Total Labor Broken Out by O&M and Capital:**

	2022 Actual	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Operating Expense	\$12,981,101	\$14,521,475	\$14,807,506	\$286,031	2.0%
Capital Expenditures	295,487	596,747	<u>580,978</u>	<u>-15,769</u>	-2.6%
	13,276,588	15,118,222	15,388,484	270,262	1.8%
Operating Expense	97.8%	96.1%	96.2%		
Capital Expenditures	2.2%	<u>3.9%</u>	3.8%		
	-100.0%	0.0%	100.0%		

## Labor Hours/Average Pay Rates

Budgeted hours are down 12,606 hours or 2.9%. This decline was due in large part to the recognition of position turnover which results in an average of five (5) full time positions being vacant at any one time (i.e., Open Positions). In addition, one budgeted full time Agency Temp position was eliminated.

## Total Labor (O&M and Capital) Hours by Type:

	2022 Actual	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	361,619	390,260	390,052	(208)	-0.1%
Open Positions	-	-	(10,400)	(10,400)	n/a
Overtime	15,553	16,755	17,025	270	1.6%
Doubletime	1,781	1,805	1,693	(112)	-6.2%
Standby	6,450	7,114	7,038	(76)	- <u>1.1</u> %
Premium Time/Standby	23,784	25,674	25,756	82	0.3%
District Employed Temps	3,772	12,720	12,720	-	0.0%
Agency Temps	4,906	2,080	-	(2,080)	n/a
Temporary Employees	8,678	14,800	12,720	(2,080)	-14.1%
	394,081	430,734	418,128	(12,606)	-2.9%

### Labor Rates by Type:

On average regular pay rates were increased 5.0%, including cost of living adjustments (COLA) and other adjustments. Changes to overtime, double-time and standby varied from the average due to shifts in personnel budgeted to cover those hours. PWD Temporary Employee rates were increased to \$18.50 per hour (2.8%).

	2022 Actual	2023 Budget	2024 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	\$33.51	\$35.02	\$36.78	\$1.76	5.0%
Overtime	42.78	45.21	47.06	1.85	4.1%
Doubletime	58.67	61.69	64.15	2.46	4.0%
<u>Standby</u>	32.38	<u>33.65</u>	<u>35.16</u>	<u>1.51</u>	4.5%
Premium Time/Standby	41.22	43.33	45.10	1.77	4.1%
District Employed Temps	15.98	18.00	18.50	0.50	2.8%
Agency Temps	20.00	40.00	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Temporary Employees	18.25	21.09	18.50	-2.59	-12.3%

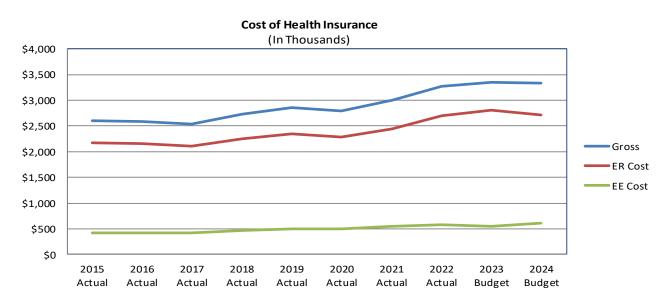
## **Employee Benefits**

In order to qualify for benefits, employees must work more than 24 hours per week (Union) and 20 hours/week (non-union). Seasonal and 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 2024, the benefits percentage (not including FICA) increased from 41.07% to 41.74% as overall benefit costs rose 3.9% and regular wages grew 2.2%.

#### **Health Insurance**

The 2024 Budget assumed no premium increase for health insurance. That assumption, paired with shifts in employee plan usage, decreased the budget (before employee contributions) by 0.7% or \$22,561. The 2024 Budget assumes that PWD's percentage of costs would be fixed based between a 82% and 92% HMO Health Reimbursement Arrangement (HRA) offering. Total employee contributions to health insurance are budgeted to be \$618,716.

The number of employees opting out of health insurance increased from nine (9) in the 2023 Budget to 13 in the 2024 Budget. Overall, the cost of the opt-out payouts increased \$19,359 (44.4%).



PWD makes health insurance coverage available to regular employees who work over 20 hours per week (24 hours per week for Union employees). The cost for part-time employees is pro-rated based on hours worked. Employees who are insured outside PWD are eligible to receive an amount equal to 40% of the premium cost for single employee coverage under the HMO plan. For the 2024 Budget that amount was \$93.07 per week.

Year	Insured	Non-Insured	Total
2023	173	9	182
<u>2024</u>	<u>167</u>	<u>13</u>	<u>180</u>
Change	-6	+4	-2

## **Employee Benefits (continued)**

#### Pension

Pension related expenses are \$2,286,400 in the 2024 Budget. PWD offers employees a defined benefit plan and a deferred compensation plan.

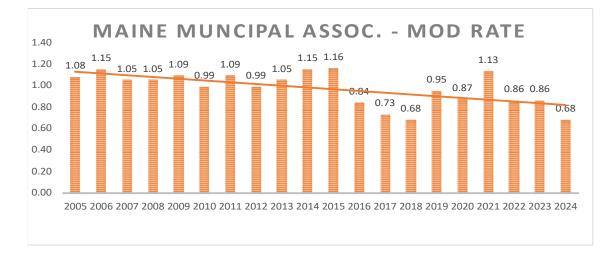
The defined benefit plan's contributions in the 2024 Budget increased 4.9% to \$1,600,000. Historically, PWD has funded the plans with at least the recommended actuarially determined amount. Because the plan is closed to new participants, the actuary has estimated that contributions to the plan will only be needed for a few more years. It was recommended to begin funding the pension at a fixed \$1.6 million a year until no new funding is needed. This will stabilize the annual budget and assure the plans will have sufficient funds.

In addition, the 457 deferred compensation plan for Union employees hired prior to 2011, and Non-Union employees hired prior to 2012, fully matches employee contributions up to \$1,500 annually. The 2024 Budget is \$79,500 for the 53 eligible employees.

New Union employees hired during or after 2011, and Non-Union employees hired during or after 2012, are enrolled in the 457 deferred compensation plan only. The plan requires employees contribute 3.0% of their base pay, which PWD matches at a rate of 150%. Since Q2 2016, PWD 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 \$550,000, an increase of \$64,200 (13.2%).

#### **Workers Compensation**

PWD participates in the Maine Municipal Association's workers' compensation program. The premium assessed is based on wages and a claim experience factor or mod. rate. PWD's mod. rate was 0.86 in 2023. It is expected to be 0.68 in 2024. The 2024 Budget is \$182,000 with a deductible cost of \$9,000 resulting in a total budget of \$191,000.



#### **Other Benefits**

Other benefits, which include dental, uniforms, unemployment, long-term disability, life insurance and a contingency for higher benefit costs total \$579,225.

# **Employee Benefits (continued)**

	2022	2023	2024	Budget	Budget
	Actual	Budget	Budget	Diff \$	Diff %
Health Insurance:					
6604041 - HEALTH INSURANCE-EMPLOYEE	\$3,266,037	\$3,348,491	\$3,325,930	(\$22,561)	-0.7%
66040419 - HEALTH INSUR - EE CONTRIB	(576,603)	(543,716)	(618,716)	(75,000)	13.8%
6604043 - MEDICAL INSURANCE PAYOUT	42,996	43,556	62,915	19,359	44.4%
6604044 - HEALTH INS - HRA DEDUCT	1,000	7,938	2,438	(5,500)	<u>-69.3%</u>
	2,733,430	2,856,269	2,772,567	(83,702)	-2.9%
Pension:					
66040611 - PEN EXP - DEFINED BENEFIT	18,081	21,900	21,900	-	0.0%
66040612 - PEN EXP - DEFER COMP 457	24,828	25,000	25,000	-	0.0%
6604062 - PENSION CONTRIBUTION	698,631	1,524,809	1,600,000	75,191	4.9%
6604063 - DEF COMP 457 MATCH - NEW	441,038	485,800	550,000	64,200	13.2%
6604064 - DEF COMP 457 MATCH - OLD	85,514	75,950	79,500	3,550	4.7%
6604065 - PENSION LEGAL EXPENSE	13,596	10,000	10,000		0.0%
	1,281,688	2,143,459	2,286,400	142,941	6.7%
Workers Compensation:					
660409 - WORKERS' COMPENSATION	157,319	170,500	182,000	11,500	6.7%
6604091 - WORKES COMP DEDUCTABLE	8,573	9,000	9,000		0.0%
	165,892	179,500	191,000	11,500	6.4%
Other Benefits:					
66025 - BENEFITS CONTINGENCY	-	150,000	260,000	110,000	73.3%
660402 - LONG-TERM DISABILITY	30,047	35,000	36,000	1,000	2.9%
660403 - LIFE INSURANCE	21,595	28,000	29,000	1,000	3.6%
660407 - EDUCATION SUBSIDY	2,124	11,000	11,000	-	0.0%
660408 - PROGRAMS ADMINISTRATION	5,142	19,000	19,000	-	0.0%
660410 - UNEMPLOYMENT COMPENSATION	2,296	20,000	20,000	-	0.0%
660413 - PWD TRAINING PROGRAM	-	5,000	5,000	-	0.0%
6604151 - FIELD UNIFORMS	51,942	45,000	55,000	10,000	22.2%
6604152 - OFFICE CLOTHING	13,029	7,200	15,000	7,800	108.3%
660416 - DENTAL COVERAGE	55,256	65,000	65,000	-	0.0%
660417 - WELLNESS PROGRAM	-	2,500	2,500	-	0.0%
660419 - EMPLOYEE BENEFTS-MISC OTH	18,618	34,900	52,225	17,325	49.6%
660422 - ACTUARY NON-PENSION	-	2,500	2,500	-	0.0%
663592 - RECRUITING SERVICES	-	7,000	7,000	-	0.0%
66595 - INDENTITY FRAUD INSURANCE	1,178	1,285	-	(1,285)	-100.0%
	201,227	433,385	579,225	145,840	33.7%
Total Employee Benefits	4,382,237	5,612,613	5,829,192	216,579	3.9%
660401 - FICA - EMPLOYERS' SHARE	954,961	1,150,169	1,177,224	27,055	2.4%
Total Costs	5,337,198	6,762,782	7,006,416	243,634	3.6%
Total Regular Labor (Benefits Basis)	12,116,790	13,666,534	13,964,576	298,042	2.2%
Benefit Rate	36.17%	41.07%	41.74%	0.67%	1.6%
Total Rate (with FICA of 7.65%)	43.82%	48.72%	49.39%	0.67%	1.4%

**Note:** The total employee benefits expense above (\$7,006,416) does not include \$109,881 in employee benefits charged directly to departments. With these costs, PWD's benefits cost is \$7,116,297.

259

#### **Authorized Headcount**

The fully-budgeted position number was decreased four positions to 184 in the 2024 Budget to account for the expected average number of vacancies. However, the 2024 Budget has five "Open Positions" in the headcount for a total of 189 with two in Water Services, one each was included in Wastewater Services, Engineering Services, and Administration.

	2022	2023	2024 Decision	
	Budget	Budget	Budget	Change
Water Services	_	_	_	-
A1 - Water Administration	5	6	6	0
A2 - Wtr Transmission/Distrib	24	23	23	0
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
Wastewater Services				
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
Environmental Services				
A5 - Water Resources	9	8	7	-1
L6 - Water/WW Laboratory	<u>7</u>	8	<u>8</u>	<u>0</u>
	16	16	15	-1
Engineering Services				
C1 - Facilities Services	10	10	10	0
E2 - Asset Engineering	18	19	22	3
E7 - SCADA Services Group	4	4	4	<u>0</u>
	_ 32	33	- 36	3
Administration				5
F1 - Customer Service	14	13	13	0
G1 - Information Services	8	8	8	0
H1 - Financial Services	8	9	9	0
I1 - Employee Services	4	4	4	0
J1 - BOT & Senior Management	-			-
	<u>10</u>	<u>10</u>	<u>9</u>	<u>-1</u> -1
	44	44	43	-1
	187	188	189	1

## **Non-Union Positions**

The overall Non-Union headcount was unchanged at 65. The table below shows the requested Non-Union positions by pay range. The pay ranges are effective 01/01/23. The Job Class Code (JCC) is in parentheses:

	<u>23</u>	<u>24</u>	Diff		<u>23</u>	<u>24</u>	Diff
Range 1 (\$51,000 to \$71,800)							
5010 - EXECUTIVE ADMIN ASST	1	1	0	9027 - DATABASE ADMINISTRATOR	1	1	0
9508 - CAD SPECIALIST (PT)	0	1	1	9028 - REGULATORY SECURITY ADVSR	1	1	0
5028 - GENERAL ACCOUNTING ASST	<u>1</u>	<u>1</u>	<u>0</u>	9030 - PROJECT ENGINEER	4	4	0
	2	3	1	9038 - UTILITY ASSET COORD	1	1	0
Range 2 (\$60,300 to \$88,400)				9039 - UTILITY ASSET COORD WATER	1	1	0
5003 - ES CONSLT-EMPLOY,COMP,BEN	1	1	0	9042 - WW CHIEF OPERATOR - TREAT	1	1	0
5004 - ES CONSLT SAFETY/TRAINING	1	1	0	9048 - WW MAINTENANCE MANAGER	1	1	0
5005 - PURCHASING AGENT/BUYER	1	1	0	9049 - ASSET MGMT PROGRAM MGR	1	1	0
5017 - ENVIRONMENTAL EDUC COORD	1	0	-1	9050 - WW CHIEF OPERATOR SYSTEMS	<u>1</u>	<u>1</u>	<u>0</u>
5020 - FINANCIAL ANALYST	2	2	0		17	17	0
5023 - ASSOCIATE ENGINEER	4	5	1	Range 5 (\$83,200 to \$124,800)			
5032 - SCHEDULER/COORD AMAP	1	1	0	9006 - CUSTOMER SERVICE MANAGER	1	1	0
5033 - SCHEDULER/COORDINATOR OPS	1	1	0	9008 - DIRECTOR OF FINANCE SERV	1	1	0
5036 - ES CONSULTANT	1	1	0	9010 - INFORMATION SRVS MANAGER	1	1	0
5037 - ASSOCIATE ENGINEER SCADA	1	1	0	9014 - DIST SYS MANAGER - WATER	1	1	0
9503 - NETWORK ADMIN 1	<u>1</u>	<u>1</u>	<u>0</u>	9020 - ENVIRONMENTAL SRV MANAGER	1	1	0
	15	15	0	9045 - SENIOR PROJECT ENGINEER	3	2	-1
Range 3 (\$70,700 to \$103,000)				9047 - STRATEGIC PROJECT MGR ADM	1	1	0
1069 - CHIEF OF SECURITY OPER	1	1	0	9507 - SCADA MANAGER	<u>0</u>	<u>1</u>	<u>1</u>
5018 - SOURCE PROTECTION COORD	1	1	0		9	9	0
5019 - FACILITIES MANAGER	1	1	0	Range 6 (\$106,100 to \$145,600)			
5035 - IND PRETRTMNT PROGRM SUPR	1	0	-1	9007 - DIRECTOR OF EMPLOYEE SRVS	1	1	0
5038 - ENVIRONMENTAL COMPL COORD	0	1	1	9011 - DIRECTOR OF OPR SRVS	2	2	0
9023 - UTILITY SPECIALIST SUPRV	1	1	0	9031 - ENG/ASSET MGMT SRV MNGR	<u>1</u>	<u>1</u> 4	<u>0</u>
9044 - NETWORK ADMIN II	2	2	0		4	4	0
9504 - BUS SYSTEM ANALYST SENIOR	1	1	0	Range 7 (\$126,900 to \$171,600)			
9505 - BUS SYS ANALYST GIS SR	1	1	0	9004 - EXEC DIRECTOR OF ADMIN	1	1	0
9506 - COPPER/LEAD COORDINATOR	1	1	<u>0</u>	9005 - EXEC DIRECTOR OF AMAP	1	1	0
	10	10	0	9035 - CORPORATE COUNSEL	<u>1</u>	<u>1</u>	<u>0</u>
					3	3	0
Range 4 (\$77,000 to \$115,400)				Range 8 (\$160,200 to \$218,400)			
5014 - RIGHT OF WAY AGENT	1	1	0	9018 - GENERAL MANAGER	1	1	0
5011 - TRANSM DIST SUPERVISOR	1	1	0				
9025 - PUBLIC RELATIONS MANAGER	1	1	0	9600 - WORKFORCE MANAGEMENT	4	3	-1
9026 - NETWORK ADMIN III	1	1	0				
9002 - WTR SVS PLNT/SYS CHIEF OP	1	1	0		65	65	0

## **Union Positions**

For the 2024 Budget, the Union headcount was increased from 123 to 124. The rates shown are effective November 2023 to October 2024. A position that was budgeted through a temp. agency was converted to a Union position.

	<u>23</u>	<u>24</u>	Diff		23	<u>24</u>	Diff
Pay Grade E (\$24.53/\$25.81)				<u>Pay Grade J (\$32.87/\$34.60)</u>			
1083 - ADMINISTRATIVE ASST WW	1	1	0	1021 - WATER RESOURCE SPECIALIST	4	4	0
1094 - ADMIN ASST FINANCE II	<u>4</u> 5	<u>4</u> 5	<u>0</u>	1022 - ENVIRONMENTAL SCIENTIST	2	1	-1
	5	5	0	1070 - TECH MAINT PERSON SLWTF	1	1	0
<u>Pay Grade F (\$25.98/\$27.34)</u>				1073 - TECH MAINT PERS MECH/ELEC	3	3	0
1006 - WASTEWATER OPERATOR	2	1	-1	1096 - TECH MAINT PERS MECH	2	2	0
1008 - CUST SERV COORD CTRL CTR	3	3	0	1097 - SCADA TECHNICIAN II	2	2	0
1086 - FACILITY TECHNICIAN I	3	3	0	1516 - CUSTOMER SERVICE FOREPE	0	<u>1</u>	<u>1</u>
1091 - FACILITY SUPP GENERALIST	1	1	0		14	14	0
1522 - TECHNICAL ADMIN ASST	2	2	<u>0</u>	Pay Grade K (\$34.77/\$36.59)			
	11	10	-1	1053 - OPERATIONS FOREPERSON	3	4	1
<u>Pay Grade G (\$27.55/\$29.00)</u>				1090 - OPERATIONS FOREMAN, SYS	1	1	0
1023 - EQUIP OPERATOR I	5	5	0	1093 - OPS FOREMAN, WW SYSTEM	1	1	0
1028 - COLLECTIONS COORDINATOR	1	1	0	1095 - UTILITIES SPEC FOREPERSON	1	1	0
1029 - FLEET MAINTENANCE TECH	1	1	0	1528 - GARAGE FOREPERSON	1	1	0
1049 - MILLWRIGHT I	1	0	-1	1557 - DIST SYSTEM FOREPERSON	5	5	0
1059 - WW MAINTENANCE OPERATOR	11	11	0	1565 - FACILITY MAINT FOREPERSON	1	1	0
1099 - ENVIRONMENTAL SCIENTIST I	2	3	1	1573 - ENV SCIENTIST LEAD	<u>1</u>	<u>1</u>	<u>0</u> 1
1579 - FACILITIES TECHNICIAN II	0	<u>1</u>	<u>1</u>		14	15	1
	21	22	1	Pay Grade L (\$36.92/\$38.86)			
Pay Grade H (\$29.23/\$30.76)				1537 - SCADA TECH FOREPERSON	1	1	0
1005 - WATER SYSTEM OPERATOR	13	13	0	1569 - TECH MAINT FOREPERSON	<u>2</u> 3	<u>2</u> 3	<u>0</u>
1017 - CUST SERV COORDINATOR	7	6	-1		3	3	ō
1020 - ENGINEERING TECHNICIAN	1	1	0				
1564 - INV CONTROL LEADPERSON	1	1	0		123	124	1
1575 - ASSET MGMT TECHNICIAN	4	5	1				
1576 - COLLECTION SY'S MAINT OPER	1	1	<u>0</u>				
	27	27	0				
<u>Pay Grade I (\$30.95/\$32.57)</u>							
1051 - WTR TREAT PLANT SYS OPER	7	7	0				
1055 - SR WW PLANT OPERATOR	5	5	0				
1082 - WW SYSTEM MAINT/OPERATOR	3	3	0				
1085 - UTILITY SPECIALIST	<u>13</u>	<u>13</u>	<u>0</u> 0				
	28	28	0				

## **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 ACA. 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 FTEs. Temporary employees hired via outside agencies are also included below.

Water Operations	2022	2023	2024	Change 23 to 24
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	1.96	<u>2.09</u>	2.09	0.00
	2.31	2.44	2.44	0.00
Wastewater Operations				
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
Environmental Services				
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
Engineering Services				
C1 - Facility Services Administration	0.50	0.50	0.50	0.00
E2 - Planning & Design	0.92	1.92	0.92	(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	2.42	1.42	(1.00)
Administration Department				
F1 - Customer Service	0.23	0.00	0.00	0.00
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>
	<u>0.23</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	<u>6.21</u>	<u>7.12</u>	<u>6.12</u>	<u>(1.00)</u>

## **Temporary & Non-Benefit Employees (continued)**

#### **Temporary Positions Detail:**

#### District Paid (Account 660131):

<u>Org</u>	Job Class	<u>ACA Type</u>	<u>#EE</u>	<u>Hrs/Wk</u>	<u># Wks</u>	<u>Hours</u>
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	Т	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	Т	1	20	52	1,040
E2	Engineering Intern	U	4	40	12	1,920
			23			

Affordable Care Act (ACA) Types:

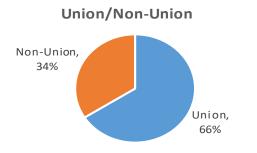
S – Seasonal (cannot work more than 26 weeks)

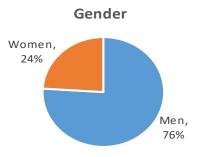
T – Temp EE (cannot exceed 30 hours in a single week)

U – Under 90 Days (maximum of 12 weeks)

V – Variable (average hours cannot exceed 30 hours/week)

## Headcount - All Regular Employees



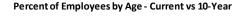


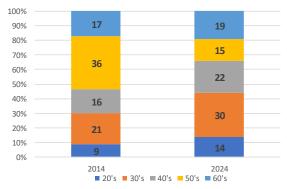
## Work Force Management

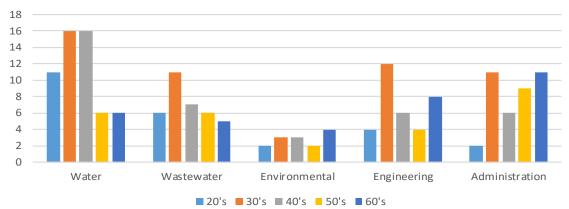
Significant changes in the workforce have happened in the past 10 years including a large number of retirees. The percent of the workforce older than 50 has declined from 53% to 34%. PWD has been proactively managing the challenges of retirements and the development of personnel and new hires.

The Wastewater Department has implemented an Apprentice Program to help educate new hires on the breadth of knowledge needed to operate 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, foreperson and supervisory roles. The Administration Department is well positioned with existing personnel.







#### Age by Department

## Average Length of Service

Water	Wastewater	Environmental	<b>Engineering</b>	Administration	Grand Total
9.8	10.1	15.0	13.0	11.4	11.2

## Work Force Management (continued)

## **Employee Development**

PWD actively promotes skill development by encouraging participation in local, regional and national organizations, and on the job training. It has a goal of an average of 80 hours of training per employee per year.

### **Managing Today**

To address work force issues, PWD requires that 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 the annual budget for out-of-state and overnight business travel. The General Manager specifically approves these travel requests.

	2023	2024	
Department	Budget	Budget	Change
Water Services	\$11,000	\$15,000	\$4,000
Wastewater Services	15,500	13,500	-2,000
Environmental Services	5,450	5,950	500
Engineering Services	14,000	15,500	1,500
Administration	23,000	42,500	<u>19,500</u>
	\$68,950	\$92,450	\$23,500

## **Training Budget**

Employee development is comprised of the annual budget for all in-state and out-of-state training. Employee development costs include the travel budget listed above.

Department	2023 Budget	2024 Budget	Change
Water Services	\$320,874	\$326,024	\$5,150
Wastewater Services	225,781	230,342	4,561
Environmental Services	74,342	70,401	-3,941
Engineering Services	184,360	207,652	23,292
Administration	<u>313,493</u>	<u>337,115</u>	23,622
	\$1,118,850	\$1,171,534	\$52,684
Operating Expense Budget	\$38,627,122	\$41,961,141	
Percentage of O&M Budget	2.9%	2.8%	

## Work Force Management (continued)

#### **Environment and Tools**

Organizational development and improvement are an on-going process. PWD continues to evaluate areas that require additional focus as business needs and demands evolve, and as laws and rules governing practices change. Many of these focus areas require cross-functional involvement including alignment to ensure understanding, practical and consistent application, and communication of changes.

PWD continues to utilize department 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.

Microsoft SharePoint will continue to evolve in 2024 as the forum for 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 a 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 the health care plan and explore ways to promote employees to live a healthy life style.

### Employee 'Inspire' Award - 2022

The Inspire Award program recognizes outstanding efforts, big and small, that are above and beyond normal job duties. Employees are encouraged to nominate co-workers for simple acts that mean a lot to their job success and big accomplishments that help PWD stay competitive and deliver excellence. The 2022 Inspire Award were awarded to the following employees:

January	James Galasyn – Environmental Scientist - Lead
February	Brianna Greene – Customer Service Coordinator Tyler Semple – Network Administrator II
March	John Scala – Technical Maintenance Foreperson Steven McLellan – Technical Maintenance Person Mech/Elec Greg Fredette – Technical Maintenance Technician Cooper Mowry – Technical Maintenance Technician Wayne Dunphe – Technical Maintenance Person - Mechanical
August	Crystal Cooper – Environmental Scientist I
November	David Jones – Senior Wastewater Operator
December	Christopher Kelley – Senior Wastewater Operator

#### **PORTLAND WATER DISTRICT PROFESSIONAL REPRESENTATION IN 2024**

Employees participate in the following associations.

American Chemical Society Member

Association of Metropolitan Water Agencies Board of Directors

American Water Works Association Public Affairs Council Strategic Management Practices Committee Benchmarking Advisory Committee

Casco Bay Estuary Partnership Management Committee

City of Portland Integrated Plan Steering Committee

Cumberland District Public Health Council Executive Committee

Health Care Coalition of Southern Maine Steering Committee

International Right-of-Way Association Member

Maine Association of Site Evaluators Licensed Site Evaluator

Maine Criminal Justice Academy Active Member

Maine GIS User Group Board of Directors

Maine Public Relations Council Treasurer

#### **Maine Water Environment Association**

Government Affairs Committee Laboratory Certification Laboratory Practice Committee Operation Challenge Pretreatment Committee

Maine Water Utilities Association Utilities Finance Officer Group

National Association of Clean Water Agencies PFAS Working Group

#### **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

#### 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

#### **Sebago Clean Waters**

Communications Committee Equity, Diversity and Inclusion Team Executive Committee Governance and Steering Committees

Southern Maine Regional Water Council Board of Directors

Water Research Foundation Board of Directors

Water Environment Federation Government Affairs Utility Management

### **Employee Recognition**

#### 5 Year Awards

Joshua Hudak Sierra Aube Eileen Bartlett MaryEllen Burke Samantha Hudak Bethany Morse Rafuse Melissa Parrott Paul Giobbi Daniel Jackson Dustin Price

#### 10 Year Awards

Joseph Gray Brian Johnson

#### 15 Year Awards Kirsten Ness

Michael Harmon

#### 20 Year Awards

Rod Beaulieu David Ivery Craig Morris Chad Davis

#### 25 Year Awards Michelle Clements Peter Cutrone

30 Year Awards Dave Herzig

35 Year Awards Mary Calder Scott Smith Thomas Whitney

45 Year Awards Gary Grimaldi















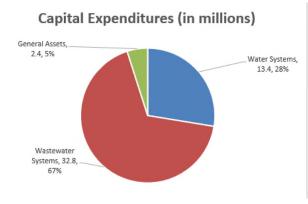


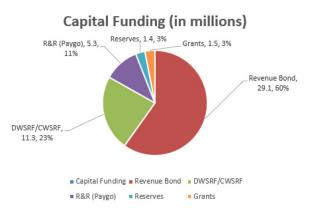


### **Introduction**

The total amount of capital expenditures is \$48.6 million. The \$13.4 million water capital budget includes \$9.4 million replacing aging water mains. The \$32.8 million wastewater capital budget includes \$10.0 million for the next phase of North Windham Treatment facility construction and \$15.8 million of upgrades at Portland's East End Treatment Facility. Additionally, the capital budget includes an investment of \$2.4 million in general assets such as vehicles, computer system, Douglass Street main office and updating the master plan.

The capital projects will be funded from a number of sources – Revenue Bonds issued by PWD or through the Maine Municipal Bond Bank, rate subsidized bonds issued through the Clean Water and Drinking Water State Revolving Loan funds (CWSRF/DWSRF), Renewal and Replacement funds which are generated through operating budget contributions, Grants from the CWSRF/DWSRF programs and Water Capital/Master Plan reserve balances.





### **Annual Fund Operating Budget**

The annual budget includes the impact of issuing of debt to finance capital projects (\$14.3 million) and contributions to the renewal and replacement funds (\$5.1 million). Most 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.

	2023 Budget	2024 Budget	\$ Change
Debt Service Principal, Interest & Related Expense	12,376,460	13,743,678	\$1,367,218
Debt Service - Allocated	550,727	539,782	(10,945)
Lease Expenses	16,711	15,780	(931)
Debt Service - Watershed Protection	33,143	32,809	(334)
Annual Debt Service	12,977,041	14,332,049	1,355,008
Renewal & Replacement - Water - General	1,250,000	1,950,000	700,000
Renewal & Replacement - Wastewater	1,499,250	1,611,250	112,000
Renewal & Replacement - Multi-Fund Assets	1,075,000	1,145,000	70,000
Renewal & Replacement - Funds	3,824,250	4,706,250	882,000
Renewal and Replacement - Transportation	400,000	400,000	
Annual Renewal and Replacement Contributions	4,224,250	5,106,250	882,000
Total Capital / Finance	17,201,291	19,438,299	2,237,008

## **Bond Financing**

#### **Overview**

PWD 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 PWD's assets have a useful life in excess of 20 years, the typical bond term is 20 years. PWD's charter authorizes PWD, 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, PWD 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 PWD'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 PWD, is an obligation of the municipality on *parity* with the municipality's general obligation debt and is entitled to the full faith and credit of the municipality.

### Water Capital Reserve Bond

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 maximum percent of water revenue that PWD can allocate to the reserve is 10%. For the past 10 years, PWD has issued a \$2 million bond each year with the debt service to be paid by raising water rates an additional 1% each year. In 2024, the maximum percent (10%) of revenue will be allocated to the fund (\$3,068,684). The amount generated will pay the annual debt service on the 10 years of debt with remaining balance spent on water mains renewal.

#### **Bond Options**

PWD issues bonds either directly to the market or through the Maine Municipal Bond Bank (MMBB). For larger projects, typically greater than \$10 million, PWD 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 2023. Moody's noted PWD's deregulation from the Maine Public Utilities Commission. Additionally, PWD'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 PWD'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 PWD has to be in default before evoking the municipalities' 'double barrel' general taxes cure. Staff will be presenting a provision to be added to PWD'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**

PWD 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 Facility scheduled for completion in 2023 causes Gorham, Westbrook and Windham ratios not to meet all the benchmark ratio. Significant pump station upgrades along with Falmouth's Treatment Facility upgrade, causes Cumberland to miss their ratios.

