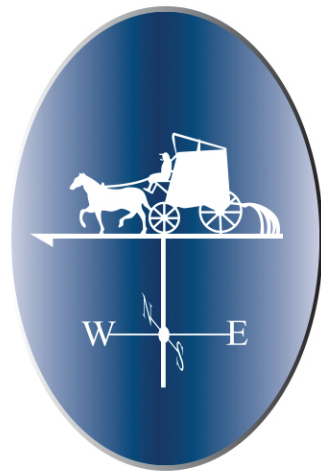




2021

Proposed Comprehensive Budget Report



Portland Water District
FROM SEBAGO LAKE TO CASCO BAY

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Portland Water District



Administrative Office
225 Douglass Street
Portland, ME 04101

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Louise G. Douglas
President
Representing Raymond/Windham

William M. Lunt III
Vice President
Cumberland/Falmouth

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Cape Elizabeth/South Portland

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Portland

Carrie Lewis
General Manager

David M. Kane
Treasurer

Table of Contents

Preface

Cover Page.....	1
Table of Contents.....	2
Portland Water District Budget Reader’s Guide.....	5
Overview of the Water and Wastewater System	6
Letter from the General Manager.....	7

Introduction

Introduction and Service Territory.....	13
History.....	14
Top Reasons to Choose Portland, Maine Now.....	15
The Regulatory Environment in Which We Function.....	16
Water Rate Change Process.....	18
Organization Structure.....	19
Board of Trustees.....	20
Annual Planning and Budget Process.....	21
Planning/Budget Process Calendar.....	22
Mission Statement.....	23
Strategic Goals.....	24
Board Established Guidelines.....	30
External Factors Impacting the Budget.....	32
Significant Budget Uncertainties.....	33
Major Policy and Resource Allocation Decisions.....	34
Operating Budget Summary.....	36
Capital Budget Summary.....	37
Combined Water and Wastewater Operating Funds.....	38
Combined Operating, Capital and Grant Funds.....	39
Land Fund.....	40
GFOA Budget Presentation Award.....	41
Community Connections.....	42

Budget by Fund

Introduction.....	43
Relation of Functional Units (Departments) to Funds.....	44
2021 Operating Budget by Fund Summary.....	45
Water Fund.....	46
Cape Elizabeth Wastewater Fund.....	56
Cumberland Wastewater Fund.....	66
Gorham Wastewater Fund.....	76
Portland Wastewater Fund.....	86
Westbrook Wastewater Fund.....	98
Windham Wastewater Fund.....	109
Falmouth Assessment and Contracted Billing Services.....	119

Revenue

Introduction.....	121
Water Sales.....	122
Water Sales Cost of Service Study.....	123
Water Sales Metered Revenue.....	124
Water Sales Metered Revenue, Consumption.....	125
Water Sales Metered Revenue, Rates.....	131
Water Sales Non-Metered Revenue.....	135
Water Sales Long-Term Considerations.....	136
Wastewater Assessment & Contracted Billing Income.....	138
Wastewater Assessments Revenue Trend.....	139
Current Municipal Wastewater Rates.....	140
Interest Income.....	141
Other Income.....	142
Fund Balance.....	143
Fee Schedule for Non-Tariff Services.....	144

Departmental Expense

Introduction and Financial Summary by Category and Department.....	145
Departmental Expense by Category.....	146
Salaries/Wages.....	146
Employee Benefits and Biosolids Disposal.....	147
Chemicals.....	148
Contracted Services.....	149
Deferred Cost Write-off.....	150
Heat/Fuel Oil and Insurance.....	151
Materials & Supplies.....	152
Other Expense.....	153
Purchased Power.....	154
Regulatory/Taxes and Telephone/Other Utilities and Transportation.....	155
Departmental Expense by Department.....	156
Water Services.....	156
Wastewater Services.....	177
Environmental Services.....	195
Engineering Services.....	217
Administrative Services.....	230
Non-Departmental.....	250

Human Resources

Introduction.....	251
Salary Costs.....	252
Labor Hours/Average Pay Rates.....	253
Employee Benefits.....	254
Authorized Head Count.....	257
Non-Union Positions.....	258
Union Positions.....	259

Human Resources (continued)

Temporary and Non-Benefit Employees.....	260
Work Force Management.....	262
PWD Professional Representation.....	267
Employee Events.....	268

Capital Finance

Introduction and Annual Fund Operating Budget.....	269
Bond Financing.....	270
Water and Wastewater Funds Debt Service.....	273
Debt Service Summary.....	275
Projected Water Debt.....	276
Outstanding Debt by Fund Trends.....	277
Water and Wastewater Debt.....	278
Capital Reserve.....	285
Renewal & Replacement.....	286
Water Fund – Renewal and Replacement Fund.....	287
Wastewater Fund – Renewal and Replacement Fund.....	288
Water Fund – Rate Stabilization and Water Master Plan Funds.....	289
Green Bonds Issued in 2020.....	290

Capital Expenditures

Introduction.....	291
Capital Improvement Program Process.....	292
Program Summary and Board of Trustee Orders.....	293
Program Summary by Fund	294
Financing Summary.....	295
Capital Improvement Program – Five Year Plan.....	296
CIP Operating Fund Summary Impact.....	297
Project Details.....	298

Financial Policies

Introduction.....	367
Significant Financial Policies.....	367
Cost Allocation Policy Detail.....	373

Appendix

Introduction.....	385
2022-2025 Financial Forecast.....	386
CES Renewable Energy Consortium.....	393
Maine Measures of Growth 2019 Scorecard.....	394
Water Benchmark Data.....	396
Portland Water District Rate Sheet Summary.....	398
Customer Satisfaction Survey Results.....	399
Board of Trustees Orders and Resolutions.....	400
Glossary/Acronyms.....	407

Portland Water District Budget – Reader’s Guide

Welcome to the Portland Water District’s 2021 Budget document. This document is intended to provide practical and pertinent information about the Portland Water District’s (PWD’s) financial planning, policies, goals and priorities for 2021 and beyond. The book holds a wealth of information including how water and wastewater revenues are used to support infrastructure and fund future years’ development.

This Budget is a Policy Document.

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

This Budget is a Financial Plan.

It describes the costs of the services provided by PWD and how they are funded. The Revenue section presents the projected revenues from water sales, wastewater assessments, interest and other income. The Departmental Expense section details expenditures by category and also by department for the Water Operations, Wastewater Operations, Environmental Services, Engineering Services and Administrative Services Departments. The Capital Expenditures section presents details of major projects planned for 2021 and projected projects through 2025. The multi-year financial plan is included in the Appendix.

This Budget is a Means of Communication.

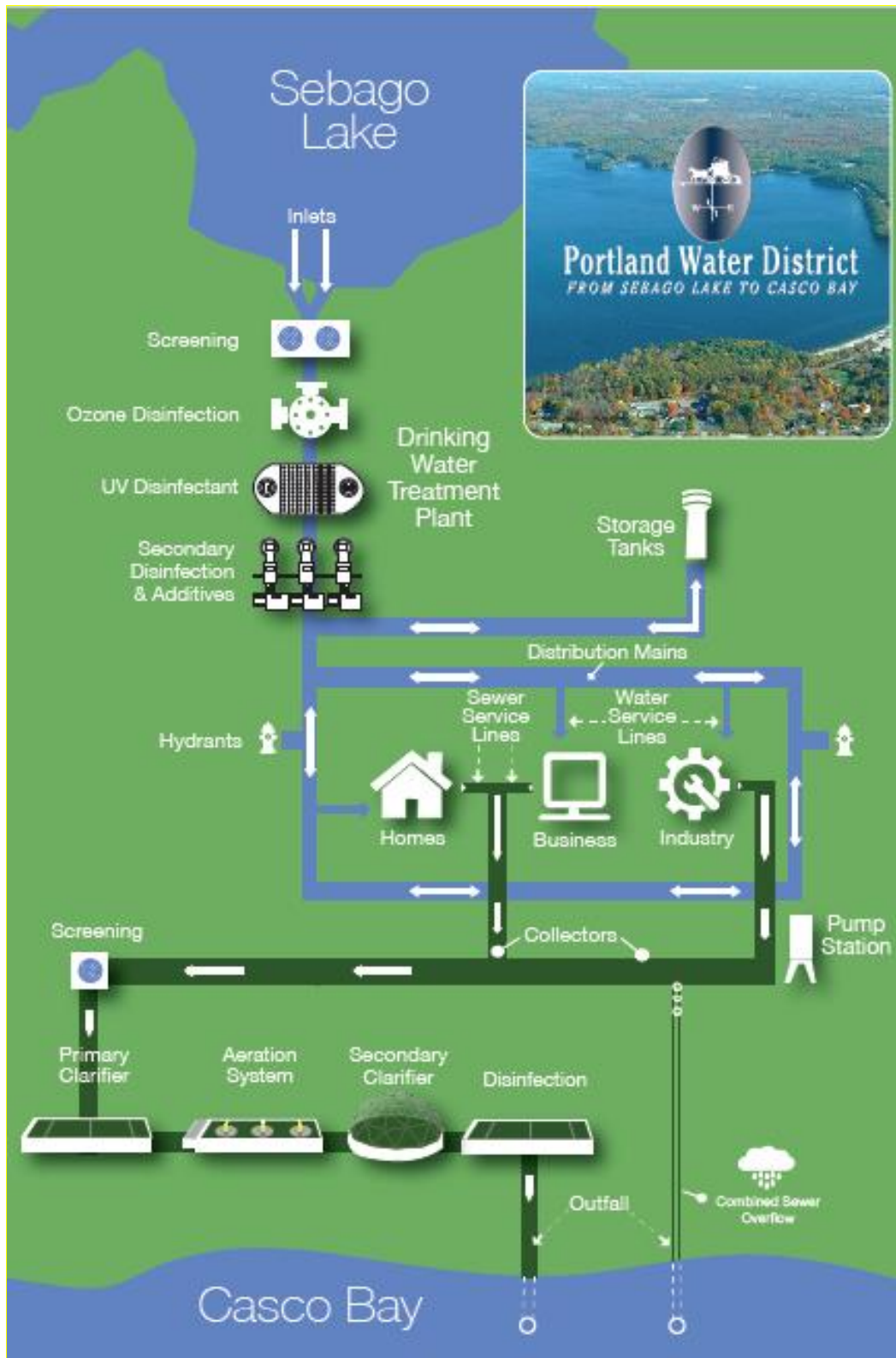
This budget is an easy-to-read document with summary information in charts and graphs that complement the details in the text. The Letter from the General Manager and Treasurer presents an organizational and financial overview of PWD. The budget for each fund- one water fund and six wastewater funds,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

This Budget is an Operations Guide.

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

Overview of the Water and Wastewater System

The diagram provides a schematic of the District system with common infrastructure terms.





Portland Water District

From Sebago Lake To Casco Bay

October 26, 2020

To the Members of the Board of Trustees,

On behalf of the entire Management Team, we are pleased to submit for your consideration of the Portland Water District's (PWD) Comprehensive Annual Budget Proposal for 2021. The document is designed to present the comprehensive financial framework for all District activities for the budget year.

The year 2020 brought unexpected challenges to PWD, from the COVID-19 pandemic to a landslide into the Presumpscot River that threatened both water and wastewater infrastructure. At the time of this writing, our involvement in and responses to both events were still underway. The expertise, teamwork, problem-solving and dedication of PWD employees were what got us through this difficult year. The whole was, indeed, greater than the sum of its parts.

As the pandemic took hold, maintaining our essential water and wastewater services remained critical. We made District-wide adjustments to protect our employees from COVID-19 to ensure that they were available to work and there would be no disruption of those essential services. We very quickly came to realize that this would only be successful if we minimized employee's contact with each other, as well as with the public. Initiatives included procuring and directing the use of Personal Protective Equipment (PPE) appropriate for specific work assignments, establishing and providing supplies for disinfection of work areas and vehicles, physically distancing employees wherever possible by staggering start times, assigning work apart from each other, and reporting directly to field work sites. Considerable effort was expended to get administrative employees' work materials relocated from their PWD offices, set up at their remote work locations and able to connect with PWD information technology resources to ensure their full productivity.

As the pandemic began to negatively impact the economy and community, the Board approved steps to assist customers. A rate increase scheduled for May was put on hold. Late fees were waived beginning in March and disconnections for non-payment were halted. These changes were revisited in late 2020 and timelines were set to restart. PWD saw lower-than-expected water usage and rising delinquencies. PWD made adjustments including cutting spending, deferring non-essential work, holding open vacant positions except for critical ones, and cancelling all business travel.

As you read this budget document for 2021, you will continue to see the effects of the ongoing pandemic. Initiatives that could not be completed due to the pandemic have been moved into 2021.

There is no increase over the 2020 operating budget. Non-essential projects and purchases continue to be postponed. Reserves are being used to fund some capital projects.

As you consider the budget for our upcoming 113th year, please reflect on our many accomplishments even as we carried on during the pandemic. We look forward to resuming as many “normal” activities as reasonable and prudent in 2021. You will see our aspirations for future years. Our dedicated staff of 186 employees works every day to ensure that clean and healthy tap water is delivered to the 210,000 inhabitants of Greater Portland, that adequate water is available for fire protection, and that wastewater is treated to remove pollution and protect the environment.

Water Services

Water Services ensures that safe, clean and healthy drinking water is delivered throughout the 11 communities in our water service area. It all starts at Sebago Lake. Because of the excellent raw water quality and strong watershed protection program, the District was granted a waiver from filtration by the Environmental Protection Agency. The District’s continued compliance with the terms of this waiver saves ratepayers the significant costs of financing, constructing and operating a filtration plant. At the Sebago Lake Water Treatment Facility (SLWTF), an average of 20 million gallons of water are treated each day using the powerful disinfectants of ozone and ultraviolet light.

After treatment, drinking water is distributed through a system of 1,000 miles of water mains, three major pump stations, and ten storage facilities. Infrastructure age, cold winter temperatures, and the underground location of many of our assets challenge staff to operate and maintain the system with minimal disruption. Since 2010, we have invested over \$58 million in water main renewal.

In 2020, due to the pandemic, work focused on maintaining the distribution system, ensuring water quality, compliance with regulations, and protecting our infrastructure during construction projects of external organizations.

Initiatives for 2021 include rebuilding raw water pumps and motors at the SLWTF to ensure redundancy of pumping capacity, completing the reprogramming of SCADA control at SLWTF to allow hypochlorite disinfection in the event of a loss of ozone disinfection, making progress toward replacement of the Windham Center Tank, testing at least 50 large water meters, and continuing fleet right-sizing and training on new equipment to increase efficiencies and decrease backlogs. A staff of 56 and a proposed operating budget of \$9.3 million and capital budget of \$9.1 million supports these activities.

Wastewater Services

Wastewater treatment is a vital community service that protects public health and the environment. Four wastewater treatment plants operated by the District remove, on average, nearly 95% of the pollution from the 21 million gallons of wastewater that is received at the plants daily from the six communities served. The clean water is safely released into the aquatic environment. Staff manages the collection system consisting of 118 miles of pipe and 76 pump stations that convey wastewater to the plants.

In 2021, initiatives include researching long range biosolids management options and an increased emphasis on asset management as the new computerized maintenance management system is rolled out. A staff of 39 and operating and capital proposed budgets of \$10.9 million and \$3.7 million, respectively, support these activities.

Engineering Services

The Engineering Services Department provides engineering and maintenance services to internal customers (Water, Wastewater and Administrative Departments) and collaborates with external customers, including communities, state agencies and developers. They oversee design and construction of water and sewer infrastructure, support long range planning, operate and maintain facilities, and support instrumentation. These functions are carried out with an asset management approach to infrastructure acquisition and maintenance.

Except for a lull in March 2020, the work performed and services provided by the Engineering group carried on hardly missing a beat. Projects within PWD and with our external partners proceeded as had been anticipated prior to the pandemic. There was no slowdown to this work. There were even projects added to reconfigure Douglass Street to support its utilization during the pandemic.

In 2021, Engineering will continue to manage and support a myriad of vertical asset upgrade projects, the water main replacement program, ten Maine Turnpike infrastructure crossing upgrades, and lead and support the implementation of the computerized maintenance management system software. A staff of 31 and a proposed budget of \$4.3 million support these activities.

Environmental Services

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

In 2020, because so many of Environmental Services' activities involve interaction with the public, the pandemic had a substantial impact on their work. Adjustments were made to keep the core functions going and they also assumed responsibility for the Total Coliform Rule distribution system monitoring program to support Water Operations. And on top of this, they collaborated with Sebago Clean Waters Partners to win a competitive \$8 million Regional Conservation Partnership Program (RCPP) grant from the Natural Resources Conservation Service to fund conservation work in the watershed for the next five years.

Initiatives for 2021 include implementing the RCPP grant, working with the District's new Forester to inventory the Sebago Lake Land Reserve and upgrade our Forest Management Plan, developing more virtual lessons for our school partners, regulating breweries under our IPT program, and reopening the Sebago Lake Land Reserve visitor kiosk system. A staff of 16 and proposed budget of \$2.1 million support these activities.

Administrative Services and Employee Services Departments

The Administrative and Employee Services Departments support the Engineering, Water and Wastewater Services Departments. In addition, Corporate Counsel and the Public Relations Manager stand ready to serve the District and our customers. Within the Administrative Services Department, the Information Services group provides computer system and technology oversight and maintenance. Financial Services provides purchasing, payroll and financial transaction processing and the Customer Service Group maintains a call center and provides billing services. The Employee Services Department handles employee recruitment and development, benefits administration and safety.

Not only did Administrative Services not miss a beat in finance, customer service, legal and human resources while adjusting for the pandemic, the Information Services group made a heroic effort to set up work systems and establish connectivity with employees working remotely and improve electronic communications at District facilities for employees reporting to work there. However, the pandemic did adversely impact both the vendors’ and District’s schedules for implementation of the new billing and asset management system.

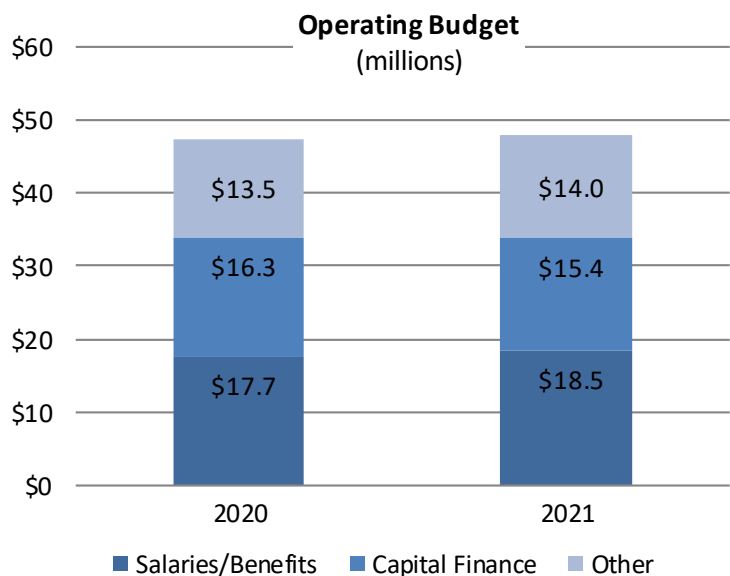
In 2021, the remaining development and successful go-live of the new billing system will continue to heavily involve and be a priority for all Administrative Services staff. The go-live target date will be deferred from February to later in the year. Other initiatives include increasing the emphasis on promoting the District’s low income programs and Employee Services will sustain their COVID-19 related activities, from tracking and tracing contacts to providing assistance to employees who request and need information about expanded FMLA childcare, travel and testing information. A staff of 44 and a proposed budget of \$6.4 million support these activities.