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

Funds	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
Water	26%	25%	26%	27%	27%	28%	28%
Wastewater							
Cape Elizabeth	18%	19%	17%	19%	21%	26%	26%
Cumberland	29%	24%	25%	38%	44%	46%	48%
Gorham	35%	33%	34%	33%	32%	31%	31%
Portland	18%	17%	16%	20%	25%	25%	24%
Westbrook	24%	24%	25%	24%	22%	22%	21%
Windham	42%	41%	37%	36%	34%	34%	33%

#### **Debt Service Ratio - Target: Greater or Equal to 1.25**

Funds	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
Water	1.41	1.33	1.38	1.42	1.49	1.50	1.52
Wastewater							
Cape Elizabeth	1.46	1.43	1.45	1.36	1.33	1.24	1.24
Cumberland	1.29	1.62	1.47	1.25	1.19	1.17	1.15
Gorham	1.21	1.24	1.21	1.21	1.22	1.21	1.21
Portland	1.47	1.44	1.52	1.24	1.15	1.22	1.22
Westbrook	1.28	1.24	1.15	1.18	1.20	1.19	1.20
Windham-South	1.12	1.22	1.23	1.22	1.22	1.22	1.22

## Water & Wastewater Funds Debt Service

#### **Long-Term Debt Principal & Interest**

PWD has \$10,741,912 and \$3,265,116 of principal and interest payments in the budget. Of the total, \$10,222,694 and \$3,190,103 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 \$413,490 and interest of \$55,941. 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 \$2,248. Lease expense, which is based on the present value of future lease payments, was budgeted for \$15,780. Principal and interest related to Watershed Protection debt service total \$32,809.

#### **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 2024 are budgeted at \$257,439.

#### **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 is estimated to be \$131,900.

#### **Premiums & Deferred Outflow**

PWD 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 PWD'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 Budget is a reduction of debt service expense of \$595,247.

#### **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 is \$303,456.

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 principal (\$13,240) and interest expense (\$2,473) totaling \$15,713 are budgeted. The anticipation note is expected to have interest expense of \$150,000.

# Water & Wastewater Funds Debt Service (continued)

# Summary of Debt Service

_			MMBB &	Debt	Premiums,		Debt
			DEP Admin	Issuance	Deferred	Contracted &	Service
	Principal	Interest	Fees	Expense	Outflow	Notes	Total
Direct Charges							
Water Fund:							
Water General Assets	4,289,135	1,726,007	60,303	57,900	(575,578)	-	5,557,767
Water Capital Reserve	1,909,968	478,486	-	-	-	-	2,388,454
Sub-Total Water	6,199,103	2,204,493	60,303	57,900	(575,578)	-	7,946,221
Wastew ater:							
Cape Elizabeth	306,500	73,688	13,128	8,000	-	-	401,316
Cumberland	6,250	11,592	326	5,500	-	303,456	327,124
Falmouth	238,000	31,067	13,457	-	-	-	282,524
Gorham	485,454	75,181	25,546	-	-	-	586,181
Portland	1,998,491	452,337	93,820	40,500	(10,680)	75,000	2,649,468
Westbrook	846,110	169,945	42,330	-	-	(13,240)	1,045,145
Windham - South	142,786	21,800	5,400	-		15,713	185,699
Windham - North	-	150,000		20,000	-	150,000	320,000
Sub-Total Wastew ater	4,023,591	985,610	194,007	74,000	(10,680)	530,929	5,797,457
Total Direct	10,222,694	3,190,103	254,310	131,900	(586,258)	530,929	13,743,678
Meters and ABC proj							
Water Fund	271,474	41,556	-	-	(5,267)	-	307,763
Wastew ater:							
Cape Elizabeth	18,810	2,210	406	-	(258)	-	21,168
Cumberland	6,066	886	400	_	(134)	-	6,818
Falmouth	3,988	309	215	-	(134)	-	4,512
Gorham	9,185	1,353	-	-	(199)	-	10,339
Portland	96,714	13,543	662	_	(1,768)	-	109,151
Westbrook	22,114	3,293	-	-	(465)	-	24,942
Windham - South	1,360	160	33	-	(100)	-	1,539
Sub-Total Wastew ater	158,237	21,754	1,316				
Sub-Total Wastew aler	150,257	21,754	1,310	-	(2,838)	-	178,469
Contracted Services:							
Scarborough	5,817	891	-	-	(113)	-	6,595
South Portland	41,595	5,882	249	-	(771)	-	46,955
Sub-Total Contracted	47,412	6,773	249	-	(884)	-	53,550
Total Allocated	477,123	70,083	1,565	-	(8,989)	-	539,782
	,	,	,				,
<u>Leases</u>							
Water Fund	9,092	551	-	-	-	-	9,643
Cape Elizabeth WW	3,503	2,634	<u> </u>	-		<u> </u>	6,137
Total Leases	12,595	3,185	-	-	-	-	15,780
Total Water/WW Funds	10,712,412	3,263,371	255,875	131,900	(595,247)	530,929	14,299,240
Watershed Protection	29,500	1,745	1,564	-	-	-	32,809
Total Debt Service	10,741,912	3,265,116	257,439	131,900	(595,247)	530,929	14,332,049

#### **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.

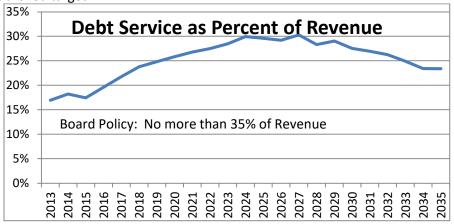
**ABC project (Allocated) Debt Service** – PWD purchased a new computer system, Cayenta and Central Square Asset Management, which handles billing, work orders, time entry and asset management. Each fund is paying its respective share of the system costs. Each fund paid for their share in varying manners 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, PWD 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	7,946,221	307,763	-	9,643	8,263,627
Wastewater:					
Cape Elizabeth	401,316	12,656	8,513	6,137	428,622
Cumberland	327,124	6,817	-	-	333,941
Falmouth	282,524	-	4,512	-	287,036
Gorham	586,181	10,339	-	-	596,520
Portland	2,649,468	95,296	13,853	-	2,758,617
Westbrook	1,045,145	24,944	-	-	1,070,089
Windham (North & South)	505,699	823	717	<u> </u>	507,239
Sub-Total Wastewater	5,797,457	150,875	27,595	6,137	5,982,064
Contracted Services:					
Scarborough	-	6,596	-	-	6,596
South Portland	<u> </u>	41,738	5,217		46,955
Sub-Total Contracted	-	48,334	5,217	•	53,551
Total Water/WW Funds	13,743,678	506,972	32,812	15,780	14,299,243
Watershed Protection	32,809	-	-	-	32,809
Total Debt Service	13,776,487	506,972	32,812	15,780	14,332,051

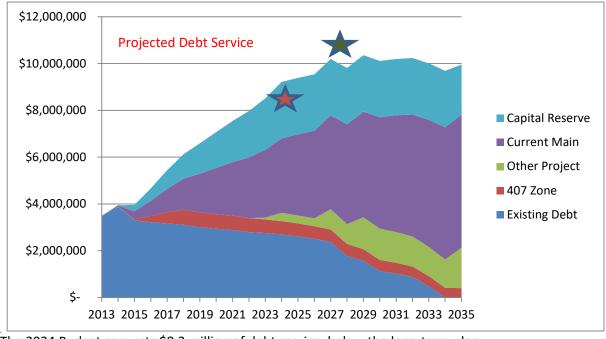
## Long-Term Water Fund Target

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 2024 Budget requests \$8.2 million of debt service, below the long-term plan

The updated multi-year projection is for \$11.1 million in 2028, \$1.9 above 2028 target. The 2024 multiyear plan recommends higher level of main renewal investments (up to \$12 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.

2023 bond issues may appear in the proposed section if the target issue date is after the publication date of 2024 budget.

					Original Issue	Yr End 2023	2024	Yr End 2024	2024	MMBB/DEP		
<u>IssueDate</u>	BondID	Purpose	<u>Maturity</u>	Range of Interest	Principal	<u>Balance</u>	<u>Principal</u>	<u>Balance</u>	Interest Exp	Admin Fee	Issue Cost	PUC_Docket#
Existing Debt V	Nater General LTD											
10/27/2005	WTR05-02	General Assets	2025	4.9000% - 5.0000%	\$900,000	\$90,000	\$45,000	\$45,000	\$1,860			2005-488
10/26/2006	WTR06-01	General Assets	2026	3.0000% - 3.0000%	\$1,500,000	\$225,000	\$75,000	\$150,000	\$4,348			2006-510
10/30/2008	WTR08-01	General Assets	2028	5.5750% - 5.5750%	\$1,500,000	\$375,000	\$75,000	\$300,000	\$16,856			2008-360
04/01/2009	WTR09-01	General Assets (407 Zone)	2028	1.0500% - 1.0500%	\$1,598,500	\$399,625	\$79,925	\$319,700	\$4,056	\$4,206		2008-360 AMENDED
08/28/2009	WTR09-04	General Assets (ARRA)	2029	0.0000% - 0.0000%	\$2,991,066	\$897,320	\$149,553	\$747,767	\$0	\$7,478		2009-128
08/28/2009	WTR09-05	General Assets (ARRA)	2029	0.0000% - 0.0000%	\$163,953	\$49,186	\$8,198	\$40,988	\$0	\$410		2009-128
05/27/2010	WTR10-02	General Assets (RZEDB)	2030	5.1730% - 5.7460%	\$400,000	\$175,000	\$25,000	\$150,000	\$5,316			2010-62
11/01/2010	WTR10-03	General Assets (DWSRF)	2030	1.0000% - 1.0000%	\$902,500	\$315,875	\$45,125	\$270,750	\$3,084	\$2,414		2010-62
10/27/2011	WTR11-01	General Assets	2031	0.5000% - 5.5000%	\$2,300,000	\$920,000	\$115,000	\$805,000	\$25,845			2011-266
05/01/2012	WTR12-03	Ozone UV Design & Forest Ave (DWSRF)	2032	1.0000% - 1.0000%	\$1,130,000	\$508,500	\$56,500	\$452,000	\$4,708	\$3,065		2011-266
10/25/2012	WTR12-01	General Assets	2032	2.9550% - 3.7060%	\$2,000,000	\$900,000	\$100,000	\$800,000	\$29,076			2012-357
05/01/2013	WTR13-01	Ozone-UV Construction Phase 1 (DWSRF)	2032	1.0000% - 1.0000%	\$2,850,000	\$1,350,000	\$150,000	\$1,200,000	\$13,250	\$8,175		2011-266
05/23/2013	WTR13-04	General Assets	2033	2.6740% - 3.7000%	\$1,428,000	\$714,000	\$71,400	\$642,600	\$23,566			2013-00167
11/04/2013	WTR13-06	Ozone-UV Construction Phase 2	2034	- 0.0000%	\$8,000,000	\$0	\$0	\$0	\$0			2011-266
11/15/2013	WTR13-05	General Assets (DWSRF)	2033	1.0700% - 1.0700%	\$1,072,000	\$536,000	\$53,600	\$482,400	\$5,640	\$2,967		2013-00167
06/30/2014	WTR14-01	General Assets	2034	3.0000% - 3.5000%	\$2,541,000	\$1,375,000	\$125,000	\$1,250,000	\$30,756			2014-00093
05/14/2015	WTR15-01	General Assets (DWSRF) Scott Dyer Rd	2034	0.1500% - 0.1500%	\$459,000	\$254,152	\$22,932	\$231,220	\$370	\$1,166		2014-38
06/25/2015	WTR15-04	General Assets - Water Main Renewal	2035	3.0000% - 3.2500%	\$3,230,000	\$1,920,000	\$160,000	\$1,760,000	\$58,800			2015-00051
06/25/2015	WTR15-05	General Assets - Ozone Destruct	2035	3.0000% - 3.2500%	\$500,000	\$300,000	\$25,000	\$275,000	\$9,188			2015-00051
12/04/2015	WTR15-06	Water Main Renewal - Gray Road	2035	1.0000% - 1.0000%	\$270,000	\$162,000	\$13,500	\$148,500	\$1,586	\$756		2015-00051
06/20/2016	WT16-04	General Assets - Water Main Renewal	2036	3.0000% - 4.0000%	\$385,000	\$245,000	\$20,000	\$225,000	\$8,267			
06/20/2016	WT16-06	407 Zone Design	2036	3.0000% - 4.0000%	\$1,830,000	\$1,170,000	\$90,000	\$1,080,000	\$39,900			
06/20/2016	WTR16-09	General Assets 2007 Refi	2027	3.0000% - 4.0000%	\$3,034,938	\$1,019,813	\$336,875	\$682,938	\$31,717			
09/28/2016	WTR16-10	General Assets - Thorton Heights Phase 3	2036	1.0000% - 1.0000%	\$1,128,979	\$779,292	\$56,433	\$722,859	\$7,558	\$3,211		
09/28/2016	WTR16-11	General Assets Westbrook St DWSRF	2036	1.0000% - 1.0000%	\$566,362	\$380,819	\$27,577	\$353,242	\$3,647	\$1,562		
07/18/2017	WTR17-05	General Assets - Water Main Renewal	2037	3.0000% - 4.0000%	\$3,725,000	\$2,600,000	\$187,500	\$2,412,500	\$83,125			
03/02/2018	WTR18-01	Ward's Hill PS (407 Zone Improvement) SRF	2037	1.0000% - 1.0000%	\$1,900,000	\$1,396,318	\$99,737	\$1,296,581	\$13,797	\$5,685		
08/01/2018	WTR18-04	Asset, Billing, Customer Relations System	2028	5.0000% - 5.0000%	\$1,000,000	\$500,000	\$100,000	\$400,000	\$24,167			
08/01/2018	WTR18-05	General Assets - Water Main Renewal	2038	3.0000% - 5.0000%	\$900,000	\$675,000	\$45,000	\$630,000	\$24,938			
11/30/2018	WTR18-08	Pleasantdale/Broadway Main Renewal SRF	2038	1.0000% - 1.0000%	\$3,000,000	\$2,250,000	\$150,000	\$2,100,000	\$22,250	\$8,625		
08/01/2019	WTR19-02	General Assets - Water Main Renewal	2039	2.0000% - 5.0000%	\$4,500,000	\$3,600,000	\$225,000	\$3,375,000	\$126,375			
07/30/2020	WTR20-03	General Assets - Water Main Renewals	2040	2.0000% - 5.0000%	\$1,745,000	\$1,484,000	\$87,000	\$1,397,000	\$47,225			
11/01/2020	WTR20-07	Preble St, PO water main relocation SRF	2040	1.0000% - 1.0000%	\$220,000	\$187,000	\$11,000	\$176,000	\$1,797	\$641		
07/29/2021	WTR21-04	General Assets - Water Main Renewal	2041	2.0000% - 5.0000%	\$3,479,157	\$3,130,221	\$174,468	\$2,955,753	\$102,982			
07/29/2021	WTR21-06	407 Zone North Transmission (Depot St, WI)	2041	2.0000% - 5.0000%	\$1,152,535	\$1,030,407	\$61,064	\$969,343	\$34,087			
12/22/2021	WTR21-09	Mackworth/Ocean Main Renewal SRF	2041	1.0000% - 1.0000%	\$2,100,000	\$1,890,000	\$105,000	\$1,785,000	\$18,725	\$6,195		
12/22/2021	WTR21-10	Crooked River Conservation Easement SRF	2041	1.0000% - 1.0000%	\$480,000	\$432,000	\$24,000	\$408,000	\$4,280	\$1,416		
08/01/2022	WTR22-04	General Assets - Water Main Renewal	2042	4.0000% - 5.0000%	\$3,500,000	\$3,325,000	\$175,000	\$3,150,000	\$147,292			
08/15/2023	WTR23-01	General Assets - Water Main Renewal	2043	4.0000% - 5.0000%	\$3,665,000	\$3,665,000	\$185,000	\$3,480,000	\$172,608			
08/15/2023	WTR23-03	Refunding 2013 Bond - Ozone WTR13-06	2034	4.0000% - 5.0000%	\$4,055,000	\$4,015,000	\$360,000	\$3,655,000	\$190,350			
08/15/2023	WTR23-04	Windham Water Tank	2043	4.0000% - 5.0000%	\$4,675,000	\$4,675,000	\$235,000	\$4,440,000	\$220,192			
08/15/2023	WTR23-05	Windham 407 Zone Project	2043	4.0000% - 5.0000%	\$2,110,000	\$2,110,000	\$110,000	\$2,000,000	\$99,333			
		Total Existing Debt Water General LTD				\$52,026,527	\$4,261,387	\$47,765,140	\$1,662,913	\$57,972		

#### Water Funds Long-Term Debt <u>(continued)</u>

#### 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.

2023 bond issues may appear in the proposed section if the target issue date is after the publication date of 2024 budget.

	<u>BondID</u> Vater General L <sup>-</sup>	Purpose TD		<u>Maturity</u>	Range of Interest	<u>Original Issue</u> <u>Principal</u>	Yr End 2023 <u>Balance</u>	2024 <u>Principal</u>	Yr End 2024 <u>Balance</u>	2024 Interest Exp	<u>MMBB/DEP</u> Admin Fee	Issue Cost	PUC Docket#
11/01/2023			Sebago Cove Conservation Easement	2043	2.0000% - 2.0000%	\$319,950	\$319,950	\$15,998	\$303,953	\$6,346	\$1,344		
11/01/2023	WT_WTR_Tar	—	Water Tank SRF	2043	2.0000% - 2.0000%	\$235,000	\$235,000	\$11,750	\$223,250	\$4,661	\$987		
11/01/2024	 WT_2024 Mai		2024 Water Maine BILS	2044	0.0000% - 0.0000%		\$0	\$0	\$1,100,000	\$0	<i><b>Q</b></i> <b>OO</b> .	\$3,000	
11/01/2024			Water Mains	2044	4.0000% - 4.0000%		\$0	\$0	\$6,000,000	\$40,000		\$45,000	
11/01/2024	WT_LCRR_1_	_1	LCRR compliance Year 1	2034	0.0000% - 0.0000%	\$150,000	\$0	\$0	\$150,000	\$0		\$400	
11/01/2024	WT_SLWTF_F	_ Roof 1_1	SLWTF Roof Phase 1	2044	4.0000% - 4.0000%		\$0	\$0	\$660,000	\$4,400		\$5,000	
11/01/2024	WT_Wind_Pu	mp_1	Windham Pump Upgrade	2044	4.0000% - 4.0000%		\$0	\$0	\$850,000	\$5,667		\$2,000	
11/01/2024	WT_Wtr_Cons	serv_1	Water Conservation Easement	2044	2.0000% - 2.0000%		\$0	\$0	\$606,050	\$2,020		\$2,500	
			Total Proposed Debt Water General LTD	)			\$554,950	\$27,748	\$9,893,253	\$63,093	\$2,331	\$57,900	
			Total Existing and Proposed Debt Water	General L	TD		\$52,581,477	\$4,289,134	\$57,658,392	\$1,726,007	\$60,303	\$57,900	
Existing Debt Wa	ater Capital Res	erv											
	WTR14-02	Water Assets - 0		2024	3.0000% - 3.0000%		\$200,000	\$200,000	\$0	\$18,776			2014-00093
06/25/2015	WTR15-03	Water Assets - 0	Capital Reserve	2025	3.0000% - 3.0000%	\$2,000,000	\$400,000	\$200,000	\$200,000	\$11,000			2015-00051
06/20/2016	WT16-05	Water Assets - 0	Capital Reserve	2026	3.0000% - 4.0000%	\$1,830,000	\$540,000	\$180,000	\$360,000	\$16,800			
07/18/2017 \	WTR17-06	Water Assets - 0	Capital Reserve	2027	3.0000% - 4.0000%	\$1,875,000	\$750,000	\$187,500	\$562,500	\$25,313			
08/01/2018	WTR18-06	Water Assets - 0	Capital Reserve	2028	5.0000% - 5.0000%	\$2,000,000	\$1,000,000	\$200,000	\$800,000	\$48,333			
08/01/2019	WTR19-03	Water Assets - 0	Capital Reserve	2029	2.0000% - 5.0000%	\$2,000,000	\$1,200,000	\$200,000	\$1,000,000	\$52,333			
07/30/2020	WTR20-04	Water Assets - 0	Capital Reserve	2030	5.0000% - 5.0000%	\$1,830,000	\$1,281,000	\$183,000	\$1,098,000	\$62,525			
07/29/2021	WTR21-05	Water Assets - 0	Capital Reserve	2031	5.0000% - 5.0000%	\$1,743,308	\$1,394,372	\$174,468	\$1,219,904	\$68,265			
08/01/2022	WTR22-05	Water Assets - 0	Capital Reserve	2032	5.0000% - 5.0000%	\$2,000,000	\$1,800,000	\$200,000	\$1,600,000	\$88,333			
08/15/2023	WTR23-02	Water Assets - 0	Capital Reserve	2033	4.0000% - 5.0000%	\$1,840,000	\$1,840,000	\$185,000	\$1,655,000	\$86,808			
			Total Existing Debt Water Capital Rese	rve			\$10,405,372	\$1,909,968	\$8,495,404	\$478,486			
Existing Debt Met		•• /								<b>*</b> ( <b>= • • =</b>			
	WTR09-02	Meters		2029	2.0800% - 5.5800%	. , ,	\$1,355,940	\$225,990	\$1,129,950	\$45,937			2006-403
	WTR09-03	Sub-Meters	_	2029	2.0800% - 5.5800%	. ,	\$54,060	\$9,010	\$45,050	\$1,831			2006-403
	WTR	Meters 2007 Re		2027	3.0000% - 4.0000%	. , ,	\$582,750	\$192,500	\$390,250	\$18,124			
06/20/2016 \	WTR16-08	Submeters 2007	Refi	2027	3.0000% - 4.0000%	\$185,813	\$62,438	\$20,625	\$41,813	\$1,942			
			Total Existing Debt Meters Allocated				\$2,055,188	\$448,125	\$1,607,063	\$67,835			
Existing Debt Tra	ansportation All												
01/31/2020			rvation Easement SRF	2029	1.0000% - 1.0000%	\$295,000	\$177,000	\$29,500	\$147,500	\$1,745	\$1,564		
		5	Total Existing Debt Transportation Allo			• • • • • • • •	\$177,000	\$29,500	\$147,500	\$1,745	\$1,564		
Proposed Tr	ransportation A	Allocated											
	WT_Vac_Truc		Vacuum Truck	2033	0.0000% - 0.0000%	\$337,500	\$337,500	\$33,750	\$303,750	\$0	\$2,025		
			Total Proposed Debt Transportation Allo	ocated			\$337,500	\$33,750	\$303,750	\$0	\$2,025	\$0	
			Total Existing and Proposed Debt Trans	portation	Allocated		\$514,500	\$63,250	\$451,250	\$1,745	\$3,589	\$0	
			Total Evicting and Proposed Water Dab	•			¢65 556 526	¢6 740 477	¢60 212 100	<u>()</u>	<b>_</b>	¢57.000	
			Total Existing and Proposed Water Deb				\$65,556,536	\$6,710,477	\$68,212,109	\$2,274,073 =	\$63,891 =	\$57,900	

## 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.

2023 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2024 budget.

							Original Issue	Yr End 2023	2024	Yr End 2024	Accru	ued 2024 Interes	t & Fees	MMBB/DEP	
<u>IssueDate</u>	<u>BondID</u>	Purpose		<u>Maturity</u>	Range of	Interest	Principal	Balance	Principal	Balance	Interest Exp	DEP Mgt Fee	Interest Expense	Admin Fee	Issue Cost
Existing Def	ot Cape Elizabe	th													
10/30/2008	WW08-03	Cape - Generator	S	2028	5.5750% -	5.5750%	\$95,000	\$23,750	\$4,750	\$19,000	\$1,068	\$0	\$1,068		
12/16/2011	WW11-01	CESO Treatment		2031		1.0000%	\$2,430,000	\$972,000	\$121,500	\$850,500	\$9,518	\$0	\$9,518	\$6,561	
10/25/2012	WW12-03		CSO Studies / Treatment	2032		3.7060%	\$160,000	\$72,000	\$8,000	\$64,000	\$2,326	\$0	\$2,326	· - · · -	
05/28/2015	WW15-02	Wastewater CE C	Barden Lane	2035	2.6400% -	3.8900%	\$240,000	\$144,000	\$12,000	\$132,000	\$4,941	\$0	\$4,941		
05/25/2017	WW17-03	Cape Elizabeth W	/W Projects	2037	2.2800% <b>-</b>	3.9180%	\$315,000	\$220,500	\$15,750	\$204,750	\$7,241	\$0	\$7,241		
11/02/2017	WW17-07	CE Wildwood PS	10	2037	2.1400% <b>-</b>	4.0650%	\$72,000	\$50,400	\$3,600	\$46,800	\$1,613	\$0	\$1,613		
06/03/2019	WW19-01		V Treatment Upgrades SRF	2039		1.0000%	\$875,000	\$700,000	\$43,750	\$656,250	\$6,927	\$0	\$6,927	\$2,538	
05/08/2020	WW20-02	•	ent Upgrades SRF Loan #2	2039			\$130,000	\$104,000	\$6,500	\$97,500	\$1,029	\$0	\$1,029	\$377	
02/18/2021	WW21-01	Little John PS Up	-	2041			\$850,000	\$765,000	\$42,500	\$722,500	\$7,579	\$0	\$7,579	\$2,508	
07/01/2021	WW21-02	Cape Elizabeth W		2041			\$388,000	\$349,200	\$19,400	\$329,800	\$3,460	\$0	\$3,460	\$1,145	
11/03/2022	WW22-08	Maiden Cove PS		2042	3.5900% -	4.8900%	\$575,000	\$546,250	\$28,750	\$517,500	\$23,020	\$0	\$23,020		
			Total Existing Debt Cape Elizabeth					\$3,947,100	\$306,500	\$3,640,600	\$68,721	\$0	\$68,721	\$13,128	
•	ape Elizabeth			0004	4 00000/	4.00000/	<b>*</b> 045,000	<b>*</b> 0	<b>\$</b> 0	<b>#045,000</b>	¢4,000	<b>\$</b> 0	¢4,000		<b>*</b> ~ ~~~
11/01/2024	WW_Cape_S		Cape System SCADA	2034	4.0000% -		\$245,000	\$0 \$0	\$0 \$0	\$245,000	\$1,633	\$0 \$0	\$1,633		\$3,000
11/01/2024	WW_Ottawa	_1	Ottawa Road Pump Station	2044	4.0000% -	4.0000%	\$500,000	\$0	\$0	\$500,000	\$3,333	\$0	\$3,333		\$5,000
			Total Proposed Debt Cape Elizabeth					\$0	\$0	\$745,000	\$4,967	\$0	\$4,967	-	\$8,000
			Total Existing and Proposed Debt Cape	Elizabeth		•		\$3,947,100	\$306,500	\$4,385,600	\$73,688	\$0	\$73,688	\$13,128	\$8,000
						•		=							
Existing Deb	ot Cumberland														
12/22/2006	WW06-01	Cumberland -Tutt	le Pump Station (SRF)	2026	1.4200% -	1 4200%	\$125,000	\$18,750	\$6,250	\$12,500	\$259	\$0	\$259	\$326	
12,22,2000		Cambonand Tak	Total Existing Debt Cumberland		1.120070-	1.120070	¢120,000	\$18,750	\$6,250	\$12,500	\$259	\$0 \$0	\$259	\$326	
Proposed C	umberland														
11/01/2024	WW_Powell_	_Rd_1	Powell Rd PS Conversion to	2044	4.0000% -	4.0000%	\$800,000	\$0	\$0	\$800,000	\$5,333	\$0	\$5,333		\$2,500
11/01/2024	WW_Tuttle F	orce 1_1	Submersible Tuttle Road Force Main -Phase 1	2044	4.0000% -	4.0000%	\$900,000	\$0	\$0	\$900,000	\$6,000	\$0	\$6,000		\$3,000
			Total Proposed Debt Cumberland					\$0	\$0	\$1,700,000	\$11,333	 \$0	\$11,333	_	\$5,500
			Total Existing and Proposed Debt Cum	berland		-		\$18,750	\$6,250	\$1,712,500	\$11,592	\$0	\$11,592	\$326	\$5,500
Existing Deb	ot Falmouth														
05/01/2016	WW16-03	Mill Creek PS SR		2036	1.0000% -		\$4,000,000	\$2,600,000	\$200,000	\$2,400,000	\$26,000	\$0	\$26,000	\$11,300	
03/21/2017	WW17-02	Falmouth Mill Cre	ek PS Phase 2 SRF	2037	1.0000% -	1.0000%	\$760,000	\$532,000	\$38,000	\$494,000	\$5,067	\$0	\$5,067	\$2,157	
			Total Existing Debt Falmouth					\$3,132,000	\$238,000	\$2,894,000	\$31,067	\$0	\$31,067	\$13,457	

(continued)

#### Wastewater Funds Long-Term Debt

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.

2023 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2024 budget.

J24 budget.												
					Original Issue	Yr End 2023	2024	Yr End 2024	Accr	ued 2024 Interes	t & Fees	MMBB/DEP
<u>IssueDate</u>	<u>BondID</u>	Purpose	Maturity	Range of Interest	Principal	Balance	<u>Principal</u>	Balance	Interest Exp	DEP Mgt Fee	Interest Expense	Admin Fee
133460416	DOINID		matanty	<u>Rango or interest</u>		Dalahoo	<u>i molpui</u>	Balanco	<u>interest Exp</u>	<u>DEI Mgrice</u>		
Existing Deb												
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$252,000	\$25,200	\$12,600	\$12,600	\$394	\$0	\$394	\$651
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$50,400	\$12,600	\$2,520	\$10,080	\$316	\$0	\$316	
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$474,672	\$142,402	\$23,734	\$118,668	\$6,657	\$0	\$6,657	
01/15/2009	WW09-01	Little Falls Conveyance (SRF)	2028	1.4400% - 1.4400%	\$4,258,208	\$1,075,305	\$215,061	\$860,244	\$14,710	\$0	\$14,710	\$11,527
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$253,475	\$63,369	\$12,674	\$50,695	\$602	\$0	\$602	\$665
05/28/2009	WW09-04	Little Falls Conveyance	2029	2.0800% - 5.5800%	\$233,954	\$70,186	\$11,698	\$58,489	\$2,378	\$0	\$2,378	
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$52,360	\$18,326	\$2,618	\$15,708	\$179	\$0	\$179	\$140
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$308,000	\$231,000	\$15,400	\$215,600	\$2,284	\$0	\$2,284	\$885
11/04/2021	WW21-08	WEWWTF Sludge storage odor control	2041	0.7600% - 2.9540%	\$53,900	\$48,510	\$2,695	\$45,815	\$974	\$0	\$974	
05/19/2022	WW22-03	Westbrook WWTF Aeration & Clarifiers SRF	2041	1.0000% - 1.0000%	\$2,498,400	\$2,248,560	\$124,920	\$2,123,640	\$22,277	\$0	\$22,277	\$7,370
		Total Existing Debt Gorham				\$3,935,458	\$423,919	\$3,511,539	\$50,772	\$0	\$50,772	\$21,239
Proposed Go	orham											
11/01/2023	WW_West_A	eration3_1 Westbrook Aerat	ion 3 2043	2.0000% - 2.0000%	\$1,230,705	\$1,230,705	\$61,535	\$1,169,170	\$24,409	\$0	\$24,409	\$4,307
		Total Proposed Debt Gorham				\$1,230,705	\$61,535	\$1,169,170	\$24,409	\$0	\$24,409	\$4,307
		Total Existing and Proposed Debt	Gorham			\$5,166,163	\$485,454	\$4,680,708	\$75,181	\$0	\$75,181	\$25,546
Existing Deb												
12/03/2004	WW04-01	EE Treatment Odor Control (SRF)	2024	1.3300% - 1.3300%	\$375,000	\$18,750	\$18,750	\$0	\$187	\$0	\$187	\$665
12/03/2004	WW04-02	EE Treatment Dewatering (SRF)	2024	1.3300% - 1.3300%	\$1,740,000	\$87,000	\$87,000	\$0	\$868	\$0	\$868	\$3,086
12/01/2005	WW05-01	EE Treatment Hypochlorite Upgrade (SRF)	2025	1.6300% - 1.6300%	\$1,900,000	\$190,000	\$95,000	\$95,000	\$2,968	\$0	\$2,968	\$4,905
04/01/2009	WW09-03	Portland India Pump Station Upgrade (SRF)	2028	1.4700% - 1.4700%	\$5,700,000	\$1,404,970	\$280,994	\$1,123,976	\$19,965	\$0	\$19,965	\$15,082
11/01/2010	WW10-03	Portland Northeast & Pump Station Upgrades (SRF)	2030	1.0000% - 1.0000%	\$752,200	\$263,270	\$37,610	\$225,660	\$2,570	\$0	\$2,570	\$2,012
10/27/2011	WW11-02	Portland Pump Station Upgrades	2031	0.5000% - 5.5000%	\$400,000	\$160,000	\$20,000	\$140,000	\$4,495	\$0	\$4,495	
11/04/2013	WW13-02	Peaks Island Sewer Extension	2033	4.0000% - 4.0000%	\$3,000,000	\$1,500,000	\$150,000	\$1,350,000	\$59,000	\$0	\$59,000	
12/04/2015	WW15-07	EEWWTF Aeration Upgrade SRF	2035	1.0000% - 1.0000%	\$2,000,000	\$1,200,000	\$100,000	\$1,100,000	\$11,750	\$0	\$11,750	\$5,600
07/08/2016	WW16-01	EEWWTF Aeration Phase 2 SRF	2036	1.0000% - 1.0000%	\$7,000,000	\$4,550,000	\$350,000	\$4,200,000	\$44,917	\$0	\$44,917	\$19,775
07/08/2016	WW16-02	Fore River PS SRF	2036	1.0000% - 1.0000%	\$1,200,000	\$780,000	\$60,000	\$720,000	\$7,700	\$0	\$7,700	\$3,390
05/01/2017	WW17-01	EEWWTF Aeration Phase 3 SRF	2036	1.0000% - 1.0000%	\$1,900,000	\$1,296,581	\$99,737	\$1,196,844	\$12,800	\$0	\$12,800	\$5,635
05/24/2018	WW18-03	Northeast Pump Station Odor Control	2038	2.6300% - 4.0420%	\$500,000	\$375,000	\$25,000	\$350,000	\$12,679	\$0	\$12,679	
07/30/2020	WW20-05	East End WWTF Primary Clarifier Upgrade	2040	2.0000% - 2.0000%	\$940,000	\$793,000	\$49,000	\$744,000	\$15,697	\$0	\$15,697	
07/30/2020	WW20-06	India St PS Tide Gate/East End Primary Clarifier	2040	2.0000% - 2.0000%	\$410,000	\$347,000	\$21,000	\$326,000	\$6,870	\$0	\$6,870	
12/10/2020	WW20-08	Fore River Pump Station Phase 2 SRF	2040	1.0000% - 1.0000%	\$3,150,000	\$2,677,500	\$157,500	\$2,520,000	\$26,513	\$0	\$26,513	\$9,214
07/01/2021	WW21-03	East End WWTF HVAC (dewatering area) SRF	2041	1.0000% - 1.0000%	\$422,000	\$379,800	\$21,100	\$358,700	\$3,763	\$0	\$3,763	\$1,245
03/09/2022	WW22-01	East End 3rd floor HVAC SRF	2041	1.0000% - 1.0000%	\$476,000	\$428,400	\$23,800	\$404,600	\$4,244	\$0	\$4,244	\$1,404
05/04/2022	WW22-02	Asset, Billing, Customer Relations System SRF	2031	1.0000% - 1.0000%	\$290,000	\$232,000	\$29,000	\$203,000	\$2,248	\$0	\$2,248	\$1,566
09/23/2022	WW22-06	Baxter Blvd Pump Station Upgrade	2042	1.0000% - 1.0000%	\$2,130,000	\$2,023,500	\$106,500	\$1,917,000	\$20,058	\$0	\$20,058	\$6,337
09/23/2022	WW22-07	East End WWTF/Northeast WWPS Power SRF	2042	1.0000% - 1.0000%	\$5,200,000	\$4,940,000	\$260,000	\$4,680,000	\$48,967	\$0	\$48,967	\$15,470
		Total Existing Debt Portland				\$23,646,771	\$1,991,991	\$21,654,780	\$308,255	\$0	\$308,255	\$95,386
		-										

Issue Cost

(continued)

#### Wastewater Funds Long-Term Debt

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.

2023 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2024 budget.

						Original Issue	Yr End 2023	2024	Yr End 2024	Accru	ued 2024 Interes	t & Fees	MMBB/DEP	
<u>IssueDate</u>	<u>BondID</u>	Purpose		Maturity	Range of Interest	Principal	<u>Balance</u>	<u>Principal</u>	Balance	Interest Exp	DEP Mgt Fee	Interest Expense	Admin Fee	Issue Cost
Proposed Po	ortland													
11/01/2023	WW_Strou	dwater_1	Stroudwater Pump Station	2043	4.0000% - 4.0000%	\$710,000	\$710,000	\$35,500	\$674,500	\$28,163	\$0	\$28,163		
11/01/2024	WW_Cong	ress_Garr_1	Congress and Garrison Pump Station	2044	4.0000% - 4.0000%	\$1,500,000	\$0	\$0	\$1,500,000	\$10,000	\$0	\$10,000		\$5,000
11/01/2024	WW_Fore_	River_1	Fore River Pump Replacement	2044	4.0000% - 4.0000%	\$2,200,000	\$0	\$0	\$2,200,000	\$14,667	\$0	\$14,667		\$4,500
11/01/2024	WW_Galler	ry_1	Primary Gallery SRF	2044	2.0000% - 2.0000%	\$3,950,000	\$0	\$0	\$3,950,000	\$13,167	\$0	\$13,167		\$8,000
11/01/2024	WW_Rake	_Gallery_1	Sec Clarifier Sludge Rake& Primary	2044	4.0000% - 4.0000%	\$12,050,000	\$0	\$0	\$12,050,000	\$80,333	\$0	\$80,333		\$23,000
			Gallery											
			Total Proposed Debt Portland				\$710,000	\$35,500	\$20,374,500	\$146,330	\$0	\$146,330	-	\$40,500
			Total Existing and Proposed Debt Portla	and			\$24,356,771	\$2,027,491	\$42,029,280	\$454,585	\$0	\$454,585	\$95,386	\$40,500

#### 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.

2023 Bond issues may appear in the proposed section if the target issue date is after the publication date of the 2024 budget.

						Original Issue	Yr End 2023	2024	Yr End 2024	Accr	rued 2024 Interest	t & Fees	MMBB/DEP
<u>IssueDate</u>	<u>BondID</u>	Purpose		<u>Maturity</u>	Range of Interes		Balance	<u>Principal</u>	Balance	Interest Exp	DEP Mgt Fee	Interest Expense	Admin Fee
Existing Deb	t Westbrook												
12/01/2005	WW05-02	WB Cottage Plac	e/ E. Bridge PS Upgrades(SRF)	2025	1.6300% - 1.6300	0% \$1,316,800	\$131,680	\$65,840	\$65,840	\$2,057	\$0	\$2,057	\$3,399
05/15/2008	WW08-01	WB Treatment G SRF	enerator / Electrical Upgrades	2028	2.2000% - 5.5000	0% \$183,360	\$45,840	\$9,168	\$36,672	\$1,151	\$0	\$1,151	
10/30/2008	WW08-02	Westbrook Cotta SRF	ge Place/ E. Bridge PS Screens	2029	5.5750% - 5.5750	0% \$2,384,641	\$715,392	\$119,232	\$596,160	\$33,444	\$0	\$33,444	
02/27/2009	WW09-02	WB Headworks/0	Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000	0% \$974,925	\$243,731	\$48,746	\$194,985	\$2,315	\$0	\$2,315	\$2,559
11/01/2010	WW10-04	Westbrook Treat	ment Misc Upgrades (SRF)	2030	1.0000% - 1.0000	0% \$113,220	\$39,627	\$5,661	\$33,966	\$387	\$0	\$387	\$303
12/04/2015	WW15-08	Westbrook CSO	Upgrade SRF	2035	1.0000% - 1.0000	0% \$1,000,000	\$600,000	\$50,000	\$550,000	\$5,875	\$0	\$5,875	\$2,800
03/02/2018	WW18-02	Westbrook Sludg	e Dewatering Upgrade SRF	2038	1.0000% - 1.0000	0% \$666,000	\$499,500	\$33,300	\$466,200	\$4,940	\$0	\$4,940	\$1,915
09/01/2018	WW18-07	Dana Court PS L	lpgrades SRF	2039	1.0000% - 1.0000	0% \$2,200,000	\$1,760,000	\$110,000	\$1,650,000	\$17,417	\$0	\$17,417	\$6,380
11/04/2021	WW21-08	WEWWTF Sludg	e storage odor control	2041	0.7600% - 2.9540	0% \$116,550	\$104,895	\$5,828	\$99,068	\$2,106	\$0	\$2,106	
05/19/2022	WW22-03	Westbrook WWT	F Aeration & Clarifiers SRF	2041	1.0000% - 1.0000	0% \$5,290,400	\$4,761,360	\$264,520	\$4,496,840	\$47,173	\$0	\$47,173	\$15,607
			Total Existing Debt Westbrook				\$8,902,026	\$712,295	\$8,189,731	\$116,865	\$0	\$116,865	\$32,963
Proposed We	estbrook												
11/01/2023	WW_West_A	veration3_1	Westbrook Aeration 3	2043	2.0000% - 2.0000	\$2,676,295	\$2,676,295	\$133,815	\$2,542,480	\$53,080	\$0	\$53,080	\$9,367
			Total Proposed Debt Westbrook				\$2,676,295	\$133,815	\$2,542,480	\$53,080	\$0	\$53,080	\$9,367.03
			Total Existing and Proposed Debt West	brook			\$11,578,321	\$846,110	\$10,732,211	\$169,944	\$0	\$169,944	\$42,330

Issue Cost

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#### 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.

2023 Bond issues may appear in the proposed section if the target issue date is after the publication date of the 2024 budget.

					Original Issue	Yr End 2023	2024	Yr End 2024	Accru	ed 2024 Interest	& Fees	MMBB/DEP	
<u>IssueDate</u>	<u>BondID</u>	Purpose	Maturity	Range of Interest	Principal	<u>Balance</u>	<u>Principal</u>	Balance	Interest Exp	DEP Mgt Fee	Interest Expense	Admin Fee	I
													-
Existing Deb	t Windham												
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$31,200	\$3,120	\$1,560	\$1,560	\$49	\$0	\$49	\$81	
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$6,240	\$1,560	\$312	\$1,248	\$39	\$0	\$39		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$40,687	\$12,206	\$2,034	\$10,172	\$571	\$0	\$571		
01/15/2009	WW09-01	Little Falls Conveyance (SRF)	2028	1.4400% - 1.4400%	\$1,681,792	\$424,695	\$84,939	\$339,756	\$5,810	\$0	\$5,810	\$4,553	
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$21,600	\$5,400	\$1,080	\$4,320	\$51	\$0	\$51	\$57	
05/28/2009	WW09-04	Little Falls Conveyance	2029	2.0800% - 5.5800%	\$196,046	\$58,814	\$9,802	\$49,011	\$1,993	\$0	\$1,993		
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$4,420	\$1,547	\$221	\$1,326	\$15	\$0	\$15	\$12	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$26,000	\$19,500	\$1,300	\$18,200	\$193	\$0	\$193	\$75	
11/04/2021	WW21-07	Depot St WWPS - Phase 1 (PWD share)	2041	0.7600% - 2.9540%	\$615,000	\$553,500	\$30,750	\$522,750	\$11,114	\$0	\$11,114		
11/04/2021	WW21-08	WEWWTF Sludge storage odor control	2041	0.7600% - 2.9540%	\$4,550	\$4,095	\$228	\$3,868	\$82	\$0	\$82		
05/19/2022	WW22-03	Westbrook WWTF Aeration & Clarifiers SRF	2041	1.0000% - 1.0000%	\$211,200	\$190,080	\$10,560	\$179,520	\$1,883	\$0	\$1,883	\$623	
		Total Existing Debt Windham				\$1,274,517	\$142,786	\$1,131,731	\$21,800	\$0	\$21,800	\$5,400	

Issue Cost

## **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 that 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. PWD 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 12/31/22)	\$ 3,780,946
10% of Revenue Requirement (2023 Budget)	\$ 3,077,964

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. PWD 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 ¼" diameter Cast Iron pipe)	84,480	\$200	16 miles	\$17 million
Totals			217 miles	\$255 million

PWD 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, 10% of the water rate revenue will be dedicated to the reserve.

	2023 Budget	2023 Projected	2024 Budget
Revenue	2,620,297	2,620,297	3,068,683
Debt Service	2,076,972	2,076,972	2,217,072
Water Mains	1,000,000	1,000,000	1,000,000
Annual Charge	(456,675)	(456,675)	(148,389)
Carry Forward	1,303,787	1,444,181	987,506
	847,112	987,506	839,117

### **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 PWD funds. These other R&R balances are:

**Douglass St** – This fund is for the building and grounds that serve as PWD'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 PWD funds.

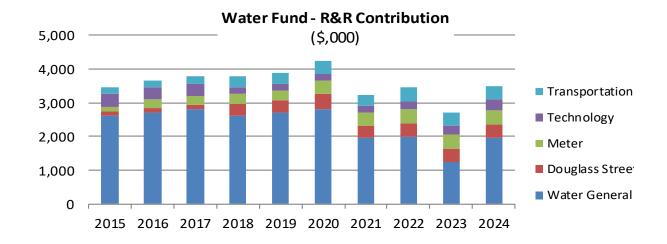
**Transportation** – These assets are used by all PWD funds. The charge for the R&R funding is part of the hourly rate of each vehicle (an internal line item).

	Fund	Douglass St	Meters	Technology	Combined*	Total
Water	\$1,550,000	\$263,802	\$259,480	\$173,810	\$697,092	\$2,247,092
Wastewater:						
Cape Elizabeth	155,000	14,910	7,040	13,813	35,763	190,763
Cumberland	40,000	6,804	4,200	7,215	18,219	58,219
Gorham	100,000	11,004	6,800	9,523	27,327	127,327
Portland	1,180,000	93,450	68,240	94,283	255,973	1,435,973
Westbrook	100,000	23,058	17,720	22,848	63,626	163,626
Windham	36,250	3,276	680	3,508	7,464	43,714
Contracted Services:						
Falmouth	-	-	-	-	-	-
Scarborough	-	42	5,560	-	5,602	5,602
South Portland		3,654	30,280		33,934	33,934
R&R - Funds	\$3,161,250	420,000	400,000	325,000	1,145,000	\$4,306,250
R&R - Transportation	ו					400,000
R&R - Total						\$4,706,250
*Combined = Dougla	ass St + Meter	s + Technology	,			

#### 2024 Contributions:

## Water Fund - Renewal & Replacement Fund

PWD will contribute a total of \$3,450,000 to the renewal and replacement fund in this budget. 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 \$5,642,075, which is the estimated depreciation of all water assets, per Maine Public Utility Commission rules. Starting in 2011, PWD 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	Douglass	Water	Technology	Transportation	Total
	General	Street	Meters			
Balance 01/01/23	\$6,577,972	\$838,433	\$380,656	\$99,021	\$193,727	\$8,089,809
Contribution	1,250,000	400,000	400,000	275,000	400,000	2,725,000
Op Surplus Xfer	100,649	-	-	-	-	100,649
Expenditures	(1,340,000)	(1,046,894)	(250,000)	(275,000)	(290,000)	(3,201,894)
2023 Ending Balance	6,588,621	191,539	530,656	99,021	303,727	7,713,564
Balance 01/01/24	6,588,621	191,539	530,656	99,021	303,727	7,713,564
Contribution	1,905,000	420,000	400,000	325,000	400,000	3,450,000
Expenditures	(1,800,000)	(250,000)	(400,000)	(355,000)	(400,000)	(3,205,000)
2024 Ending Balance	6,693,621	361,539	530,656	69,021	303,727	7,958,564

## 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.

In this budget R&R contributions increased for Portland (\$1.0 million to \$1.18 million) and decreased in Westbrook (\$168,000 to \$100,000). Contributions for Cape Elizabeth, Cumberland, Gorham and Windham remained the same as the prior year.

The estimated expenditures from the R&R funds are based on the 2023 & 2024 Capital Improvements Plans. The 2024 amounts are outlined in the Capital Expenditure section.

	Cape Elizabeth	Cumberland	Gorham	Portland	Westbrook	Windham
Balance 01/01/23	\$703,824	\$211,042	\$905,701	\$5,946,111	\$3,999,190	\$387,157
Contribution	155,000	40,000	100,000	1,000,000	168,000	36,250
Expenditures	(117,500)	(63,601)	(116,706)	(908,030)	(421,890)	(18,214)
2023 Ending Balance	741,324	187,441	888,995	6,038,081	3,745,300	405,193
Balance 01/01/24	741,324	187,441	888,995	6,038,081	3,745,300	405,193
Contribution	155,000	40,000	100,000	1,180,000	100,000	36,250
Expenditures	(120,000)	(30,000)	(173,600)	(1,080,000)	(639,700)	(31,700)
2024 Ending Balance	776,324	197,441	815,395	6,138,081	3,205,600	409,743

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. While currently negative, the balance is projected to become positive by the end of 2026.

Balance 01/01/23	(\$26,087)
Contribution	125,000
Expenditures	(153,963)
2023 Ending Balance	(55,050)
Balance 01/01/24	(55,050)
Contribution	97,500
Expenditures	(98,001)
2024 Ending Balance	(55,551)

### Water Fund - Rate Stabilization & Water Master Plan Funds

On January 27, 2020, PWD'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 PWD's multi-year and annual financial planning and to assure that the minimum debt coverage ratio established in PWD'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 disbursed for the purposes of computing PWD'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. PWD 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 PWD purposes.

The Capital Improvement Plan includes authorizing and starting Comprehensive Asset Management Strategic Plan project and related infrastructure assessments. A total of \$400,000 It is expected to be spent in 2024.

	Balance		Balance	2024	Balance
-	01/01/23	Withdrawal	12/31/23	Budget	12/31/242
Rate Stabilization Fund	\$300,000	\$0	\$300,000	\$0	\$300,000
Water Master Plan	944,548	<u>(800,000)</u>	144,548	<u>(144,548)</u>	<u>0</u>
	\$1,244,548	(\$800,000)	\$444,548	(\$144,548)	\$300,000

### **Introduction**

PWD develops a five-year Capital Improvement Plan (CIP) each year taking into consideration various factors including:

- infrastructure and operational evaluation plans
- strategic/tactical goals, benchmarks
- multi-year financial projections
- Board established budget guidelines (each described in the Introduction Section).

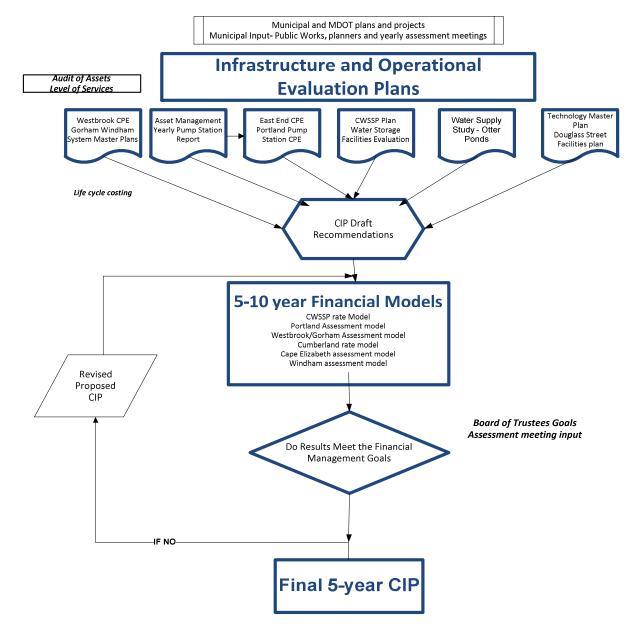
The CIP is developed with PWD stakeholders' input, including input from customers, municipalities, regulators, and staff. PWD staff recommend the Board of Trustees authorize the projects for the first year of the plan.

Capital Expenditures are for a physical asset that exceeds \$10,000 and has a useful life of greater than five years or extends the useful life of an existing asset for more than five years.



\*CWSSP - Comprehensive Water System Strategic Plan

### **Capital Improvement Program Process**



### **Infrastructure and Operational Evaluation Plans**

The water and wastewater industry is asset intensive. Approximately 90% of PWD's total assets are infrastructure assets. Capital-financing costs related to those assets are 30% of the annual budget. As the chart above indicates, a number of studies, information on assets, and input from a variety of sources is the basis for the CIP. Annually, internal work groups facilitated by AMAP review plans, evaluations, and operations to update the CIP. From the process, a draft 5-year project list is created. The draft list is reviewed with special attention to staffing and financial capacity. At the November Workshop meeting, the Board and public are presented with the proposed CIP. Taking input into consideration, a final 5-year plan is adopted at the November Business meeting.

### **Program Summary and Board of Trustees Approval Order**

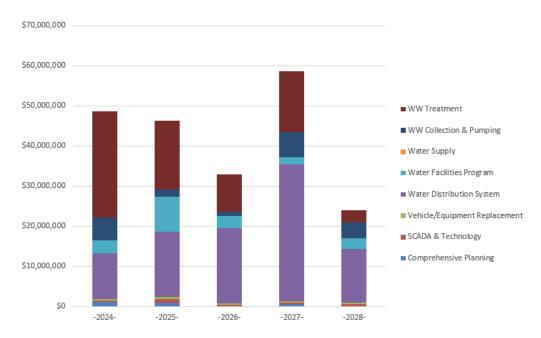
	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$1,000,000	\$900,000		\$500,000	
SCADA & Technology	\$405,000	\$950,000	\$325,000	\$325,000	\$450,000
Vehicle/Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$11,375,000	\$16,275,000	\$18,775,000	\$34,075,000	\$13,475,000
Water Facilities Program	\$3,185,000	\$8,730,000	\$3,040,000	\$1,800,000	\$2,700,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Collection & Pumping	\$5,770,000	\$1,895,000	\$1,060,000	\$6,225,000	\$3,785,000
WW Treatment	\$26,455,000	\$17,145,000	\$9,320,000	\$15,215,000	\$3,115,000
Grand Total	\$48,615,000	\$46,320,000	\$32,945,000	\$58,565,000	\$23,950,000

Note: Projects that require "special approval" will be brought to the Board of Trustees for specific authorization. In 2024, there is one project included in this category, the North Windham Wastewater System.

#### **Proposed Board Action:**

**ORDERED**: The 2024-2028 Capital Improvement Plan is hereby adopted and the General Manager is authorized to solicit bids or proposals for the 2024 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**: The General Manager shall solicit bids or proposals and partner with municipalities, MDOT, and developers 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 below summarizes the proposed 2024 CIP by fund. A page reference is provided where more details are provided on the projects.

#### **Program Summary Index**

		Page References:	
	-2024-	Introduction	Project Listing
Water	\$13,360,000	297	301
Comprehensive Planning			
SCADA & Technology	\$50,000		
Water Distribution System	\$10,875,000		
Water Facilities Program	\$2,410,000		
Water Supply	\$25,000		
Cape Elizabeth	\$320,000	322	323
WW Collection & Pumping	\$95,000		
WW Treatment	\$225,000		
Cumberland	\$1,730,000	327	328
WW Collection & Pumping	\$1,730,000		
Gorham	\$35,000	331	335
WW Collection & Pumping	\$35,000		
Portland	\$19,930,000	349	352
Comprehensive Planning	\$300,000		
SCADA & Technology			
WW Collection & Pumping	\$3,850,000		
WW Treatment	\$15,780,000		
Westbrook	\$340,000	331	335
Comprehensive Planning	\$300,000		
WW Collection & Pumping	\$40,000		
Westbrook Joint	\$450,000	331	335
SCADA & Technology			
WW Collection & Pumping			
WW Treatment	\$450,000		
Windham	\$10,020,000	331	335
WW Collection & Pumping	\$20,000		
WW Treatment	\$10,000,000		
Water & Wastewater	\$2,430,000	360	360
Comprehensive Planning	\$400,000		
SCADA & Technology	\$355,000		
Vehicle/Equipment Replacement	\$400,000		
Water Distribution System	\$500,000		
Water Facilities Program	\$775,000		
Grand Total	\$48,615,000		

### **Financing Summary of 2024 Capital Improvement Plan**

Capital projects are financed through the issuance of bonds – general market bonds or low-interest rate State Revolving Loan Program (SRF) bonds – or drawdowns from the renewal and replacement funds. The Capital Financing section contains more information.

	Bond	Bond SRF	Bond Anticipation Note	Grant	Renewal and Replacement	Master Plan Reserve	Capital Reserve	Grand Total
∃Water	\$7,760,000	\$1,250,000		\$1,550,000	\$1,800,000		\$1,000,000	\$13,360,000
Comprehensive Planning								
SCADA & Technology					\$50,000			\$50,000
Water Distribution System	\$6,000,000	\$1,250,000		\$1,550,000	\$1,075,000		\$1,000,000	\$10,875,000
Water Facilities Program	\$1,760,000				\$650,000			\$2,410,000
Water Supply					\$25,000			\$25,000
Cape Elizabeth	\$200,000				\$120,000			\$320,000
WW Collection & Pumping					\$95,000			\$95,000
WW Treatment	\$200,000				\$25,000			\$225,000
Cumberland	\$1,700,000				\$30,000			\$1,730,000
WW Collection & Pumping	\$1,700,000				\$30,000			\$1,730,000
Gorham					\$35,000			\$35,000
WW Collection & Pumping					\$35,000			\$35,000
Portland	\$7,850,000		\$11,000,000		\$1,080,000			\$19,930,000
Comprehensive Planning					\$300,000			\$300,000
SCADA & Technology								
WW Collection & Pumping	\$3,500,000				\$350,000			\$3,850,000
WW Treatment	\$4,350,000		\$11,000,000		\$430,000			\$15,780,000
⊡Westbrook					\$340,000			\$340,000
Comprehensive Planning					\$300,000			\$300,000
WW Collection & Pumping					\$40,000			\$40,000
Westbrook Joint					\$450,000			\$450,000
SCADA & Technology								
WW Collection & Pumping								
WW Treatment					\$450,000			\$450,000
- Windham		\$10,000,000			\$20,000			\$10,020,000
WW Collection & Pumping					\$20,000			\$20,000
WW Treatment		\$10,000,000						\$10,000,000
Water & Wastewater	\$625,000				\$1,405,000	\$400,000		\$2,430,000
Comprehensive Planning						\$400,000		\$400,000
SCADA & Technology					\$355,000			\$355,000
Vehicle/Equipment Replacement					\$400,000			\$400,000
Water Distribution System	\$100,000				\$400,000			\$500,000
Water Facilities Program	\$525,000				\$250,000			\$775,000
Grand Total	\$18,135,000	\$11,250,000	\$11,000,000	\$1,550,000	\$5,280,000	\$400,000	\$1,000,000	\$48,615,000

### **Five-Year Capital Improvement Plan**

In addition to planning the capital projects for the upcoming year, a 5-year plan has been developed to assist PWD in managing staff, communicating to external partners to improve coordination, and developing financial projections for future water rate and wastewater assessments/adjustments.

The table below summarizes the planned capital projects in 2024. Additional details on each program are provided on the following pages.

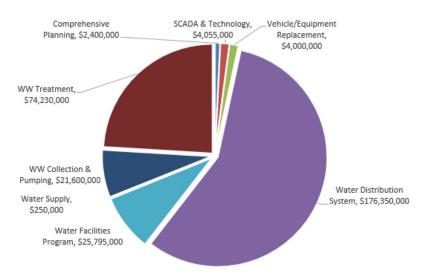
	- 2024 -	- 2025 -	- 2026 -	- 2027 -	- 2028 -
⊡Water	\$13,360,000	\$22,105,000	\$18,490,000	\$24,350,000	\$15,600,000
Comprehensive Planning		\$600,000			
SCADA & Technology	\$50,000	\$75,000	\$50,000	\$50,000	\$100,000
Water Distribution System	\$10,875,000	\$14,775,000	\$15,775,000	\$24,075,000	\$13,075,000
Water Facilities Program	\$2,410,000	\$6,630,000	\$2,640,000	\$200,000	\$2,400,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Cape Elizabeth	\$320,000	\$2,520,000	\$335,000	\$360,000	\$350,000
WW Collection & Pumping	\$95,000	\$395,000	\$35,000	\$335,000	\$35,000
WW Treatment	\$225,000	\$2,125,000	\$300,000	\$25,000	\$315,000
□ Cumberland	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000
WW Collection & Pumping	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000
∃ Gorham	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
WW Collection & Pumping	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
- Portland	\$19,930,000	\$4,985,000	\$1,875,000	\$4,155,000	\$2,730,000
Comprehensive Planning	\$300,000	\$300,000		\$500,000	
SCADA & Technology					
WW Collection & Pumping	\$3,850,000	\$1,000,000	\$250,000	\$1,050,000	\$325,000
WW Treatment	\$15,780,000	\$3,685,000	\$1,625,000	\$2,605,000	\$2,405,000
⊡Westbrook	\$340,000	\$40,000	\$40,000	\$3,440,000	\$40,000
Comprehensive Planning	\$300,000				
WW Collection & Pumping	\$40,000	\$40,000	\$40,000	\$3,440,000	\$40,000
□ Westbrook Joint	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$1,045,000
SCADA & Technology					\$50,000
WW Collection & Pumping					\$600,000
WW Treatment	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$395,000
∃ Windham	\$10,020,000	\$10,020,000	\$7,020,000	\$10,835,000	\$20,000
WW Collection & Pumping	\$20,000	\$20,000	\$20,000	\$835,000	\$20,000
WW Treatment	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000	
Water & Wastewater	\$2,430,000	\$4,875,000	\$4,075,000	\$12,275,000	\$1,800,000
Comprehensive Planning	\$400,000				
SCADA & Technology	\$355,000	\$875,000	\$275,000	\$275,000	\$300,000
Vehicle/Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$800,000
Water Facilities Program	\$775,000	\$2,100,000	\$400,000	\$1,600,000	\$300,000
Grand Total	\$48,615,000	\$46,320,000	\$32,945,000	\$58,565,000	\$24,350,000

### Ten-Year Capital Improvement Plan

### 10 Year Total by Fund

	Water	Cape Elizabeth C	umberland	Gorham	Portland	Westbrook	Westbrook	Windham	Water & Wa	Grand Total
-2024-	\$13,360,000	\$320,000	\$1,730,000	\$35,000	\$19,930,000	\$340,000	\$450,000	\$10,020,000	\$2,430,000	\$48,615,000
-2025-	\$22,105,000	\$2,520,000	\$330,000	\$110,000	\$4,985,000	\$40,000	\$1,335,000	\$10,020,000	\$4,875,000	\$46,320,000
-2026-	\$18,490,000	\$335,000	\$680,000	\$35,000	\$1,875,000	\$40,000	\$395,000	\$7,020,000	\$4,075,000	\$32,945,000
-2027-	\$24,350,000	\$360,000	\$530,000	\$35,000	\$4,155,000	\$3,440,000	\$2,585,000	\$10,835,000	\$12,275,000	\$58,565,000
-2028-	\$15,600,000	\$350,000	\$2,730,000	\$35,000	\$2,730,000	\$40,000	\$1,045,000	\$20,000	\$1,400,000	\$23,950,000
-2029-	\$14,350,000	\$150,000	\$630,000	\$35,000	\$1,105,000	\$540,000	\$85,000	\$20,000	\$1,350,000	\$18,265,000
-2030-	\$15,300,000	\$385,000	\$30,000	\$35,000	\$230,000	\$40,000	\$145,000	\$20,000	\$1,350,000	\$17,535,000
-2031-	\$16,300,000	\$60,000	\$30,000	\$35,000	\$305,000	\$40,000	\$85,000	\$20,000	\$1,350,000	\$18,225,000
-2032-	\$17,300,000	\$60,000	\$30,000	\$35,000	\$230,000	\$40,000	\$70,000	\$20,000	\$1,350,000	\$19,135,000
-2033-	\$22,340,000	\$35,000	\$30,000	\$35,000	\$1,225,000	\$40,000	\$50,000	\$20,000	\$1,350,000	\$25,125,000
	\$70,000,000 \$60,000,000 \$50,000,000 \$40,000,000 \$30,000,000					_	Water & \ Windham Westbroo Westbroo Portland	k Joint	er	
	\$20,000,000 \$10,000,000						Gorham Cumberla Cape Eliza			
	\$0		20 <sup>21</sup> 20 <sup>28</sup> :	2029, 2030, 25	3 <sup>34°</sup> 28 <sup>33°</sup> 28		Water			

### 10 Year Total by Program



### Significant Non-Recurring Capital Projects

PWD has over \$578 million of infrastructure assets, which is over 90% of the PWD's total assets. Approximately \$211 million of capital additions and replacements are planned over the next five years. Several projects involve 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.