Financial Overview

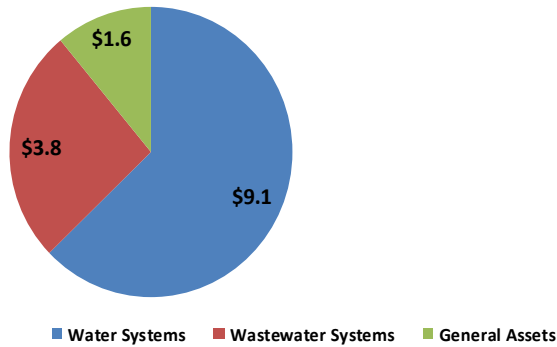
The proposed budget for 2021 recommends \$47.9 million for operations and \$14.5 million for the first year of a five-year Capital Improvement Plan. The operating budget consists of three major expense categories— salaries/benefits (39%), capital finance (32%) and all other materials and services (29%). Salaries reflects the same number of employees with a wage adjustment of 3.0% (\$367,000). Benefit costs increased \$402,000, primarily due to higher pension costs. Capital financing costs are lower primarily due to lower current year funding of capital projects (\$1,323,000) partially offset by higher debt service costs (\$511,000). Total other expenses increased \$489,000, or 3.6%, from the prior year.

The significant changes in specific other expense line items include:

- Higher biosolids disposal costs (\$459,000) reflects the increased regulator and public PFAS concerns with the impact of limiting the available outlets to dispose biosolids causing the per unit cost of disposal to significantly increase;
- Higher chemical costs (\$141,000) due to expected price increases; and
- Lower fuel (\$58,000) and electricity costs (\$34,000) reflecting declines in unit costs.



Capital Budget
(millions)



The \$9.1 million water capital budget includes \$7.0 million replacing aging water mains.

The \$3.8 million wastewater capital budget includes \$1.5 million of upgrades at the Garrison and Congress Street, Portland pump stations and SCADA upgrades in the Cape Elizabeth and Portland systems.

Additionally, the capital budget includes an investment of \$1.6 million in general assets such as vehicles, computer system and Douglass Street main office.

BUDGET HIGHLIGHTS		
NEW INITIATIVES	BUDGET SUMMARY	CHALLENGES AND ISSUES
<p>Investing \$7.0 million in water main renewal; including \$2.0 million through capital reserve fund</p> <p>Implementation of new Asset Management and Customer Billing system with a scheduled live date of October 2021.</p>	<p>The Operating Budget is proposed to be \$47.9 million, an increase of \$0.4 million or 0.9%.</p> <p>Total Revenues are projected at \$47.9 million, which includes no water rate increase and wastewater assessments that meet the municipalities' expectations, except for Cumberland and Portland.</p> <p>The Capital Budget is proposed at \$14.5 million. It continues commitment to invest in water mains and wastewater facilities renovations.</p> <p>Full-time positions remains at 186.</p> <p>The proposed budget continues funding to implement technology solutions for knowledge management, continues to invest in staff training, and provides incentives for multi-skill development.</p>	<p>COVID-19 impact to our operations, customers and partners is unknown</p> <p>Long range biosolids management options related to PFAS concerns</p> <p>Aging infrastructure requires asset replacement</p> <p>Recruiting and retaining new employees and training existing employees to adjust to needed workforce skills</p>

Customer Impact

The proposed budget assumes no water rate adjustment in 2021.

Assessments to wastewater communities meet or are lower than municipal expectations, except in Cumberland and Portland. The Assessment for Portland increased by 4.5%, which is \$250,000 higher than expected primarily due to higher biosolids disposals cost per unit price increase. The Assessment for Cumberland increased by 2.5%, which is \$24,000 higher than expected due to the higher costs from the town of Falmouth for treatment plant capital projects. Cape Elizabeth's, Gorham's, Westbrook's and Windham's assessments increased by 7.6%, 2.4%, 2.9%, and 5.6% respectively. Falmouth's assessment remained the same as the prior year.

The 2021 budget guidelines established by the Board of Trustees are mostly met in this budget proposal.

- Operating fund expenses are increasing less than 1%,
- Wastewater assessments meet the municipal expectations, except for the town of Cumberland & Portland,
- Water rates are affordable and sufficient to meet operational needs,
- Full-time positions are optimized to meet the workload, and
- Investment in our infrastructure continues as planned.

We strive to successfully execute PWD's mission statement and meet corporate goals while providing the best value to our ratepayers both today and into the future.



Carrie Lewis
General Manager



David M. Kane
Treasurer

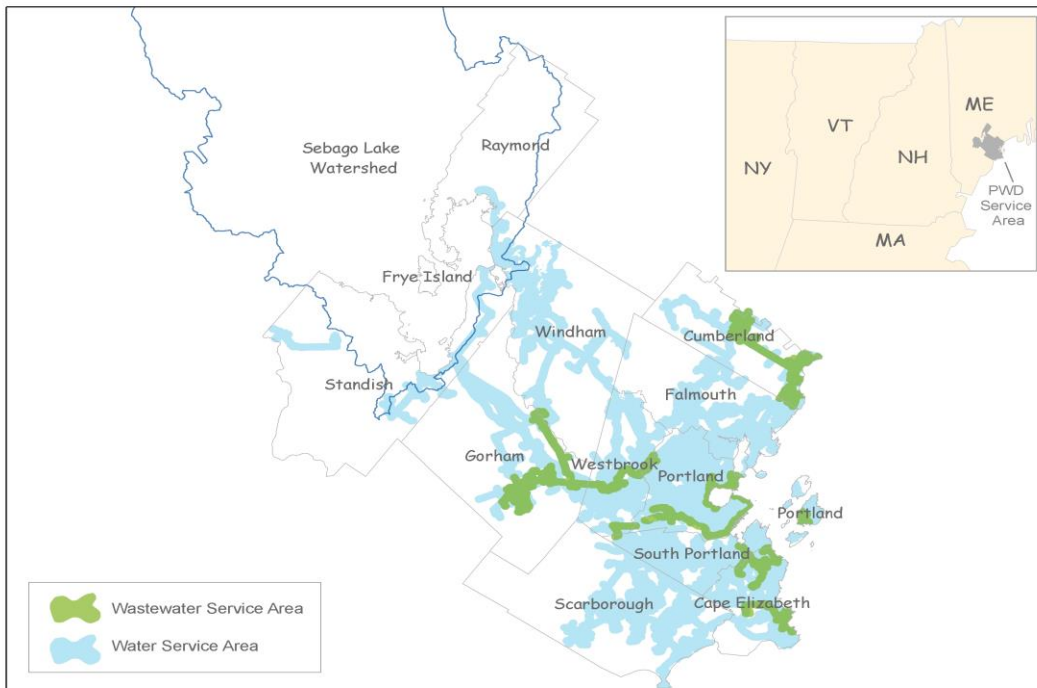
Introduction

The Portland Water District (PWD) is a quasi-municipal utility authorized by state charter to provide water service to eleven Greater Portland communities and wastewater treatment and interception services to six of those communities. Water service is provided to 55,500 customers. Sebago Lake provides virtually all the water delivered. A network of 1,000 miles of water mains delivers water from Sebago Lake to customers. The system provides fire protection through 5,150 fire hydrants and 2,450 sprinkler systems. PWD provides additional wastewater-related services through contracts with the communities. Additional services include sewer billing and collector/storm drain system operations.

Summary of Wastewater Services Provided:

Community	Customers	By Charter:			By Contract:		
		Treatment	Interceptors	Collectors	Storm Drains	Billing	
Cape Elizabeth	2,386	Yes	Yes	No	No	Yes	
Cumberland	1,216	No	Yes	Yes	No	Yes	
Falmouth	2,022	No	No	No	No	Yes	
Gorham	1,909	Yes	Yes	Yes	No	Yes	
Portland	17,204	Yes	Yes	Peaks Island (only)	Peaks Island (only)	Yes	
Scarborough	421	No	No	No	No	Yes	
South Portland	7,939	No	No	No	No	Yes	
Westbrook	4,710	Yes	Yes	No	No	Yes	
Windham	57	Yes	Yes	Yes	No	Yes	

Service Territory



History

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

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

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

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

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

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

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

A focus on aging water mains began in 2011 when the Board committed to double the main renewal budget by 2016. In 2014, the Board established a capital reserve fund to provide an additional \$2 million available for main renewal. A \$7.0 million investment in water main replacement is budgeted for 2020. Also, new regulations required a second water treatment process be installed. In 2014, an ultraviolet process was added along the existing ozonation process.

Top Reasons to Choose Portland, Maine Now

Portland is Maine's business, financial and retail capital and the largest city in the state. Seascapes and cityscapes blend harmoniously in Portland, perched on a peninsula, jutting out into island-studded Casco Bay. The metropolitan hub of Maine's south coast region, Portland is a progressive, lively city incorporating the character of yesteryear into a modern urban environment. Historic architecture blends gracefully with the new as you stroll along her working waterfront or the cobblestone streets of the restored Old Port section of the city. With a metro population of 210,000, the Greater Portland area is home to almost one quarter of Maine's total population.

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

Portland: Yes. Life's good here.™

South Portland lands on Money magazine's list of 100 Best Places to Live in U.S. for 2017 9/2017

Portland was named 2014's 19th Most Educated Metro Area in a recent study from the personal finance outlet WalletHub.com.

Portland Named One of America's Most Learned Cities *Back-to-School Report gives high ranks for Portland's educated residents.*

CardHub released its Back-to-School Report, which identifies cities and states with the best learning environments for children. The report listed Portland, Maine is one of twenty cities in the country that had the most highly educated citizens. 9/4/2013

U.S News & World Report selects Portland as the 23rd Best Places to Live in America. The only New England city on the list. 4/2019

Concerned About the Environment

Portland Ranked Seventh "Greenest City" in the United States, according to the readers of Travel & Leisure Magazine. 4/4/2012

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

Great Place to Visit

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

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

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

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

Economic Hub of Maine

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

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

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

The Regulatory Environment in Which We Function

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

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

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

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

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

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

The Regulatory Environment in Which We Function (continued)

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

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

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

Act to Reform Regulation of Consumer-Owned Water Utilities

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

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

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

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

Water Rate Change Process

In 2020, the District's Board of Trustees will consider a 3.5% rate adjustment. The chart on the next page outlines the process the District will follow in 2020. The District will continue the same Board and public review process and does not require Maine Public Utilities Commission approval.

A Public Utilities Commission rule (chapter 675) allowed for the creation of a capital reserve fund starting in 2014. The fund can be used to pay costs related to water infrastructure. For utilities our size, an additional 10% over other costs may be included in justifying proposed water rates. A system infrastructure assessment (SIA) must be submitted prior to getting approval to fund the reserve. The SIA would include the list of infrastructure projects that will be funded from the reserve. Annual updates of the status of the projects and reserve fund balances are required. The District filed the SIA in October 2013 and has incorporated funding the reserve by designating 1% of the proposed December 1, 2020 3.4% rate adjustment for the reserve.

Water Rate Case Process

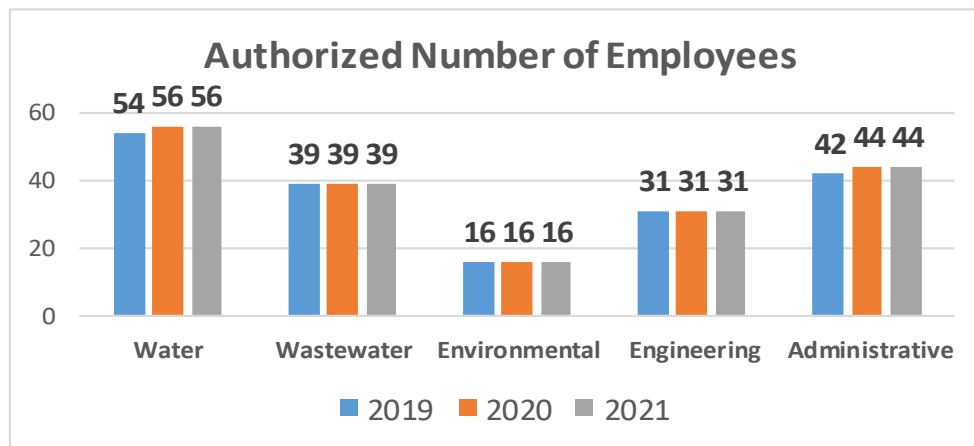
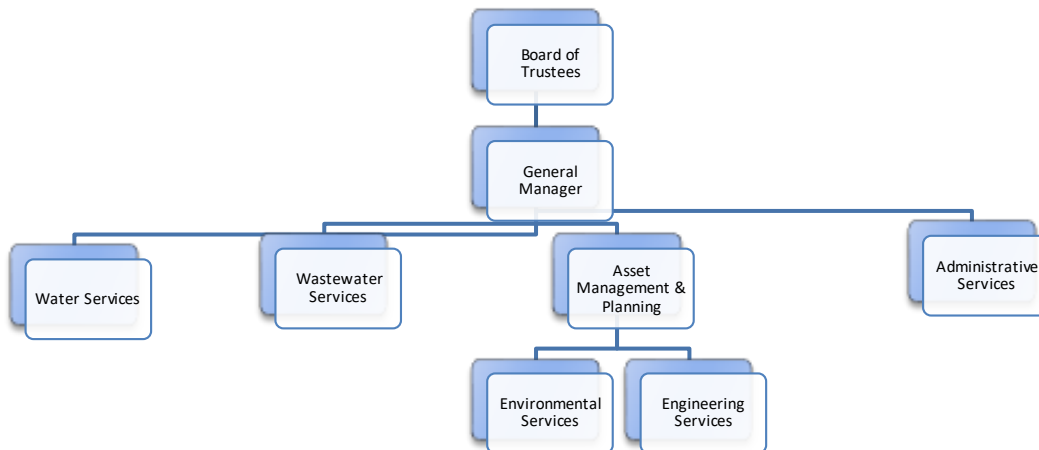
Because of COVID-19, the May 1, 2020 rate adjustment was delayed until December 1, 2020. No additional rate adjustment is scheduled for 2021. Tentatively, the next adjustment will be May 1, 2022

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

November 22, 2021	Board approves 2022 Budget.
January 10, 2022	Administration and Finance Committee reviews and makes final recommendation to be sent to customers. Finance staff will provide up-to-date financial information and revenue projections.
January 24, 2022	Board considers approving Administration and Finance Committee's recommendation.
February 14, 2022	Supporting documentation for rate adjustment is available to the Public
February 25, 2022	Publish notice of rate adjustment and provide notice to all customers. Notice is mailed to all customers and includes an invitation to attend the public hearing.
March 14, 2022	Special public hearing on proposed rate adjustment. General Manager and Treasurer provide information supporting the rate adjustment. Public has an opportunity to ask questions and provide feedback to the Board as they consider the proposed rate schedule.
March 28, 2022	Board business meeting – Approve final rate schedule. The final rate schedule incorporates changes based on the public hearing and Board's feedback.
April 28, 2022	File final rate schedule based on public hearing and Board review. Rate schedule is distributed to Maine Public Utilities Commission for informational purposes only.
May 1, 2022	Rate adjustment are effective date.

Organization Structure

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



- **Water Services** provides water treatment and distribution system operation and maintenance. In 2020 they added Water System and Equipment operators.
- **Wastewater Services** provides wastewater treatment and interception/collector system operation and maintenance services.
- **Environmental Services** provides watershed protection and laboratory services.
- **Engineering Services** provides general engineering, facility and vehicle maintenance services.
- **Administrative Services** provides customer, computer, finance and general management services. In 2020 they added an Employee and Information Services employee.

A more detailed organization chart and description of services provided are located in the Operating Expense section. The Human Resource section provides more details on the proposed number of employees and 2021 changes.

Board of Trustees

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

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

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

BOARD OF TRUSTEES



Matthew Beck
*South Portland &
Cape Elizabeth*

Robert Burns
Gorham

Guy Cote
Westbrook

Louise Douglas
President
*Windham
& Raymond*

Seth Garrison
Scarborough

Kenneth Levinsky
Portland



Gary Libby
Portland

William Lunt, III
Vice President
*Falmouth &
Cumberland*

Kim Rich
Portland

Joseph Siviski
*South Portland
& Cape Elizabeth*

Jamie Willey
Portland

Annual Planning/Budget Process

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

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

Planning/Budget Process Calendar

The outline below illustrates the process used to arrive at an adopted budget. The only legal requirement is that wastewater communities must be assessed the operating budget by January 15th. The process was streamlined in anticipation of the new computer system implementation in the fall.

April

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

May

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

Aug

12-21 Department Managers present draft Operating and Capital budget to the General Manager.

Sep

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

Oct

26 Budget is presented to the Board of Trustees.

Nov

9 Departments present Operating Budget and Capital & Non-Capital projects and initiatives to their respective Board Committee. The Full Board reviews the Five-Year Capital Improvement Plan.

23 Board considers adopting budget.

Board Committees' Department Review Responsibility

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

Operations – Water Services and Wastewater Services

Planning – Environmental Services and Engineering Services

Wastewater Communities: The proposed Wastewater Assessment for each municipality is presented and reviewed with each municipality at meetings scheduled between October 29 and November 5. By January 15, 2021, the District notifies each municipality of their certified assessment amount.

Mission Statement

The District's mission is to protect public health, safety, and the environment by providing our customers with reliable and affordable water, wastewater and related services. In order to fulfill the mission, the following six strategic goals have been established.

Goal 1 - Public Health:

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

Goal 2 - Public Safety:

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

Goal 3 - Environment:

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

Goal 4 - Reliability:

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

Goal 5 - Affordability:

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

Goal 6 - Employees and Work Environment:

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

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

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

Strategic Goals

Strategic Goal 1: Public Health

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

Background

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

Strategic Benchmarks (updated periodically):

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

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

Current Status, Challenges and Impact to Current Budget:

A new water storage tank station in the 407 zone (Windham and Gorham) will be constructed in 2021.

Continue to allocate money to work with watershed partners to prevent non-point pollution into Sebago Lake. Continue developing the Sebago Clean Water coalition to generate funds to protect watershed land.

Strategic Goal 2: Safety

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

Background

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

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

Strategic Benchmarks (periodically by ISO):

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

Benchmarks:

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

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

Current Status, Challenges and Impact to Current Budget:

The Capital Improvement Plan includes funding to replace water mains and hydrants, including \$7.5 million to continue upgrading the 407 zone, an area in Gorham and Windham, over the next 5 years. Additionally, staff will continue meeting with the municipal fire departments to identify action steps to improve. Annual inspection of all hydrants will be done and any inoperable hydrants will be fixed promptly.

Strategic Goal 3: Environment

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

Background

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

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

Strategic Benchmarks (updated every 5 years):

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

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

Current Status, Challenges and Impact to Current Budget:

Many of the non-compliance incidents occur during wet weather when the facilities cannot treat the volume of water resulting in untreated or less treated wastewater to be discharged to the watershed. In 2021, the focus in each system is as follows:

Cape Elizabeth – Assisting the town in identifying the source and solution for the overflow related to the Ottawa Road pump station, including a planned \$350,000 pump station upgrade in 2021.

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

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

Strategic Goal 4: Reliability

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

Background

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

Strategic Benchmarks (updated every 5 years):

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

Current Status, Challenges and Impact to Current Budget:

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

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

In 2021, the most significant water system project to increase reliability is the \$7.0 million investment in aging water mains, which will reduce main failures. Significant wastewater system projects/programs that will increase reliability include the renovating aging pump stations and treatment facilities; including a significant upgrade to the Portland's East End WW Treatment plant electricity system and construction of a \$12 million Westbrook Regional WW Treatment plant aeration upgrade.

Strategic Goal 5: Affordability

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

Background

An industry affordability benchmark is to compare the typical household bill as a percent of median household income. The national standard is the utility bill is considered affordable if the annual bill is less than 2% of median income. The District water rates are well below the affordability standard with the typical household paying only 0.46% of median income. The Board established target is not to increase water rates greater than the rate of inflation. Since 1998, water rates are significantly below that target.

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

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

Current Status, Challenges and Impact to Current Budget:

Water rates are assumed to increase by 3.4% effective December 1, 2020 and no increase in 2021. Since 1998, water rates have increased the same amount as the long-term inflation rate. The proposed increase is consistent with the Board of Trustees' direction to have small incremental water rate increases annually. Increases are needed to meet the increasing capital costs to replace aging water mains, funding a new capital reserve fund contribution and funding an adequate contingency fund.

In 2021, Wastewater assessments increased on average by 4.3% - higher than rate of inflation but at or below the level each municipality expected, except for the town of Cumberland and Portland. Higher biosolids disposal costs was the primary reason Portland's assessment was higher. The increase is related to general concern with PFAS. Cumberland assessment was higher due to additional funding for the Town of Falmouth's capital project at their plant that treats Cumberland sewer.

Wastewater assessments have increased above the rate of inflation (56.8%) since 1998. The increase is related to meet municipal request for expanded service, additional regulatory requirements, and replacing aging infrastructure. To mitigate the upward pressure on assessments, the wastewater services area has reorganized its staff and continues to review processes and procedures to become more efficient.

Strategic Goal 6: Employees and Work Environment

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

Background

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

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

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

Strategic Benchmarks (updated every 5 years):

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

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

Current Status, Challenges and Impact to Current Budget:

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

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

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

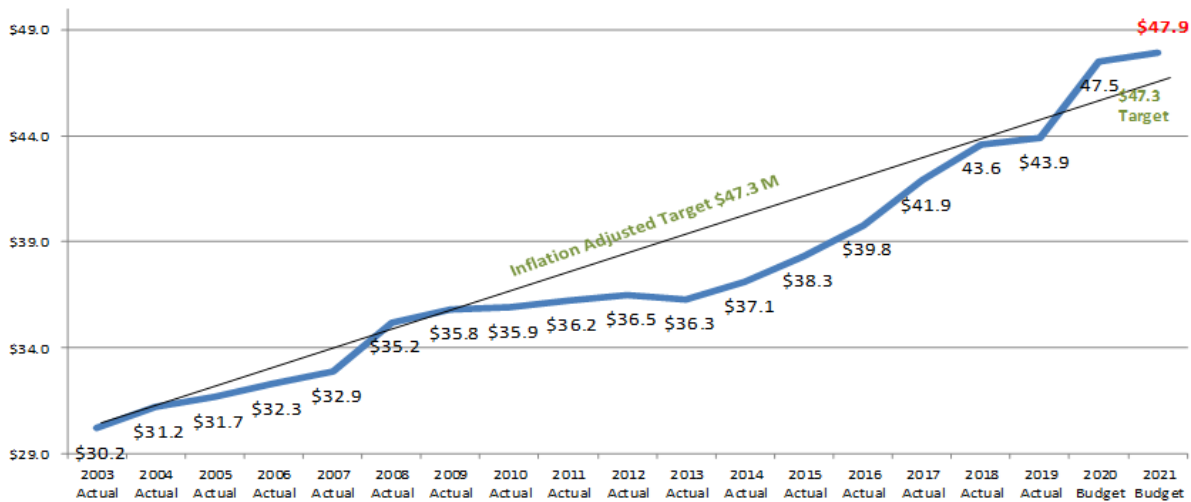
In 2021, the Employees Services department will be staffed with additional person for the full year to continue improving services and programs focusing on employment development and support.

Board Established Annual Budget Guidelines

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

<u>Guideline</u>	The Operating Funds' Budget will not increase more than the rate of inflation over the long-term. The annual target is rate of inflation plus any unfunded federal/state/local mandates and funding for water main renewal of up to 1% of water revenues.
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The Guideline is established to limit growth of the budget to a reasonable growth level not exceeding the inflation rate. Inflation for the past year 1.2%. A 1.2% growth from 2020 budget sets a target of \$48.1 million. Requested budget is \$47.9 million. Over the long-term, the requested budget is only \$0.6 million above inflation not adjusted for federal/state/local mandates.



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

Board Established Annual Budget Guidelines (continued)

<u>Guideline</u>	Water Revenue Requirement and Wastewater Assessments increases will not exceed the rate of inflation excluding the impact of mutually agreed upon changes in services, capital investments, surplus fund utilization or Board's request to increase surplus balance.
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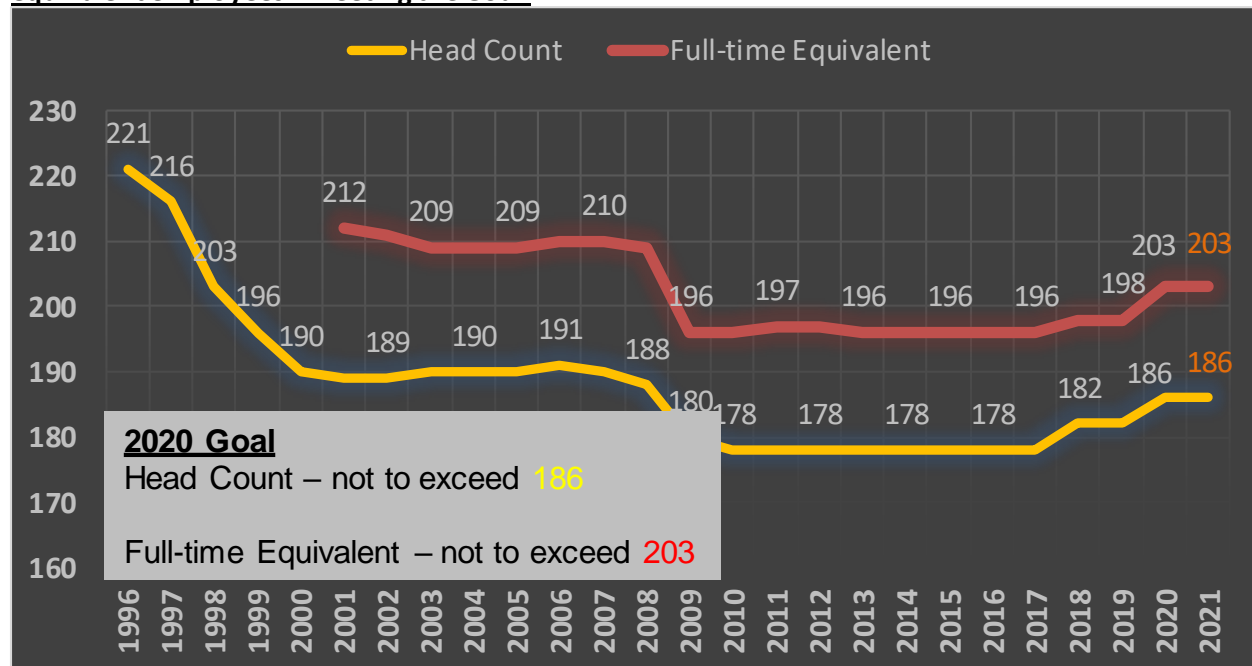
All Wastewater assessments and Water Revenue Increases meet or are below the Board of Trustees and Municipal expectations except Cumberland due to higher Falmouth treatment assessment and Portland due to higher biosolids disposal costs. The most significant reason for the better than forecast results is lower capital debt service and amount of paygo contribution for capital expenditures.

	2021 Target		2021 Proposed Budget	
Water	\$27,232,956	6.2%	\$25,660,964	0.0%
Cape Elizabeth	\$1,854,425	8.7%	\$1,835,412	7.6%
Cumberland	\$962,955	0.0%	\$989,268	2.5%
Gorham	\$1,255,243	8.1%	\$1,188,840	2.4%
Portland	\$13,190,949	2.5%	\$13,441,944	4.5%
Westbrook	\$2,951,910	4.6%	\$2,903,244	2.9%
Windham	\$419,184	7.8%	\$410,916	5.6%

Salary and benefits are one of the District's most significant costs. To control costs, a targeted

<u>Guideline</u>	The number of employees will not exceed 186 and the full-time equivalency (FTE) will not exceed 203.
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headcount is established. **The proposed budget contains 186 employees and 203.25 full-time equivalent employees – meeting the Goal.**



External Factors Impacting the Budget

Economy

The local economy was significantly impacted by COVID-19. Greater Portland's unemployment rate from historic lows of less than 3% to 11% in April 2020. The rate has dropped to 6.3% since April. The real estate market for the quarter ending August 31, 2020 showed 10% lower number of sales but median sale price increased by 11%. A CNN Business 'back-to-normal' index indicates Maine is operating at 93% of where it was in early March before the pandemic – ranking Maine number 1.

The national economy continues the trend of keeping interest rates relatively lower than historical levels affecting interest earning on investments. The 2021 budget includes a decrease in interest income of \$431,000, or 61%, decrease in earnings from operating funds investments as the average rates increase to 0.5% from 2.0%.

The equity market returns fluctuation, along with the higher pension liability, caused the annual pension costs to increase by \$0.3 million resulting in a contribution of \$1.4 million in 2021.

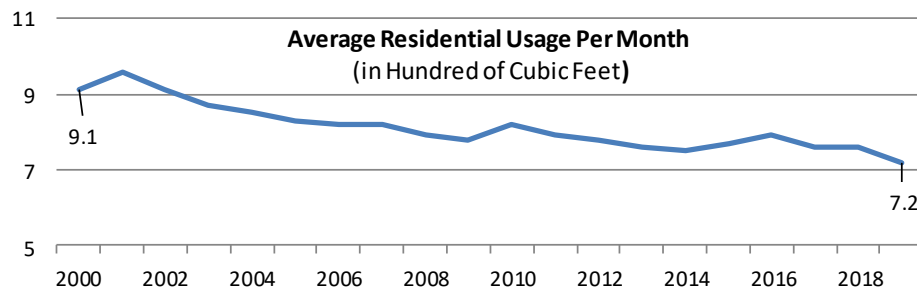
The chemical, metal and fuel commodity market prices are impacted by the economy's health and have been volatile in the past couple of years. Approximately 10% of the District's expenses are related to chemical, metal and fuel markets. The 2021 budget reflects the commodity prices available in mid-2020.

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). The current regulatory focus is compliance with the long-term surface water disinfection rule under the SDWA and the combined sewer overflow requirements under the CWA. The 2020 Budget includes the impact of debt service of \$14.1 million in capital expenditures and approximately \$200,000 in operating expenses addressing these two focus areas.

Water Consumption

Though the District has ample supply of water, consumers have reduced their water consumption. Since 2000, the average residential household usage (HCF) has declined by more than 20%. Some of the reasons are rising wastewater fees encouraging conservation and the availability of more water efficient household appliances.



Significant Budget Uncertainties

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

Salaries and Wages (\$12.52 million or 26.1% of total budget). The current union contract includes a 3.0% wage rate increase in November 2020. The current pact will expire at the end of October 2021, two months before the end of the fiscal year. Non-union pay rates were assumed to increase by 2.8% effective January 1, 2021.

In addition, the operating budget assumes 15,505 hours of overtime and doubletime pay. The amount of overtime and doubletime is directly related to amount of emergency repair work that is needed. Additional hours were included in the budget to assist in the implementation of the new Asset, Billing and Customer Relations computer system, though the actual hours needed are unknown. For every additional 1,000 hours of overtime/doubletime pay, costs increase by approximately \$41,325.

Purchased Power (\$1.90 million or 4.0% of total budget). Electricity costs consist of delivery charges purchased from Central Maine Power (\$874,287) and energy costs purchased from Constellation Energy (\$1,030,294). Typically, CMP implements a rate adjustment effective July 1st. The amount of the 2021 increase is unknown. The 2021 budget assumes a 3% increase. For every variance of 1%, the budget would be impacted by approximately \$9,000. Energy contracts lock in the prices for the whole year.

The actual amount of electricity used varies primarily based on weather conditions, which impacts the amount of water produced and wastewater processed. Since 2007, the variance between the highest and lowest kilowatt amount of electricity for individual accounts in total is 11%, which would impact the budget by approximately \$200,000.

Chemicals (\$1.36 million or 2.8% of total budget). The chemical contract is put out to bid each December. Prices used for the budget are estimates using the June market prices. Chemical prices have been volatile and have reacted to the global/national economy.

Biosolids Disposal (\$2.18 million or 4.6% 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 2021 budget assumes 21%. In the past 5 years, the average has varied from 18% to 22%. A 1% difference is approximately \$140,000.

In addition, the District's contract with the vendor that deposits of the biosolids expires at the end of 2020. As of the date of this budget, a new contract has not been negotiated. This budget estimates a rate of \$90.00/wet ton of biosolids. Given the projected volume of biosolids, each dollar of change in the rate is \$24,238.

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

Major Policy and Resource Allocation Decisions

Operating Budget

Personnel. The same number of employees were budget in 2021. In 2020, a new Employee Services Consultant was budget starting in April. The position is budgeted for the full year causing an increase in the budget. Three Information Services and SCADA positions were reclassified to better support the organization technology programs resulting in higher salary costs. The Meter Reading position was consolidated with the Control Center positions to provide move flexibility in fulfilling their responsibilities.

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

New billing/customer relations and computerized maintenance management systems are being configured and integrated with a timeline to go live in 2021. These significant projects will impact every employee at the District, ten of whom are dedicated to the implementation.

Employee Benefits The costliest employee benefits are health insurance and pension benefits. Health insurance premiums decreased by 2.5% resulting in the budget increased by 3.1% (\$76,492). The defined benefit plan contributions in the 2021 Budget increased by \$303,651. Without a recently Board approved funding policy change, the increase would have been almost \$300,000 higher. Overall pension related expenses were up \$313,376 (18.9%).

Wastewater Sewer Lines Inspection In 2008, a commitment was made to inspect all sewer lines at least once every 10 years. In 2021, \$61,250 was allocated to meet that commitment.

Wastewater Combined Sewer Overflow (CSO) Monitoring To assist the municipalities in meeting their federal CSO requirements, the District remotely monitors the flow. In 2021, \$154,000 was allocated to meet their request.

Water System Flushing Starting in 2012, a renewed effort was made to flush the whole distribution system over a 3-year cycle. Flushing the system improves the water quality in the distribution system. The 2021 budget continues this effort by allocating close to \$93,000.

Renewal and Replacement - The annual commitment of current revenue committed to capital projects increased to \$4.2 million which is a decrease of \$1.3 million over last year's budget. The Water Fund's contribution is \$0.9 million lower partially due to less capital projects and the decision to fund \$0.4 million of asset purchased from reserves. The Wastewater Funds' contribution matches the lower expected capital expenditures.

Biosolids – The agreement with the District's disposal vendor expires at the end of 2020. It is anticipated that the new contract%, which has yet to be negotiated, will have significantly higher rate. The budget assumes a disposal rate of \$90/wet ton, that is a 26.7% increase over the 2020 Budget assumption of \$71.05. It is expected that issues with per- and poly-fluoroalkyl substances (PFAS) will impact the price.

Major Policy and Resource Allocation Decisions (continued)

Capital Projects

The 2003 water strategic master plan noted that a considerable amount of water mains will be reaching the end of their useful life in the next 20 years. In 2021, the amount dedicated to replace aging water mains will be \$7.0 million. In 2021, part of the \$7.0 million (\$500,000) will be dedicated to replace smaller mains. Water Services has included additional staffing due to the level of effort allocated to water main inspection.

Other significant capital projects include the following:

- Westbrook Regional Wastewater Treatment Plant: In 2020, planning will begin construction on the \$12 million aeration project.
- Portland's East End Wastewater Treatment Plant: Significant upgrades to electrical system is planned (\$1.6 million)
- Pump Station upgrades in Cape Elizabeth (Ottawa Road - \$ 350,000) and Portland (Congress and Garrison Streets - \$1,500,000)
- Two Windham Wastewater projects related to Depot Street pump station and a new North Windham will continue.
- Several projects started in previous years will be completed including Ward's Hill water tank construction (\$1 Million), Westbrook Regional Wastewater Treatment Plant aeration system (\$12 million) and Portland's East End Electricity Upgrade (\$4.3 million and Baxter Boulevard Pump Station (\$2.2 million).

Revenues

To balance the desire to provide funding for infrastructure improvement and operational needs with keeping water rates affordable, the Board adopted a policy of small modest annual increases close to the rate of inflation. A 3.4% increase is planned to be implemented with an effective date of December 1, 2020. No increase is expected in 2021.

The December 2020 3.4% increase includes allocating 1.0% to the Capital Reserve fund. The Maine Public Utilities Commission adopted a rule in 2013 allowing the District to increase water rates up to 10% of water revenues and dedicate revenues for capital improvement. After the proposed increase, the percent of water revenue allocated to the Capital Reserve annually will be 7.0%. The proposed budget assumes the additional reserve will be used to pay the debt service of \$2 million bond to finance replacing aging water mains.

2021 Operating Budget Summary

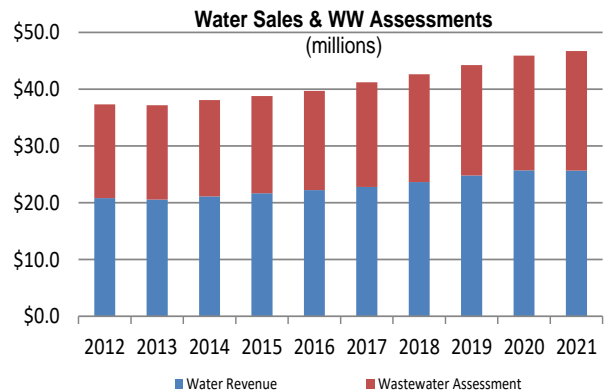
The proposed budget includes \$47.93 million in revenues and expenses.