	- 2024 -	- 2025 -	- 2026 -	- 2027 -	- 2028 -
⊡Water	\$250,000	\$7,350,000	\$3,000,000	\$12,000,000	
18/3007/SLWTF Intake Screening Phase 1	\$250,000	\$3,750,000			
262/3069/SLWTF - Emergency Storage/Transmission- Design		\$600,000			
262/3070/SLWTF - Emergency Storage/Trans - Construction				\$12,000,000	
307/3068/407 Zone Reliability Improvements		\$3,000,000	\$3,000,000		
⊡ Cape Elizabeth	\$200,000	\$2,000,000			
424/3188/Aeration and Clarification Upgrade	\$200,000	\$2,000,000			
∃ Portland	\$11,000,000				
21/3204/Dewatering System Upgrade/ Ordor control	\$11,000,000				
∃ Windham	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
182/3241/North Windham WWTF	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
⊡ Water & Wastewater	\$100,000	\$1,100,000	\$2,600,000	\$9,600,000	\$400,000
63/3046/Meter Replacement and Leak Detection	\$100,000	\$1,100,000	\$2,600,000	\$9,600,000	\$400,000
Grand Total	\$21,550,000	\$20,450,000	\$12,600,000	\$25,150,000	\$400,000

<u>SLWTF Intake Screening</u>: Raw water screening for Sebago Lake Water Treatment Facility (SLWTF) was evaluated as part of the CWSSP. The current screens at the intake buildings are 70 years old and are in need of replacement. The operating impact of the project is \$360,000 starting in 2026 (all debt service).

<u>SLWTF Emergency Storage</u>: PWD will construct a 7.0 Million gallon reservoir near the 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 \$1,134,000 starting in 2028 (all debt service).

<u>Cape Elizabeth Aeration/Clarification Ugprade:</u> Upgrade aging system at the Wastewater Treatment Facility (WWTF) with an operating impact of \$198,000 starting in 2026 (all debt service).

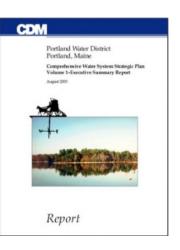
<u>Portland Dewatering System Upgrade</u>: Upgrade aging systems at the Est End Wastewater Treatment Facility (EEWWTF) which is expected to save \$450,000 in biosolids disposal costs per year. The debt service of \$990,000 will offset those savings starting in 2025.

<u>Meter Replacement</u>: In 2026, new meters and a new meter reading system will be needed due to the age of the existing system. The project may take several years with total costs up to \$13.8 million. The operating impact of the \$13.8 million project is \$1.2 million starting in 2027 (all debt service).

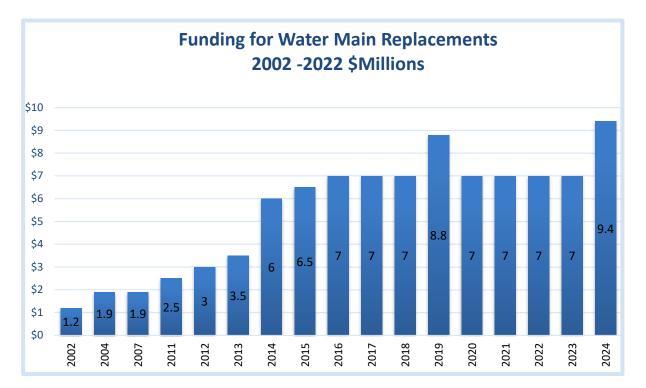
<u>North Windham WWTF:</u> The Town of Windham has requested that PWD construct a new WWTF and collection system to serve the North Windham area. An almost \$38 million project budget has been estimated to complete all phases. The operating impact of the project is estimated to be \$2.4 million (\$900,000 operating and \$1.5 million debt service).

### Comprehensive Water System Strategic Plan (CWSSP) - March 2003

Camp Dresser & McKee, Inc., PWD's engineering consultants, completed a master plan of the water 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, PWD also undertook the replacement of water meters and installed 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 2025. This project was originally approved in the 2020 CIP but was canceled due to the pandemic.



CWSSP recommended removal or rehabilitation of several water storage tanks. PWD has removed three tanks from the system – Munjoy Hill reservoir, Shore Acres and Oak Hill. In 2008, PWD rehabilitated two 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 OHSA fall protection standards.



CWSSP identified system deficiencies and recommended actions. The most significant project from the priority - 1 projects was inadequacies associated with service from the Elevation 407 zone. CWSSP recommended combining the 407-north zone with the south zone. Many projects have been completed to that end. They 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 PWD completed the transmission portion of the north 407 zone by extending 24 inch main from the pump station site 6,500 feet along 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.

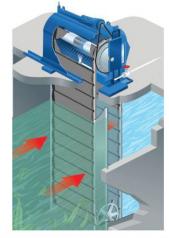
A hydraulic analysis of the system and final design of the new 407 zone pump station (Wards Hill) was completed in 2017. The pump station construction started in 2017 (CIP #307) and was on-line in September 2018. Land acquisition and design for a new storage facility to replace the Windham Center Tank 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, PWD completed the Depot Street water transmission main connector (2020 CIP 307/3066), to extend the 407-zone transmission system, in the summer of 2021. Proposed in 2022 CIP 307/3067 is a project 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 2023 and constructed in the summer of 2024.

#### **Greater Portland Water System - Water Treatment/Alternate Source - November 2008**

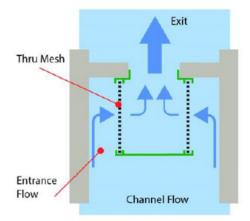
Camp Dresser & McKee, Inc., PWD's engineering consultants, completed a study of the Sebago Lake Water Treatment Facility (SLWTF) in November of 2008. The primary focus of the study was to evaluate design alternatives for the ultraviolet disinfection (UV) process proposed to meet upcoming disinfection 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 investigated was 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 UV to evaluate the potential of fouling on the 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. The 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



1: Image of a Typical Thru-Flow Traveling Water Screen

Typical Flow Path through Dual-Flow Traveling Water Screens

### Water Fund (continued)

### Southern Maine Regional Water Council – Water Master Plan Study – October 2008 (Updated 2016)

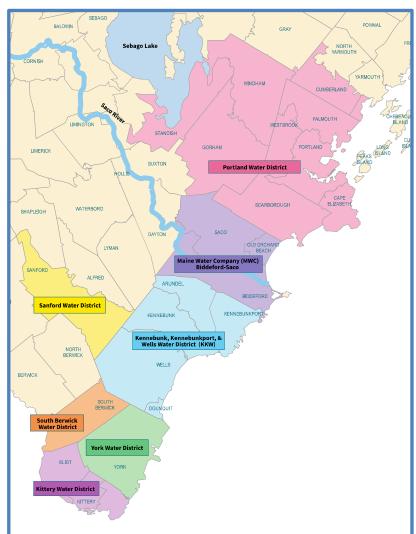
The Southern Maine Regional Water Council (SMRWC), made up of the seven major water utilities of Cumberland and York County, completed a master plan in October of 2008. This document provides the region with a planning tool for regional solutions to

sustainable water resources and infrastructure for the foreseeable future. This study accomplished 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 SMRWC has continued to collaborate on regional utility planning and purchasing efforts. In 2016, the SMRWC 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:

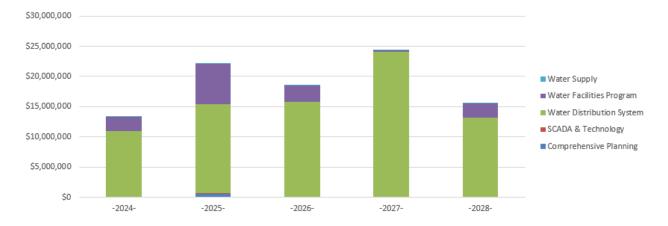
- Existing capabilities for each system
- Hydraulic limitations
- Available water from neighboring systems
- Water quality compatibility issues





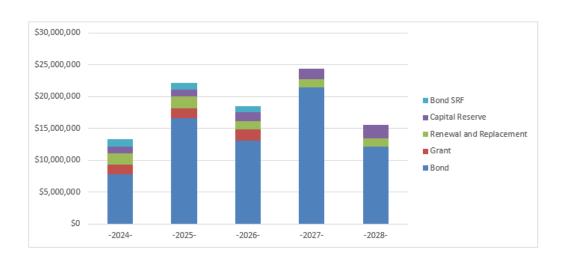
### Water Fund (continued)

Program Summary						
	-2024-	-2025-	-2026-	-2027-	-2028-	
Comprehensive Planning		\$600,000				
SCADA & Technology	\$50,000	\$75,000	\$50,000	\$50,000	\$100,000	
Water Distribution System	\$10,875,000	\$14,775,000	\$15,775,000	\$24,075,000	\$13,075,000	
Water Facilities Program	\$2,410,000	\$6,630,000	\$2,640,000	\$200,000	\$2,400,000	
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
Grand Total	\$13,360,000	\$22,105,000	\$18,490,000	\$24,350,000	\$15,600,000	



### **Financing Summary**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$7,760,000	\$16,550,000	\$13,040,000	\$21,400,000	\$12,075,000
Grant	\$1,550,000	\$1,620,000	\$1,750,000		
Renewal and Replacement	\$1,800,000	\$1,855,000	\$1,350,000	\$1,350,000	\$1,400,000
Capital Reserve	\$1,000,000	\$1,000,000	\$1,400,000	\$1,600,000	\$2,125,000
Bond SRF	\$1,250,000	\$1,080,000	\$950,000		
Grand Total	\$13,360,000	\$22,105,000	\$18,490,000	\$24,350,000	\$15,600,000



	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning		\$600,000			
262/3069/SLWTF - Emergency Storage/Transmission- Design		\$600,000			
SCADA & Technology	\$50,000	\$75,000	\$50,000	\$50,000	\$100,000
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			\$50,000
Water Distribution System	\$10,875,000	\$14,775,000	\$15,775,000	\$24,075,000	\$13,075,000
262/3070/SLWTF - Emergency Storage/Trans - Construction				\$12,000,000	
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	\$11,000,000	\$12,000,000
43/3296/WMR- Lead Copper Galv. Replacement	\$2,400,000	\$2,400,000	\$2,400,000		
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
61/3282/LCRR Compliance - Phase 1 Inventory (GPS services)	\$400,000	\$300,000	\$300,000		
65/3072/Water Hydrant Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Water Facilities Program	\$2,410,000	\$6,630,000	\$2,640,000	\$200,000	\$2,400,000
122/3032/Water Facilities R&R	\$250,000	\$150,000	\$150,000	\$150,000	\$150,000
122/3210/Chemical Storage Facilities Upgrades Phase 1		\$1,550,000	\$1,800,000		\$2,200,000
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			
122/3258/Chemical Storage Facilities Upgrades Phase 2					
122/3259/Chemical Storage Facilities Upgrades Phase 3					
122/3261/Blanchard/Bruce Hill Area Planning					
122/3287/SLWTF - Roof Replacement Phase 1	\$660,000				
122/3288/SLWTF - Roof Replacement Phase 2			\$640,000		
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			
203/3262/Cumberland Tank Improvements Preliminary Design					
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	\$13,360,000	\$22,105,000	\$18,490,000	\$24,350,000	\$15,600,000

### SCADA/Process Control - Water

**Division:** Water - General **Funding:** R & R – Water-Div. 20

Subprogram # 110

Manager: Pellerin, Greg Priority: Upgrade obsolete facility

#### Description:

The program supports 30 water sites across PWD by upgrading and replacing the Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to PWD SCADA standards and provide for increased automation of the water systems and treatment. Programmable

Logic Controllers (PLC) have been replaced across PWD 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 PWD.

#### History:

PWD 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
□ Renewal and Replacement	\$50,000	\$75,000	\$50,000	\$50,000	\$100,000
SCADA & Technology	\$50,000	\$75,000	\$50,000	\$50,000	\$100,000
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			\$50,000
Grand Total	\$50,000	\$75,000	\$50,000	\$50,000	\$100,000

Previous Years on CIP:	
Related Projects:	

2003 Subprogram #177 302

### 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 SLWTF at the start of the 60 inch 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 CWWSP, 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
∃Bond		\$600,000		\$12,000,000	
Comprehensive Planning		\$600,000			
262/3069/SLWTF - Emergency Storage/Transmission- Design		\$600,000			
Water Distribution System				\$12,000,000	
262/3070/SLWTF - Emergency Storage/Trans - Construction				\$12,000,000	
Grand Total		\$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 Funding: Bonds – Water - Div. 20 Manager: Johnson, Gordon 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.

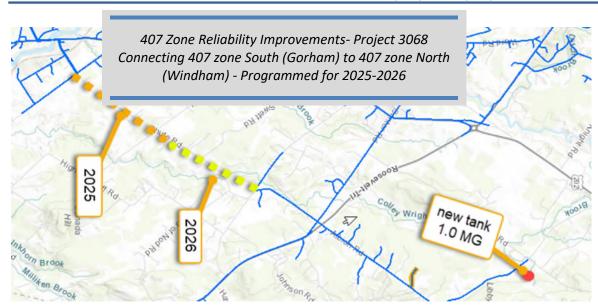
#### Origin of the Subprogram:

Projects identified and proposed phasing outlined in Comprehensive Water System Strategic Plan.

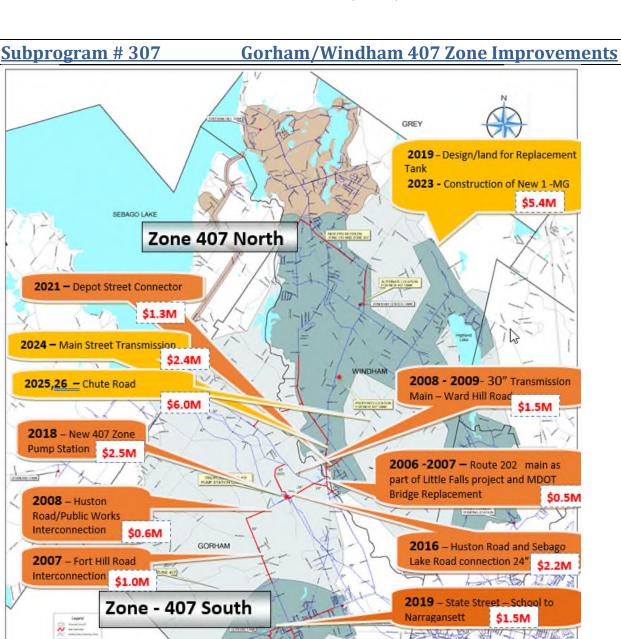


2019 – Subprogram 307, project #3004 Water Storage for 407 zone north. The project will replace an old undersized 1958 Elevated Tank (left) with new ground storage tank (right). Currently under design – Construction to start 2023 with anticipated completion summer of 2024

	-2024-	-2025-	-2026-	-20272028-
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	



305



Public health, system reliability and public safety benefits:

**Completed Projects** 

CDM

**Planned or in Progress Projects** 

 Replacement of two obsolete Pumping Stations (Gorham- 1898, Prides Corner – 1950) with state-ofthe-art single new pump station (Wards Hill)

WE:

ZONE 407 CONSOLIDATION PROPOSED SYSTEM IMPROVEMENTS

POURE 8-1

- Elimination of pressure limitations to approximately 150 customers
- Replacement of old 1958 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

### Construction of New 407 zone tank

Access Road design to new 1.0 million gallon tank – Contractor Installing 20" HDPE water main up the newly constructed Access Road – September 2023. This is contract 1 of 2. The tank is expected to be online in Summer of 2024



307

# Subprogram # 408Water System Redundancy (Looping) andUpsizing

Division: Water - General	Manager: Johnson, Gordon
Funding: R & R - Water	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 PWD 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:** 

	-2024-	-2025-	-2026-	-2027-	-2028-
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:	PWD labor & equipment or low bid contract installation

### Subprogram # 43 Water Main Replacement

Division: Water - General Funding: Bonds and R&R - Water- Div. 20 Manager: Johnson, Gordon 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 two 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. PWD has a long term program to upgrade these mains.

#### Origin of the Subprogram:

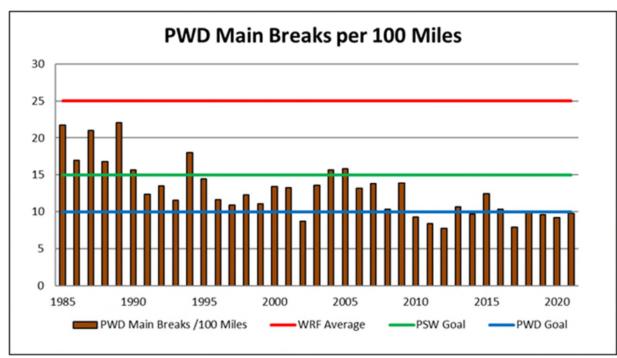
The current list of projects is determined on the basis of water quality complaints, leak frequency data, age of main, and municipal/state reconstruction projects.

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$7,100,000	\$7,960,000	\$8,420,000	\$9,400,000	\$9,875,000
Water Distribution System	\$7,100,000	\$7,960,000	\$8,420,000	\$9,400,000	\$9,875,000
43/3121/WMR- Various Main Replacements	\$6,000,000	\$7,000,000	\$7,600,000	\$9,400,000	\$9,875,000
43/3296/WMR- Lead Copper Galv. Replacement	\$1,100,000	\$960,000	\$820,000		
⊡ Grant	\$1,300,000	\$1,440,000	\$1,580,000		
Water Distribution System	\$1,300,000	\$1,440,000	\$1,580,000		
43/3296/WMR- Lead Copper Galv. Replacement	\$1,300,000	\$1,440,000	\$1,580,000		
□ Capital Reserve	\$1,000,000	\$1,000,000	\$1,400,000	\$1,600,000	\$2,125,000
Water Distribution System	\$1,000,000	\$1,000,000	\$1,400,000	\$1,600,000	\$2,125,000
43/3121/WMR- Various Main Replacements	\$1,000,000	\$1,000,000	\$1,400,000	\$1,600,000	\$2,125,000
Grand Total	\$9,400,000	\$10,400,000	\$11,400,000	\$11,000,000	\$12,000,000

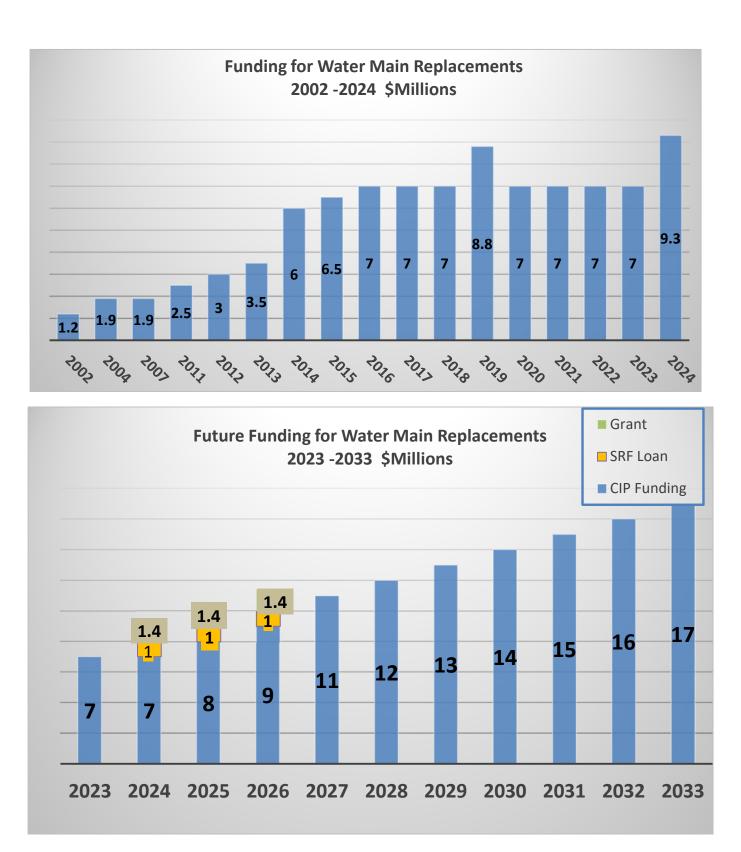
#### **Budget Summary:**

	PROJECT	MUNICIPALITY		ΛΑΤΙΟΝ	
	PROJECT	WONICIPALITY	Total Length	CIP est. Budget	Reason for project
	Falmouth & Winn	Falmouth	1160	\$700,000	multiple leaks
	Providence Street	Portland	1940	\$1,200,000	multiple leaks
	Center Street	Portland	800	\$500,000	Portland CSO project
Projects	Vaile, Olympia, Helene	Portland	920	\$600,000	multiple leaks
ja j	Libby & Forest	Westbrook	1120	\$700,000	multiple leaks
	Elm Street	Portland	800	\$500,000	multiple leaks
Anticipated		Portland	1400		
ntic	Nasons Corner, Dennett,	Portland	570	\$1,600,000	multiple leaks
	Dorsett, Kent	Portland	640		
20.24	Market & Hannaford	South Portland	800	\$500,000	multiple leaks
	Operations projects	various	1200	\$700,000	
	Lead Copper SRF projects	various	4000	\$2,400,000	These project depends on SRF grant funding
		TOTAL (2024)	15350	\$9,400,000	

### Anticipated water main replacement projects for 2024 and estimated cost



WRF = Water Research Foundation, PSW = Partnership for Safe Water



310

### 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 PWD's 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:

PWD's target is to replace 50 ( + or - ) valves per year.



#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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: Related Projects: Procurement Issues:

Subprograms 43, 61

All

Work is to be performed using PWD 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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	Manager: Wallace, Jim
Funding: R & R – Water- Div. 20	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 PWD 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. PWD 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. PWD also have 260 cast iron services installed prior to 1950. PWD's goal is to replace at least 300 services per year.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
∃Bond	\$150,000	\$120,000	\$130,000		
Water Distribution System	\$150,000	\$120,000	\$130,000		
61/3282/LCRR Compliance - Phase 1 Inventory (GPS services)	\$150,000	\$120,000	\$130,000		
⊡Grant	\$250,000	\$180,000	\$170,000		
Water Distribution System	\$250,000	\$180,000	\$170,000		
61/3282/LCRR Compliance - Phase 1 Inventory (GPS services)	\$250,000	\$180,000	\$170,000		
□ 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	\$1,000,000	\$900,000	\$900,000	\$600,000	\$600,000

Previous Years on CIP: All

### Subprogram # 61 Water Services - Renew Domestic & Fire

*Expected service life of a water service is 70-years* 

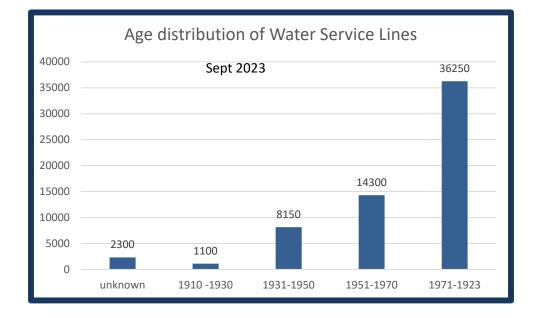
81% of the PWD's services are less than 70-years old

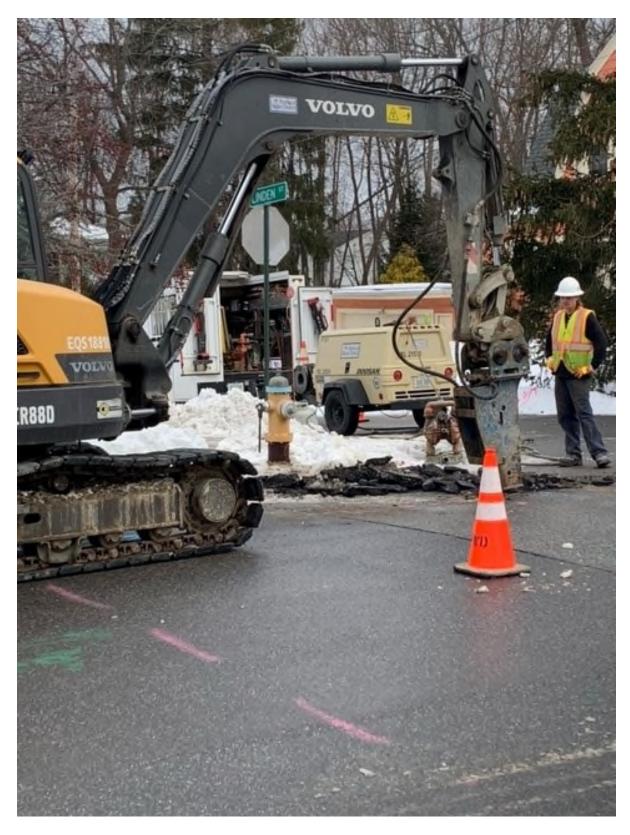
Water Services by Install Date

Install Date	# Services	% of services
unknown	2300	3.7%
<= 1910	65	0.1%
1911-130	1100	1.7%
1931-1950	8150	13%
1951-1970	14300	23%
1971-1923	36250	58%

Total

62500





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 PWD's hydrants meet fire protection standards and provide direction for PWD's 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:

PWD's project is focused on replacing and upgrading 75 hydrants per year over a twenty year replacement program of 1450 hydrants.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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



### Subprogram # 122 Water Facilities Renewal and Replacement

Division: Water - General	Manager: Wallace, Jim
Funding: R & R – Water- Div. 20	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.

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$1,510,000	\$1,550,000	\$2,440,000		\$2,200,000
Water Facilities Program	\$1,510,000	\$1,550,000	\$2,440,000		\$2,200,000
122/3210/Chemical Storage Facilities Upgrades Phase 1		\$1,550,000	\$1,800,000		\$2,200,000
122/3211/Windham Pump Upgrades	\$850,000				
122/3258/Chemical Storage Facilities Upgrades Phase 2					
122/3259/Chemical Storage Facilities Upgrades Phase 3					
122/3287/SLWTF - Roof Replacement Phase 1	\$660,000				
122/3288/SLWTF - Roof Replacement Phase 2			\$640,000		
Renewal and Replacement	\$600,000	\$630,000	\$150,000	\$150,000	\$150,00
Water Facilities Program	\$600,000	\$630,000	\$150,000	\$150,000	\$150,00
122/3032/Water Facilities R&R	\$250,000	\$150,000	\$150,000	\$150,000	\$150,000
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			
122/3261/Blanchard/Bruce Hill Area Planning					
Grand Total	\$2,110,000	\$2,180,000	\$2,590,000	\$150,000	\$2,350,000

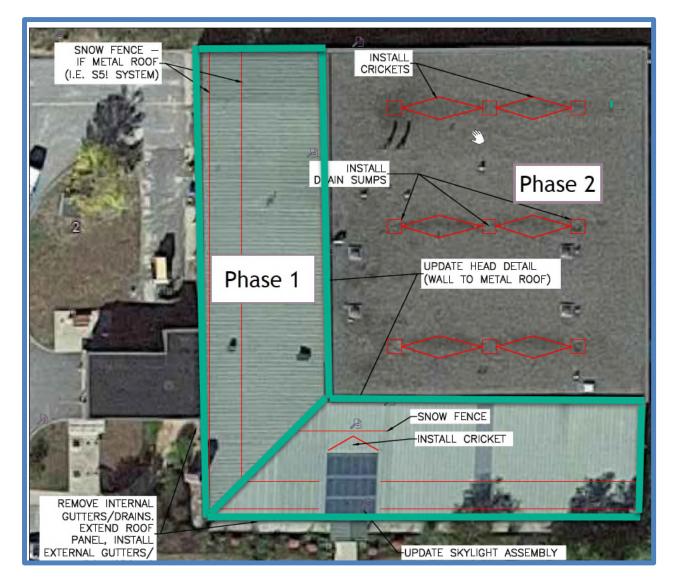
#### **Budget Summary:**

### Roof replacement on 30-year Sebago Lake Water Treatment Facility

2024 CIP, Project 3287 Phase 1 roof replacement - metal roof - \$660,000

2025 CIP Project 3288 Phase 2 roof Replacement- flat roof - 640,000

Roof Asset Management Plan - Condition Assessment for SLWTF - January 2023



#### 319

#### **SLWTF Intakes - Replace Mechanical Screens** Subprogram # 18

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. PWD have experienced small fish getting by the screens and showing up in the clearwell. The ozone and chlorination process kills the fish, but PWD do not want to let them escape into the system.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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			

1998 to present **Previous Years on CIP:** 



### Sebago Lake WTF **Intake Screening Improvements**

Final Preliminary Design Report April 9, 2018

320

### 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.

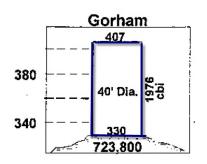
#### Origin of the Subprogram:

Maintenance has been deferred for several years pending completion of a hydraulic study to determine which tanks still have hydraulic value.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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	\$50,00
Water Facilities Program	\$50,000	\$50,000	\$50,000	\$50,000	\$50,00
203/3102/Water Storage Facility Maintenance & Upgrade	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
203/3262/Cumberland Tank Improvements Preliminary Design					
Grand Total	\$50,000	\$700,000	\$50,000	\$50,000	\$50,00

Previous Years on CIP: Procurement Issues:



#### Since 2000

RFP preparation and contract

administration will be by PWD Staff. Maintenance and repair services will

rham Tank is scheduled for abilitation and Painting in 2025

be competitively bid.



### Subprogram # 46Water System Security

Division: Water - General Funding: R & R - Water - Div.20 Manager: Wallace, Jim Priority: Security of facilities

321

#### Description:

This program is to improve the physical security of PWD's water facilities. The program supports installing and upgrading security measures on PWD 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:

PWD 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 PWD 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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: Related Projects: Procurement Issues: 2004 to present

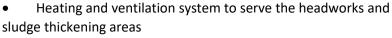
Standard purchasing procedures will apply.

### **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:



• Replacement of the chlorine and sodium bisulfite chemical disinfection systems with Ultraviolet Disinfection

Cape Elizabeth Wastewater Treatment Facility Advanced Treatment Assessment Report – 2020 CIP 424, project# 3000 - This Assessment Report completed in August 2021 recommended Clarification and Aeration Upgrade Project # 3188 2024 CIP Design and 2025 CIP Construction

#### Cape Elizabeth – Sewer System

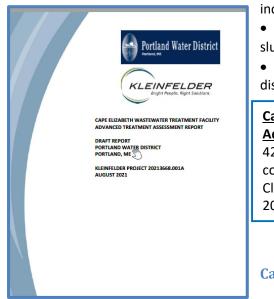
The current CSO Master Plan identifies reduction of CSO volume through infiltration/inflow (I/I) reduction within the Town's and City of South Portland's collection systems and improvements to the Ottawa Road Pump Station. The Town of Cape Elizabeth completed a project that installed new storm drains 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 PWD's 10-year program to inspect its entire collection system.