Revenues

The two major revenue sources are water sales (\$25.66 million or 53.5% of total revenue) and wastewater assessment revenues (\$21.08 million or 44.0% of total revenue). Wastewater revenues have increased from \$16.52 million (27.6%) since 2012 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 2021 Budget assumes an increase of 3.4% over current rates effective December 1, 2020 and no rate increase in 2021.

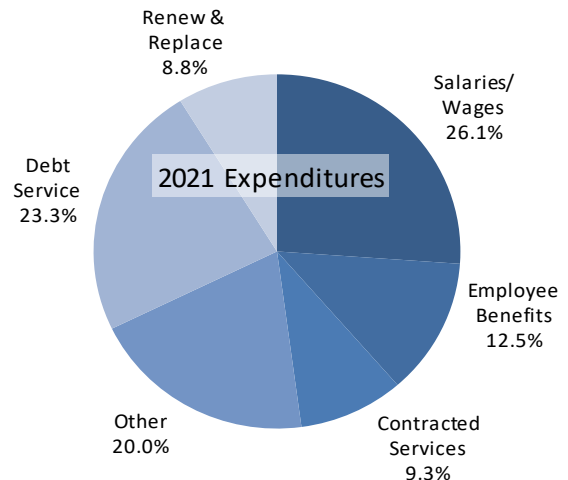
Wastewater assessments are the amounts billed individual municipalities to provide collection, sewer treatment, interception, utility billing services and, by request, collection and billing services. Assessments in 2021 increased 4.3% overall (\$865,143)



Expenses

Operating Expenses increased to \$47.94 million, an increase of 0.9%.

Personnel Costs, (Salaries/Wages and Employee Benefits) which are 38.6 % of the total budget, increased 4.3% due to the average labor rate increase of 2.8%, 953 addition labor hours (0.2%) and a 4.5% increase in benefit rate. Debt Service (23.3% of expense) increased 4.8% due to new debt issues. Contracted Services (\$4.45 million) decreased 1.6% (\$72,278). Renewal and Replace contributions decreased \$1,322,500 (23.8%) while Other Expense increased \$511,490 (2.8%).



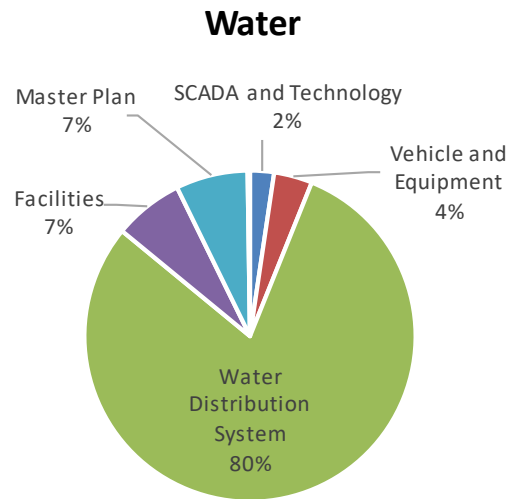
2021 Capital Budget Summary

The proposed Capital Budget is \$14.49 million with projects for the water and wastewater funds of \$10.67 and \$3.82 million, respectively.

Water

Of the \$10.67 million in water capital projects, the largest component (80%) involves the renewal of water distribution assets such as mains, services, meters and hydrants. The other categories include water facilities and security (7%), comprehensive asset management strategic plan (7%), vehicles and equipment (4%), technology and SCADA (2%) and water supply (<1%). A multi-year project to upgrade the HVAC system at Douglass St. (the district's main office building & garage) will also start in 2021.

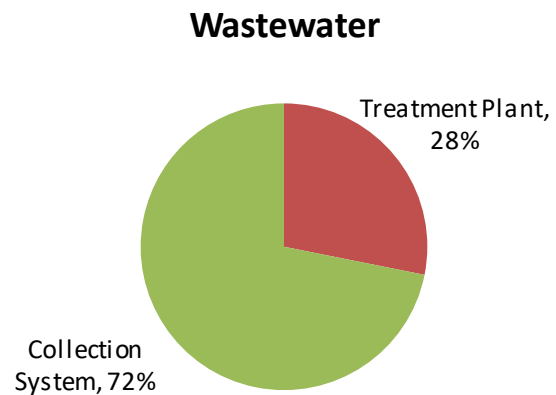
The projects will be funded by issuing \$6.45 million in bonds and utilizing \$3.47 million in drawdowns from renewal and replacement funds. \$750k will be paid from the Water Master Plan Reserve.



Wastewater

The wastewater capital plan includes several projects for WW pump station upgrades, such as: \$350k for Ottawa Rd. PS in Cape Elizabeth, \$750k for Garrison St. PS in Portland and \$750k for Congress St. PS in Portland. \$325k is also set aside for influent screens at two pump stations in Westbrook: Cottage Place and East Bridge St. Substantial treatment plant projects, totaling over \$16 million, were in progress in 2020. They will continue to be at the forefront in 2021, including the Westbrook WWTF aeration & clarifier upgrade and the East End WWTF power project.

The projects will be funded by issuing \$2.39 million in bonds and by utilizing \$1.35 million in drawdowns from renewal and replacement funds. \$75k will be charged to the Westbrook Operating Fund in a future year.



2021 Combined Water and Wastewater Operating Funds

Total revenues are \$47.93 million, \$435,694 or 0.9% higher than last year's budget. The Budget proposes a 3.4% water rate increase effective December 2020, the 3.5% water rate increase effective May 2020 that was in the 2020 Budget did not happen. Wastewater Assessment increases for the full year are budgeted in Cape Elizabeth (7.6%), Cumberland (2.5%), Gorham (2.4%), Portland (4.5%), Westbrook (2.9%) and Windham (5.6%).

Operating Expenses are \$47.94 million, an increase of 0.9%. The following pages provide additional detail.

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Beginning Fund Balance	\$11,969,153	\$12,662,033	\$12,888,478	\$12,825,727		
Water Sales	24,566,977	11,513,750	25,686,370	25,660,964	-25,406	-0.1%
Assessment Income	19,448,472	10,109,286	20,218,572	21,083,736	865,164	4.3%
Contracted Billing Income	212,388	106,230	212,460	212,796	336	0.2%
Interest Income	973,933	532,698	707,747	276,655	-431,092	-60.9%
Other Income	897,732	249,071	664,790	691,482	26,692	4.0%
Total Revenue	46,099,502	22,511,035	47,489,939	47,925,633	435,694	0.9%
Salaries & Wages	11,287,519	5,623,898	12,149,805	12,516,650	366,845	3.0%
Employee Benefits	5,204,644	2,616,420	5,577,447	5,979,151	401,704	7.2%
Biosolids Disposal	1,809,983	880,621	1,722,166	2,181,420	459,254	26.7%
Chemicals	1,173,157	588,799	1,221,909	1,363,231	141,322	11.6%
Contracted Services	3,893,337	1,683,873	4,521,570	4,449,292	-72,278	-1.6%
Deferred Cost W/O	10,098	0	0	0	0	n/a
Heat/Fuel Oil	316,450	207,739	386,485	328,901	-57,584	-14.9%
Insurance	206,305	103,246	211,175	222,707	11,532	5.5%
Materials & Supplies	1,485,953	674,764	1,760,135	1,722,510	-37,625	-2.1%
Other Expense	574,963	279,914	792,365	769,906	-22,459	-2.8%
Purchased Power	1,800,127	957,123	1,930,289	1,896,317	-33,972	-1.8%
Regulatory/Taxes	275,688	235,502	288,430	300,696	12,266	4.3%
Tele/Other Utilities	415,216	177,320	365,099	386,574	21,475	5.9%
Transportation	1,035,709	476,437	1,167,423	1,197,317	29,894	2.6%
Trans Offset	-736,742	-345,406	-840,466	-803,190	37,276	-4.4%
Department Expense	28,752,407	14,160,250	31,253,832	32,511,482	1,257,650	4.0%
Debt Service & Lease Expense	10,003,820	5,222,926	10,678,552	11,190,042	511,490	4.8%
Renewal & Replacement - Direct	4,240,549	2,238,672	4,477,349	3,244,849	-1,232,500	-27.5%
Renewal & Replace - Indirect	850,000	525,002	1,050,000	960,000	-90,000	-8.6%
Renewal & Replacement - Contracted	15,597	15,000	30,000	30,000	0	0.0%
Operating Expense	43,862,373	22,161,850	47,489,733	47,936,373	446,640	0.9%
Current Surplus (Deficit)	2,237,129	349,185	206	-10,740		
Transfer to R&R	-129,287	0	0	0		
Transfer to Capital Reserve	-170,413	-139,964	-279,927	-125,054		
Transfer to Rate Stabilization Fund	-300,000	0	0	0		
Transfer to Master Plan Fund	-944,548	0	0	0		
Return of WW Accumulated Surplus	0	-614,111	0	0		
Ending Fund Balance	12,662,034	12,257,144	12,608,757	12,689,933		

2021 Combined Operating, Capital and Grant Funds

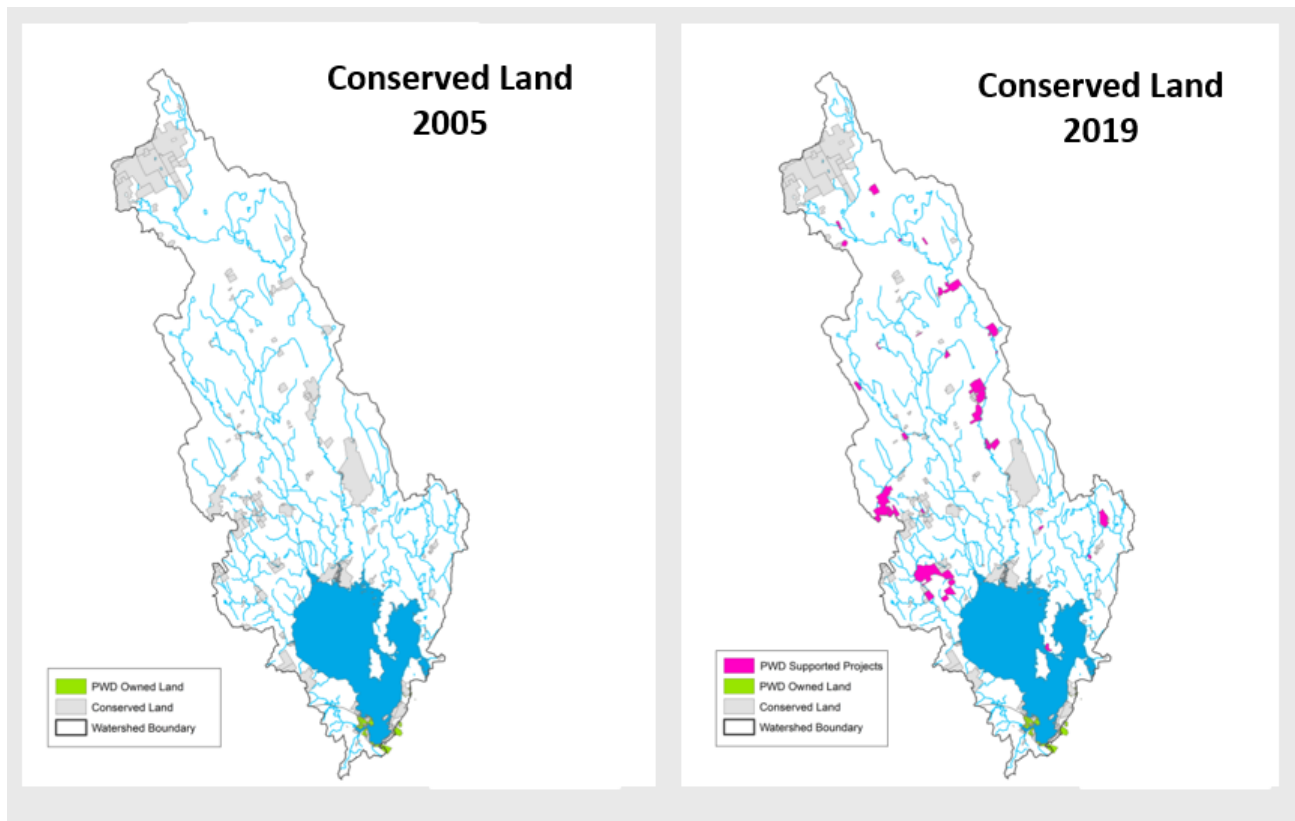
The total combined revenue and funding for 2021 is \$62.33 million, total combined expenditures are \$62.41 million. The combined budgeted deficit for 2021 is \$80,048.

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	\$25,660,964	-	-	\$25,660,964
Assessment Income	21,083,736	-	-	21,083,736
Water Bond	-	6,450,000	-	6,450,000
Water R&R	-	3,475,000	-	3,475,000
Wastewater Bond	-	2,395,000	-	2,395,000
Wastewater R&R	-	1,350,000	-	1,350,000
Water Master Plan Reserve	-	750,000	-	750,000
Westbrook Operating Fund	-	75,000	-	75,000
Contracted Billing Income	212,796	-	-	212,796
Interest Income	276,655	-	9,230	285,885
Other Income	691,482	-	-	691,482
Total Revenue	47,925,633	14,495,000	9,230	62,429,863
Salaries & Wages	12,516,650	390,114	-	12,906,764
Employee Benefits	5,979,151	167,381	-	6,146,532
Biosolids Disposal	2,181,420	-	-	2,181,420
Chemicals	1,363,231	-	-	1,363,231
Contracted Services	4,449,292	13,284,147	-	17,733,439
Deferred Cost W/O	-	-	-	-
Heat/Fuel Oil	328,901	-	-	328,901
Insurance	222,707	-	-	222,707
Materials & Supplies	1,722,510	562,300	-	2,284,810
Other Expense	769,906	-	324,800	1,094,706
Purchased Power	1,896,317	-	-	1,896,317
Regulatory/Taxes	300,696	-	-	300,696
Tele/Other Utilities	386,574	-	-	386,574
Transportation	1,197,317	91,058	-	1,288,375
Trans Offset	(803,190)	-	-	(803,190)
Operating Expense	32,511,482	14,495,000	324,800	47,331,282
Debt Service	11,190,042	-	33,738	11,223,780
Renewal & Replacement - Direct	3,244,849	-	-	3,244,849
Renewal & Replace - Indirect	960,000	-	-	960,000
Renewal & Replace - Contracted	30,000	-	-	30,000
Total Expense	47,936,373	14,495,000	358,538	62,789,911
Surplus (Deficit)	(10,740)	-	(349,308)	(360,048)

Land Fund

In the 2021 budget document, transactions related to protecting the watershed were separated from the Operating Fund on the Combined Funds statement on the adjacent page. The District has \$1.85 million reserved for activities to protect the watershed land including purchasing conservation easements and contributions to organization supporting such efforts. A three-year \$20,000 pledge has been made to Sebago Clean Waters. In 2020 the District issued its first bond in support of the effort – a \$295,000 bond to purchase a conservation easement on a property in Sebago called Tiger Hills. A federal grant of \$8 million was awarded to the District to assist in watershed protection efforts over the next 5 years.



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, 2020. In order to receive the award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

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



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

Portland Water District

Maine

For the Fiscal Year Beginning

January 1, 2020

Christopher P. Morrill

Executive Director

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 2020, two scholarships were awarded to Priscilla Arsenault and Daniel Quinho both of South Portland. They are attending the Southern Maine Community College.

Environmental Education



Through our environmental education program, we connect with thousands of students-- teaching about our water resources and encouraging stewardship. Due to the impacts the pandemic has had on school operations, our programs have shifted to providing virtual trainings and online resources.

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.



Annual Giving

Along with an active internal giving campaign that involves payroll deductions and a raffle, the Portland Water District typically hosts a Charity Golf Classic. Due to the pandemic, the 2020 golf tournament was cancelled. Still, employees continue to contribute to charities through payroll deductions and donating to food drives.



Water Bottle Filling Fountain Grants

The Board of Trustees awarded five grants in 2020: Windham Christian Academy, Mason-Motz Activity Center, Falmouth High School (photo below), The Governor Baxter School of the Deaf, and Apex Racket and Fitness.