### **Cape Elizabeth - Pump Stations**

PWD 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**

	-2024-	-2025-	-2026-	-2027-	-2028-
WW Collection & Pumping	\$95,000	\$395,000	\$35,000	\$335,000	\$35,000
WW Treatment	\$225,000	\$2,125,000	\$300,000	\$25,000	\$315,000
Grand Total	\$320,000	\$2,520,000	\$335,000	\$360,000	\$350,000

### **Projects by Program**

	-2024-	-2025-	-2026-	-2027-	-2028-
WW Collection & Pumping	\$95,000	\$395,000	\$35,000	\$335,000	\$35,000
52/3005/Ottawa Rd PS Upgrades Phase 2		\$300,000			
52/3130/Cape Elizabeth Pump Station R&R	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
52/3168/Stonegate South Upgrades					
52/3169/Algonquin PS Upgrades					
52/3170/Peabbles Cove PS Upgrades					
52/3294/Peabble Cove Generator Replacement	\$60,000				
52/3297/Broad Cove North Generator		\$60,000			
52/3298/LittleJohn PS HVAC improvements				\$300,000	
⊟WW Treatment	\$225,000	\$2,125,000	\$300,000	\$25,000	\$315,000
424/3129/Cape Elizabeth WWTF- R&R	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
424/3188/Aeration and Clarification Upgrade	\$200,000	\$2,000,000			
424/3189/Boiler Upgrade/Replacement		\$100,000			
424/3207/Sludge Handling and Headworks Odor Control			\$275,000		
424/3224/Odor Control (PEND)					\$275,000
424/3225/Peabbles Dechlorination Bunker Repurposing					\$15,000
424/3226/Building Envelope					
Grand Total	\$320,000	\$2,520,000	\$335,000	\$360,000	\$350,000

## Financing Summary

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$200,000	\$2,300,000	\$275,000	\$300,000	\$275,000
Renewal and Replacement	\$120,000	\$220,000	\$60,000	\$60,000	\$75,000
Grand Total	\$320,000	\$2,520,000	\$335,000	\$360,000	\$350,000

### Subprogram # 52

### **Cape Elizabeth Pump Stations - R&R**

Division: Wastewater - Cape Elizabeth Funding: Bond and R&R – Wastewater – Div. 51 Manager: Poulin, Charlene **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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond		\$300,000		\$300,000	
WW Collection & Pumping		\$300,000		\$300,000	
52/3005/Ottawa Rd PS Upgrades Phase 2		\$300,000			
52/3298/LittleJohn PS HVAC improvements				\$300,000	
Renewal and Replacement	\$95,000	\$95,000	\$35,000	\$35,000	\$35,000
WW Collection & Pumping	\$95,000	\$95,000	\$35,000	\$35,000	\$35,000
52/3130/Cape Elizabeth Pump Station R&R	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
52/3168/Stonegate South Upgrades					
52/3169/Algonquin PS Upgrades					
52/3170/Peabbles Cove PS Upgrades					
52/3294/Peabble Cove Generator Replacement	\$60,000				
52/3297/Broad Cove North Generator		\$60,000			
Grand Total	\$95,000	\$395,000	\$35,000	\$335,000	\$35,000

Previous Years on CIP: 2005 to present Related Projects: Subprogram #407

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# **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 under design)	3.12	2.87
CEP43	Ottawa Road (2022 under construction)	2.79	2.09
CEP42	Maiden Cove Completed Upgrades 2022	<del>2.14</del> <b>5.0</b>	1.98
Cape Elizabeth		3.74	3.53
Average		5.74	5.55
PWD -All Average		3.72	



Division: Wastewater - Cape Elizabeth Funding: R & R – Wastewater – Div. 51

# **Cape Elizabeth WWTF**

Manager: Firmin, Scott 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 PWD 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$200,000	\$2,000,000	\$275,000		\$275,00
WW Treatment	\$200,000	\$2,000,000	\$275,000		\$275,00
424/3188/Aeration and Clarification Upgrade	\$200,000	\$2,000,000			
424/3207/Sludge Handling and Headworks Odor Control			\$275,000		
424/3224/Odor Control (PEND)					\$275,00
Renewal and Replacement	\$25,000	\$125,000	\$25,000	\$25,000	\$40,00
WW Treatment	\$25,000	\$125,000	\$25,000	\$25,000	\$40,00
424/3129/Cape Elizabeth WWTF- R&R	\$25,000	\$25,000	\$25,000	\$25,000	\$25,00
424/3189/Boiler Upgrade/Replacement		\$100,000			
424/3225/Peabbles Dechlorination Bunker Repurposing					\$15,000
424/3226/Building Envelope					
Grand Total	\$225,000	\$2,125,000	\$300,000	\$25,000	\$315,000

# **Cumberland Wastewater**

#### **Cumberland – Pump Stations**

In 2007, PWD 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.

PWD 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 PWD'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

# **<u>Cumberland Wastewater (continued)</u>**

# **Program Summary**

	-2024-	-2025-	-2026-	-2027-	-2028-
WW Collection & Pumping	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000
Grand Total	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000

# Projects by Program

	-2024-	-2025-	-2026-	-2027-	-2028-
GWW Collection & Pumping	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000
41/3136/Cumberland WW Pump Stations - R&R	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
41/3171/Stony Ridge Pump Replacement			\$300,000		
41/3172/Ocean Terrace PS Pump Replacement, Bypass			\$350,000		
41/3173/Ferne Lane PS Pump Replacement					
41/3174/Ledge Rd PS Upgrades					\$200,000
41/3175/Brookside PS Pump and Electrical Upgrades				\$300,000	
41/3176/Cumberland Meadows PS Upgrades					
41/3177/Smalls Brook PS Upgrades				\$200,000	
41/3244/Powell Rd PS Conversion to Submersible PS	\$800,000				
41/3290/Phase 1- Tuttle Road Force Main Replacement	\$900,000				
41/3291/Phase 2 - Tuttle Road Force Main Replacment					\$2,200,000
41/3299/Foreside PS upgrades					\$300,000
41/3300/Tuttle Road PS upgrades		\$300,000			
Grand Total	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000

# **Financing Summary**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$1,700,000	\$300,000	\$650,000	\$500,000	\$2,700,000
Renewal and Replacement	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Grand Total	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000

# Subprogram # 41 Cumberland WW Pump Stations - R&R

**Division:** Wastewater - Cumberland **Funding:** R & R – Wastewater- Div. 53 Manager: Poulin, Charlene 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
∃ Bond	\$1,700,000	\$300,000	\$650,000	\$500,000	\$2,700,000
WW Collection & Pumping	\$1,700,000	\$300,000	\$650,000	\$500,000	\$2,700,000
41/3171/Stony Ridge Pump Replacement			\$300,000		
41/3172/Ocean Terrace PS Pump Replacement, Bypass			\$350,000		
41/3173/Ferne Lane PS Pump Replacement					
41/3174/Ledge Rd PS Upgrades					\$200,000
41/3175/Brookside PS Pump and Electrical Upgrades				\$300,000	
41/3176/Cumberland Meadows PS Upgrades					
41/3177/Smalls Brook PS Upgrades				\$200,000	
41/3244/Powell Rd PS Conversion to Submersible PS	\$800,000				
41/3290/Phase 1- Tuttle Road Force Main Replacement	\$900,000				
41/3291/Phase 2 - Tuttle Road Force Main Replacment					\$2,200,000
41/3299/Foreside PS upgrades					\$300,000
41/3300/Tuttle Road PS upgrades		\$300,000			
Renewal and Replacement	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
WW Collection & Pumping	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
41/3136/Cumberland WW Pump Stations - R&R	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Grand Total	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000

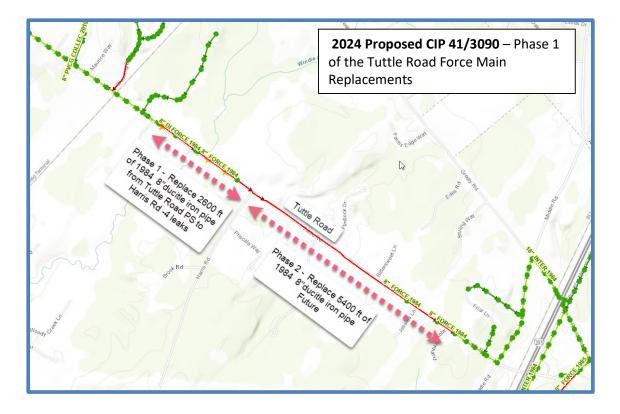
Previous Years on CIP: 2001 to present

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	Proposed year for RR	Est cost of RR upgrades
CUP45	Longmeadow – (no generator - 2023	4.56	3.26	2023	Under
	CIP proposed generator additions)				construction
CUP54	Drowne Road	4.06	4.93		
CUP55	Twin Brook	4.00	3.83		
CUP41	Foreside Road	3.93	3.75	2028	\$300,000
CUP51	Cumberland Meadow	3.75	3.63		
CUP46	Ledge Road	3.70	3.82	2028	\$200,000
CUP52	Small's Brook Crossing	3.54	3.43	2027	\$200,000
CUP43	Tuttle Road	3.51	3.80	2025	\$300,000
CUP44	Ocean Terrace	3.45	3.26	2026	350000
CUP42	Powell Road (2024 proposed)	3.36	3.73	2024	\$800,000
CUP47	Ferne Lane	3.35	3.81	2029	\$300,000
CUP48	Brookside	3.31	3.18	2027	\$300,000
CUP50	Stony Ridge	3.19	3.60	2026	\$300,000
Cumberland		3.67	3.72		
Average					
PWD -All Ave	rage	3.72		Total	\$2,750,000



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# Gorham/Westbrook/Windham Wastewater

## Westbrook Regional Treatment Facility

The Westbrook Regional WWTF was brought online in the mid '70s. Over the years PWD 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), Polymer system improvements (2019)
- RAS pumps (2011)
- Plant Control System (2013)
- RAS distribution and flow split to the secondary clarifiers (2014)
- Sludge Dewatering (2018)
- Aeration and Secondary Clarifiers (2023)
- Additional Screening at influent Pump stations (2023)
- New power distribution system and switchgear

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 were installed in 2023 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.

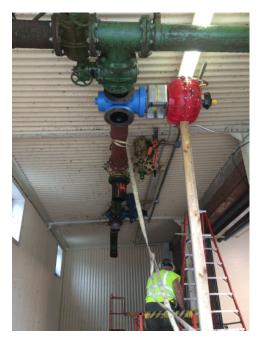
The aeration system was evaluated in 2015 to develop a roadmap for the eventual upgrade of the aeration system as it nears the end of its service life. The 2019 CIP included design phase services to upgrade the aeration system and secondary clarification process. These upgrades will facilitate process 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 plan in Portland, a selector was 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 was completed in the fall of 2023. This upgrade included a new power distribution system and electrical switchgear.

# Gorham/Westbrook/Windham Wastewater (continued)

In 2015, PWD 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 PWD competitively pre-procured a 3-way valve and pneumatic actuator to create a 4<sup>th</sup> 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



2019 CIP 416 project 3026 - Polymer System Improvements

# Gorham/Westbrook/Windham Wastewater (continued)

#### Westbrook - Sewer System

In late 2007, PWD 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 PWD. 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 PWD 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 PWD 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.

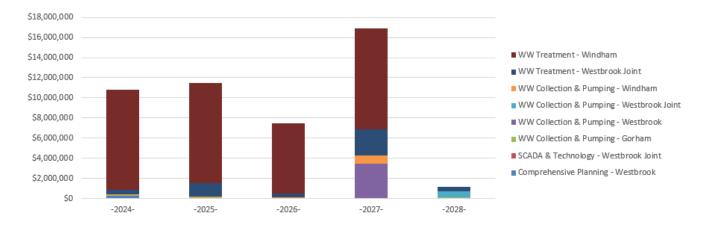
To ensure that accurate wastewater flow is measured and used for allocating operating costs to the Town of Gorham, a flow meter was installed to measure the flow from the Town of Gorham to the Westbrook/ Gorham/Windham WWTF. This meter was installed and is maintained by a third-party vendor as part of PWD's extensive flow monitoring program.

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# 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					
	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$300,000				
Westbrook	\$300,000				
SCADA & Technology					\$50,000
Westbrook Joint					\$50,000
■WW Collection & Pumping	\$95,000	\$170,000	\$95,000	\$4,310,000	\$695,000
Gorham	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
Westbrook	\$40,000	\$40,000	\$40,000	\$3,440,000	\$40,000
Westbrook Joint					\$600,000
Windham	\$20,000	\$20,000	\$20,000	\$835,000	\$20,000
□WW Treatment	\$10,450,000	\$11,335,000	\$7,395,000	\$12,585,000	\$395,000
Westbrook Joint	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$395,000
Windham	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000	
Grand Total	\$10,845,000	\$11,505,000	\$7,490,000	\$16,895,000	\$1,140,000



	-2024-	-2025-	-2026-	-2027-	-2028-
Bond		\$750,000	\$200,000	\$5,950,000	\$600,000
Grant				\$6,450,000	
Renewal and Replacement	\$845,000	\$755,000	\$290,000	\$945,000	\$540,000
Bond SRF	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
Grand Total	\$10,845,000	\$11,505,000	\$7,490,000	\$16,895,000	\$1,140,000

# Gorham/Westbrook/Windham Wastewater (continued)

# Projects by Program

	-2024-	-2025-	-2026-	-2027-	-2028-
□ Comprehensive Planning	\$300,000				
3/3301/WWGWWTF Capacity Study	\$300,000				
SCADA & Technology					\$50,000
177/3127/Westbrook SCADA Server Replacement Program					\$50,000
∃WW Collection & Pumping	\$95,000	\$170,000	\$95,000	\$4,310,000	\$695,000
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	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
411/3302/Cottage Place PS- Generator/Transfer Repl.					\$600,000
411/3306/East Bridge St PS - Generator/Transfer Replac.					
60/3137/Gorham WW Pump Station - R&R	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
60/3180/Briarwood PS Telemetry Upgrade		\$75,000			
60/3275/Dana Ct. Forcemain Replacement				\$200,000	
WW Treatment	\$10,450,000	\$11,335,000	\$7,395,000	\$12,585,000	\$395,000
182/3241/North Windham WWTF	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000	
416/3132/Westbrook Gorham Windham WWTF R&R	\$50,000	\$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	\$400,000				
416/3191/TWAS Mixing System Replacement		\$150,000			
416/3198/WAS and GBT System Upgrade/Rehabilitation		\$350,000			
416/3199/RAS Pumping Upgrade					\$300,000
416/3200/Hypochlorite Storage Tank Replacement					
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		\$20,000
416/3271/Structural/Architectural Assessment/Rehab		\$35,000		\$35,000	
416/3273/Outfall Condition Assessment					\$25,000
Grand Total	\$10,845,000	\$11,505,000	\$7,490,000	\$16,895,000	\$1,140,000

# Subprogram # 180 Windham - Little Falls WW System

Division: Wastewater - Windham Little Falls	Manager: Poulin, Charlene
Funding: Bonds, R&R – Wastewater – Div. 55	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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
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	\$85,000	\$20,000
WW Collection & Pumping	\$20,000	\$20,000	\$20,000	\$85,000	\$20,000
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	\$835,000	\$20,000

Previous Years on CIP: Procurement Issues: 2000 to present Engineering and contracting will be via standard competitive retention procedures.

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 PWD 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. Phase 2 of the Depot Street Pump Station project will coincide with the Keddy Mill clean-up and redevelopment.



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	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		

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# 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 polution 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. PWD received a conditional permit from the DEP that would allow for discharge of highly treated effluent to the ground. In April of 2022 PWD received a SRF loan award from the DEP Clean Water State Revolving Loan fund for \$38.6M loan with a \$2.25M principal



forgivenss award. In June of 2022 the town voted overwelmingly in favor of the North Windham Sewer Project. PWD 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:**

	-2024-	-2025-	-2026-	-2027-	-2028-
Grant				\$6,450,000	
WW Treatment				\$6,450,000	
182/3241/North Windham WWTF				\$6,450,000	
Bond SRF	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
WW Treatment	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
182/3241/North Windham WWTF	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
Grand Total	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000	

Siting of Preliminary June 14<sup>th</sup> **TP/effluent Design Build** Design & Pre-Construction selection/ disposal Referendum permitting start Fall 2023,2024,2025 Site Testing Vote **Project Budget** 2022 established



# Westbrook CSO Abatement

**Division:** Wastewater - Westbrook **Funding:** Bond – Wastewater Div 62 Manager: Poulin, Charlene Priority: Regulatory mandate

#### Description:

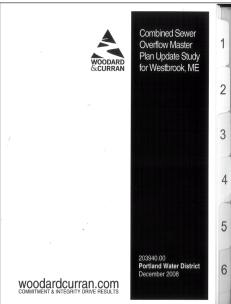
This project is driven by the permit requirement to mitigate combined sewer overflows in the City of Westbrook. The most recent 5 year portion of the mitigation, or Long Term Control Plan, has been in large part completed. The plan is currently undergoing another review and will be updated with the next 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:**

	-2024-	-20252026-	-2027-	-2028-
Bond			\$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



## **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 PWD 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 PWD SCADA standards and provide for increased automation of wastewater systems and treatment. Programmable Logic Controllers (PLC) have been replaced across PWD 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 PWD.

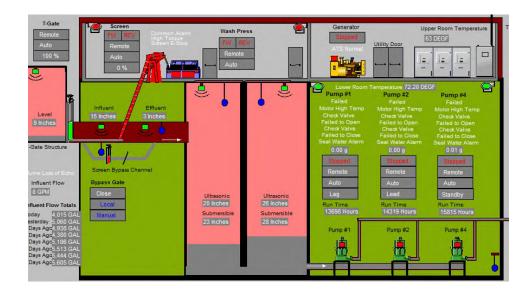
#### History:

PWD 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:**

	-2024-	-2025202620272028-
⊟ Renewal and Replacement		\$50,000
SCADA & Technology		\$50,000
177/3127/Westbrook SCADA Server Replacement Program		\$50,000
Grand Total		\$50,000

Previous Years on CIP:2003 to presentRelated Projects:Subprogram #110 Water, #177 Sewer Portland,





Westbrook 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:

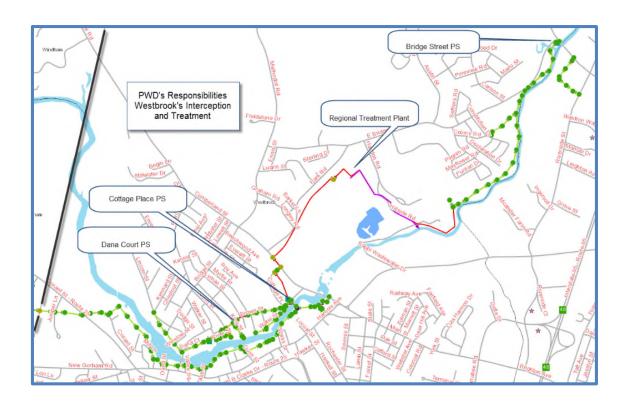
An on-going study to upgrade the Westbrook CSO Master Plan will be complemented with the addition of a portable flow monitoring device.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond					\$600,000
WW Collection & Pumping					\$600,000
411/3302/Cottage Place PS- Generator/Transfer Repl.					\$600,000
□ Renewal and Replacement	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
WW Collection & Pumping	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
411/3134/Westbrook WW Systems R&R	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
411/3306/East Bridge St PS - Generator/Transfer Replac.					

#### Grand Total

\$40,000 \$40,000 \$40,000 \$40,000 \$640,000



# 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 I	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	
Funding: Bond and R&R – Wastewater – Div. 61	

Manager: Poulin, Charlene 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:

	-2024-	-2025-	-2026-	-2027-	-2028-
Renewal and Replacement	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
WW Collection & Pumping	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
60/3137/Gorham WW Pump Station - R&R	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
60/3180/Briarwood PS Telemetry Upgrade		\$75,000			
Grand Total	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000

#### Previous Years on CIP: Procurement Issues:



2000 - present

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 conjuction 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

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#### 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 PWD 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 Fall of 2023.

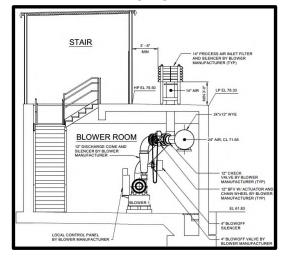
#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond		\$750,000	\$200,000	\$2,000,000	
WW Treatment		\$750,000	\$200,000	\$2,000,000	
416/3166/Process Area Ventilation Upgrades		\$750,000			
416/3232/Septage Screening Facilities			\$200,000	\$2,000,000	
□ Renewal and Replacement	\$450,000	\$585,000	\$195,000	\$585,000	\$395,000
⊟WW Treatment	\$450,000	\$585,000	\$195,000	\$585,000	\$395,000
416/3132/Westbrook Gorham Windham WWTF R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls			\$125,000		
416/3190/Access Road and Parking Lot Resurfacing	\$400,000				
416/3191/TWAS Mixing System Replacement		\$150,000			
416/3198/WAS and GBT System Upgrade/Rehabilitation		\$350,000			
416/3199/RAS Pumping Upgrade					\$300,000
416/3200/Hypochlorite Storage Tank Replacement					
416/3256/Dewatered Sludge Conveyance Upgrade				\$500,000	
416/3270/Process Valve/Actuator Replacement			\$20,000		\$20,000
416/3271/Structural/Architectural Assessment/Rehab		\$35,000		\$35,000	
416/3273/Outfall Condition Assessment					\$25,000
Grand Total	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$395,000

**Capital Expenditures** 

# Subprogram # 416 Westbrook Gorham Windham Regional WWTF

**CIP 2020, Subprogram #416, Project # 3023: \$11,250,000** - Westbrook aeration and secondary clarifier upgrade. Construction Started in 2021 and was completed in the fall of 2023. 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.





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Westbrook WW Pump Stations - R&R

# Subprogram # 60

Division: Wastewater - Westbrook Funding: Bond and R&R – Wastewater – Div. 62

Manager: Poulin, Charlene 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:**

	-2024-	-20252026-	-2027-	-2028-
Renewal and Replacement			\$200,000	
WW Collection & Pumping			\$200,000	
60/3275/Dana Ct. Forcemain Replacement			\$200,000	
Grand Total			\$200,000	

Previous Years on CIP:

2000 - present



East Bridge PS roof replacement completed fall of 2023

# Subprogram # 421 Wastewater Asset Condition Evaluations

Division: Wastewater – Westbrook Gorham Windham	Manager: Pellerin, Greg
Funding: R & R – Wastewater – Div. 64	Priority: Planning

#### 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 multiyear 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:**

	-20242025202620272028-
Renewal and Replacement	\$300,000
Comprehensive Planning	\$300,000
3/3301/WWGWWTF Capacity Study	\$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

• PWD has been discussing the treatment plant capacity allocated to the three communities that contribute to PWD's treatment plants; Westbrook, Gorham, and Windham. With continued and planned growth, PWD expect that some communities will reach their allocations in the future. A study is planned to more clearly understanding the amount and timing for capacity increases, the work that will be required to accommodate additional loadings at the treatment plant, and how those costs will be allocated. While growth pressures are emerging, the existing treatment plant, and the plan to understand development needs, should allow for the needs of all communities to be served.

# **Portland Wastewater**

## **East End Treatment Facility**

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)
- Medium Voltage Power Distribution Upgrades (2022)
- Biosolids Master Plan and preliminary Engineering completed for dewatering (2023)

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 EEWWTF/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 facility, 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.

CIP 2023 21/3204 dewatering upgrade engineering to replace existing rotary presses



# **Biosolids Master Plan**

Prepared for Portland Water District Portland, ME April 12, 2023

# **Portland Wastewater (continued)**

#### **Peaks Island Treatment Facility**

In 2014, PWD conducted a feasibility study of ultraviolet disinfection at the Peaks facility as a potential replacement of the batch chlorination/de-chlorination 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, PWD 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, PWD 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 Facility'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 PWD. The project was completed in 2014.

# **Portland Wastewater (continued)**

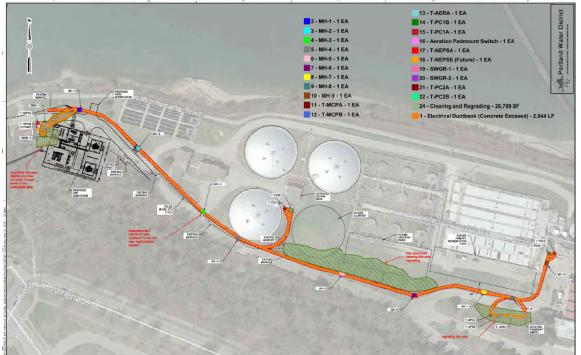
# **Program Summary**

	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$300,000	\$300,000		\$500,000	
SCADA & Technology					
WW Collection & Pumping	\$3,850,000	\$1,000,000	\$250,000	\$1,050,000	\$325,000
WW Treatment	\$15,780,000	\$3,685,000	\$1,625,000	\$2,605,000	\$2,405,000
Grand Total	\$19,930,000	\$4,985,000	\$1,875,000	\$4,155,000	\$2,730,000

# **Financing Summary**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$7,850,000	\$3,700,000	\$1,375,000	\$3,050,000	\$2,000,000
Bond Anticipation Note	\$11,000,000				
Renewal and Replacement	\$1,080,000	\$1,285,000	\$500,000	\$1,105,000	\$730,000
Grand Total	<b>\$1</b> 9,930,000	\$4,985,000	\$1,875,000	\$4,155,000	\$2,730,000

2019 -2020 CIP 21 project 3014 East End Medium Voltage Power Distribution Upgrade – The project was completed in November of 2022





# Portland Wastewater (continued) Projects by Program

	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$300,000			\$500,000	
3/3268/Portland Forcemain Eval /Condition Assessment	\$300,000			\$500,000	
SCADA & Technology	\$500,000	\$500,000		\$500,000	
177/3128/EEWWTF SCADA Server Replacement Program					
WW Collection & Pumping	\$3 850 000	\$1,000,000	\$250.000	\$1,050,000	\$325,00
423/3182/Torrington Point PS Upgrades	\$3,030,000	\$1,000,000	\$100,000		\$525,00
423/3279/Stormwater System Upgrades	\$25,000	\$25,000			
70/3135/Portland WW Pump Stations - R&R	\$125,000				
70/3144/Baxter Blvd PS Upgrades Phase II	\$125,000	\$125,000	\$125,000	\$900,000	
70/3187/India St PS Generator & HVAC Upgrade		\$850,000		\$500,000	
70/3205/Northeast PS Generator and Switchgear Replacement	\$1,300,000	\$050,000			
70/3295/Spare Pump Assembly Northeast PS	\$200,000				
70/3303/Stroudwater PS upgrades - paving/generator	\$200,000				\$200,00
70/3293/Fore River Pump Replacement Project	\$2,200,000				9200,00
WW Treatment	\$15,780,000	\$3,685,000	\$1,625,000		\$2,405,00
21/3019/Gravity Thickener #2 Rehabilitation				\$1,750,000	
21/3020/Process Valve and Actuator Replacement	\$30,000	\$30,000		\$30,000	\$30,00
21/3133/East End WWTF R&R	\$230,000	\$150,000	\$75,000	\$75,000	\$75,00
21/3146/Gravity Belt Thickener Replacement		\$550,000			
21/3148/Return Sludge Piping Replacement	\$3,000,000				
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	\$1,000,00
21/3155/Heating System Expansion					\$300,00
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/ Ordor control	\$11,000,000				
21/3253/Thickened Primary Sludge Handling Rehabilitation					\$1,000,00
21/3266/Structural/Architectural Assessment/Rehab		\$75,000		\$75,000	
21/3267/Outfall Condition Assessment		\$50,000			
21/3292/Entry Gate Replacement	\$100,000				
21/3305/Primary Clarifier equipment replacement		\$400,000			
423/3131/Peaks Island R&R	\$20,000				
423/3192/Aeration System Upgrade				\$300,000	
423/3193/Decanter and Mixer Upgrade, Tanks A and B	\$50,000	\$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			
and Total	\$19,930,000	\$4,985.000	\$1,875.000	\$4.155.000	\$2,730.00



# Subprogram # 70 Portland WW Pump Stations - R&R

Division: Wastewater - Portland	Manager: Poulin, Charlene
Funding: R&R, Bonds – Wastewater- Div. 57	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:

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$3,500,000	\$850,000		\$900,000	
WW Collection & Pumping	\$3,500,000	\$850,000		\$900,000	
70/3144/Baxter Blvd PS Upgrades Phase II				\$900,000	
70/3187/India St PS Generator & HVAC Upgrade		\$850,000			
70/3205/Northeast PS Generator and Switchgear Replacement	\$1,300,000				
70/3293/Fore River Pump Replacement Project	\$2,200,000				
□ Renewal and Replacement	\$325,000	\$125,000	\$125,000	\$125,000	\$325,000
WW Collection & Pumping	\$325,000	\$125,000	\$125,000	\$125,000	\$325,000
70/3135/Portland WW Pump Stations - R&R	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000
70/3269/NEPS Capacity Assessment					
70/3295/Spare Pump Assembly Northeast PS	\$200,000				
70/3303/Stroudwater PS upgrades - paving/generator					\$200,000
Grand Total	\$3,825,000	\$975,000	\$125,000	\$1,025,000	\$325,000

#### 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

Capital Expenditures



#### 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. PWD 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 Completed 2023	<del>2.97 <b>4.2</b></del>	3.34
POP44	Baxter Boulevard (completed upgrade in 2022)	<del>2.73</del> <b>4.0</b>	3.11
POP49	Garrison Street (2021 under construction)	1.63	2.65
POP50	Congress Street (2021 under design)	1.63	2.80
Portland Average		3.47	3.43
PWD -All Average (74 P	rump 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

## East End WWTF Upgrade

Division: Wastewater – Portland Funding: Bonds & R&R– Wastewater – Div. 57

#### 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:** 

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$4,350,000	\$2,850,000	\$1,375,000	\$1,850,000	\$2,000,000
WW Treatment	\$4,350,000	\$2,850,000	\$1,375,000	\$1,850,000	\$2,000,00
21/3009/Dewatering Odor Control Rehab and Expansion					
21/3019/Gravity Thickener #2 Rehabilitation				\$1,750,000	
21/3146/Gravity Belt Thickener Replacement		\$550,000			
21/3148/Return Sludge Piping Replacement	\$3,000,000				
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	\$1,000,00
21/3156/Clarifier Ventilation			\$1,375,000		
21/3202/Thickened Sludge Storage and Mixing Rehab		\$500,000			
21/3253/Thickened Primary Sludge Handling Rehabilitation					\$1,000,00
21/3305/Primary Clarifier equipment replacement		\$400,000			
Bond Anticipation Note	\$11,000,000				
WW Treatment	\$11,000,000				
21/3204/Dewatering System Upgrade/ Ordor control	\$11,000,000				
Renewal and Replacement	\$360,000	\$305,000	\$105,000	\$355,000	\$405,00
WW Treatment	\$360,000	\$305,000	\$105,000	\$355,000	\$405,00
21/3020/Process Valve and Actuator Replacement	\$30,000	\$30,000	\$30,000	\$30,000	\$30,00
21/3133/East End WWTF R&R	\$230,000	\$150,000	\$75,000	\$75,000	\$75,00
21/3155/Heating System Expansion					\$300,00
21/3157/HVAC Upgrades - 2nd Floor Admin				\$175,000	
21/3266/Structural/Architectural Assessment/Rehab		\$75,000		\$75,000	
21/3267/Outfall Condition Assessment		\$50,000			
21/3292/Entry Gate Replacement	\$100,000				
irand Total	\$15,710,000	\$3,155,000	\$1,480,000	\$2,205,000	\$2,405,000

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Priority: Upgrade obsolete facility

Manager: Firmin, Scott

# 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 multiyear 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:**

	-2024-	-2025-	-20262027-	-2028-
⊟ Renewal and Replacement	\$300,000	\$300,000	\$500,00	0
Comprehensive Planning	\$300,000	\$300,000	\$500,00	0
3/3268/Portland Forcemain Eval /Condition Assessment	\$300,000	\$300,000	\$500,00	0
Grand Total	\$300,000	\$300,000	\$500,00	0

Previous Years on CIP:noneRelated Projects:Subprogram # 3, Comprehensive Infrastructure Asset Management PlanProcurement 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



# **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 PWD 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 PWD SCADA standards and provide for increased automation of wastewater systems and treatment. Programmable Logic Controllers (PLC) have been replaced across PWD 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 PWD.

In 2017, the new aeration system went on line. The system is fully automated and is represented in PWD's SCADA system.

#### History:

PWD 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

#### none

Previous Years on CIP: Related Projects: 2003 to present Subprogram #110



**Peaks Island WW Treatment and Systems** 

Division: Wastewater - Peaks Funding: R & R – Wastewater – Div. 66 Manager: Firmin, Scott Priority: Routine replacement

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#### Description:

This account will provide for timely routine replacement of equipment at the Peaks Island Treatment Facility 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:**

	-2024-	-2025-	-2026-	-2027-	-2028
Bond				\$300,000	
WW Treatment				\$300,000	
423/3192/Aeration System Upgrade				\$300,000	
Renewal and Replacement	\$95,000	\$555,000	\$270,000	\$125,000	
WW Collection & Pumping	\$25,000	\$25,000	\$125,000	\$25,000	
423/3182/Torrington Point PS Upgrades			\$100,000		
423/3279/Stormwater System Upgrades	\$25,000	\$25,000	\$25,000	\$25,000	
WW Treatment	\$70,000	\$530,000	\$145,000	\$100,000	
423/3131/Peaks Island R&R	\$20,000				
423/3167/Electrical Service and Power Distribution					
423/3193/Decanter and Mixer Upgrade, Tanks A and B	\$50,000	\$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			
Grand Total	\$95,000	\$555,000	\$270,000	\$425,000	

Previous Years on CIP:

2007 – present

#### Peaks Island Treatment Facility – 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**

	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$400,000				
SCADA & Technology	\$355,000	\$875,000	\$275,000	\$275,000	\$300,000
Vehicle/Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$800,000
Water Facilities Program	\$775,000	\$2,100,000	\$400,000	\$1,600,000	\$300,000
Grand Total	\$2,430,000	\$4,875,000	\$4,075,000	\$12,275,000	\$1,800,000

# **Projects by Program**

	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$400,000				
3/3071/Comprehensive InfrastructureAsset Management Plan	\$400,000				
SCADA & Technology	\$355,000	\$875,000	\$275,000	\$275,000	\$300,000
50/3038/Technology Upgrade and Replacement	\$355,000	\$275,000	\$275,000	\$275,000	\$250,000
50/3039/Upgrade of Finance System		\$600,000			
50/3281/Douglass St PI Server Upgrade					\$50,00
Vehicle/Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
326/3041/Vehicle and Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$800,00
63/3046/Meter Replacement and Leak Detection	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$800,000
Water Facilities Program	\$775,000	\$2,100,000	\$400,000	\$1,600,000	\$300,000
68/3054/HVAC Improvements -Phases 2, 3, 4	\$525,000	\$1,600,000			
68/3055/Douglass Street Roof repl. Ph 4		\$300,000			
68/3217/Office Renovations- post HVAC projects	\$100,000	\$100,000	\$100,000		
68/3283/Douglass St - Aggregate Storage Facility			\$200,000	\$1,500,000	
Grand Total	\$2,430,000	\$4,875,000	\$4,075,000	\$12,275,000	\$1,800,000

## **Financing Summary**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$625,000	\$3,300,000	\$2,800,000	\$11,100,000	\$400,000
Master Plan Reserve	\$400,000				
Renewal and Replacement	\$1,405,000	\$1,575,000	\$1,275,000	\$1,175,000	\$1,400,000
Grand Total	\$2,430,000	\$4,875,000	\$4,075,000	\$12,275,000	\$1,800,000

## Subprogram # 3 Comprehensive Infrastructure Asset Management Plan (Updated CWSSP Plan)

**Division:** Allocation **Funding:** Water Master Plan Reserve

Manager: Crovo, Chris Priority:

#### Description:

PWD completed a Comprehensive Water System Stategic Plan (CWSSP) in 2003. This plan has served as PWD'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 PWD's assets. This project will provide an update to the existing CWSSP plan but will also build out Asset Management Plans for all PWD's water and wastewater critical assets.

#### Justification / Impact:

Since the completion of the CWSSP plan in 2003 PWD has completed the following;

- Completed an Asset Inventory of PWD's Infrastructure Systems
- Fully developed and integrated PWD's 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

PWD is preparing to take the next step in Asset Management and would be seeking consulting assistance to complete the following;

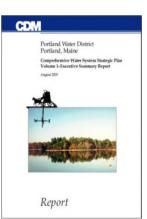
- Determine assets that are critical to sustained performance and develop asset management plans for each asset class
- Development of condition-based monitoring plans and deployment
- Determine long-term optimized financial strategy

This effort would be used to update and create a single document outlining the status of PWD's infrastructure and a multi-year plan on projects to be completed in the coming decade.

#### **Budget Summary:**

	-2024-	-2025202620272028-
Master Plan Reserve	\$400,000	
Comprehensive Planning	\$400,000	
3/3071/Comprehensive InfrastructureAsset Management Plan	\$400,000	
Grand Total	\$400,000	

Previous Years on CIP: 2019 Related Projects: Procurement Issues: Engineering consulting procurement – purchasing policy



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# 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 PWD's 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. PWD's 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 PWD's employees and customers.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond		\$600,000			
SCADA & Technology		\$600,000			
50/3039/Upgrade of Finance System		\$600,000			
Renewal and Replacement	\$355,000	\$275,000	\$275,000	\$275,000	\$300,000
SCADA & Technology	\$355,000	\$275,000	\$275,000	\$275,000	\$300,000
50/3038/Technology Upgrade and Replacement	\$355,000	\$275,000	\$275,000	\$275,000	\$250,000
50/3281/Douglass St PI Server Upgrade					\$50,000
Grand Total	\$355,000	\$875,000	\$275,000	\$275,000	\$300,000

Previous Years on CIP: Related Projects: Procurement Issues: All since 1996

Standard procurement procedures are used for major hardware, software and consulting purchases.

# Subprogram # 326Vehicle 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 PWD'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 PWD's "mission to provide PWD's customers with quality water, wastewater and related environmental services." Maintaining a reliable fleet of vehicles and equipment enables staff to fullfill 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 PWD's 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.

# leet,

#### Origin of the Subprogram:

Annual review and replacement of vehicles and equipment is a basic operating need of any geographically dispersed utility.

#### **Budget Summary:**

	-2024-	-2025-	-2026-	-2027-	-2028-
□ Renewal and Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Vehicle/Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
326/3041/Vehicle and Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Grand Total	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000

Previous Years on CIP: Procurement Issues:

#### All

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.



# 2024 Annual Vehicle and Equipment Estimated Replacement Cost and Trade-in values

2024 Annual Vehicle and Equipment Replacement	· ·	Estimated Cost	Actu	al Cost
VEH24010- 4x4 2 door 3/4 ton	ASSET PURCHASE	\$45,000	s	48,863.00
VEH11070-4x4 2 door PU with lift gate	TRADE	(\$5,000)	s	(7,000.00)
VEH24020-1/2 ton PU 2WD ext cab	ASSET PURCHASE	\$30,000	s	42,545.00
VEH13100-F150 2WD	TRADE	(\$6,000)	s	(7,500.00)
VEH24030- 1/2 ton PU 2WD ext cab	ASSET PURCHASE	\$30,000	s	42,545.00
VEH14060-F150 2WD	TRADE	(\$8,000)	s	(7,500.00)
VEH24040- 4x4 3/4 Ton PU ext cab	ASSET PURCHASE	\$45,000	s	50,751.00
VEH18060-1500 4x4 ext cab	TRADE	(\$9,000)	s	(14,000.00)
VEH24050-AWD SUV	ASSET PURCHASE	\$35,000	s	30,465.00
VEH13080-1500 2WD	TRADE	(\$6,000)	s	(7,000.00)
VEH24060/VEH24070- 4x4 PU w/ Cap	ASSET PURCHASE	\$90,000	s	93,466.00
VEH14020/VEH15060-Vans	TRADE	(\$12,000)	s	(18,000.00)
VEH24080- 4x2 3/4 ton with Cap	ASSET PURCHASE	\$45,000	s	52,400.00
VEH14080-4x4 PU w/ utility 3/4 ton	TRADE	(\$10,000)	s	(10,888.00)
VEH24090- Crew Truck	ASSET PURCHASE	\$67,000	s	85,322.00
VEH15020- Dodge 5500 Crew Truck	TRADE	(\$10,000)	s	(22,000.00)
TRL24510- Diesel Compressor	ASSET PURCHASE	\$25,000	s	32,995.00
TRL16510- Gas Compressor	TRADE	(\$7,000)	s	(7,000.00)
OBM24010/OBM24020	ASSET PURCHASE	\$60,000	s	60,000.00
Old Boat Motors	TRADE	(\$6,000)	s	(6,000.00)
EQ\$10610	TRADE	(\$38,000)	s	(38,000.00)
Vehicle Set Up Costs	SET UP	\$20,000	\$	5,536.00
	Total CIP Request	\$375,000	\$	400,000.00



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. PWD 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. Preliminary work has begun exploring the strategy to replace the meters and related encoder receiver transmitters (ERTs). Significant costs are expected to begin being incurred in 2025.

#### Justification / Impact:

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 PWD 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:**

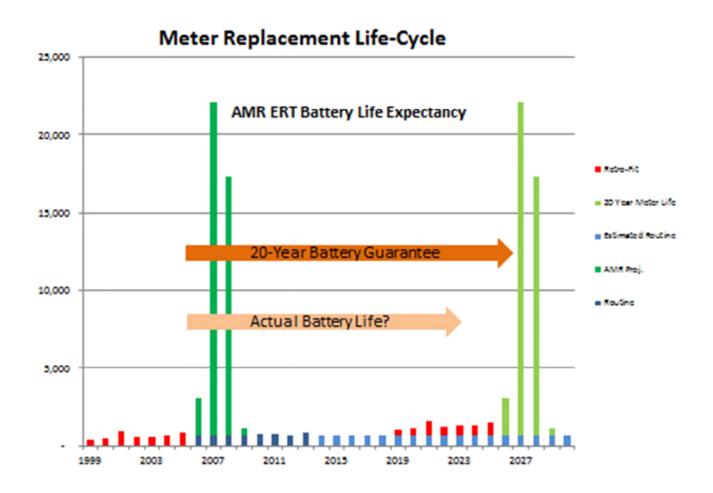
	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$400,000
Water Distribution System	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$400,000
63/3046/Meter Replacement and Leak Detection	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$400,000
Grand Total	\$500,000	\$1,500,000	\$3,000,000	\$10,000,000	\$400,000

Previous Years on CIP: Related Projects: Procurement Issues: All none Standard meter procurement procedures.





Meter Replacement and Leak Detection



The above graph is projecting the life cycle of PWD's 60,000 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 PWD's office facilities in good condition and provide a suitable environment for PWD's 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

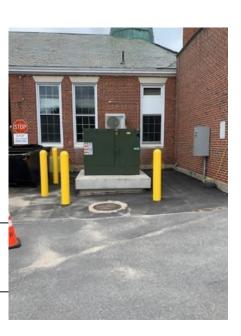
	-2024-	-2025-	-2026-	-2027-	-2028-
Bond	\$525,000	\$1,600,000	\$200,000	\$1,500,000	
Water Facilities Program	\$525,000	\$1,600,000	\$200,000	\$1,500,000	
68/3054/HVAC Improvements -Phases 2, 3, 4	\$525,000	\$1,600,000			
68/3283/Douglass St - Aggregate Storage Facility			\$200,000	\$1,500,000	
⊟ Renewal and Replacement	\$250,000	\$500,000	\$200,000	\$100,000	\$300,000
Water Facilities Program	\$250,000	\$500,000	\$200,000	\$100,000	\$300,000
68/3050/Facility Upgrades	\$150,000	\$100,000	\$100,000	\$100,000	\$300,000
68/3055/Douglass Street Roof repl. Ph 4		\$300,000			
68/3217/Office Renovations- post HVAC projects	\$100,000	\$100,000	\$100,000		
Grand Total	\$775,000	\$2,100,000	\$400,000	\$1,600,000	\$300,000

be addressed on an ongoing basis. Budget Summary: Previous Years on CIP: 2000



2020 CIP – Project 68/3215 Generator/Electrical Upgrades \$400k - <u>Completed September</u> <u>2022</u>. 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





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# Watershed/Land Funds

## Subprogram # 1

Watershed Land Acquisition

Division: Water - General	Manager: Jackson, Laurel
Funding: Watershed Land Reserve	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:

PWD 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. PWD do not aggressively solicit land to buy, but PWD have made public PWD's 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		<b>Budget Year Cost</b>
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	Tax Assessed Value			
Lot	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 Funding: Watershed Land Reserve Manager: Hunt, Paul 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. PWD acknowledges that it is neither feasible nor necessary to own all land in the watershed. Instead PWD 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. PWD 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, PWD, 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 PWD 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 PWD's estimated contribution is outlined in the budget summary.

#### **Budget Summary:**

Budget year 2024	Pend	Project Watershed Land Conservation - PWD's match	Budget Year Cost \$280,000
Previous Years o	on CIP:	None	
<b>Related Projects</b>	ion (lower bay)		
Procurement Iss	sues:	Project contributions are recommended by	staff based on a formula. Board of
		Trustees approval of contributions is requir	ed.

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.



**Capital Expenditures** 

## Watershed Land Conservation Results

Sebago Lak	e Watershed Conserved Land
PWD Owned Land Conserved Land PWD Supported Projects Watershed Boundary	
vvatersneu Boundary V S	Portland Water District - March 2023

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	0	0	\$0	\$0
2023	4	358	\$71,460	\$584,100
Totals	32	14,498	\$1,795,912	\$14,173,600

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## **Introduction**

PWD 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. PWD is in compliance with the policies, except where noted below (non-compliance is noted in red). Each policy is designated as being adopted by Law, Board or Management see designation in parenthesis by policy title. Policies are reviewed periodically for relevance and adherence to the policy.

## **Significant Financial Policies**

## Accounting, Auditing, and Financial Reporting:

#### **Basis of Accounting (Law-Charter)**

PWD 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, PWD 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 PWD's charter, eight-supporting enterprise funds will be maintained—one fund for water service and seven funds for each of the communities provided with 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, PWD provides billing and meter reading services to two communities. Related costs are recorded in the appropriate fund. Costs that benefit more than one fund are recorded in an

#### 2022/2023 Policy Changes/Highlights Water Rates

Starting in 2024, but consistent with the previous policy of adjusting rates by class to align with costs of service, water rate increases will be adjusted resulting in relatively higher increases to the larger user base fixed rate and relatively lower increases to the variable consumption volume rates for larger customers. This will result in a more stable revenue stream from those customers.

#### Pension Funding Policy

Historically, PWD has funded the plans with at least the recommended actuarially determined amount. Because the plan is closed to new participants, the actuary has estimated that contributions to the plan will only be needed for a few more years, it was recommended to begin funding it at a fixed \$1.6 million a year until not needed. This will stabilize the annual budget and assure the plans will have sufficient funds.

#### 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 PWD could allocate 10% of revenue to a capital reserve that could be used to finance approved projects. Each year PWD increased its rates by 1% with the money going to pay for the debt service on a \$2 million bond. The tenth bond was issued in 2023 and will now have 10% of annual revenue dedicated to capital fund. Starting in 2024, additional debt will be issued and expenditures will be paid directly from the fund.

#### <u>Budget – Salary</u>

In prior years, the salary/wage of all authorized employees were included in the budget. In 2024, the budget assumes five positions will be vacant reducing the budget by \$320,000.

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).

## **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
- 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 15<sup>th</sup> of each year. The PWD 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).

# Financial Planning Policies (continued):

## Long-Range Planning (Management)

#### **Capital Improvement Plan**

A five-year capital improvement plan (CIP) 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 CIP.

#### **Operating Budget**

Operating projections of at least three future years are created. For the water fund, the projection is used to recommend an appropriate water rate adjustment annually. For most communities, wastewater services are a joint effort of PWD providing treatment and interception service and the community providing collection and storm drain services. PWD'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 plans and operational evaluations/studies when projecting operating costs.

#### **Asset Inventory (Management)**

PWD utilizes an asset management system, Lucity EAM, that tracks PWD's assets. All employees must record their time to work orders and the applicable asset they are working on. Asset classifications are reviewed for accuracy and completeness with the review focusing on the most important assets. Condition rating assets has been completed on some assets. 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 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. Immediately 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 Board adopted the approach of gradually adjusting rates over the future rate adjustments to address this issue. PWD established a policy in 2007 to gradually increase the rates of classes that were not paying rates appropriate to their cost-of-service allocation at a rate of 150% of the rate adjustments to base or meter charges and to the volumetric rates, including adjustments to each consumption tier or block. Effective in 2024, the method to allocate the increases was slightly modified (see 2022/2023 Policy Changes/Highlights) so that a larger portion of the 150% of the rate adjustment was allocated to the fixed charge than the base meter charge.

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.

#### Water Rates (Board) (continues

In 2013, a new state law allowed for funding through an infrastructure capital reserve. The law allows PWD to include an additional 10% in rates to fund a capital reserve. An additional 1% was added for each of the past ten years. The 2024 Budget allocates the maximum 10% of revenue to the capital reserve.

## **Revenue Policies (continued):**

#### Wastewater Assessment (Law -Charter)

Wastewater assessments are established to provide sufficient revenues to support the operation of each of wastewater funds' activities. By state law, the municipality must pay PWD's assessment.

#### Service Fees (Board)

Fees for miscellaneous services are based on the actual cost to provide the service. Effective January 1, 2016, PWD's Board can authorize changes for water related fees without Maine Public Utilities Commission (PUC) approval. PWD must file Terms and Conditions (T&Cs) with the Maine PUC for information purposes only. The T&Cs includes the fees for any service PWD requires customers to obtain from PWD. Additionally, the Board annually approves non-water related fees. Effective in 2023, all fees will be reviewed as part of the budget process and become effective the following January 1<sup>st</sup>.

#### **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, PWD is 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 U.S. equities portion of plan assets, securities of foreign-based issuers that are transacted in U.S. dollars on U.S. exchanges are permitted up to a limit of 20%, an increase from 10%, and will be classified as U.S. equities.

	Minimum Weight	Target Weight	Maximum Weight
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)

PWD's Board has established a fund to collect the net proceeds of watershed land sales. The fund is dedicated to future investment in protecting the watershed land. Unexpected water net income is typically allocated to a 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.

## **Expenditure Policies:**

#### Debt (Board) not fully in compliance

Debt may be issued for capital expenditures only. There is no legal limit for the amount of debt PWD 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). In addition, operating revenue available for debt service should be at least 125% of the annual debt service.

PWD is projected to be in compliance with the benchmarks in 2024 except in Westbrook, Gorham and Windham due to significant capital projects (i.e., Westbrook Wastewater Treatment Facility upgrades, 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) not fully in compliance**

Each operating fund has a target balance of 25% of annual net operating budget. All funds are below the 25% threshold. The fund's balances range from 0.9% to 23.7% - see page 145. The wastewater funds have utilized part of the reserves in the past two years due to unexpected operating costs. The water fund dipped below the 25% mark in 2023 due to lower water sales as the result of the wet, cool summer. The water fund is expected to be over the benchmark in the coming year.

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, Portland Wastewater, Westbrook Wastewater, and Windham Wastewater funds meet the target balance now and projected for the next 5 years. Cape Elizabeth, Cumberland and Gorham Wastewater Funds do not meet the increased target currently. Cape Elizabeth is expected to meet the target balance by 2028. 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 4.4% at the end of 2024. The 2025–2028 trend of operating and renewal & replacements fund balances for each of the water and wastewater funds are located in the 2024 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 a project's cost is anticipated to exceed the budget or the lowest bid is not accepted, the Board must specifically authorize. The General Manager can approve emergency capital expenditures, but must inform the Board of the expenditure.

## **Expenditure Policies (continued):**

## **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. PWD is in compliance with the policy.

#### Pension Funding Policy (Board) not fully in compliance with Board approval

The Board voted to fully fund PWD's defined benefit plan by contributing at least the annual required contribution as calculated by the actuary. As noted in the above (see 2022/2023 Policy Changes/Highlights), it was decided to contribute \$1.6 million in 2024 and for future years until the fund is fully paid.

## **Risk Management Policies**

## Maine Tort Claims Act (Law-State)

As a public entity, PWD's liability for third party tort claims is limited by the provisions of the Maine Tort Claims Act. The Act provides that PWD is immune from claims, unless the Act provides a specific exception from immunity. In PWD's case, the exception most likely to affect PWD is one making PWD liable for negligent use of machinery and equipment. Should PWD 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 PWD's insurance lower, allowing PWD 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)**

The four-person Employee Services department oversees PWD's employee relations management and practices. Over 60 policies have been created to guide management and employees.

#### In-House Legal Counsel (Board)

In 2006, the Board authorized hiring in-house legal counsel. Legal counsel actively participates in overseeing PWD's operation, including reviewing all contracts, and proactively identifying ways to reduce or avoid legal issues.

# **Cost Allocation Policy Detail**

PWD has one water fund and six wastewater funds (Cape Elizabeth, Cumberland, Gorham, Portland, Westbrook and Windham). In addition, PWD also provides billing and/or meter reading services to three other municipalities (Falmouth, Scarborough and South Portland).

It is PWD'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, PWD 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 PWD's current auditors during 2013. Currently PWD 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	<u>Fund</u>	Description
10	Allocated to All Direct Funds	57	Portland Wastewater
20	Water - members	59	South Portland Billing
30	Water - nonmembers	61	Gorham Wastwater
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 Wastewater

## **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 Sanitary District does its own billing and payment processing utilizing PWD's meter reading data, thus they have no general or billing expenses.

#### Sub-Groups Using Method:

#### F1 – Customer Service

H1 – Financial Services (payment processing)

-	General F1	Billing F1	Meter Read F1	Paymts H1
Water	68.06%	66.53%	68.02%	66.53%
Cape Eliz	2.15%	2.15%	2.15%	2.15%
Cumberland	1.09%	1.09%	1.09%	1.09%
Falmouth	0.38%	1.91%	0.00%	1.91%
Gorham	1.74%	1.74%	1.74%	1.74%
Portland	15.23%	15.23%	15.23%	15.23%
Scarborough	0.00%	0.00%	0.42%	0.00%
So Portland	7.05%	7.05%	7.05%	7.05%
Westbrook	4.25%	4.25%	4.25%	4.25%
Windham	<u>0.05%</u>	<u>0.05%</u>	0.05%	<u>0.05%</u>
	100.00%	100.00%	100.00%	100.00%

-	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%

#### **Dollars Allocated:**

	General	Billing	Meter	Paymts
-	F1	F1	Read F1	H1
Water	\$854,996	\$253,013	\$48,930	\$137,444
Cape Eliz	\$27,009	\$8,176	\$1,547	\$4,442
Cumberland	\$13,693	\$4,145	\$784	\$2,252
Falmouth	\$4,774	\$7,264	\$0	\$3,946
Gorham	\$21,859	\$6,617	\$1,252	\$3,595
Portland	\$191,325	\$57,920	\$10,956	\$31,464
Scarborough	\$0	\$0	\$302	\$0
So Portland	\$88,565	\$26,811	\$5,071	\$14,565
Westbrook	\$53,390	\$16,163	\$3,057	\$8,780
Windham	<u>627</u>	<u>190</u>	<u>35</u>	<u>101</u>
	\$1,256,238	\$380,299	\$71,934	\$206,589

-	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	<u>578</u>	207	<u>34</u>	<u>117</u>
	\$1,154,995	\$413,282	\$69,217	\$238,868

# **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 – Wastewater Treatment
C1 – Facilities Services
E7 – SCADA Services Group (general wastewater)

L6 – Laboratory L9 – Water/Wastewater Systems

2024 Allocation %:	B1	<b>B</b> 3	C1	E7	L6	L9
Water	0.00%	0.00%	74.94%	0.00%	62.29%	0.00%
Cape Elizabeth	13.16%	9.24%	3.33%	13.16%	3.58%	13.16%
Cumberland	4.03%	0.00%	0.99%	4.03%	0.00%	4.03%
Gorham	6.22%	2.69%	1.87%	6.22%	1.54%	6.22%
Portland	60.06%	71.48%	14.30%	60.06%	23.05%	60.06%
Westbrook	14.54%	16.21%	3.30%	14.54%	9.33%	14.54%
Windham	1.99%	0.38%	1.27%	1.99%	0.21%	1.99%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Dollars Allocated:	B1	<b>B</b> 3	C1	E7	L6	L9
Water	\$0	\$0	\$186,839	\$0	\$195,479	\$0
Cape Elizabeth	64,664	49,539	8,302	15,887	11,235	89,010
Cumberland	19,802	0	2,468	4,865	0	27,258
Gorham	30,563	14,422	4,662	7,509	4,833	42,070
Portland	295,117	383,227	35,652	72,506	72,336	406,228
Westbrook	71,445	86,907	8,227	17,553	29,279	98,344
Windham	9,779	2,037	3,168	2,403	659	13,460
	\$491,370	\$536,132	\$249,318	\$120,723	\$313,821	\$676,370
2023 Allocation %:	B1	B3	C1	E7	L6	L9
Water	0.00%	0.00%	76.26%	0.00%	56.62%	0.00%
	0.0070	0.0070			00.0270	0.0078
Cape Elizabeth	13.21%	9.28%	3.34%	13.21%	4.18%	13.21%
Cape Elizabeth Cumberland				13.21% 3.83%		
· ·	13.21%	9.28%	3.34%		4.18%	13.21%
Cumberland	13.21% 3.83%	9.28% 0.00%	3.34% 0.98%	3.83%	4.18% 0.00%	13.21% 3.83%
Cumberland Gorham	13.21% 3.83% 6.32%	9.28% 0.00% 2.80%	3.34% 0.98% 1.55%	3.83% 6.32%	4.18% 0.00% 1.86%	13.21% 3.83% 6.32%
Cumberland Gorham Portland	13.21% 3.83% 6.32% 60.48%	9.28% 0.00% 2.80% 71.39%	3.34% 0.98% 1.55% 13.12%	3.83% 6.32% 60.48%	4.18% 0.00% 1.86% 26.43%	13.21% 3.83% 6.32% 60.48%
Cumberland Gorham Portland Westbrook	13.21% 3.83% 6.32% 60.48% 14.16%	9.28% 0.00% 2.80% 71.39% 16.15%	3.34% 0.98% 1.55% 13.12% 4.69%	3.83% 6.32% 60.48% 14.16%	4.18% 0.00% 1.86% 26.43% 10.66%	13.21% 3.83% 6.32% 60.48% 14.16%
Cumberland Gorham Portland Westbrook	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u>	9.28% 0.00% 2.80% 71.39% 16.15% <u>0.38%</u>	3.34% 0.98% 1.55% 13.12% 4.69% <u>0.06%</u>	3.83% 6.32% 60.48% 14.16% <u>2.00%</u>	4.18% 0.00% 1.86% 26.43% 10.66% <u>0.25%</u>	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u>
Cumberland Gorham Portland Westbrook Windham	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00%	9.28% 0.00% 2.80% 71.39% 16.15% <u>0.38%</u> 100.00%	3.34% 0.98% 1.55% 13.12% 4.69% <u>0.06%</u> 100.00%	3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00%	4.18% 0.00% 1.86% 26.43% 10.66% <u>0.25%</u> 100.00%	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00%
Cumberland Gorham Portland Westbrook Windham Dollars Allocated:	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% B1	9.28% 0.00% 2.80% 71.39% 16.15% <u>0.38%</u> 100.00% B3	3.34% 0.98% 1.55% 13.12% 4.69% <u>0.06%</u> 100.00% C1	3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% E7	4.18% 0.00% 1.86% 26.43% 10.66% <u>0.25%</u> 100.00% L6	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00%
Cumberland Gorham Portland Westbrook Windham Dollars Allocated: Water	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% B1 \$0	9.28% 0.00% 2.80% 71.39% 16.15% <u>0.38%</u> 100.00% B3 \$0	3.34% 0.98% 1.55% 13.12% 4.69% 0.06% 100.00% C1 \$190,130	3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% E7 \$0	4.18% 0.00% 1.86% 26.43% 10.66% <u>0.25%</u> 100.00% L6 \$177,685	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% L9 \$0
Cumberland Gorham Portland Westbrook Windham Dollars Allocated: Water Cape Elizabeth	13.21% 3.83% 6.32% 60.48% 14.16% 2.00% 100.00% B1 \$0 64,910	9.28% 0.00% 2.80% 71.39% 16.15% 0.38% 100.00% B3 \$0 49,753	3.34% 0.98% 1.55% 13.12% 4.69% 0.06% 100.00% C1 \$190,130 8,327	3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% <b>E7</b> \$0 15,948	4.18% 0.00% 1.86% 26.43% 10.66% 0.25% 100.00% L6 \$177,685 13,118	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% L9 \$0 89,348
Cumberland Gorham Portland Westbrook Windham Dollars Allocated: Water Cape Elizabeth Cumberland	13.21% 3.83% 6.32% 60.48% 14.16% 2.00% 100.00% B1 \$0 64,910 18,819	9.28% 0.00% 2.80% 71.39% 16.15% 0.38% 100.00% B3 \$0 49,753 0	3.34% 0.98% 1.55% 13.12% 4.69% 0.06% 100.00% C1 \$190,130 8,327 2,443	3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% <b>E7</b> \$0 15,948 4,624	4.18% 0.00% 1.86% 26.43% 10.66% 0.25% 100.00% L6 \$177,685 13,118 0	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% L9 \$0 89,348 25,905
Cumberland Gorham Portland Westbrook Windham Dollars Allocated: Water Cape Elizabeth Cumberland Gorham	13.21%         3.83%         6.32%         60.48%         14.16%         2.00%         100.00%         B1         \$0         64,910         18,819         31,055	9.28% 0.00% 2.80% 71.39% 16.15% 0.38% 100.00% B3 \$0 49,753 0 15,012	3.34%         0.98%         1.55%         13.12%         4.69%         0.06%         100.00%         C1         \$190,130         8,327         2,443         3,864	3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% E7 \$0 15,948 4,624 7,630	4.18% 0.00% 1.86% 26.43% 10.66% 0.25% 100.00% <b>L6</b> \$177,685 13,118 0 5,837	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% 100.00% L9 \$0 89,348 25,905 42,747
Cumberland Gorham Portland Westbrook Windham Dollars Allocated: Water Cape Elizabeth Cumberland Gorham Portland	13.21%         3.83%         6.32%         60.48%         14.16%         2.00%         100.00%         B1         \$0         64,910         18,819         31,055         297,181	9.28% 0.00% 2.80% 16.15% 0.38% 100.00% B3 \$0 49,753 0 15,012 382,745	3.34% 0.98% 1.55% 13.12% 4.69% 0.06% 100.00% C1 \$190,130 8,327 2,443 3,864 32,711	3.83% 6.32% 60.48% 14.16% 2.00% 100.00% E7 \$0 15,948 4,624 7,630 73,013	4.18% 0.00% 1.86% 26.43% 10.66% 0.25% 100.00% <b>L6</b> \$177,685 13,118 0 5,837 82,943	13.21% 3.83% 6.32% 60.48% 14.16% <u>2.00%</u> 100.00% 100.00% 50 89,348 25,905 42,747 409,069

# **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 I1 – Employee Services	1	H1 – Financial Services J1 – General Manager's Office		G1 – Informatio	on Service
2024 Allocation %:	E7	G1	H1	11	J1
Water	53.48%	53.48%	53.48%	53.48%	53.48%
Cape Elizabeth	4.25%	4.25%	4.25%	4.25%	4.25%
Cumberland	2.22%	2.22%	2.22%	2.22%	2.22%
Gorham	2.93%	2.93%	2.93%	2.93%	2.93%
Portland	29.01%	29.01%	29.01%	29.01%	29.01%
Westbrook	7.03%	7.03%	7.03%	7.03%	7.03%
Windham	<u>1.08%</u>	<u>1.08%</u>	<u>1.08%</u>	<u>1.08%</u>	<u>1.08%</u>
	100.00%	100.00%	100.00%	100.00%	100.00%
Dollars Allocated:	E7	G1	H1	<b>I</b> 1	J1
Water	\$124,457	\$859,151	\$493,879	\$393,281	\$1,137,637
Cape Elizabeth	9,890	68,276	39,248	31,254	90,407
Cumberland	5,166	35,664	20,501	16,325	47,224
Gorham	6,819	47,070	27,058	21,547	62,328
Portland	67,511	466,043	267,902	213,334	617,107
Westbrook	16,360	112,936	64,921	51,697	149,544
Windham	<u>2,513</u>	<u>17,350</u>	<u>9,974</u>	7,942	<u>22,973</u>
	\$232,716	\$1,606,490	\$923,483	\$735,380	\$2,127,220
2023 Allocation %:	E7	G1	H1	11	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	1	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>	14,221	7,871	<u>6,717</u>	21,286
	\$226,341	\$1,481,299	\$819,947	\$699,602	\$2,217,361