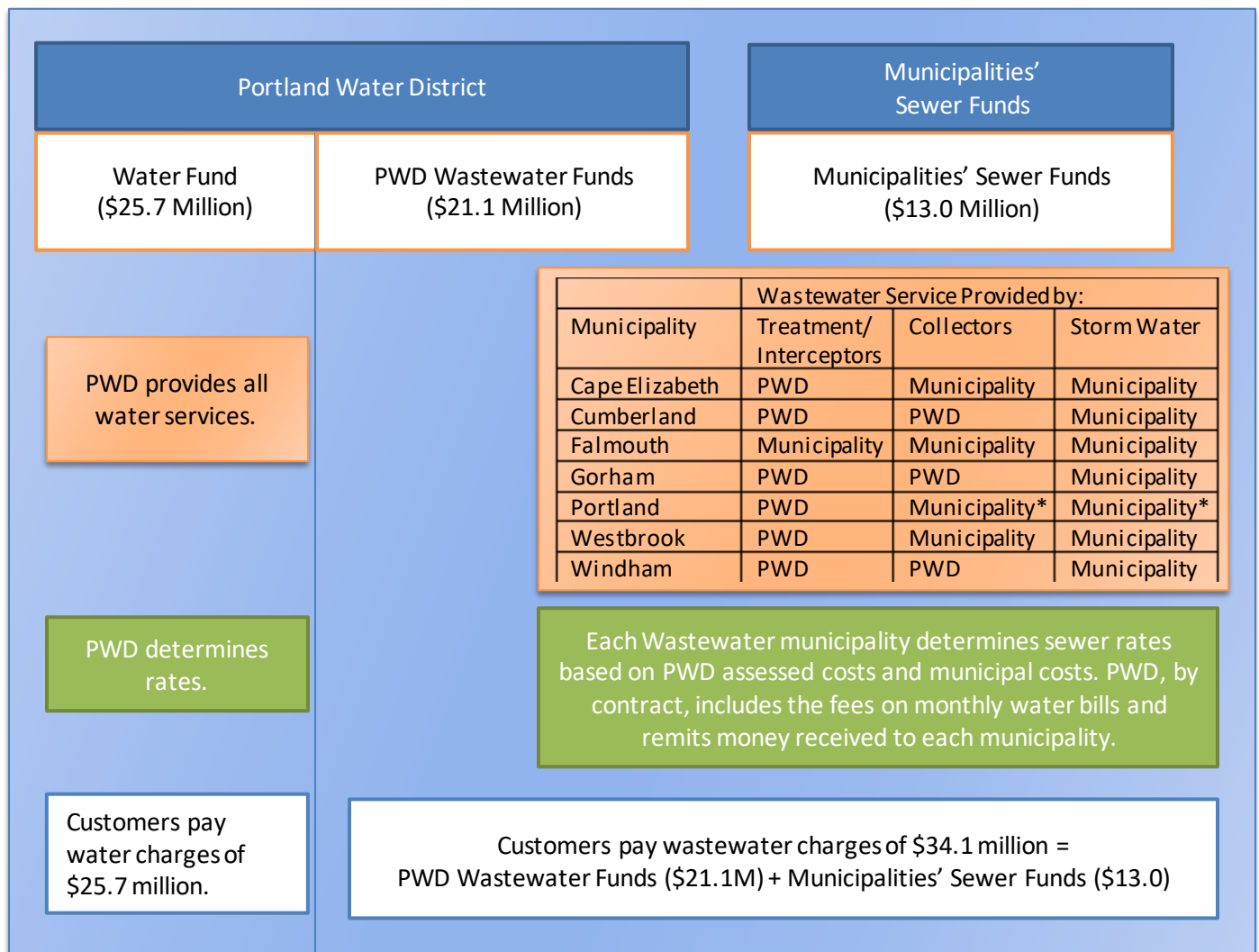
Introduction

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

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

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

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



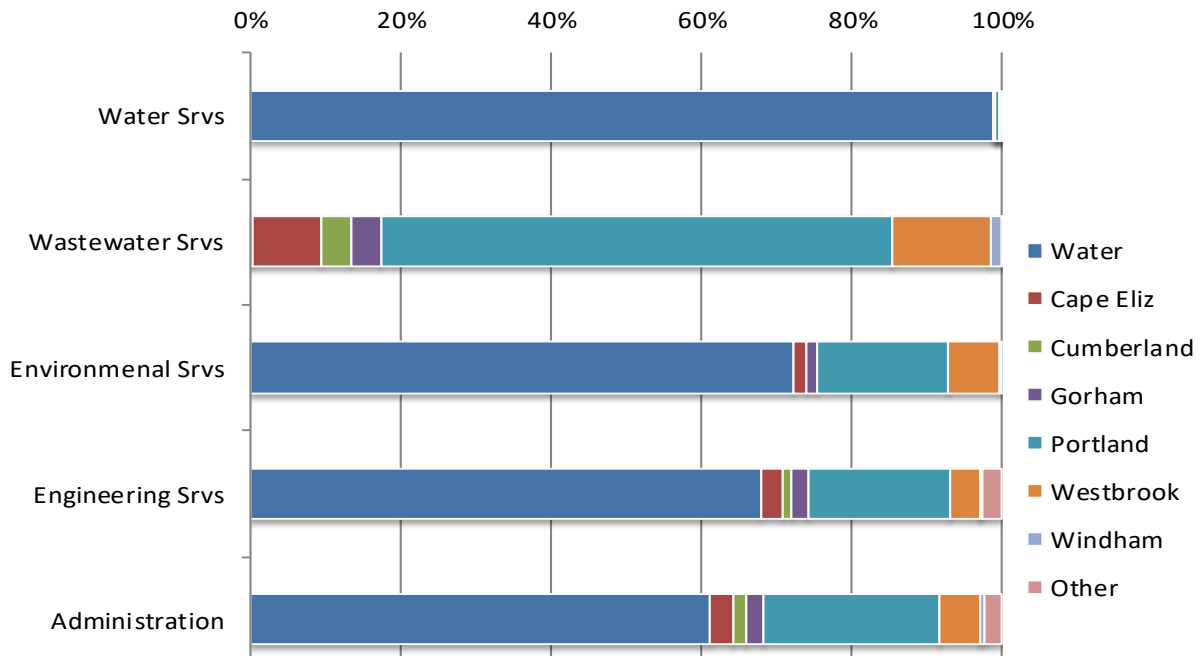
*By contract, the District maintains collectors and storm drain system on Peaks Island, a small part of Portland

Relation of Functional Units (Departments) to Funds

As expenses are incurred, each department charges a cost center, which indicates to what fund the expenditure belongs. The totals below show how the costs for each department are spread across the organization. Not surprisingly, 98.9% of the costs of the Water Services department are assigned to the Water Fund and 99.8% of the Wastewater Services department costs go to the Wastewater funds. The expenditures of the remaining departments assign between 61.0% and 72.2% of costs to the Water Fund with the remaining going to the Wastewater funds.

Department	Dept Exp	Water	Cape Eliz	Cumber	Gorham	Portland	Westbr	Windham	Other
Water Srvs	\$9,262,055	98.9%	0.1%	0.1%	0.0%	0.6%	0.1%	0.0%	0.2%
Wastewater Srvs	10,889,691	0.2%	9.2%	4.0%	4.0%	67.9%	13.1%	1.5%	0.0%
Environmental Srvs	2,144,175	72.2%	1.7%	0.0%	1.5%	17.5%	6.9%	0.3%	0.0%
Engineering Srvs	4,327,806	67.8%	2.9%	1.3%	2.3%	18.8%	3.9%	0.4%	2.6%
Administration	6,368,680	61.0%	3.2%	1.8%	2.2%	23.6%	5.3%	0.6%	2.3%
<u>Non-Departmental</u>	<u>322,265</u>	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Department Exp	33,314,672								
<u>(less) Trans Exp</u>	<u>(803,190)</u>								
Fund Expense	32,511,482								

Allocation of Costs Between Departments and Funds

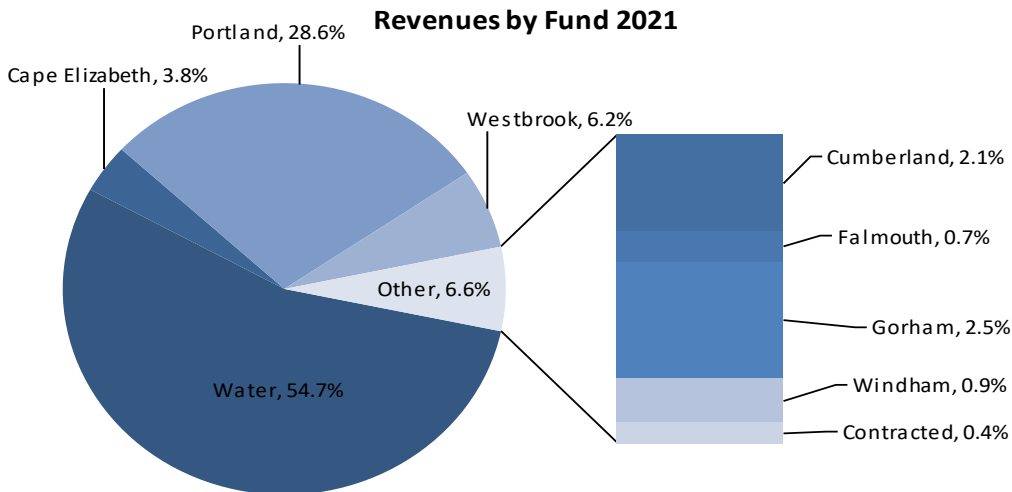


More details on how costs are allocated between departments and funds are included in the Financial Policy section.

2021 Operating Budget by Fund Summary

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

	Total	Water	Cape Eliz	Cumber	Gorham	Portland	Westbk	Windham	Falmouth/ Contract
Beg Balance	\$12,825,727	\$7,004,267	\$456,544	\$259,019	\$339,048	\$3,848,794	\$771,710	\$56,761	\$89,584
Water Revenue	25,660,964	25,660,964	-	-	-	-	-	-	-
WW Assess	21,083,736	-	1,835,412	989,268	1,188,840	13,441,944	2,903,244	410,916	314,112
Contract Billing	212,796	-	-	-	-	-	-	-	212,796
Interest Income	276,655	143,433	8,000	6,001	11,997	60,003	41,216	4,005	2,000
Other Income	691,482	433,482	-	-	-	210,000	48,000	-	-
	47,925,633	26,237,879	1,843,412	995,269	1,200,837	13,711,947	2,992,460	414,921	528,908
Depart Expense	32,511,482	17,331,397	1,363,620	611,112	704,428	10,040,733	2,062,088	231,530	166,574
Debt Service	11,190,042	6,338,278	318,640	300,121	376,253	2,765,066	613,592	142,942	335,150
Renew & Repl	4,234,849	2,568,204	161,152	84,036	120,156	906,148	316,780	40,449	37,924
	47,936,373	26,237,879	1,843,412	995,269	1,200,837	13,711,947	2,992,460	414,921	539,648
Surplus (Deficit)	(10,740)	-	-	-	-	-	-	-	(10,740)
Xfer-Cap Resrv	(125,054)	(125,054)	-	-	-	-	-	-	-
Ending Surplus	\$12,689,933	\$6,879,213	\$456,544	\$259,019	\$339,048	\$3,848,794	\$771,710	\$56,761	\$78,844

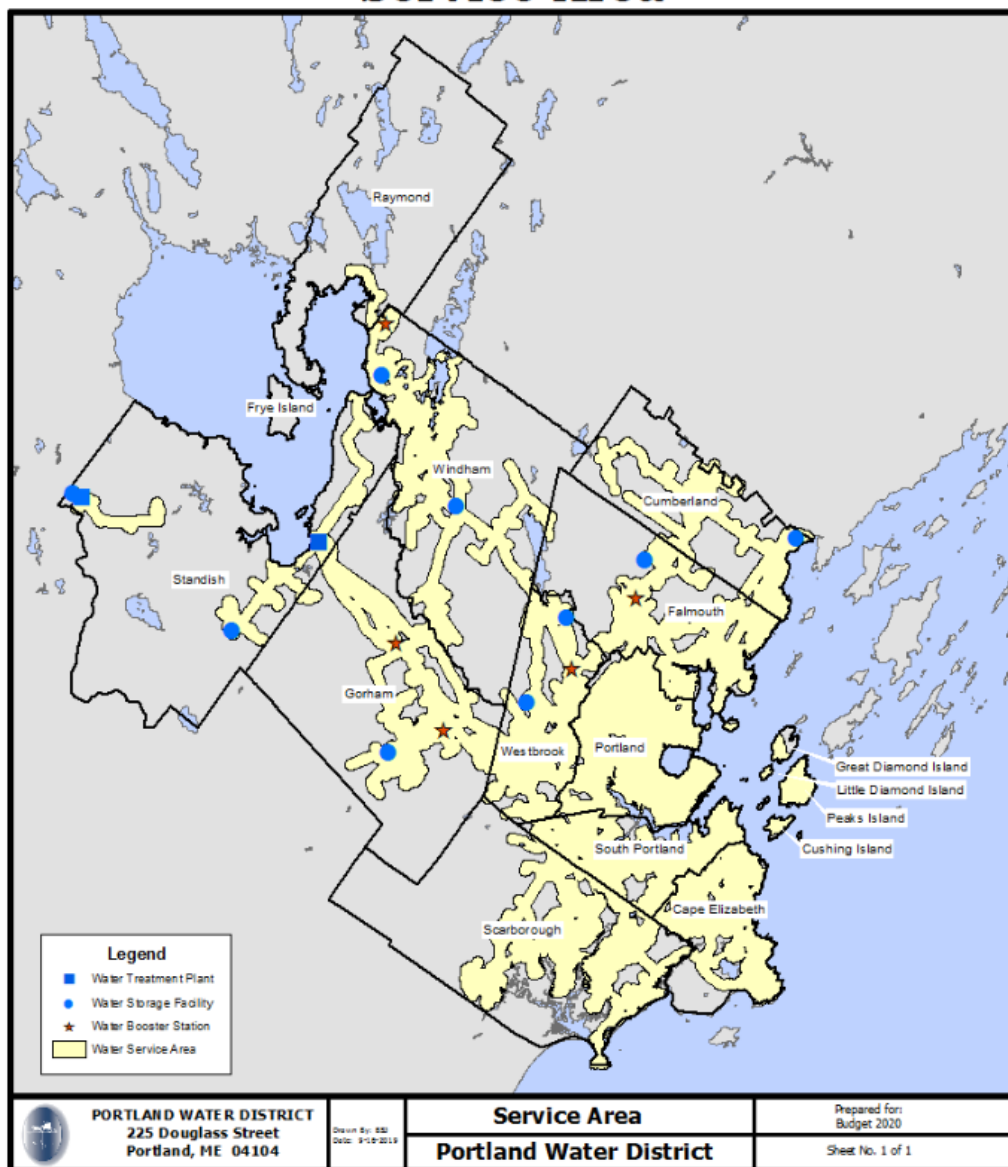


Fund: Water

Background

The Portland Water District's charter authorizes the District to provide service to the inhabitants of 11 cities and towns. Approximately 210,000 inhabitants are served potable drinking water. In addition, water for public and private fire protection is provided. Water operation is regulated by the Department of Health and Human Services for water quality and the Maine Public Utilities Commission. Effective January 1, 2016, the Commission granted a waiver from their laws/rules including the Board review of water rate changes, financing transactions, capital reserve and new customer service line standards.

Portland Water District Service Area



Fund: Water

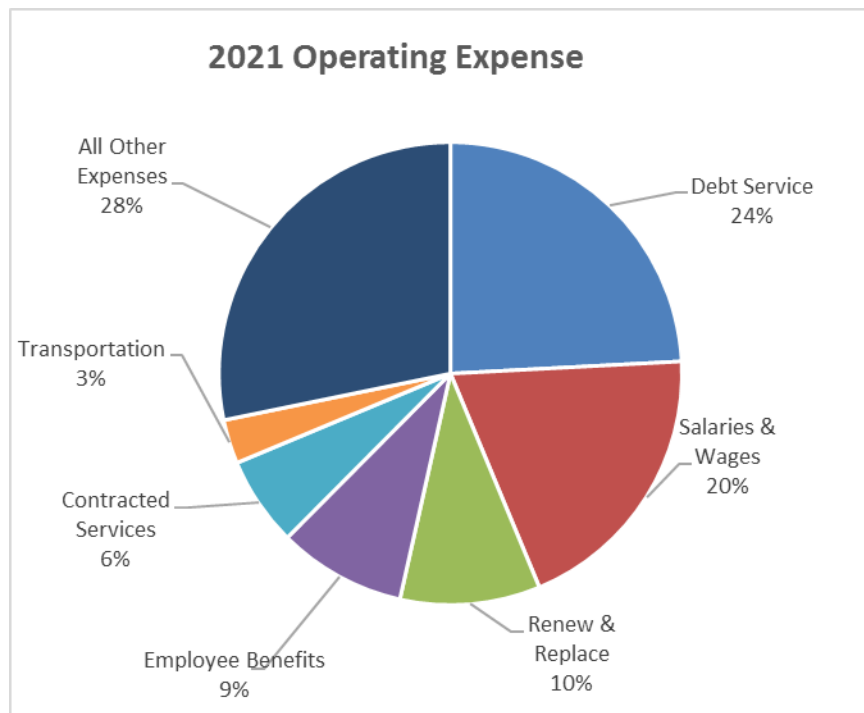
The Portland Water District operates two water systems; the Greater Portland System delivers 21 million gallons of water per day from Sebago Lake and the Steep Falls System delivers 30,000 gallons per day from a single well in Standish. The quality of the water from Sebago Lake is exemplary, and the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

2021 Financial Summary

The proposed 2021 Operating expense and Capital budgets are \$26,237,879 and \$10,675,000, respectively.

Operating Expense was \$281,408 or 1.1%, lower than the previous year. Departmental Expense was up 2.2% (\$368,300) and Renewal & Replacement (direct & indirect) was down \$893,576 (25.8%). Debt Service increased \$243,868 (4.0%) due to newly issued debt.

The Capital budget includes \$7 million for distribution main renewals. One of the focuses of the 2021 Capital Plan is to invest in a \$750,000 Comprehensive Asset Management Strategic Plan. This will be funded by the Master Plan Fund that was created in 2019. Another project that will be started is an upgrade to the HVAC system at Douglass St. (the district's main office & garage). That will be funded by bonds over a four year period and has an overall budget of \$2,675,000.



2021 Operating Expense Highlights

Salaries/Wages – Wage rates increased an average of 2.8% and total hours decreased 79 hours. The result was an overall increase of \$136,040 (2.7%).

Employee Benefits – The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses. Overall, Employee Benefits expense increased 6.6% (\$144,287).

Chemicals – Costs are budgeted to increase \$44,550 (9.8%). Sodium hypochlorite is budgeted to increase \$38,808 (27.1%) due to a 26.4% increase in the per unit cost and fluorine compound is up \$4,398 (13.3%) also because of a per unit price increase.

Contracted Services – This cost for services provided by third party vendors decreased \$186,761 (10.2%). The 2020 Budget included a \$100,000 transmission main assessment and the 2021 Budget does not include such a similar assessment. In addition, valve box maintenance was reduced \$50,000 to \$250,000.

Heat/Fuel Oil – This expense covers the cost of fuel for the generator at the treatment plant. It decreased 17.5% (\$20,181) due to a drop in the per gallon cost of heating oil.

Purchased Power – Overall, the budget decreased 5.3% (\$20,669) primarily due to a 136,609 kWh usage reduction and move to a fixed energy rate that includes capacity and retail costs. Both of these factors are in relation to the Sebago Lake Water Treatment Facility (SLWTF). The average \$ amount per kWh for T&D increased \$0.003 but energy decreased by \$0.003 and had a greater impact because it is 62% of the facility's total power budget. A 3% assumption is also included for future CMP rate changes.

Transportation - Transportation has increased by \$7,976 or 1.0% as vehicle hours and vehicle rates budgeted were relatively flat.

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 \$258,201 or 5.4%. Most of this increase can be traced to the overall labor rate and benefit cost increases in 2021. The higher overall increase in Environmental Services has to do with a shift in hours with the Wastewater Laboratory towards the Water fund.

Debt Service/Lease Expense – This is the annual principal and interest payments on bonds issued to finance capital projects. This expense will increase 4.0% (\$243,868).

Renewal & Replacement – These are dollars put aside to fund capital projects. The total for this item is \$2,568,204 in the 2021 budget.