## **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 PWD's 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

#### 2024 Allocation %:

	All	WW
Water	64.19%	0.00%
Cape Elizabeth	3.25%	9.08%
Cumberland	1.61%	4.49%
Falmouth	0.00%	0.00%
Gorham	3.70%	10.32%
Portland	21.27%	59.39%
Westbrook	5.03%	14.06%
Windham	<u>0.95%</u>	2.66%
	100.00%	100.00%

#### 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	<u>0.81%</u>	2.31%
	100.00%	100.00%

#### **Dollars Allocated:**

	All	WW
Water	\$935,778	\$0
Cape Elizabeth	47,379	37,087
Cumberland	23,471	18,339
Falmouth	0	0
Gorham	53,940	42,152
Portland	310,079	242,576
Westbrook	73,329	57,428
Windham	13,849	10,864
	\$1,457,825	\$408,446

	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

## **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.

2023 Allocation %:

#### Sub-Group Using Method:

A6 – Utility Services (meter service)

## 2024 Allocation %:

	A6
Water	64.87%
Cape Elizabeth	1.76%
Cumberland	1.05%
Gorham	1.70%
Portland	17.06%
Scarborough	1.39%
South Portland	7.57%
Westbrook	4.43%
Windham	<u>0.17%</u>
	100.00%

#### **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% 0.17% Windham 100.00%

#### **Dollars Allocated:**

	A6
Water	\$144,736
Cape Elizabeth	3,927
Cumberland	2,343
Gorham	3,793
Portland	38,064
Scarborough	3,101
South Portland	16,890
Westbrook	9,884
Windham	<u>379</u>
	\$223,117

	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

## **Relative Benefits**

This method of allocation is based upon PWD'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)

2024 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%	4.30%	11.60%
Portland	0.00%	61.29%	60.50%
Westbrook	0.00%	24.60%	25.60%
Windham	0.00%	0.57%	2.30%
	100.00%	100.00%	100.00%

#### **Dollars Allocated:**

	F1	L6	IPT
Water	\$205,288	\$0	\$0
Cape Elizabeth	0	21,686	0
Cumberland	0	0	0
Gorham	0	10,092	5,880
Portland	0	143,845	30,667
Westbrook	0	57,735	12,976
Windham	<u>0</u>	1,338	1,166
	\$205,288	\$234,696	\$50,689

#### 2023 Allocation %:

2023 Anocation 70.			
	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%

	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	<u>0</u>	2,110	1,609
	\$195,335	\$242,472	\$67,036

## **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.

2024 Allocation %:	
Water Operations	
A1 - Water Administration	4.51%
A2 - Transmission/Distribution	2.99%
A6 - Utility Services	<u>1.32%</u>
	8.82%
Environmental Services	
A5 - Water Resources	0.78%
L6 - Water/WW Laboratory (IPT)	<u>1.31%</u>
	2.09%
Wastewater Operations	
B1 - WW Administration	1.63%
L9 - Water/WW Systems	3.50%
	5.13%
Engineering Services	
C1 - Facility Services	22.11%
E2 - Planning & Design	18.66%
E7 - SCADA Services Group	<u>1.94%</u>
	42.71%
Administration	
F1 - Customer Service	10.19%
G1 - Information Services	6.20%
H1 - Financial Services	8.09%
I1 - Employee Services	4.32%
J1 - BOT & Senior Management	12.45%
	41.25%
	100.00%

#### **Dollars Allocated:**

	\$
Water Operations	\$76,554
Environmental Services	18,140
Wastew ater Operations	44,524
Engineering Services	370,705
Administration	358,032
	\$867,955

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)	0.54%
	1.34%
Wastewater Operations	
B1 - WW Administration	1.75%
L9 - Water/WW Systems	3.60%
	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%
11 - Employee Services	4.44%
J1 - BOT & Senior Management	14.58%
	44.19%
	100.00%

	\$
Water Operations	\$66,086
Environmental Services	9,972
Wastew ater Operations	39,815
Engineering Services	299,470
Administration	328,865
	\$744,210

## **Vehicle Rates**

Internal transportation costs are charges to the departments for the availability of PWD 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 decreased \$41,219 primarily due to lower vehicle fuel costs and from lowering the rate of the Special Purpose – D Jet Vac used in L9.

2024	4 B	udget	Details		
Vehicle Type		Rate	Active Hours	Stand-by Hours	Total Hours
Backhoe/Loader <19,501 GVW	\$	40.31	526	-	526
Car	\$	3.83	3,095	3,445	6,540
Compressor	\$	24.41	5,570	-	5,570
Dump Truck < 15,000 GVW	\$	10.29	675	1,405	2,080
Dump Truck 15,001-40,000 GVW	\$	13.22	1,650	2,510	4,160
Dump Truck >= 40,000 GVW	\$	17.67	4,780	3,540	8,320
Generator/Load Bank	\$	41.52	341	-	341
Misc. Const. Equipment - Forklift, etc.	\$	28.08	3,505	-	3,505
Misc. Trailed Equipment - Trailer Mounted Pump, Jet Ma	\$	18.33	3,715	-	3,715
Pick-up Truck/SUV - Light - < 6,000 GVW	\$	3.83	8,949	7,691	16,640
Pick-up Truck/SUV - Medium - 6,001-7,500 GVW	\$	4.11	10,059	23,221	33,280
Pick-up Truck/SUV - Heavy - 7,501-10,000 GVW	\$	5.00	6,736	7,974	14,710
Special Purpose - C - Crane, Sludge, etc.	\$	54.95	60	-	60
Special Purpose - D - Jetvac, etc.	\$	46.04	1,106	-	1,106
Utility Truck 6,001 - 10,000 GVW	\$	4.11	6,264	6,216	12,480
Utility Truck 10,001 - 14,000 GVW	\$	5.88	8,292	6,268	14,560
Utility Truck 14,001 - 16,000 GVW	\$	6.47	5,311	3,009	8,320
Utility Truck 16,001 - 19,500 GVW	\$	7.05	7,305	3,095	10,400
Van 7,501-10,000 GVW	\$	5.00	14,818	14,302	29,120
Total Hours			92,757	82,676	175,433

Sub-Group	2023 Budget	2024 Budget	\$ - Difference	% - Difference
A1 - Water Administration	\$ -	\$ -	\$ -	n/a
A2 - Transmission/Distribution	\$ 695,233	\$ 713,469	\$ 18,236	2.6%
A3 - Water Treatment	\$ 36,938	\$ 36,470	\$ (468)	-1.3%
A5 - Water Resources	\$ 39,752	\$ 40,999	\$ 1,247	3.1%
A6 - Utility Services	\$ 189,415	\$ 181,712	\$ (7,703)	-4.1%
B1 - WW Administration	\$ -	\$ -	\$ -	n/a
B3 - Wastew ater Treatment	\$ 64,748	\$ 65,396	\$ 648	1.0%
C1 - Facility Services	\$ 67,503	\$ 67,437	\$ (66)	-0.1%
E2 - Planning & Design	\$ 19,326	\$ 20,098	\$ 772	4.0%
E7 - SCADA Services Group	\$ 24,833	\$ 25,066	\$ 233	0.9%
F1 - Customer Service	\$ 16,338	\$ 15,935	\$ (403)	-2.5%
I1 - Employee Services	\$ -	\$ -	\$ -	n/a
J1 - BOT & Senior Management	\$ -	\$ -	\$ -	n/a
L6 - Water/WW Laboratory	\$ 861	\$ -	\$ (861)	-100.0%
L9 - Water/WW Systems	\$ 211,145	\$ 158,291	\$ (52,854)	-25.0%
	\$ 1,366,092	\$ 1,324,873	\$ (41,219)	-3.0%

## Joint Use Facilities - Operations and Maintenance Allocations

PWD 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 South Windham is treated at Westbrook Regional WWTF, with one pump station handling the flow from all communities. The budget for 2024 is up \$186,885 (10.2%) due to higher costs for power (\$118k) and contracted services (\$62.7k).

**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 \$86,405, a \$2,111 decrease (2.4%) from the previous year.

	V	Vestbrook Reg	jional	Little	e Falls
	Gorham	Westbrook	Windham	Gorham	Windham
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%
2024	14.00%	84.00%	2.00%	33.00%	67.00%

#### **Contracted Services Facilities:**

**South Portland** – Wastewater from the Northern portion of Cape Elizabeth is treated at the South Portland Treatment Facility (SPTF), which is owned by the City of South Portland. The contractual agreement charges PWD based on Cape Elizabeth's portion of the total flow at the SPTF; that flow (from last 12 months) decreased slightly from 8.0% to 7.7%. Shared costs rose 11.4% increasing Cape Elizabeth's portion 5.8% (\$15,000).

**Falmouth** – All of Cumberland's wastewater is treated at the Falmouth Treatment Facility (FTF) through a contractual agreement. This cost is budgeted to be \$695,656 in 2024 which is an increase of \$50,139 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
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%
2024	7.7%	92.3%	24.0%	76.0%	40.8%

## Joint Use Facilities - Capital Cost Sharing Allocations

PWD has two areas where wastewater flows from more than one community and 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.

	Millions	s of Gallo	Flow	w Percentage				
System	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.

		Gallons/Day -		Flow	Percent		
Facility Name	Gorham	Windam	Total	Gorham	Windam		
Gray Rd/Mallison St Gravity Sew er	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 Sew er	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 Sew er	638,000	100,000	738,000	86.4%	13.6%		
Industrial Park Gravity Sew er Upgrade	2,105,000	100,000	2,205,000	95.5%	4.5%		
Woodlaw n 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.

	Millior	ns Gallons/Day (I	Flow Percentage				
Facility Name	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 Sew er Service Agreement dated 08/11/93.

**Falmouth** – All of the wastewater from Cumberland is treated at the Falmouth Wastewater Treatment Facility through a contractual agreement.

	Millions of	Gallons/Day	(MGD)*	Flow Percentage				
Facility Name	Cumberland	Falmouth	Total	Cumberland	<b>Falm outh</b>			
Route 88 Interceptor - Tow n 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 Sew er Extension to Johnson Rd PS	0.144	0.490	0.634	22.7%	77.3%			
Existing Sew ers & 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:

- 2025-2028 Financial Forecast
- Maine Measures of Growth 2022 Scorecard
- Population Change and Density
- Portland Water District Rate Sheet Summary
- Customer Satisfaction Survey
- Board of Trustees' Orders and Resolutions
- Glossary

# 2025 to 2028 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:

	2022 Budget	2022 Actual	2023 Budget	2024 Budget	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
Revenues:								
Water Sales	26,824,845	27,780,678	29,043,602	30,779,641	32,947,948	34,816,264	37,506,758	39,402,500
Assessment Income	22,346,196	22,346,196	25,403,484	27,006,984	28,876,186	31,957,598	34,642,953	35,495,936
Contracted Billing Income	220,236	220,236	242,268	250,860	250,853	258,534	274,941	274,392
Interest Income	104,660	346,246	354,946	1,171,042	1,171,042	1,171,042	1,171,042	1,171,042
Other Income	726,451	1,130,781	1,021,252	1,467,700	1,467,700	1,467,700	1,467,700	1,467,700
Total Revenues	\$50,222,388	\$51,824,137	\$ 56,065,552	\$ 60,676,227	\$ 64,713,729	\$ 69,671,138	\$ 75,063,394	\$ 77,811,570
Operating Expenses:								
Salaries & Wages	7,098,299	6,883,086	8,097,899	8,133,026	8,539,678	8,838,567	9,147,918	9,468,094
Employee Benefits	3,008,557	2,724,316	3,492,164	3,585,595	3,800,730	4,028,773	4,270,499	4,526,729
Biosolids Disposal	2,333,500	2,411,502	3,444,636	3,201,669	3,361,752	3,529,840	3,706,332	3,891,648
Chemicals	1,294,556	1,905,490	1,972,351	2,723,902	2,832,858	2,917,844	3,005,380	3,095,542
Contracted Services	3,385,809	3,673,055	3,850,237	4,262,927	4,433,443	4,566,447	4,703,440	4,844,543
Facilities	110,723	109,244	105,381	121,167	126,014	129,794	133,688	137,699
Heat/Fuel Oil	295,461	341,285	425,538	331,190	344,438	354,771	365,414	376,377
Insurance	97,957	109,020	107,972	126,391	131,446	135,389	139,451	143,634
Materials & Supplies	1,214,146	1,494,312	1,279,520	1,365,442	1,420,060	1,462,661	1,506,541	1,551,737
Other Expense	129,494	151,081	142,378	78,481	81,620	759,074	986,590	1,025,188
Purchased Power	2,000,556	1,922,970	2,027,520	2,816,638	2,957,471	3,075,771	3,168,043	3,263,084
Regulatory/Taxes	557,736	336,342	326,906	341,497	355,157	365,812	376,785	388,088
Tele/Other Utilties	309,278	366,324	230,829	375,928	390,965	402,695	414,776	427,220
Transportation	999,145	1,045,514	1,197,992	1,059,727	1,102,117	1,135,180	1,169,236	1,204,313
SS - Administration	6,470,444	6,859,318	7,299,366	7,539,942	7,916,939	8,233,617	8,562,961	8,905,481
SS - Engineering Services	1,881,209	2,026,635	2,079,775	2,469,028	2,591,244	2,694,246	2,801,344	2,912,696
SS - Environmental Services	571,856	623,497	655,826	621,256	652,319	678,412	705,548	733,771
SS - Wastewater Services	1,520,263	1,573,574	1,715,522	1,703,872	1,739,067	1,758,630	1,778,975	1,800,134
SS - Water Services	171,124	262,307	175,310	206,528	216,854	225,528	234,551	243,932
Total Operating Expenses	33,450,113	34,818,872	38,627,122	41,064,206	42,994,172	45,293,051	47,177,472	48,939,910
Debt Service & Lease	12,078,648	12,067,227	12,943,899	14,299,242	16,309,355	18,295,772	20,830,541	21,424,402
Renewal & Replacement - Direct	3,446,500	3,446,500	2,749,250	3,516,250	3,098,849	3,348,849	3,898,849	3,898,849
Renewal & Replace - Indirect/Contract	1,080,001	1,082,060	1,200,001	1,242,501	1,067,679	1,067,679	1,067,679	1,067,679
Capital Finance Expense	16,605,149	16,595,787	16,893,150	19,057,993	20,475,883	22,712,300	25,797,069	26,390,930
Total Operating Expenses	\$50,055,262	\$51,414,659	\$ 55,520,272	\$ 60,122,199	\$ 63,470,055	\$ 68,005,351	\$ 72,974,541	\$ 75,330,840
Current Year Surplus(Deficit)	\$ 167,126	\$ 409,478	\$ 545,280	\$ 554,028	\$ 1,243,674	\$ 1,665,787	\$ 2,088,853	\$ 2,480,730

#### Consolidated Capital Budget:

	-2024-	-2025-	-2026-	-2027-	-2028-
Water	\$13,360,000	\$22,105,000	\$18,490,000	\$24,350,000	\$15,600,000
Cape Elizabeth	\$320,000	\$2,520,000	\$335,000	\$360,000	\$350,000
Cumberland	\$1,730,000	\$330,000	\$680,000	\$530,000	\$2,730,000
Gorham	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
Portland	\$19,930,000	\$4,985,000	\$1,875,000	\$4,155,000	\$2,730,000
Westbrook	\$340,000	\$40,000	\$40,000	\$3,440,000	\$40,000
Westbrook Joint	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$1,045,000
Windham	\$10,020,000	\$10,020,000	\$7,020,000	\$10,835,000	\$20,000
Water & Wastewater	\$2,430,000	\$4,875,000	\$4,075,000	\$12,275,000	\$1,800,000
Grand Total	\$48,615,000	\$46,320,000	\$32,945,000	\$58,565,000	\$24,350,000

# 2025 to 2028 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 6.5% each year. The impact to retail customers is listed in the second table. All 2024 wastewater assessments, except Gorham, are above projections that were provided to the wastewater municipalities for ratemaking purposes in 2022 due to unexpected cost increases. The updated 2025-2028 are preliminary and will be reviewed with municipal officials in November 2023 before being finalized.

# Water Revenues and Municipal Assessments:

				Prior Year								
		Proposed	2024 2025		2025							
	2	024 Budget		Projection		Forecast	20	26 Forecast	20	27 Forecast	20	28 Forecast
Water	\$	30,779,641	\$	31,024,509	\$	32,947,948	\$	34,816,264	\$	37,506,758	\$	39,402,500
		6.0%		6.8%		7.0%		5.7%		7.7%		5.1%
Wastewater:												
Cape Elizabeth		2,390,220		2,362,515		2,483,773		2,554,742		2,781,634		2,795,918
		3.9%		2.7%		3.9%		2.9%		8.9%		0.5%
Cumberland		1,279,680		1,217,059		1,617,977		1,829,567		1,976,880		2,089,754
		8.0%		2.7%		26.4%		13.1%		8.1%		5.7%
Falmouth	\$	314,112	\$	305,084	\$	300,336	\$	298,583	\$	296,860	\$	295,168
		0.00%		-2.87%		-4.39%		-0.58%		-0.58%		-0.57%
Gorham	\$	1,675,344	\$	1,682,283	\$	1,712,503	\$	1,739,882	\$	1,789,921	\$	1,830,330
		19.3%		7.4%		2.2%		1.6%		2.9%		2.3%
Portland	\$	16,543,176	\$	16,253,061	\$	17,609,860	\$	19,498,194	\$	20,638,546	\$	21,162,761
		13.2%		2.9%		6.4%		10.7%		5.8%		2.5%
Westbrook	\$	3,995,964	\$	3,899,208	\$	4,152,064	\$	4,200,835	\$	4,344,052	\$	4,460,515
		17.3%		4.7%		3.9%		1.2%		3.4%		2.7%
Windham	\$	808,488	\$	804,659	\$	999,673	\$	1,835,795	\$	2,815,061	\$	2,861,490
		0.0%		56.0%		23.6%		83.6%		53.3%		1.6%

## Water Rates:

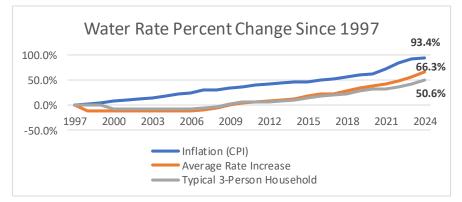
Actual 2022-2023 rates, proposed 2024 and projected 2025-2028 rates.

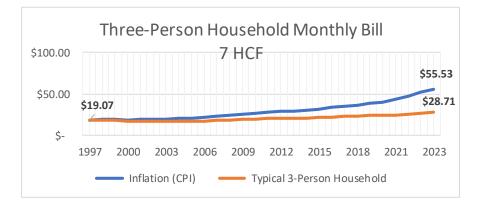
<u>(By Dollar</u>	ב) -	<u>3/1/2022</u>	<u>1/1/2023</u>	<u>1/1/2024</u>	<u>1/1/2025</u>	<u>1/1/20252</u>	<u>1/1/2027</u>	<u>1/1/2028</u>
Residential	.62" meter, 7 HCF	\$ 25.91	\$ 27.19	\$ 28.71	\$ 30.50	\$ 32.01	\$ 34.19	\$ 35.70
Commercial	.62" meter, 40 HCF	\$ 108.88	\$ 114.85	\$ 121.22	\$ 128.75	\$ 135.11	\$ 144.35	\$ 150.71
Small Industrial	2" meter, 1,300 HCF	\$ 2,032.14	\$ 2,174.81	\$ 2,337.63	\$ 2,517.15	\$ 2,677.78	\$ 2,908.92	\$ 3,078.41
Large Industrial	8" meter, 56,000 HCF	\$ 65,786.45	\$ 70,327.11	\$ 76,570.48	\$ 83,395.36	\$ 89,649.85	\$ 98,741.25	\$ 105,557.92
Government	2" meter, 70 HCF	\$ 209.94	\$ 223.51	\$ 242.13	\$ 264.85	\$ 285.28	\$ 314.42	\$ 335.71
Sprinkler	6" meter (month)	\$ 39.92	\$ 41.92	\$ 44.30	\$ 47.03	\$ 49.40	\$ 52.72	\$ 55.07
Public Fire (per year)		\$ 1,566,432	\$ 1,644,768	\$ 1,738,188	\$ 1,845,434	\$ 1,938,444	\$ 2,068,708	\$ 2,160,972
(By Percent)								
Residential	.62" meter, 7 HCF	3.2%	4.9%	5.6%	6.2%	5.0%	6.8%	4.4%
Commercial	.62" meter, 40 HCF	3.6%	5.5%	5.5%	6.2%	4.9%	6.8%	4.4%
Small Industrial	2" meter, 1,300 HCF	4.7%	7.0%	7.5%	7.7%	6.4%	8.6%	5.8%
Large Industrial	8" meter, 56,000 HCF	4.5%	6.9%	8.9%	8.9%	7.5%	10.1%	6.9%
Government	2" meter, 70 HCF	4.3%	6.5%	8.3%	9.4%	7.7%	10.2%	6.8%
Sprinkler	6" meter (month)	3.6%	5.0%	5.7%	6.2%	5.0%	6.7%	4.5%
Public Fire (per year)		3.6%	5.0%	5.7%	6.2%	5.0%	6.7%	4.5%

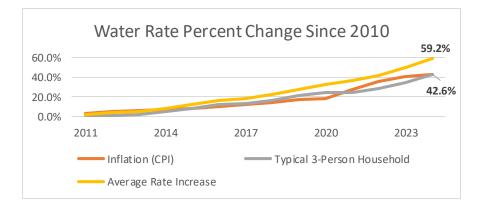
# 2025 to 2028 Financial Forecast(continued)

# Water Rates

As the table indicates on the previous page, water rates are expected to increase between 4.5% and 6.2% in the upcoming years; which is higher than the expected rate of inflation. The primary driver is higher investment in the aging infrastructure. Historically, rates have been rising lower than inflation as the two top tables below indicate. However, in more recent years, the average increases have been above inflation while the typical three-person household have seen increases equal to inflation (see bottom graph).

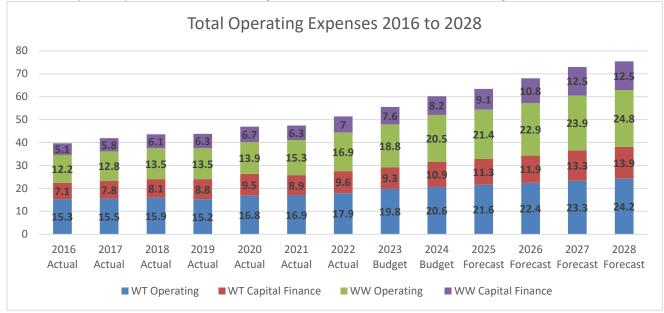






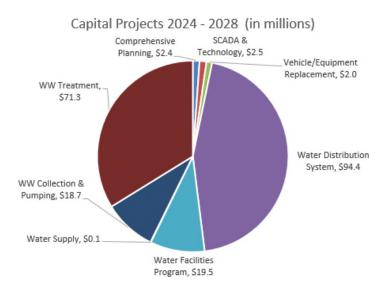
## 2025 to 2028 Financial Forecast (continued)

Total expenses are projected to increase to almost \$76 million by 2028, a 90% total increase since 2016 (or 5.6% a year). As the chart shows, increases in capital financing are driving the increases with water and wastewater capital finance cost increasing by 103% and 145%, 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 28%.



The assumptions incorporated in the projections are as follows:

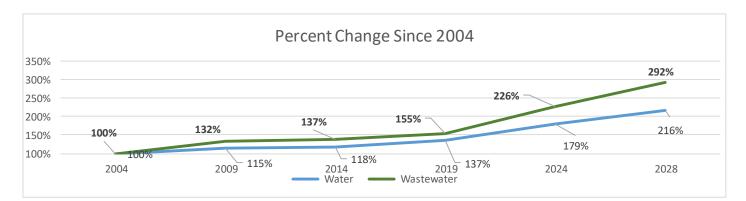
- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$211 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.



# 2025 to 2028 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. Most of the wastewater facilities were built in the 1970's and 1980's with federal grants and we continue to replace those assets but now have to borrow funds to pay for the upgrades.



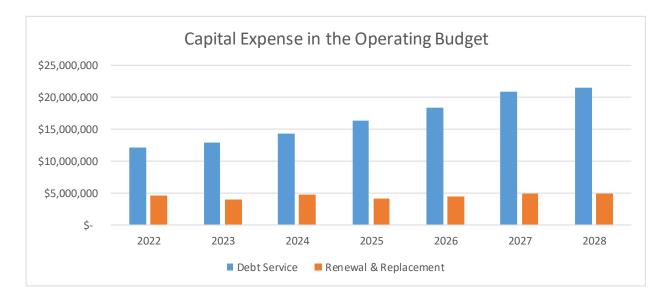
# **Total Expense Budget**

Fund	2004	2009	2014	2019	2024	2028
Water	\$17,608,717	\$20,245,019	\$20,817,310	\$24,087,928	\$31,460,796	\$38,070,037
WW- Cape Elizabeth	1,043,475	1,089,695	1,378,857	1,571,432	2,473,026	2,878,724
WW- Cumberland	498,146	767,586	771,632	954,624	1,316,586	2,126,660
WW- Falmouth	45,721	10,937	15,012	306,132	304,792	298,013
WW- Gorham	578,340	1,056,084	1,121,671	1,103,156	1,735,323	1,890,309
WW- Portland	8,481,000	10,951,209	10,982,397	12,535,853	17,507,832	22,127,417
WW- Westbrook	1,920,536	2,474,362	2,645,693	2,688,293	4,392,293	4,700,744
WW- Windham	54,091	338,117	355,253	391,218	830,596	2,883,602
Other Contract Billing	<u>136,834</u>	<u>206,279</u>	<u>189,158</u>	<u>196,122</u>	<u>257,055</u>	<u>355,334</u>
Total	\$30,366,860	\$37,139,288	\$38,276,983	\$43,834,758	\$60,278,299	\$75,330,840
Total WW	12,758,143	16,894,269	17,459,673	19,746,830	28,817,503	37,260,803

# <u>Capital</u>

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 2022-2028, the expense increases on average more than 10% a year.



Over \$211 million of new bonds are forecasted to be issued between 2024 and 2028. 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 4.0%. The Capital Improvement Plan assumes the following funding of future projects. The Bond Anticipation Note will temporarily finance Portland's East End Treatment Facility's Dewatering Upgrade project. Grants will fund projects related to compliance with new Federal Lead Copper rule and construction on the new treatment plant located in Windham's North Windham area. Reserves set aside for updating the District-wide Master Plan and Water Main Projects will be withdrawn from reserves set aside for those purposes.

		-2024-		-2025-	-2026-	-2027-		-2028-
Bond	\$	19,385,000	\$	27,980,000	\$ 19,290,000	\$ 42,300,000	\$	18,050,000
Bond SRF	\$	10,000,000	\$	10,000,000	\$ 7,000,000	\$ 3,550,000		
Bond Anticipation Note	s	11,000,000						
Grant	\$	1,550,000	s	1,620,000	\$ 1,750,000	\$ 6,450,000		
Renewal and Replacement	\$	5,280,000	\$	5,720,000	\$ 3,505,000	\$ 4,665,000	s	4,175,000
Master Plan Reserve	s	400,000						
Capital Reserve	\$	1,000,000	\$	1,000,000	\$ 1,400,000	\$ 1,600,000	s	2,125,000
Grand Total	\$	48,615,000	\$	46,320,000	\$ 32,945,000	\$ 58,565,000	\$	24,350,000

# 2025 to 2028 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.

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. Significant pump station upgrades. along with Falmouth's Treatment Facility upgrade, causes Cumberland to miss their ratios.

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

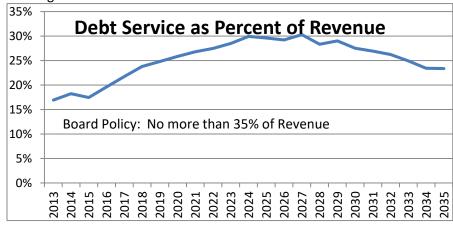
Funds	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
Water	26%	25%	26%	27%	27%	28%	28%
Wastewater							
Cape Elizabeth	18%	19%	17%	19%	21%	26%	26%
Cumberland	29%	24%	25%	38%	44%	46%	48%
Gorham	35%	33%	34%	33%	32%	31%	31%
Portland	18%	17%	16%	20%	25%	25%	24%
Westbrook	24%	24%	25%	24%	22%	22%	21%
Windham	42%	41%	37%	36%	34%	34%	33%

Debt Service Ratio – Target: Greater or Equal to 1.25

Funds	2022	2023	2024	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
Water	1.41	1.33	1.38	1.42	1.49	1.50	1.52
Wastewater							
Cape Elizabeth	1.46	1.43	1.45	1.36	1.33	1.24	1.24
Cumberland	1.29	1.62	1.47	1.25	1.19	1.17	1.15
Gorham	1.21	1.24	1.21	1.21	1.22	1.21	1.21
Portland	1.47	1.44	1.52	1.24	1.15	1.22	1.22
Westbrook	1.28	1.24	1.15	1.18	1.20	1.19	1.20
Windham-South	1.12	1.22	1.23	1.22	1.22	1.22	1.22

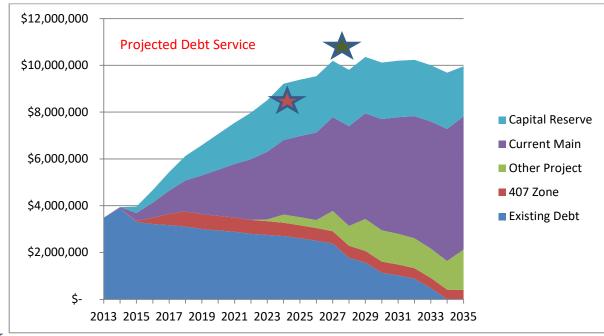
# Long-Term Water Fund Target

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 2024 Budget requests \$8.2 million of debt service, below the long-term plan

The updated multi-year projection is for \$11.1 million in 2028, \$1.9 above 2028 target. The 2024 multi-year plan recommends higher level of main renewal investments (up to \$12 million from the planned \$7M) and the impact of the higher-than-expected Windham Tank project.