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Water Sales	24,566,977	11,513,750	25,686,370	25,660,964	-\$25,406	-0.1%
Interest Income	472,511	294,168	408,100	143,433	-264,667	-64.9%
<u>Other Income</u>	<u>463,400</u>	<u>186,905</u>	<u>426,290</u>	<u>433,482</u>	7,192	1.7%
Total Revenue	25,502,888	11,994,823	26,520,760	26,237,879	-282,881	-1.1%
Salaries & Wages	4,626,246	2,326,343	4,998,590	5,134,630	136,040	2.7%
Employee Benefits	2,067,177	1,044,777	2,201,826	2,346,113	144,287	6.6%
Chemicals	430,395	210,872	452,397	496,947	44,550	9.8%
Contracted Services	1,450,472	616,129	1,824,670	1,637,909	-186,761	-10.2%
Facilities	112,874	52,866	112,336	110,506	-1,830	-1.6%
Heat/Fuel Oil	97,065	60,887	115,044	94,863	-20,181	-17.5%
Insurance	26,702	13,875	27,449	28,867	1,418	5.2%
Materials & Supplies	604,775	241,270	718,353	722,774	4,421	0.6%
Other Expense	81,082	74,745	186,402	175,597	-10,805	-5.8%
Purchased Power	314,981	160,696	388,884	368,215	-20,669	-5.3%
Regulatory/Taxes	255,515	227,462	245,430	256,046	10,616	4.3%
Tele/Other Utilities	100,461	36,757	88,328	89,365	1,037	1.2%
Transportation	669,966	319,896	798,779	806,755	7,976	1.0%
SS - Administration	3,362,860	1,673,167	3,733,011	3,926,538	193,527	5.2%
SS - Engineering Services	875,876	477,585	888,615	920,289	31,674	3.6%
SS - Environmental Services	88,701	51,792	77,074	105,700	28,626	37.1%
<u>SS - Water Services</u>	<u>74,483</u>	<u>26,961</u>	<u>105,909</u>	<u>110,283</u>	<u>4,374</u>	<u>4.1%</u>
Operating Expense	15,239,631	7,616,080	16,963,097	17,331,397	368,300	2.2%
Debt Service & Lease Expense	5,562,829	2,996,045	6,094,410	6,338,278	243,868	4.0%
Renewal & Replacement - Direc	2,750,000	1,400,000	2,800,000	1,964,000	-836,000	-29.9%
<u>Renewal & Replace - Indirect</u>	<u>535,468</u>	<u>330,891</u>	<u>661,780</u>	<u>604,204</u>	<u>-57,576</u>	<u>-8.7%</u>
Total Expense	24,087,928	12,343,016	26,519,287	26,237,879	-281,408	-1.1%
Current Year Surplus (Deficit)	1,414,960	-348,193	1,473	0		
Transfer to Capital Reserve	-170,413	-139,964	-279,927	-125,054		
Xfer to Rate Stabilization Fund	-300,000	0	0	0		
Transfer to Master Plan Fund	-944,548	0	0	0		
<u>Prior Year Surplus</u>	<u>6,824,530</u>	<u>6,824,529</u>	<u>7,495,835</u>	<u>7,004,267</u>		
Accumulated Surplus	6,824,529	6,336,372	7,217,381	6,879,213		

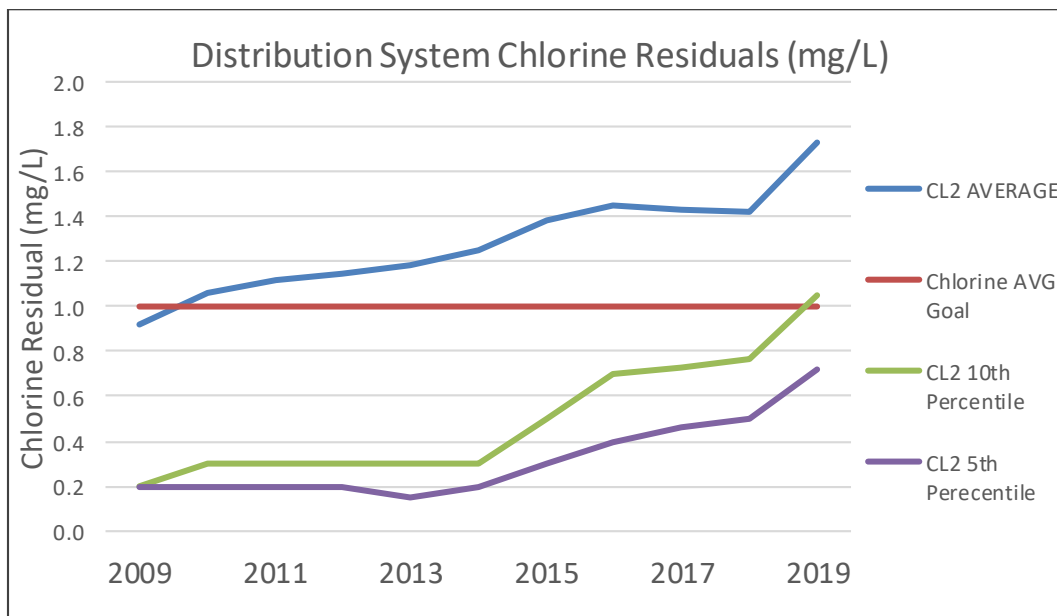
Operation Summary

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

The District maintains approximately 1,000 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 2021, the District plans to spend \$7.0 million dollars to replace and upgrade these mains, and intends to maintain this level of investment in order to achieve our renewal objectives. In addition, the Transmission/Distribution group performs operation and maintenance procedures to ensure that our customers experience minimal disruptions in water service.

To meet the growing water demand in Gorham, the new Wards Hill Booster Station was constructed and placed in service during 2018. The new station replaced the current booster station at the intersection of Main St. and Libby Ave. The old station, which had received many upgrades over the years, had been continuously in service since constructed by the Gorham Water Company in 1895. The old station is currently still being used as back-up to the new station.

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. Staff have been working for a few years to increase the residuals at the far ends of the system. As shown in the chart below, the chlorine residuals have significantly increased since the addition of UV in 2014. This additional level of treatment is having a positive effect on the distribution system, especially at the far ends of the mains.



Operation Summary (continued)

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



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

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

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

Capital Summary

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

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2021 CIP</u>	<u>Total</u>
Projects:			
Water Only	\$ 3,900,000	\$ 8,365,000	\$ 12,265,000
Asset Management Strategic Plan		\$ 750,000	\$ 750,000
Total by CIP Year	<u>\$ 3,900,000</u>	<u>\$ 9,115,000</u>	<u>\$ 13,015,000</u>

Source of Funds:

	<u>R&R Fund</u>	<u>Future Bond</u>	<u>Funding Total</u>	<u>Bond Issue Year</u>
Beginning Balance	\$ 3,481,725			
2021 Contribution	\$ 1,964,000			
Total R&R Balance Available	<u>\$ 5,445,725</u>			
Projects:				
Water Only				
Wards Hill Tank Preliminary - 2658		\$ 400,000	\$ 400,000	2021
Wards Hill Tank Construction - 3004		\$ 2,500,000	\$ 2,500,000	2023
407 Zone North Transmission - 3066		\$ 1,000,000	\$ 1,000,000	2021
2021 CIP Budget - Water Operations	\$ 1,025,000		\$ 1,025,000	
2021 CIP Budget - Main Renewals	\$ 1,050,000	\$ 6,000,000	\$ 7,050,000	2021
2021 CIP Budget - Water Facilities/Other	\$ 290,000		\$ 290,000	
Total	<u>\$ 2,365,000</u>	<u>\$ 9,900,000</u>	<u>\$ 12,265,000</u>	
Ending Balance	<u>\$ 3,080,725</u>			
Water Master Plan Reserve	\$ 750,000		<u>\$ 13,015,000</u>	

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.

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:

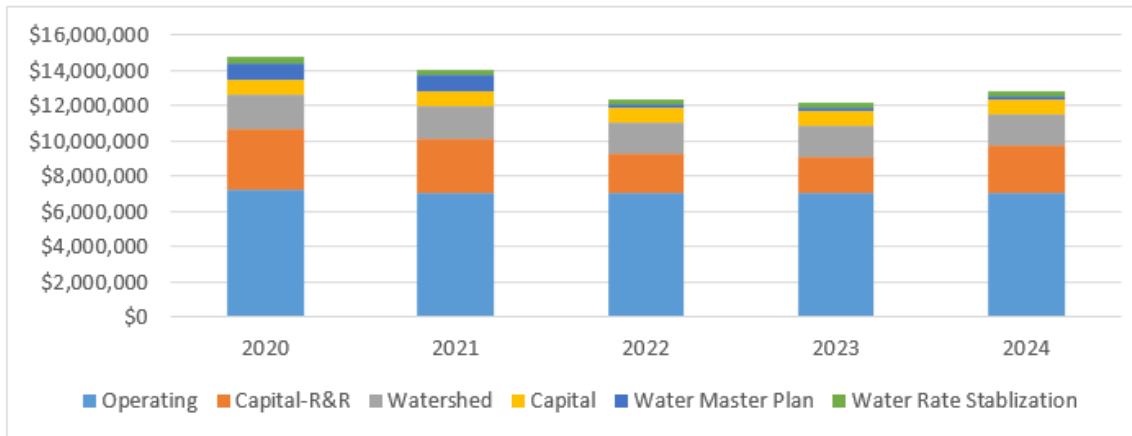
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase of 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life between 1% and 2.5% interest.

Summary of Projection Impact:

Water Revenue is projected to increase to \$29,754,163 in 2024, a 16% increase over 2021 Budget, with the most significant cost change related to debt service issued to finance capital projects. Operating Ratios are better than target and Operating Reserve balance and Capital R&R balance are below the target balances.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
21%	22%	23%	24%	25%	26%	27%

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

2018	2019	2020	2021	2022	2023	2024
182%	151%	157%	141%	142%	144%	145%

Projections for Rate-Making Purposes (continued)

Water Fund

Operating Fund:

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Water Sales	25,686,370	25,660,964	26,966,738	28,327,382	29,754,163
Interest Income	408,100	143,433	143,433	143,433	143,433
Other Income	426,290	433,482	433,482	433,482	433,482
Total Revenues	26,520,760	26,237,879	27,543,653	28,904,297	30,331,078
Operating Expenses:					
Salaries & Wages	4,998,590	5,134,630	5,237,323	5,342,069	5,448,910
Employee Benefits	2,201,826	2,346,113	2,463,419	2,586,590	2,715,920
Chemicals	452,397	496,947	511,855	527,211	543,027
Contracted Services	1,824,670	1,637,909	1,662,478	1,687,415	1,712,726
Facilities	112,336	110,506	112,164	113,846	115,554
Heat/Fuel Oil	115,044	94,863	96,286	97,730	99,196
Insurance	27,449	28,867	29,300	29,740	30,186
Materials & Supplies	718,353	722,774	733,616	744,620	755,789
Other Expense	187,183	175,597	178,231	180,904	183,618
Purchased Power	388,884	368,215	368,215	368,215	368,215
Regulatory/Taxes	244,649	256,046	259,887	263,785	267,742
Tele/Other Utilities	88,328	89,365	90,705	92,066	93,447
Transportation	798,779	806,755	818,856	831,139	843,606
SS - Administration	3,733,011	3,926,538	4,029,610	4,135,387	4,243,941
SS - Engineering Services	888,615	920,289	944,217	968,767	993,955
SS - Environmental Services	77,074	105,700	108,475	111,322	114,244
SS - Water Services	105,909	110,283	133,178	136,674	140,262
	16,963,097	17,331,397	17,777,815	18,217,480	18,670,338
Debt Service	6,085,224	6,338,278	6,854,058	7,425,037	8,048,960
Renewal & Replacement - Direct	2,800,000	1,964,000	2,250,000	2,600,000	2,950,000
Renewal & Replace - Indirect	670,966	604,204	661,780	661,780	661,780
Capital Finance Expense	9,556,190	8,906,482	9,765,838	10,686,817	11,660,740
Total Operating Expenses	26,519,287	26,237,879	27,543,653	28,904,297	30,331,078
Current Year Surplus(Deficit)	1,473	0	0	0	0
Transfer to Capital Reserve	-279,927	0	0	0	0
Prior Year Surplus	7,495,835	7,004,267	7,004,267	7,004,267	7,004,267
Accumulated Surplus	7,217,381	7,004,267	7,004,267	7,004,267	7,004,267
Target Balance(25% of budget)	6,629,822	6,559,470	6,885,913	7,226,074	7,582,770
Above/(Below)	587,559	444,797	118,354	-221,807	-578,503

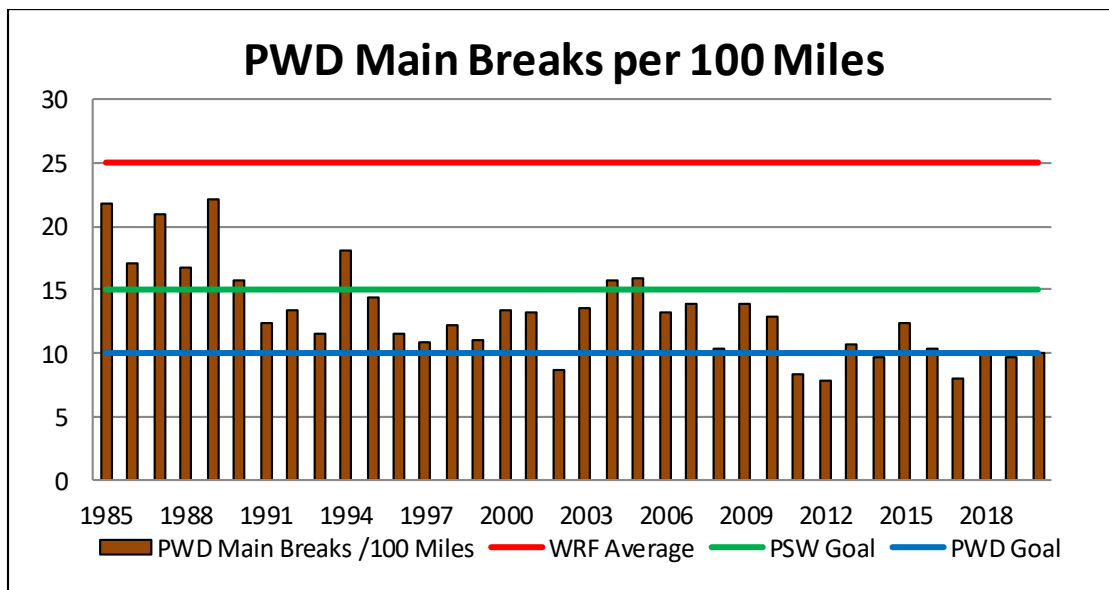
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$3,400,000

	<u>2021 Forecast</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
R&R Balance BOY	\$ 3,481,725	\$ 3,080,725	\$ 2,230,725	\$ 2,080,725
Contribution	\$ 1,964,000	\$ 2,250,000	\$ 2,600,000	\$ 2,950,000
Withdrawals	\$ (2,365,000)	\$ (3,100,000)	\$ (2,750,000)	\$ (2,300,000)
R&R Balance EOY	\$ 3,080,725	\$ 2,230,725	\$ 2,080,725	\$ 2,730,725

Water Main Renewals



Our commitment to maintain aging water infrastructure includes replacing water mains. The 2021 budget continues this commitment with planned projects totaling \$7.0 million dollars. The projects will be funded with current year’s revenue (\$1 million) and bond proceeds (\$6 million). The increased investment in main renewal has impacted the number of main breaks.

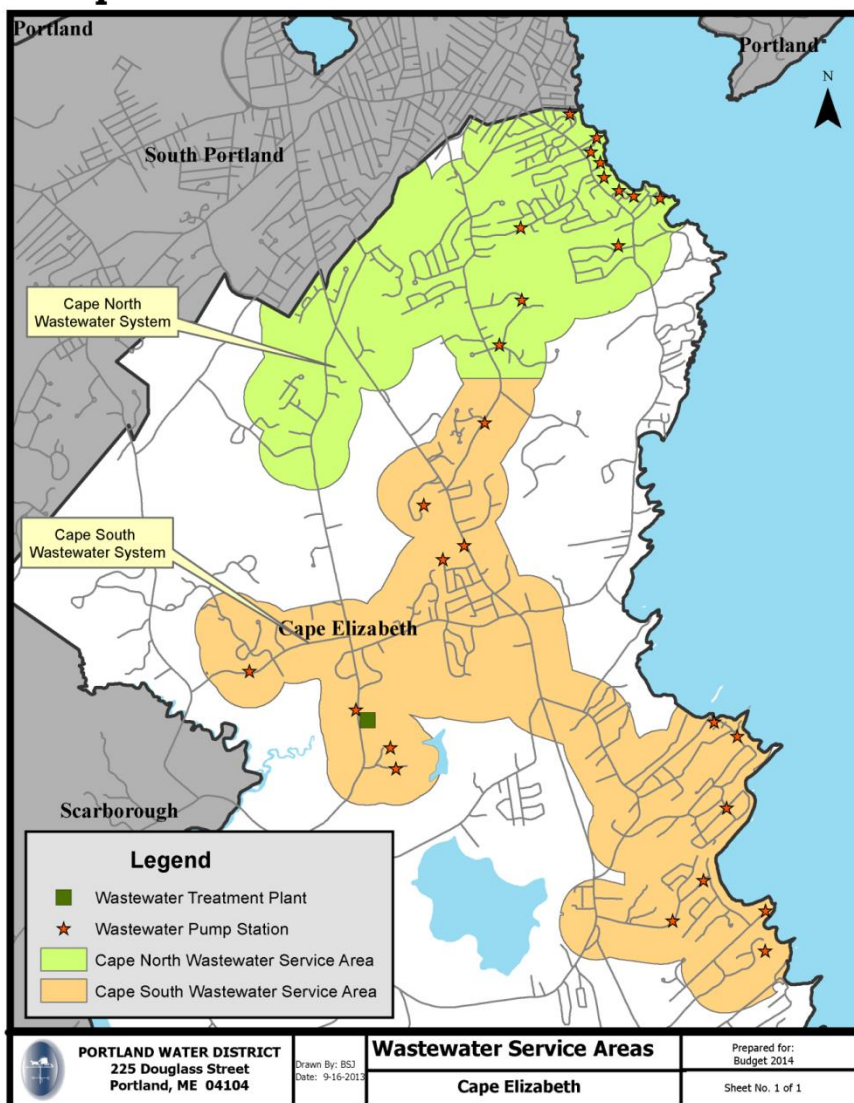


Fund: Wastewater - Cape Elizabeth

Background

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

Cape Elizabeth Wastewater Service Area



Summary of Services Provided:

Treatment:

Cape South 0.52 million gallons/day

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

Collection System:

27 Pump Stations with 18.8 miles of pipe

Utility Billing Services:

Annual Billings of \$2,168,412 on 2,390 Customers (avg. \$74.61/month)

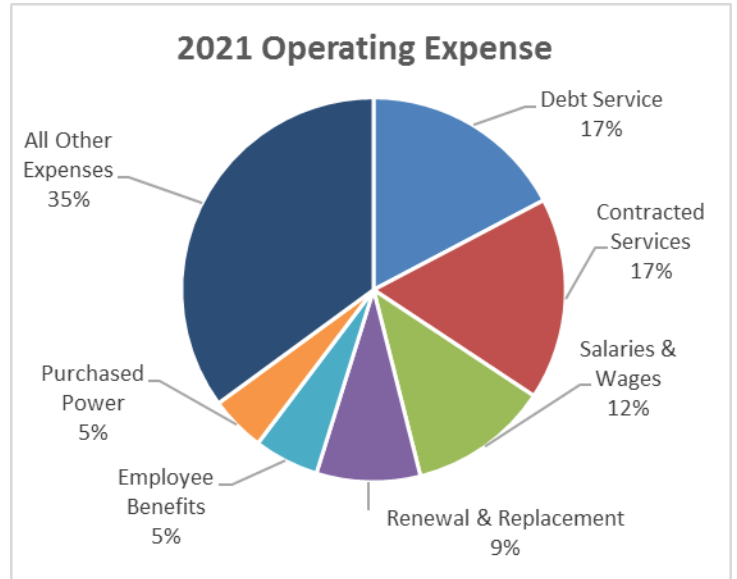
Fund: Wastewater - Cape Elizabeth

2021 Financial Summary

The proposed assessment of \$1,835,412 is a 7.6% increase. The assessment is lower than the forecasted assessment provided to the town last year.

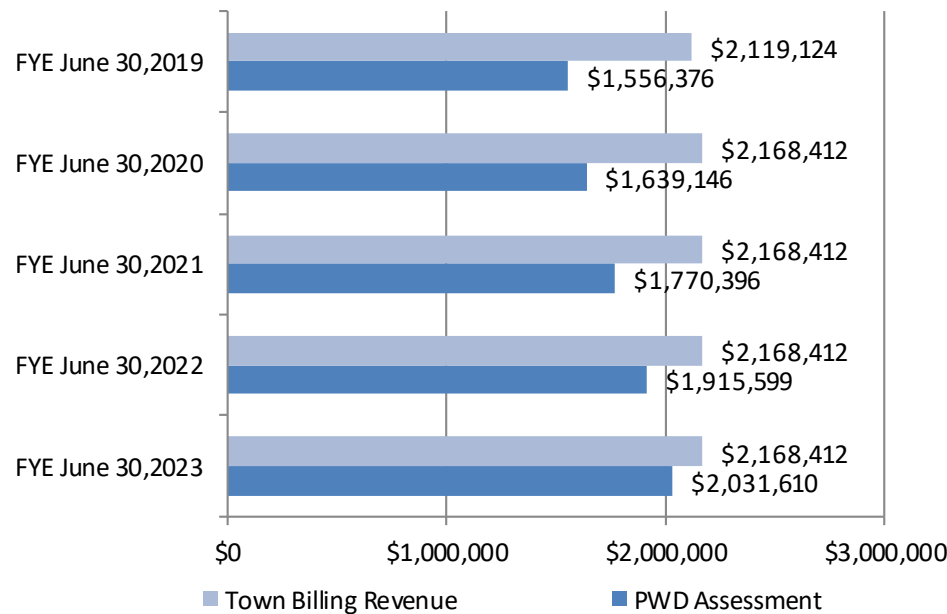
The proposed 2021 Operating Expense and Capital budgets are \$1,843,412 and \$645,000 respectively. The Operating Expense budget increased \$117,148 or 6.8%.

The 2021 Capital budget includes \$350,000 for upgrades to the Ottawa Rd. wastewater pump station and \$245,000 for the replacement of obsolete SCADA radio modems. Both of these items are planned to be bonded in 2022.



Assessment Compared to Ratepayers' Billing

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



Revenue Assumptions:

- Consumption is for the 12 months ending June 30, 2020

- Rates Assumed:

Effective Date:	Base/Per HCF
-----------------	--------------

Mar 2013	\$43/\$5.25
Mar 2014	\$46/\$5.41
Mar 2015	\$48/\$5.57
Mar 2016	\$49.50/\$5.68

2021 Operating Expense Highlights

Salaries/Wages – Labor hours budgeted decreased 0.3% (21 hours). This combined with the average wage rates increase of 2.9% resulted in a 2.6% (\$5,548) increase in Salaries/Wages.

Employee Benefits – The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses. Overall, Employee Benefits expense increased 6.8% (\$6,435).

Biosolids Disposal – The budget for Biosolids Disposal increased \$5,670 (26.6%). The budgeted volume disposed is flat; however, cost per wet ton disposed is estimated to increase by \$18.95 (26.7%) per wet ton as the District negotiates a new vendor contract (the current contract expires at the end of 2020). The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids.

Chemicals – The budget increased by \$2,462 (21.6%) primarily due to a rise in the per unit cost of Sodium Bicarbonate from \$0.31 to \$0.39 (25.8%).

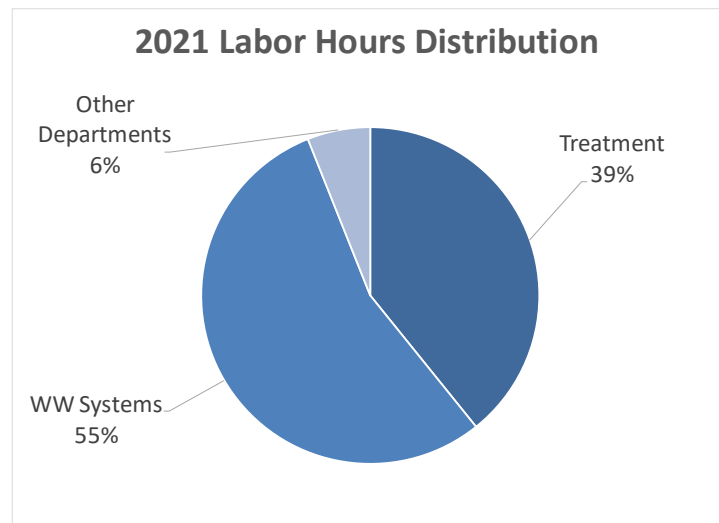
Contracted Services – The budget increased 9.5% (\$27,130) due to higher treatment costs expected to be charged by South Portland as well as increases in maintenance costs and sludge hauling.

Heat/Fuel Oil – The budget decreased 5.7% (\$1,042) mostly due to an estimated drop in the cost of heating oil from \$2.08 to \$1.69 per gallon.

Purchased Power – The Purchased Power budget increased 8.5% (\$6,746) partially due to increased demand usage but also due to increased T&D rates. Starting in July 2020, the treatment facility and medium sized pump stations saw rate increases of 2.6% - 4.4%. Small pump stations had effective rate increases between 6.5% - 7.0%. A 3% assumption is also included for potential CMP rate changes in Summer 2021.

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 \$30,511 or 6.7%.

The allocation from Administration increased \$12,684 (6.4%) because of the annual average wage increase (2.8%), higher employee benefit expenses (pension) and the first year of computer support costs related to the new billing system. The costs associated with Wastewater Services increased \$7,713 (5.3%). The increase was due to annual labor rate increase and higher employee benefit costs.



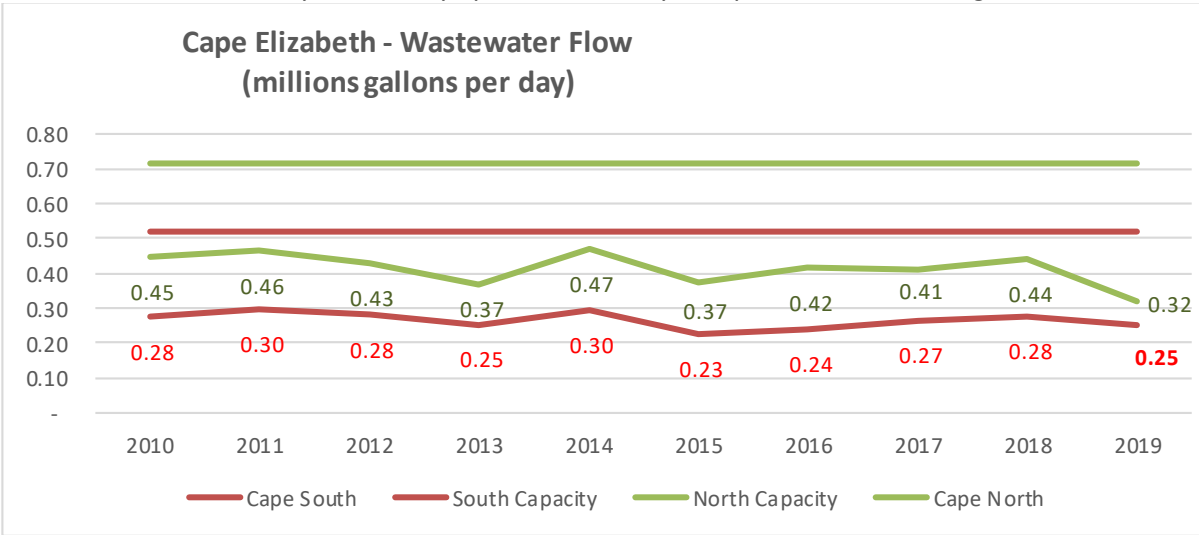
Debt Service/Lease Expense – This represents the annual principal and interest payments on bonds issued to finance capital projects. This cost increased \$23,290 (7.9%) from the prior year budget to \$318,640. Bond principal payments are budgeted to increase \$17,400 in 2021 mostly due to a HVAC Project bond scheduled to be issued in late 2020.

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 \$161,152 will be made in 2021.

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$1,572,912	\$852,690	\$1,705,380	\$1,835,412	\$130,032	7.6%
Interest Income	30,323	13,092	20,884	8,000	-12,884	-61.7%
Total Revenue	1,603,235	865,782	1,726,264	1,843,412	117,148	6.8%
Salaries & Wages	215,957	106,169	211,528	217,076	5,548	2.6%
Employee Benefits	97,579	47,787	94,367	100,802	6,435	6.8%
Biosolids Disposal	12,258	8,686	21,330	27,000	5,670	26.6%
Chemicals	15,702	6,899	11,405	13,867	2,462	21.6%
Contracted Services	243,511	141,991	286,515	313,645	27,130	9.5%
Heat/Fuel Oil	16,052	12,950	18,206	17,164	-1,042	-5.7%
Insurance	4,438	2,249	4,677	4,947	270	5.8%
Materials & Supplies	40,773	12,525	39,960	40,950	990	2.5%
Other Expense	2,997	4,000	750	1,000	250	33.3%
Purchased Power	83,495	55,933	79,305	86,051	6,746	8.5%
Regulatory/Taxes	1,380	878	1,150	1,300	150	13.0%
Tele/Other Utilities	22,151	6,497	24,988	23,366	-1,622	-6.5%
Transportation	32,669	15,512	34,025	32,844	-1,181	-3.5%
SS - Administration	179,188	88,799	198,236	210,920	12,684	6.4%
SS - Engineering Services	47,297	25,810	77,127	83,130	6,003	7.8%
SS - Environmental Services	31,480	14,041	29,765	33,742	3,977	13.4%
SS - Wastewater Services	143,583	81,491	145,138	152,851	7,713	5.3%
SS - Water Services	2,000	721	2,831	2,965	134	4.7%
Operating Expense	1,192,510	632,938	1,281,303	1,363,620	82,317	6.4%
Debt Service & Lease Expense	230,607	139,976	295,350	318,640	23,290	7.9%
Renewal & Replacement - Direct	125,000	60,350	120,700	135,000	14,300	11.8%
Renewal & Replace - Indirect	23,315	14,456	28,911	26,152	-2,759	-9.5%
Total Expense	1,571,432	847,720	1,726,264	1,843,412	117,148	6.8%
Current Year Surplus (Deficit)	31,803	18,062	0	0		
Transfer to R&R	0	0	0	0		
Prior Year Surplus	398,772	430,575	439,022	456,544		
Accumulated Surplus	430,575	448,637	439,022	456,544		

Operation Summary

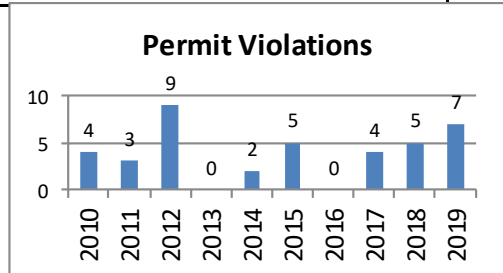
Wastewater Treatment: The Cape Elizabeth Wastewater System is comprised of two general areas, North and South. Flow generated in the Northern area is delivered to South Portland for treatment while flow generated in South Cape is treated at the Cape Elizabeth WWTF. The Cape Elizabeth treatment facility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



In 2019, the flow in the Northern area averaged 0.32 mgd and the South Cape flow to the treatment plant averaged 0.25 mgd.

Effluent Permit Requirements:

Parameter	Discussion
Biological Oxygen Demand (BOD)	Measure of organic material and the strength of pollution. The treatment plant removed 93% of the BOD; well above the required 85% removal.
Total Suspended Solids (TSS)	Measure of suspended material in the incoming wastewater; also the strength of pollution. The treatment plant removed 96% of the TSS, well above the required 85% removal.
Total Residual Chlorine	Used previously for disinfecting the treated effluent, chlorine must be removed before the effluent is discharged. The permit limit was met at all times. The UV disinfection upgrade has eliminated the use of disinfection system chemicals and the need to monitor chlorine residual.
Fecal Coliform Bacteria	Following disinfection, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.



The Discharge Permit was renewed in late 2016. There were seven (7) effluent permit violations in 2019. These violations were generally associated with the performance of the disinfection system. In 2020, there were no effluent permit violations with the new UV disinfection system.

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 are expected to lower the frequency and volume of overflow during extreme wet weather events by addressing private sources of infiltration and inflow in the collection systems of Cape Elizabeth and South Portland. Both the Town of Cape Elizabeth and the City of South Portland have completed an inventory of private sources of inflow & infiltration. Cape Elizabeth has installed additional storm drainage and redirected private sources of I/I to the storm sewer system. This effort has addressed 35 of 37 known sources of private I/I in 2018. South Portland has completed a project on Drew Rd. to remove 10 private sources of I/I. The project also lined the collection system pipe in the area to reduce infiltration. This project was completed in 2018. PWD completed a project that increased pumping capacity of the existing pumps at the Ottawa Rd. pump station and will monitor flows to determine if the collective efforts have sufficiently reduced extraneous flows and the volume of CSO overflows.

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

Parameter	2020 Actual to September	2021 Projected
Preventive Work Orders	400	350
Corrective Work Orders	17	50
Wet wells cleaned	43	45
Debris removed (ton)	42.39	40
Dry Weather Overflows	2	0

2020 Other Highlights

- A new ultraviolet light disinfection system was installed in 2020. The new system has operated well. As a result of the effectiveness of the new system, there were no effluent fecal violations in 2020.
- Asset Management Software continues to drive the preventive maintenance program; generating both monthly and annual preventive maintenance tasks for all pump stations, continuing our emphasis on the pump station preventive maintenance program. The new position of Maintenance Manager/Planner will help to optimize efforts. The replacement of the current asset management computer system will further enable improvements in our effectiveness.
- Construction to update and refurbish the Littlejohn Pump Station began in 2020. This station serves the entire Northern Cape Elizabeth area.
- The first phase of an HVAC system upgrade is under construction at the treatment plant.

2021 Work Plan

- Flow monitoring will continue to assess the flow reductions that have been realized due to the Ottawa Rd. drainage area I/I flow reduction efforts by Cape Elizabeth and South Portland.
- Design of the Maiden Cove Pump Station and force main replacement began in 2020. The site is very limited and construction will be challenging.
- Design of an upgrade to the Ottawa Rd. Pump Station will result in an upgrade of the station. This will include bypass valving, installation of the new generator, new pumps, upgraded controls, and other miscellaneous improvements.
- A process evaluation of the treatment plant will be completed. This assessment will review the current aeration system and equipment. With the attention to nitrogen reduction (both from a water quality and process performance standpoint), the original aeration equipment will be assessed and updates and improvements will likely be identified.
- The radio network that monitors the various pump stations and treatment plant will be upgraded to replace equipment that served us well over its service life.

Capital Summary

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

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2021 CIP</u>	<u>CIP Total</u>
Projects:			
SCADA - radio modems - 3125 (<i>prorated</i>)		\$ 245,000	\$ 245,000
WW Collection & Pumping			
Maiden Cove PS Upgrades - 3002	\$ 445,000		\$ 445,000
Little John PS Upgrades - 1360	\$ 900,000		\$ 900,000
Ottawa Rd PS Upgrades - 3005		\$ 350,000	\$ 350,000
Pump Station R&R - 3130		\$ 25,000	\$ 25,000
WW Treatment			
Treatment Plant R&R - 3129		\$ 25,000	\$ 25,000
Total by CIP Year	\$ 1,345,000	\$ 645,000	\$ 1,990,000

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue</u> <u>2021</u>	<u>Bond Issue</u> <u>2022</u>	<u>Funding</u> <u>Total</u>
Beginning Balance	\$ 332,639			
2021 Contribution	\$ 135,000			
Total R&R Balance Available	\$ 467,639			
Projects:				
SCADA - radio modems - 3125			\$ 245,000	\$ 245,000
WW Collection & Pumping				
Maiden Cove PS Upgrades - 3002	\$ 445,000			\$ 445,000
Little John PS Upgrades - 1360	\$ 900,000			\$ 900,000
Ottawa Rd PS Upgrades - 3005			\$ 350,000	\$ 350,000
Pump Station R&R - 3130	\$ 25,000			\$ 25,000
WW Treatment				
Treatment Plant R&R - 3129	\$ 25,000			\$ 25,000
Total	\$ 50,000	\$ 1,345,000	\$ 595,000	\$ 1,990,000
Ending Balance	\$ 417,639			

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

Projections for Rate-Making Purposes

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

Summary

Major Assumptions:

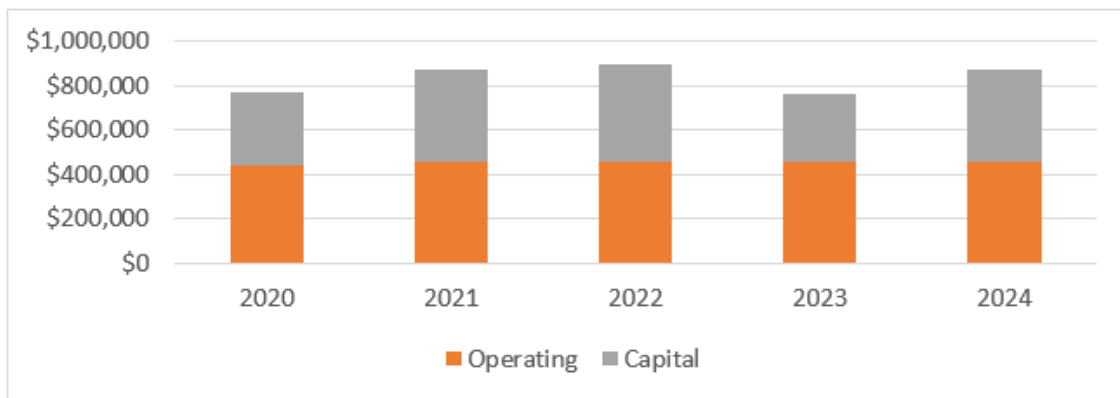
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Biosolids contract expires in 2021; assumed a \$90/wet ton price in 2021 with 1.2% increase in future years. Actual contract renewal price may result in a significant increase.
- Other expenses increase of 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life between 1% and 2.5% interest.