**Projected Debt by Fund** Projected debt including proposed debt to finance the 5-year Capital Plan for next 20 years.

		Water					pe Elizabeth astewater		
		Principal		Interest			Principal	Inte	rest
2023	\$	5,726,299	\$	2,016,149	2023	\$	306,500	\$	75,870
2024	\$	6,214,102	\$	2,206,177	2024	\$	306,500	\$	73,688
2025	\$	6,675,464	\$	2,349,587	2025	\$	356,000	\$	95,554
2026	\$	7,018,951	\$	2,354,564	2026	\$	371,000	\$	115,279
2027	\$	7,545,616	\$	2,838,270	2027	\$	494,750	\$	189,559
2028	\$	7,865,328	\$	3,083,694	2028	\$	494,750	\$	179,070
2029	\$	8,540,061	\$	3,547,865	2029	\$	503,750	\$	175,883
2030	\$	8,195,229	\$	3,242,198	2030	\$	503,750	\$	163,040
2031	\$	7,954,836	\$	2,943,135	2031	\$	503,750	\$	150,106
2032	\$	7,588,466	\$	2,662,740	2032	\$	382,250	\$	137,313
2033	\$	7,134,410	\$	2,404,845	2033	\$	374,250	\$	125,524
2034	\$	6,810,363	\$	2,154,111	2034	\$	375,250	\$	113,916
2035	\$	6,078,014	\$	1,918,319	2035	\$	349,750	\$	102,398
2036	\$	5,584,378	\$	1,711,926	2036	\$	337,750	\$	91,724
2037	\$	5,210,787	\$	1,523,171	2037	\$	337,750	\$	81,417
2038	\$	4,926,050	\$	1,347,163	2038	\$	318,400	\$	71,208
2039	\$	4,726,050	\$	1,169,881	2039	\$	318,400	\$	61,626
2040	Ś	4,490,050	Ś	1,004,016	2040	Ś	268,150	Ś	52,112
2041	Ś	4,405,050	\$	845,063	2041	Ś	206,250	\$	42,489
2042		4,046,050	Ś	692,801	2042	Ś	206,250	Ś	33,988
		126,735,554		42,015,675		\$	7,315,200		2,131,764

	umberland /astewater			W	Gorham /astewater		
	Principal	Interest			Principal	Inte	rest
2023	\$ 6,250	\$ 348	2023	\$	427,498	\$	61,921
2024	\$ 6,250	\$ 11,592	2024	\$	485,454	\$	75,181
2025	\$ 91,250	\$ 69,603	2025	\$	485,454	\$	67,150
2026	\$ 106,250	\$ 80,348	2026	\$	472,854	\$	58,993
2027	\$ 132,500	\$ 101,050	2027	\$	472,854	\$	50,732
2028	\$ 157,500	\$ 112,250	2028	\$	472,854	\$	44,161
2029	\$ 157,500	\$ 107,283	2029	\$	251,840	\$	44,014
2030	\$ 167,500	\$ 107,583	2030	\$	216,408	\$	40,930
2031	\$ 167,500	\$ 100,883	2031	\$	213,790	\$	37,859
2032	\$ 167,500	\$ 94,183	2032	\$	213,790	\$	34,806
2033	\$ 167,500	\$ 87,483	2033	\$	213,790	\$	31,743
2034	\$ 167,500	\$ 80,783	2034	\$	213,790	\$	28,679
2035	\$ 167,500	\$ 74,083	2035	\$	213,790	\$	25,613
2036	\$ 167,500	\$ 67,383	2036	\$	213,790	\$	22,544
2037	\$ 167,500	\$ 60,683	2037	\$	213,790	\$	19,473
2038	\$ 167,500	\$ 53,983	2038	\$	213,790	\$	16,397
2039	\$ 167,500	\$ 47,283	2039	\$	198,390	\$	13,344
2040	\$ 167,500	\$ 40,583	2040	\$	198,390	\$	10,418
2041	\$ 167,500	\$ 33,883	2041	\$	198,390	\$	7,490
2042	\$ 167,500	\$ 27,183	2042	\$	70,775	\$	4,782
	\$ 2,835,000	\$ 1,358,453		\$	5,661,481	\$	696,230

# **Projected Debt by Fund**

Projected debt including proposed debt to finance the 5-year Capital Plan for next 20 years.

	Portland Wastewater			stbrook stewater	
	Principal	Interest	Pi	rincipal	Interest
2023	\$ 2,149,941	\$ 346,137	2023 \$	725,316 \$	139,530
2024	\$ 2,027,491	\$ 454,585	2024 \$	846,110 \$	169,944
2025	\$ 2,906,741	\$ 1,109,742	2025 \$	846,110 \$	153,969
2026	\$ 3,829,241	\$ 1,545,903	2026 \$	780,270 \$	138,044
2027	\$ 3,897,991	\$ 1,499,800	2027 \$	780,270 \$	123,279
2028	\$ 3,897,991	\$ 1,412,242	2028 \$	780,270 \$	110,210
2029	\$ 3,671,997	\$ 1,354,070	2029 \$	742,335 \$	110,003
2030	\$ 3,671,997	\$ 1,260,787	2030 \$	623,103 \$	101,742
2031	\$ 3,629,387	\$ 1,167,708	2031 \$	617,442 \$	93,542
2032	\$ 3,580,387	\$ 1,075,916	2032 \$	617,442 \$	85,381
2033	\$ 3,580,387	\$ 984,401	2033 \$	617,442 \$	77,200
2034	\$ 3,430,387	\$ 893,859	2034 \$	617,442 \$	69,016
2035	\$ 3,430,387	\$ 808,288	2035 \$	617,442 \$	60,826
2036	\$ 3,330,387	\$ 722,950	2036 \$	567,442 \$	52,757
2037	\$ 2,820,650	\$ 639,195	2037 \$	567,442 \$	45,055
2038	\$ 2,820,650	\$ 559,383	2038 \$	567,442 \$	37,406
2039	\$ 2,795,650	\$ 480,372	2039 \$	424,142 \$	28,769
2040	\$ 2,638,150	\$ 400,551	2040 \$	424,142 \$	22,482
2041	\$ 2,552,050	\$ 323,658	2041 \$	424,142 \$	16,191
2042	\$ 2,421,750	\$ 247,387	2042 \$	153,795 \$	10,368
	\$ 63,083,612	\$17,286,934	\$12	,339,541 \$	1,645,714

	1	Windham Nastewater		Total	
		Principal	Interest	Principal	Interest
2023	\$	143,229	\$ 24,052	\$ 9,485,033	\$ 2,664,007
2024	\$	142,786	\$ 21,800	\$ 10,028,693	\$ 3,012,967
2025	\$	142,786	\$ 19,639	\$ 11,503,805	\$ 3,865,244
2026	\$	141,226	\$ 123,995	\$ 12,719,792	\$ 4,417,126
2027	\$	1,207,893	\$ 651,148	\$ 14,531,874	\$ 5,453,838
2028	\$	1,207,893	\$ 627,760	\$ 14,876,586	\$ 5,569,387
2029	\$	1,122,342	\$ 605,347	\$ 14,989,825	\$ 5,944,465
2030	\$	1,110,505	\$ 583,363	\$ 14,488,492	\$ 5,499,643
2031	\$	1,110,284	\$ 561,353	\$ 14,196,989	\$ 5,054,586
2032	\$	1,110,284	\$ 539,298	\$ 13,660,119	\$ 4,629,637
2033	\$	1,110,284	\$ 517,139	\$ 13,198,063	\$ 4,228,335
2034	\$	1,110,284	\$ 494,961	\$ 12,725,016	\$ 3,835,325
2035	\$	1,110,284	\$ 472,754	\$ 11,967,167	\$ 3,462,281
2036	\$	1,110,284	\$ 450,523	\$ 11,311,531	\$ 3,119,807
2037	\$	1,110,284	\$ 428,256	\$ 10,428,203	\$ 2,797,250
2038	\$	1,110,284	\$ 405,940	\$ 10,124,116	\$ 2,491,480
2039	\$	1,108,984	\$ 383,600	\$ 9,739,116	\$ 2,184,875
2040	\$	1,108,984	\$ 361,246	\$ 9,295,366	\$ 1,891,408
2041	\$	1,108,984	\$ 338,873	\$ 9,062,366	\$ 1,607,647
2042	\$	1,067,447	\$ 316,658	\$ 8,133,567	\$ 1,333,167
	\$	18,495,331	\$ 7,927,705	\$ 236,465,719	\$73,062,475

# **Strategic Goal Impact**

In the next five years, the District is forecasted to spend over \$340 million in operating expenses and \$211 million in capital expenditures to meet our mission to protect public health, safety, and the environment by providing customers with high-quality, reliable and affordable water services. Below is an overview of some of the significant impacts spending the money will have on meeting our mission and strategic goals.

At the beginning of the 2024 planning cycle, the Senior Management Team developed a preliminary list of action items and prioritize the list (i.e., declared the critical, important or desirable). The list below identifies items included in the 5-year plan.

#### Goal 1 – Public Health and Safety

Protect public health and safety by providing services that meet or exceed federal, state and local health, and safety standards.

Name		2024 to 2028 Impact
Federal Law: Lead/Copper Compliance	Critical 🛆	Full-time staff person continues to coordinate efforts. Per law, complete inventory of lead pipes in the sytem to be idenfied and public notification system created in 2024. In next 3 years, all galvanize pipes will be removed (\$7.2M) and GPS location points of obtained customers to allow customers to review their line status on our website (\$1.0M).
Portland WW Secondary Clarifier and Primary Gallery	Critical 📐	Due to operation issues, the secondary clarifier & primary gallery need to be replace in an expedited manner to assure treatment process will continue to meet standards at the East End Wastewater Treatment Facility Plant located in Portland (\$10.4M).
Biosolids Disposal Management	Important	Staff began the process of creating a long-term strategy to deal with the disposal of biosolids including addressing the PFAS embedded in biosolids (\$300k). The study will be completed in 2024 and with cooperation of state, local and private sector come up with a recommended solution. Since the solution has not been determined, no financial resources allocated in future years but could be significant.
Prioritize critical assets at SLWTF and optimize maint. plans	Important	Upgrades to the 30-year old water treatment plant will begin including projects related to the chemical feed and roof (\$9M).

#### Goal 2 - Environmental Stewardship

Ensure the sustainability of natural resources by protecting the environment within our shared watersheds and service area.

Name		2024 to 2028 Impact
Windham North Windham	Critical 📐	The Town on Windham identified the North Windham business area as needing a public sewer system. Construcition of the \$38.4M project began in 2023 with a target date of completion of early 2026.
WGW Treatment Plant Capacity Expansion Plan	Important	
Watershed Protection - Continue \$8M RCCP Grant	Desirable	The third year of \$8M RCCP Grant activities will be coordinated by the District and its partner Sebago Clean Waters. Beginning in 2024, the District will provide a grant to support the SCW program (\$60K). PWD continues to allocate significant resources annually to protect the Sebago Lake Watershed (\$1.3M). 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.
Westbrook Wastewater Storage	Desirable	A \$3.2M 2027 project constructing a wastewater storage tank to capture rain water and reducing the level untreated wastewater may be required if alternative methods of reduction do not work.

# **Strategic Goal Impact**

#### Goal 3 - Reliable & Sustainable Service

Provide services in a manner that is reliable and sustainable, so customers can depend on them.

Name		2024 to 2028 Impact
Portland WW Secondary Clarifier Sludge Rake	Critical 📐	
Windham Water Tank	Critical 🛆	In 2024, the new Windham Water Tank will become operational and replacing an aging
		tank (\$5.1M) improve water system volume and pressure.
		Upgrade of the aging Cape Elizabeth's Treatment Facility Aeration system (\$2.2M). The
Cape WW Aeration Upgrade	Important	project will also protects the environment by reducint the amount of nitrogen returned to the
		environment.
Mater Desides Observe Out Designed	less seterat	The current meter reading/meter system was installed almost 20 years ago. Within the
Meter Reading Change Out Program	Important	next 5 years the meter reading system/meters will be replaced (\$15.8M). Alternatives to the
		current drive by meter reading system will be examined.
		The \$11M project at Portland's East End Wastewater Treatment facility will reduce the
Master Plan (CWWSP)	Important	volume and costs of biosolids to be disposed. In addition to identify projects to assure
		reliable service, the plan will address other issues related to meeting expected regulations
		and affordability.
Water Main Replacement Program	Important	Continue replacing aging water mains (\$47M).
		A \$300k study will be completed in 2024 reviewing the future wastewater flow coming from
WGW Treatment Plant Capacity Expansion Plan	Important	the Westbrook, Gorham and Windham areas to assure the Westbrook Regional Treatment
		Facility has adaquate capacity to treat.
		The 2027 \$2.2M project to upgrade the septage screen facilitites at the Westrbrook
Westbrook Septage Screen Facilities	Desirable	Regional Treatment facility will enable private septage haulers to deliver septage to the
		plant. This would generate revenue and encourage septage to be treated
		Over the next 5 years, 26 aging pump station and related piping throughout 6 wastewater
Wastewater Pump Stations Upgrades	Desirable	communites will be upgraded (\$18.7M) and will increase reliability of the system. The
		upgrade of the Keddy Mill pump station (\$750K) will enable the elimination of 1 pump
		station and promote economic development in the South Windham area.
Sebage Lake Intake facilities	Desirable	Water Emergency Storage Capacity (\$12.6M) and Intake facilities replacement (\$4M) will
	Booliable	be considered to improve the reliablity of the water system.
Cybersecurity and Computer Backup	Desirable	Continue the development of the computer system backup and response to a cybersecurity
cycerectany and computer buokap	Decirable	incident (\$100k)

#### Goal 4 -High Value

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Provide high value services, which requires engaging and understanding customer needs and priorities; balancing competing goals with the cost of services with customers' ability to pay.
2024 to 2028 Impact N

Name		2024 to 2020 impact
Master Plan (CWWSP)	Important	In 2023, the process began to update the Comphensive Water Master Plan and will continue throughout 2024 (\$1.2M). The first step is a series of system assessments.
EAM Development Program	Important	Work areas will continue the development and use of the recently install asset management system.
Customer Satisfaction Survey response	Important	A customer satisfaction survey was conducted. The survey indicated 97% of customers were at least satisfied with the District service. The results will be reviewed and apppropriately responded
Paper Reduction Project	Desirable	A catalog of most paper system was created in 2023. From the catalog, projects will be identified to streamline to more cost-effective.
Finance System Upgrade	Desirable	Will review the options to upgrade or replace the current finance system will be explored (\$600k). Focus will be on obtaining a system that could integrate with asset management system in a cost-effective manner.
Power BI Rollout	Desirable	Work areas will explore ways to use a new information display tool (Power BI).

Goal 5 – High-Performance and Supportive Work Environment Maintain a safe work atmosphere that values diversity and inclusiveness, collaboration, engagement, and respect, while embracing continuous improvement and efficiency.

Name		2024 to 2028 Impact
Employee Succession Plan	Critical ٨	With close to 20% of the work force in their 60's, management will continue to prepare the
		organization for the transistion.
Employee Satisfaction Survey Response	Important	An Employee Satisfaction Survey will be conducted last 2023. Action steps will be
Employee Satisfaction Survey Response	important	developed to address any issues or concerns identified in the survey.
Employee Engagement Activities	Desirable	In last 2023, a new team was formed to identify, plan and implement activities to
Employee Engagement Activities	Desirable	encourage employees activities
Update Key Performance Metrics for PWD	Desirable	
Diversity Inclusion Equity -Workforce management	Desirable	
Douglass Street HVAC	Desirable	Continue investments will be made into the office and other work areas to address work
	Desitable	environment issues

# **Strategic Goal Impact**

## 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.

				Renev	val and
	Opera	ting	Percent	of Repla	cement (Capital)
	Contir	igency Reserve	Budget	Reser	ve
Water	\$	6,703,291	18%	\$	9,688,621
Wastewater:					
Cape Elizabeth	\$	286,836	10%	\$	981,324
Cumberland	\$	60,779	3%	\$	247,441
Gorham	\$	94,177	5%	\$	442,915
Portland	\$	5,531,854	25%	\$	5,818,081
Westbrook	\$	313,278	7%	\$	1,925,840
Windham (South Only)	\$	162,227	6%	\$	301,539

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 21% to 48%. Cumberland's debt service is high to due significant debt service assessed by the Town of Falmouth for improvements at their treatment plant facility that services Cumberland along with significant upgrades by the District on Cumberland's pump station throughout the next five years.

	Debt Service - Percent of Budget	Debt Service Ratio
Target	<35%	>125%
Water	28%	152%
Wastewater:		
Cape Elizabeth	26%	124%
Cumberland	48%	115%
Gorham	31%	121%
Portland	24%	122%
Westbrook	21%	120%
Windham (South Only)	33%	122%

The Maine Economic Growth Council updates Measures of Growth Report which tracks 25 indicators that provide a snapshot of how Maine's economy is faring. The full report is located here - <a href="https://www.mdf.org/economic-policy-research/measures-of-growth-report/">https://www.mdf.org/economic-policy-research/measures-of-growth-report/</a> ).

	FUNDAMENTAL PERFORMANCE INDICATORS			O ECONOMY	
	PROSPERITY			INNOVATION	
<b>*</b>	1. Wages In 2021, average wages rose 0.5% after adjusting for inflation.	pg 8	+0.2%	9. Research & Development In 2019, Maine's R&D spending rose from 0.8% to 1.0% of GDP.	pg 17
. <b>0.3</b> %	2. Poverty In 2020, poverty fell slightly from 10.9% to 10.6 due to federal stimulus measures.	<b>pg 9</b>	+32%	<ol> <li>International Exports</li> <li>Maine exports soared 32% in 2021, reaching their highest level in a decade.</li> </ol>	pg 18
+1%	3. Gender Wage Equity In 2021, women's median wages rose 1% compa men's, but remained about 83% of men's earning		<b>*</b> +5%	11. Entrepreneurship In 2020, the number of business starts exceede closures by 9%, up from 4% in 2019.	<b>pg 19</b> d
+3%	<b>4. Racial/Ethnic Income Equity</b> In 2016-2020, the average incomes of BIPOC* a Latino or Hispanic Mainers rose 3% but remain 33% below those of White Mainers, dramatical short of full equity. (*Black, Indigenous, People of a	ned Ily	-2%	TALENT 12. Prekindergarten Education In 2021-22, the share of schools with pre-Ks fell to 77%, partly due to COVID, but this is expected to rebound next year.	
+1%	PEOPLE 5. Labor Force Maine's labor force grew 1% in 2021 but remain below pre-pandemic levels.	pg 12 ns	NA	13. Fourth-Grade Reading In 2019, 36% of Maine 4th graders were proficie in reading. 2022 results were not available at the of publication.	
0%	6. Labor Force Participation In 2021, 60% of Maine adults were in the labor —unchanged since 2020 and below the U.S. av		NA	14. Eighth-Grade Math In 2019, 34% of Maine 8th graders were proficie in mathematics. 2022 results were not available time of publication.	
+2%	PRODUCTIVITY 7. Value-Added In 2021, value-added per worker rose 2%, but remained 23% below the U.S. average.	pg 14	NA	15. Postsecondary Degrees & Credentials In 2019, 53% of Mainers had a degree or a profe credential, below the New England average of 5 2022 results were not available at time of public	
+5%	8. Gross Domestic Product In 2021, Maine's GDP rose 5%, resuming growt after its 2020 slump.	<b>pg 15</b> h	0%	BUSINESS CLIMATE 16. Cost of Doing Business In 2021, Maine's cost of doing business was unchanged.	pg 24
			-0.4%	<ol> <li>Cost of Health Care</li> <li>Health care expenditures fell 0.4% in 2021</li> <li>but remain an ongoing challenge.</li> </ol>	pg 25

<u>Why is this of significance to Portland Water District</u>? Ability to hire new skilled employees will be a challenge in the future. Cost of doing business and living in Maine is high, which might inhibit the ability to continue to increase water rates.

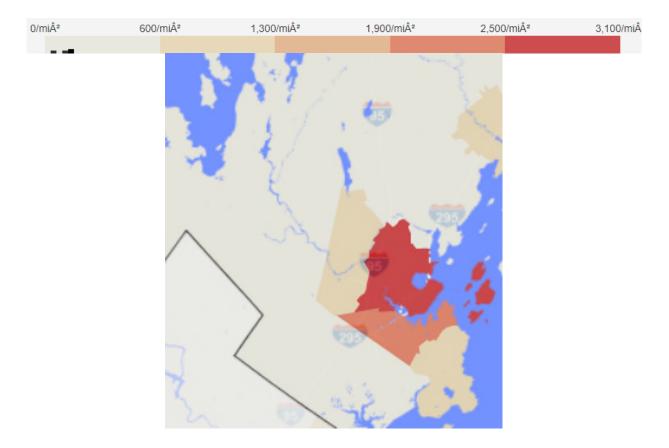
# Maine Measures of Growth 2022 Scorecard

+10%	18. Cost of Energy The price of industrial electricity rose 10% in 202 mirroring increases across New England.	pg 26	25. Mental & Behavioral Health (NEW) In 2019-2020, the percentage of children with a mental and/or behavioral condition rose over 2%	pg 34
-0.5%	19. State and Local Tax Burden In 2020, Maine's tax burden declined but remain above the New England average.	pg 27 ed	26. Health Insurance Coverage Maine's health insurance coverage is stable and above the U.S. average.	pg 35
		-2%	27. Food Security In 2019-2021, the share of Mainers experiencing food insecurity fell about 2 percentage points.	pg 36
NA	INFRASTRUCTURE 20. Internet Connectivity In 2022, 78% of locations have high-speed or broadband internet. Annual comparison not	pg 29	🔹 ENVIRONMENT	
+7%	available due to changed data methods.	pg 30	28. Air Quality In 2021, there were 28 moderately unhealthy days three more than last year.	<b>pg 37</b> s,
-	In 2021, 66% of Maine roadways were rated good or fair, a noteworthy 7% increase. 22. Housing Affordability	pg 31	29. Water Quality In 2022, Maine maintained its excellent water quality rating.	pg 38
NA	Home ownership affordability got much worse in 2021, but the full index (including rentals) was not available at time of publication.	+8%	30. Sustainable Forest Lands       In 2021, the growth-to-harvest ratio rose 8%         to 1.43 and remained above the sustainability growth remained above the sustainability g	<b>pg 39</b> pal.
	HEALTH & SAFETY			
	23. Safety In 2020, Maine's crime rate was 46% below the U.S. average. The 2021 rate was not available at time of publication.	pg 32	<b>31. Greenhouse Gas Emissions</b> From 2018 to 2019, GHG emissions fell 2%.	pg 40
+0.1%	<b>24. Physical Wellness</b> About 2/3 of Maine adults are overweight or obe virtually unchanged for several years.	<b>pg 33</b> se,		
*	Exceptional Performance Very high national standing and/or signification positive progress compared to past perform Needs Attention Very low national standing and/or establish trend toward significant decline. The indication may show improvement but is still viewed in needing attention.	hed ator	Favorable movement since the last available data. No significant movement since the last available data. Unfavorable movement since the last available data or data not available.	

# **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	2010		
	Population	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 July 1, 2023 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.

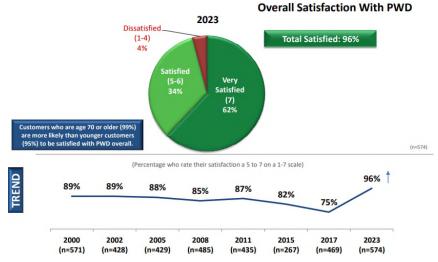
#### PORTLAND WATER DISTRICT RATE SHEET 07.01.2023

#### 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					2		S	EWER RATE	S			
Effective Date 01/01/23				07/01/23	09/01/18	07/01/23	07/01/23	01/01/22	05/01/23	04/01/23		
# OF PEOPLE	GALLONS = HO	F	MEMBERS	NON- MEMBERS		PORTLAND	CUMBERLAND	SOUTH PORTLAND	CAPE ELIZABETH	WESTBROOK	WINDHAM	GORHAM
1	1,800 =	2	13.59	15.65		25.50	47.96	13.90	58.54	20.46	48.84	23.03
2	3,600 =	5	21.75	25.07		63.75	64.52	34.75	76.63	43.65	48.84	45.0
3	5,400 =	7	27.19	31.35		89.25	75.56	48.65	88.69	59.11	68,38	59.7
4	7,200 =	10	35.35	40.77		127.50	92.12	69.50	106.78	82.30	97.69	81.7
5	9,000 =	12	40.79	47.05		153.00	103.16	83.40	118.84	97.76	117.23	96.4
6	10,800 =	14	46.23	53.33		178.50	114.20	97.30	130.90	113.22	136,77	111.1
7	12,600 =	17	54.39	62.75		216.75	130.76	118.15	148.99	136.41	166.08	133.13
8	14,400 =	19	59.83	69.03		242.25	141.80	132.05	161.05	151.87	185.62	147.81
9	16,200 =	22	67.99	78.45		280.50	158.36	152.90	179.14	175.06	214,93	169.8
WATER RATES			Min Charge includes 1 HCF		litional CF HCF	HCF 31-100 HCF			Lifeline Water Rate (Reduction in Monthly Minimum Charge)		Minimum includes 1 HCF	
MEMBERS			10.87	2.	72		2.51		MEN	ABERS	2.7	2
NON-MEMBERS			12.51	3.	14		2.90	_	NON-N	IEMBERS	3.1	4
SEV	VER RATES		Min HCF	MINC	HARGE		HCF	-		Municpal Conta	cts for Sewer	
PORTLAND			1	12	75	1	2.75		Ben Pearson		874-8843	
CUMBERLAN	D		0	36	92	5.52			Pam Bosarge		829-2207	
SOUTH POR	TLAND		1	6.	95	6.95			Colleen Mitch	ell	767-7675	
CAPE ELIZAB	BETH		1	52	51	(	5.03		Ben McDouga	1	799-5251	
WESTBROOM	ĸ		1	12	.73		7.73	1 m 1 m	Eric Dudley		854-9105 x222	2
GORHAM			1	15	69		7.34		Freeman Abbo	11	222-1608	
WINDHAM			5 hcf per unit RATE PER	48	84		9.77		Barry A. Tibbe		892-1907	
FALMOUTH	eff 07.01.2023		LIVING UNIT	Commercial	Fixtures > 17	SCI	HOOLS		Beth Pauls		781-4462	
FALMOUTH EI W.01.2023			\$49,73 x # of units (Residential)	(\$49.73 x # of fixtures - 17 fo (Com'l combine			very 15 students hools)		Note: These a	are the most con is not a com		tes, but this

# **Customer Satisfaction Survey**

A periodic customer satisfaction survey is conducted. The overall result of the 2023 survey were strong and improved since the last survey with 96% of customer as least satisfied with the District.



# **Key Findings**

Overall satisfaction with PWD is very high and has increased since the organization's most recent customer survey in 2017.

- Almost all surveyed customers are satisfied with PWD overall (96%), representing a new high.
  - Satisfaction with PWD is higher than satisfaction with other tested utilities or service providers.
- In addition, customers are almost universally satisfied with the reliability (99%) and quality (96%) of their water from PWD, and nine out of ten are satisfied with PWD's wastewater service overall (90%).
- Huge majorities also believe the water they receive from PWD is safe (93%), colorless (97%), odor-free (93%), good tasting (92%), and delivered with adequate pressure (92%).
  - Two out of three agree that PWD responds quickly to emergencies (64%), and half agree that the organization provides advance alerts about planned shut-offs (52%). While customers are more likely to praise PWD's performance in other areas of service, given the perceived reliability of PWD and the fact that many do not have a firm opinion about PWD's performance in planned or emergency outages, these ratings likely reflect a lack of experience with these issues as a customer of PWD.
- Many customers are also satisfied with the price of their water (78%) or the overall value of PWD's services (70%). Eight out of ten believe
  PWD provides accurate bills (79%) an increase over recent waves of the survey.
  - Fewer who use PWD for wastewater service are satisfied with the price of those services (62%).

#### Communication also appears to be a strength of the organization.

- Eight out of ten customers rate the amount of communication they receive from PWD as about right (82%), and almost none rate the amount
  of communication they receive as too much (<0.5%) or too little (4%).</li>
- Another eight out of ten believe the organization keeps customers informed (79%), and seven out of ten believe the organization is easy to reach (72%).

#### PWD also enjoys a strongly positive image among its customers.

- Majorities believe PWD serves the public well (81%) or view the company as experienced (71%), well-run (65%), or trustworthy (60%).
- Many would also describe the organization as safe (69%) or reliable (67%).

#### PWD's online services are particularly popular; phone-based services are less popular.

- Seven out of ten surveyed customers currently use PWD's paperless billing (72%) or online bill payment systems (70%), and six out of ten use online auto payments (60%).
- In contrast, no more than one out of ten customers use account information by phone (8%), pay-by-phone (6%), or pay-by-text (6%) services. Importantly, this low usage is not necessarily a result of low awareness – usage of these services is low even among customers who are aware of them.
- Email is, by far, the preferred form of communication about account status, billing, water testing, construction, and information about PWD.
   Many would also like to receive emails about service interruptions, though text messages are also a popular way to receive information about water delivery issues.

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# **Proposed Board of Trustees' Orders and Resolutions**



## **BOARD OF TRUSTEES / AGENDA ITEM SUMMARY**

Agenda Items:	
Date of Meeting:	November 27, 2023
Subject:	Proposed Budget Orders
Presented By:	Seth Garrison, General Manager

The Administration and Finance, Operations and Planning Committees reviewed the 2024 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 2024 budget and authorizes billing the municipalities for wastewater and billing services.

## Order 23-38

<u>ORDERED</u> that the 2024 Budget and Wastewater Assessments as presented by the General Manager at the October 23,2023 Regular Board meeting 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 2024 the participating municipalities for wastewater related costs as follows:

Town of Cape Elizabeth	\$ 2,390,220
Town of Cumberland	\$ 1,279,680
Town of Falmouth	\$ 314,112
Town of Gorham	\$ 1,675,344
City of Portland	\$ 16,543,176
City of Westbrook	\$ 3,995,964
Town of Windham	\$ 808,488

and to assess non-participating municipal corporations for billing-related costs as follows:

City of South Portland	\$ 236,916
Scarborough Sanitary District	\$ 13,944

#### 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 2024 Budget assumes an average water rate increase of 6.4%. The proposed motion authorizes the specific rates to be adopted.

## Order 23-39

<u>ORDERED</u> that the final rate schedule for the water rate adjustment, hereto and incorporated herein by reference, are hereby adopted with an effective date of January 1, 2024.

## 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 23-40

<u>ORDERED</u> the revisions to the Portland Water District's Terms & Conditions of water service, hereto and incorporated herein by reference, are hereby adopted with an effective date of January 1, 2024.

## Non-Water Tariff Services

The fee schedule was last amended in November 2023. The proposed schedule is amended reflecting updated fees to current costs and several new Main Extension and New Service (MEANs) fees.

## Order 23-41

<u>ORDERED</u> 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, 2024.

## Capital Budget and Related Bond Reimbursement Motions

The motion accepts the proposed capital improvement plan and authorizes staff to implement the 2024 projects within the restrictions stated below and in compliance with the purchasing policy guidelines.

## Order 23-42

<u>ORDERED</u> The 2024-2028 Capital Improvement Plan is hereby adopted and the General Manager is authorized to solicit bids or proposals for the 2024 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;

<u>BE IT FURTHER ORDERED</u> The General Manager shall solicit bids or proposals and partner with municipalities, MDOT, and developers 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 23-XX 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 23 - 14

<u>RESOLVED</u> the Board of Trustees hereby declares its intent to issue debt to reimburse costs incurred by the District for water fund, Cape Elizabeth, Cumberland, Portland, Westbrook, Gorham and Windham wastewater funds projects identified in the 2024 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 23-14 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 taxexempt 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. <u>Declaration of Intent</u>. 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 \$43,615,000.
- 2. <u>General Description of Property to which Reimbursement Relates.</u> 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, including the Sebago Lake Treatment facility roof and the intake screen;
- 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.

## Cape Elizabeth Wastewater Fund CIP Projects

- Renovation of the Cape Elizabeth Treatment Facility's aeration and clarification system; and
- Replacement of obsolete assets at various pump stations, including but not limited to Peabble Cover pump station.

## Cumberland Wastewater Fund CIP Projects

• Replacement of obsolete assets at various pump stations, including but not limited to Powell Road pump station, and Tuttle Road force main.

## Portland Wastewater Fund CIP Projects

• Renovation, repair and replacement of machinery and equipment and facilities at the East End and Peaks Island Wastewater Treatment Facility, including but not limited to projects related to the return sludge piping, influent screen, dewatering system, and entry gate;

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 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 the Fore River and Northeast pump stations.

## 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.** <u>Public Availability of Official Intent</u>. This Declaration of Official Intent shall be maintained as a public record of the Issuer.

**4.** <u>**Treasury Regulations.**</u> This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.

**5.** <u>Authority for Declaration</u>. This declaration is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.

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.

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

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.

## **<u>Glossary/Acronyms</u>**

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.
NWWWTF	North Windham Wastewater Treatment Facility
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.

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

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