Summary of Projection Impact:

Assessment is projected to increase to \$2,066,448 in 2024, a 13% increase over 2021 Budget, with the most significant cost change related to debt service issued to finance capital projects. Operating Ratios are better than target and Operating Reserve balance and Capital R&R balance are below the target balances.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
15%	15%	17%	17%	21%	22%	22%

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

2018	2019	2020	2021	2022	2023	2024
165%	150%	153%	151%	140%	140%	141%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Assessment Income	1,705,380	1,835,412	1,995,786	2,067,434	2,066,448
Interest Income	20,884	8,000	8,000	8,000	8,000
Other Income	0	0	0	0	0
Total Revenues	1,726,264	1,843,412	2,003,786	2,075,434	2,074,448
Operating Expenses:					
Salaries & Wages	211,528	217,076	221,418	225,846	230,363
Employee Benefits	94,367	100,802	105,842	111,134	116,691
Biosolids Disposal	21,330	27,000	27,324	27,652	27,984
Chemicals	11,405	13,867	14,283	14,711	15,152
Contracted Services	286,515	313,645	318,350	323,125	327,972
Heat/Fuel Oil	18,206	17,164	17,421	17,682	17,947
Insurance	4,677	4,947	5,021	5,096	5,172
Materials & Supplies	39,960	40,950	41,564	42,187	42,820
Other Expense	1,900	2,300	2,335	2,370	2,406
Purchased Power	79,305	86,051	86,051	86,051	86,051
Tele/Other Utilities	24,988	23,366	23,716	24,072	24,433
Transportation	34,025	32,844	33,337	33,837	34,345
SS - Administration	198,236	210,920	216,457	222,139	227,970
SS - Engineering Services	77,127	83,130	85,291	87,509	89,784
SS - Environmental Services	29,765	33,742	34,628	35,537	36,470
SS - Wastewater Services	145,138	152,851	181,863	186,637	141,536
SS - Water Services	2,831	2,965	3,943	4,047	4,153
	1,281,303	1,363,620	1,418,844	1,449,632	1,431,249
Debt Service	290,555	318,640	416,678	447,538	454,935
Renewal & Replacement - Direc	120,700	135,000	145,000	155,000	165,000
Renewal & Replace - Indirect	33,706	26,152	23,264	23,264	23,264
Capital Finance Expense	444,961	479,792	584,942	625,802	643,199
Total Operating Expenses	1,726,264	1,843,412	2,003,786	2,075,434	2,074,448
Current Year Surplus(Deficit)	0	0	0	0	0
Prior Year Surplus	439,022	456,544	456,544	456,544	456,544
Accumulated Surplus	439,022	456,544	456,544	456,544	456,544
Target Balance(25% of budget)	431,566	460,853	500,947	518,859	518,612
Above/(Below)	7,456	-4,309	-44,403	-62,315	-62,068

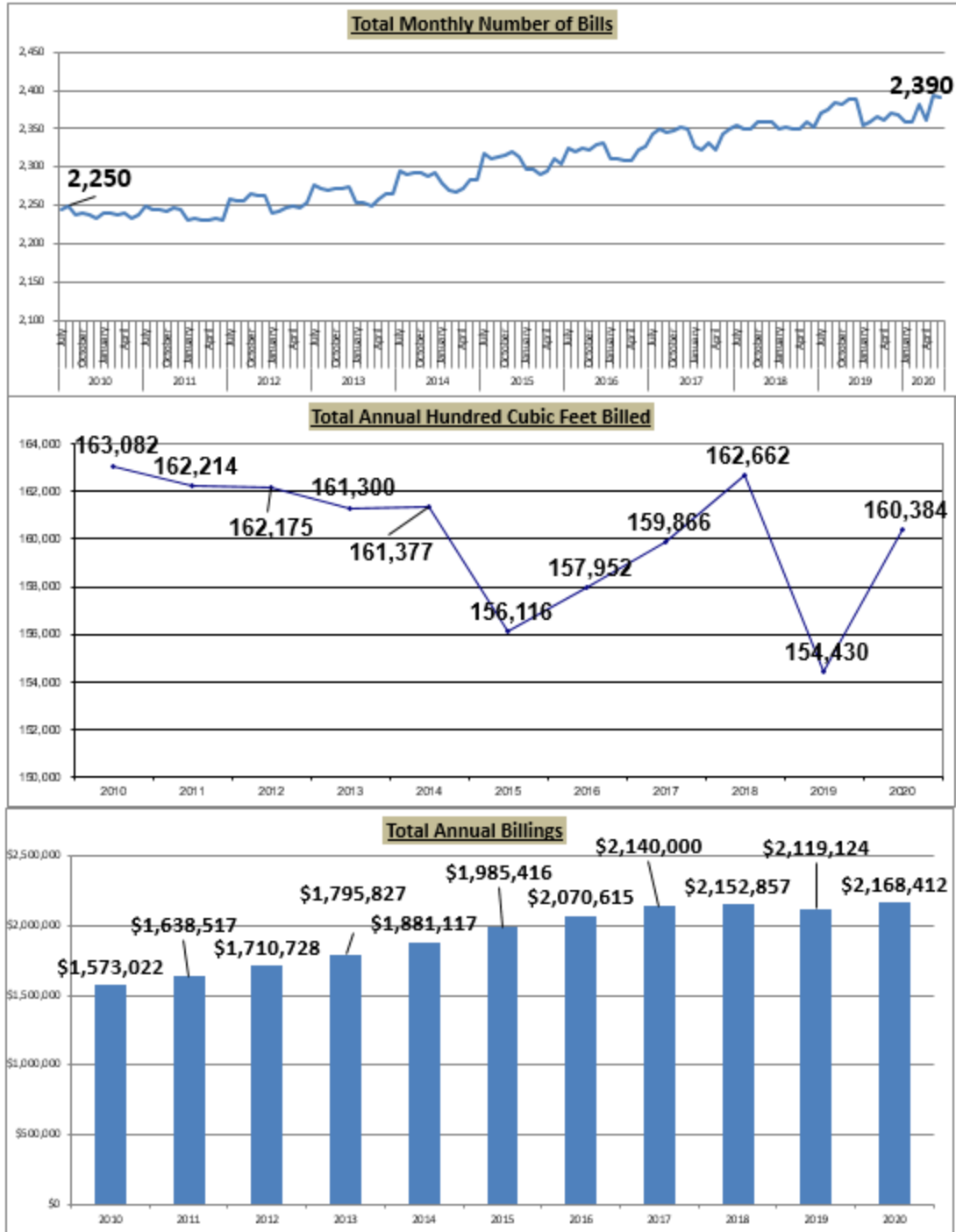
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$875,000

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
	<u>Budget</u>	<u>Forecast</u>	<u>Forecast</u>	<u>Forecast</u>
R&R Balance BOY	\$ 332,639	\$ 417,639	\$ 437,639	\$ 302,639
Contribution	\$ 135,000	\$ 145,000	\$ 155,000	\$ 165,000
Withdrawals	\$ (50,000)	\$ (125,000)	\$ (290,000)	\$ (50,000)
R&R Balance EOY	\$ 417,639	\$ 437,639	\$ 302,639	\$ 417,639

Sewer Billing Statistics

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

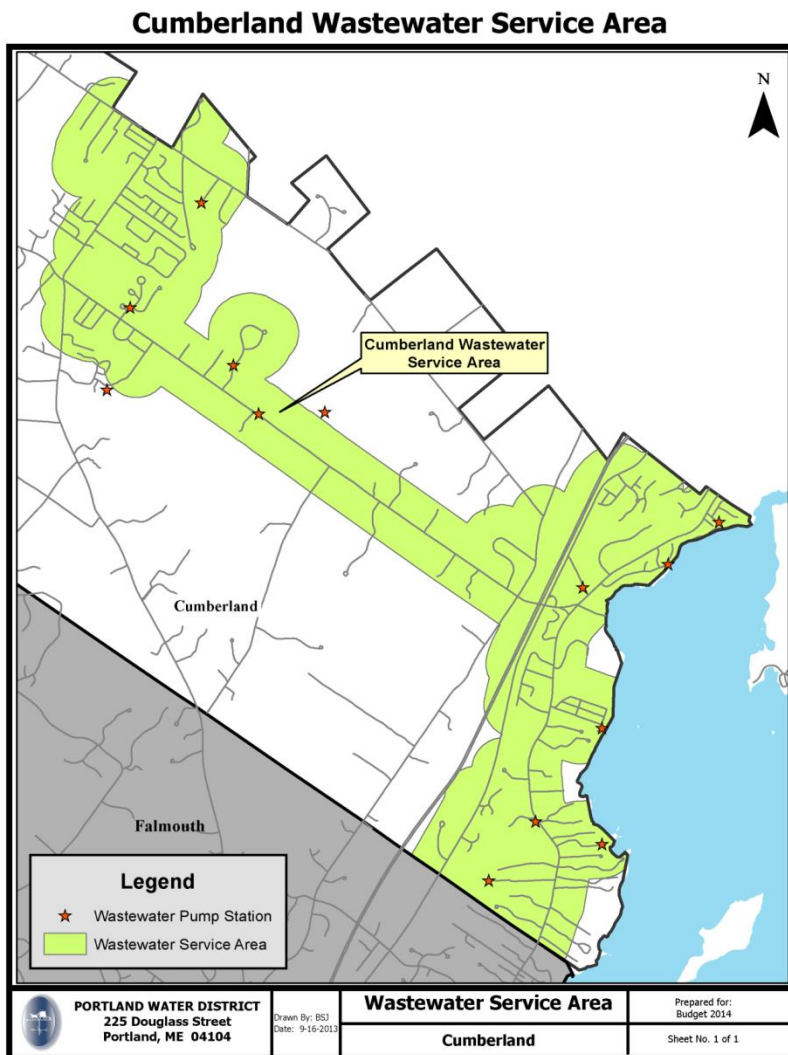
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater - Cumberland

Background

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



Summary of Services Provided:

Treatment
0.235 million
gallons/day

Collection System:
13 Pump Stations with
29.2 miles of pipe

Utility Billing Services:
Annual Billings of
\$1,064,762 on 1,214
Customers
(avg. 73.09/month)

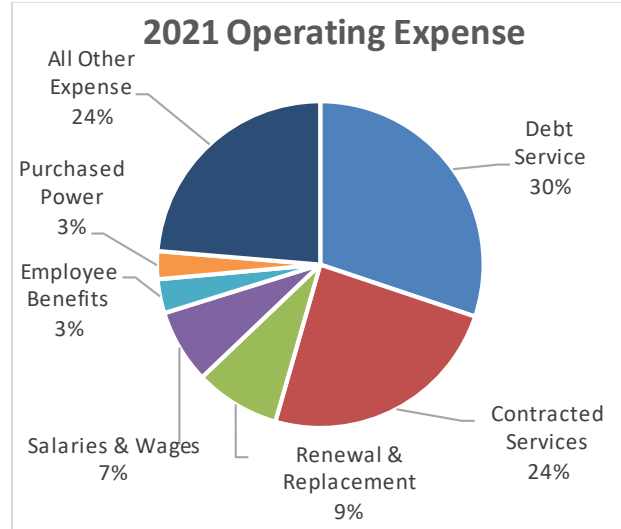
Fund: Wastewater - Cumberland

2021 Financial Summary

The proposed assessment of \$989,268 is an increase of \$23,976 or 2.5%.

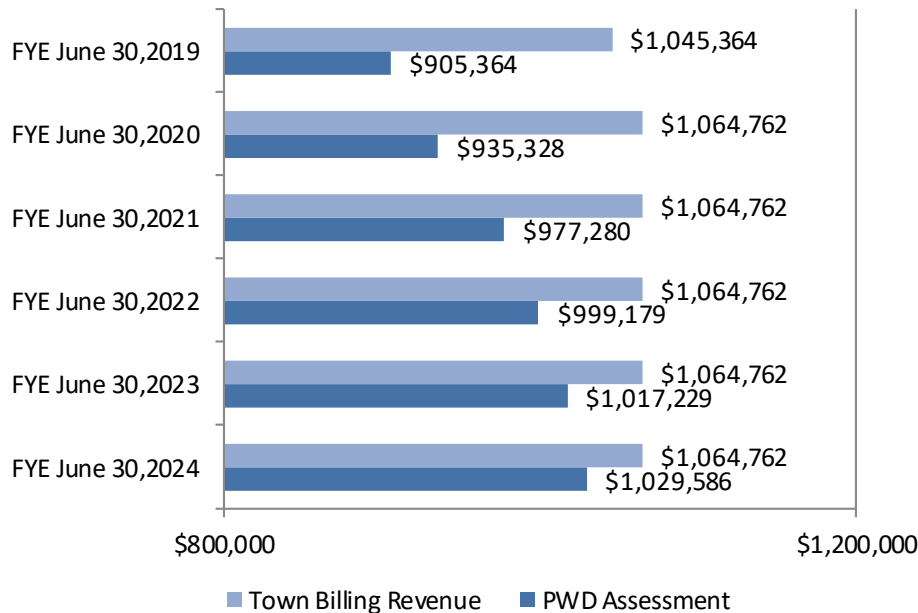
The proposed 2021 Operating Expense and Capital budgets are \$995,269 and \$120,000, respectively. The Operating Expense increase is 1.7% (\$16,674) with increases to Contracted Services and Materials & Supplies and reductions to Debt Service and Transportation.

Cumberland’s 2021 Capital plan consists of \$100,000 for the Harris Road culvert relocation as part of the force main replacement and \$20,000 from renewal and replacement funds for needs related to the wastewater pump stations. Many of the pump station upgrades previously scheduled for the next year were postponed to 2022.



Assessment Compared to Ratepayers' Billing

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



Revenue Assumptions:

- Consumption is the 12 months ending June 30, 2019

- Rates Assumed:

Effective Date:	Base/Per HCF
-----------------	--------------

Jul 2013	\$34.25/\$4.96
Sep 2013	\$34.25/\$5.29
Sep 2015	\$35.58/\$5.29
Sep 2016	\$36.92/\$5.29
Sep 2018	\$36.92/\$5.52

2021 Operating Expense Highlights

Salaries/Wages – This expense is budgeted to increase 3.0% to \$72,811. The labor hours for this fund decreased 20 hours (0.8%) with the average wage increase driving the change.

Employee Benefits – The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses. Overall, Employee Benefits expense increased 5.1% (\$1,622).

Contracted Services – This category includes payments to the Town of Falmouth for wastewater treatment and pumping services. Overall Contracted Services increased 1.9% (\$4,463) to a total of \$241,660. The portion of that amount applicable to the treatment services from the Town of Falmouth is \$196,300.

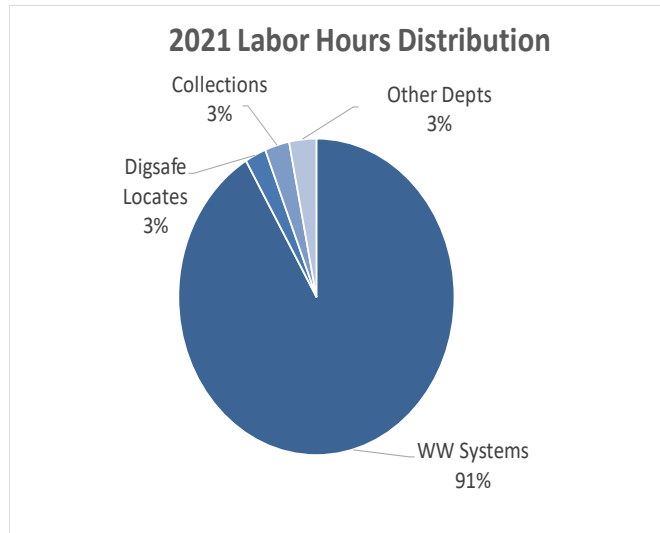
Materials & Supplies – The budget increased \$4,300 to \$12,050. The increase relates to small parts needed to repair pump station equipment.

Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer service, billing or computer support) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$9,084 or 4.9%.

The allocation from Administration increased \$3,586 (3.1%) because of the annual average wage increase (2.8%), higher employee benefit expenses (pension) and the first year of computer support costs related to the new billing system. Engineering Services are up \$3,814 (11.2%) because of the first year of support costs for the new asset management system as well as labor and benefits.

Debt Service – Debt service expense decreased 1.1% (\$3,457) due to a decline in interest expense as debt is paid down.

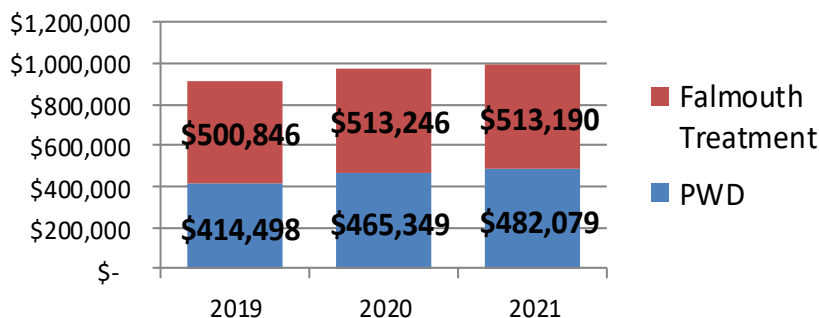
Renewal and Replacement – This is the annual contribution to a fund to finance smaller capital projects. A contribution of \$84,036 will be made in 2021, a decrease of \$1,408 from the previous year. This contribution goes towards: Cumberland only assets (\$40,000), Falmouth assets utilized (\$30,000) and Cumberland's share of meters (\$14,036).



	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$905,364	\$482,646	\$965,292	989,268	\$23,976	2.5%
Interest Income	20,802	11,238	13,303	6,001	-7,302	-54.9%
Total Revenue	926,166	493,884	978,595	995,269	16,674	1.7%
Salaries & Wages	67,476	23,788	70,672	72,811	2,139	3.0%
Employee Benefits	29,611	11,291	31,926	33,548	1,622	5.1%
Contracted Services	248,862	114,980	237,197	241,660	4,463	1.9%
Heat/Fuel Oil	37	194	332	332	0	0.0%
Insurance	3,024	2,684	3,232	3,436	204	6.3%
Materials & Supplies	9,922	3,481	7,750	12,050	4,300	55.5%
Other Expense	50	0	0	0	0	n/a
Purchased Power	25,535	15,230	26,668	27,497	829	3.1%
Tele/Other Utilities	2,490	945	2,160	2,370	210	9.7%
Transportation	26,782	7,693	22,647	21,335	-1,312	-5.8%
SS - Administration	104,507	51,227	114,257	117,843	3,586	3.1%
SS - Engineering Services	21,354	11,170	34,079	37,893	3,814	11.2%
SS - Wastewater Services	37,778	21,028	37,100	38,669	1,569	4.2%
SS - Water Services	1,095	395	1,553	1,668	115	7.4%
Operating Expense	578,523	264,106	589,573	611,112	21,539	3.7%
Debt Service & Lease Expense	308,224	151,635	303,578	300,121	-3,457	-1.1%
Renewal & Replacement - Direct	39,700	20,000	40,000	40,000	0	0.0%
Renewal & Replace - Indirect	12,580	7,723	15,444	14,036	-1,408	-9.1%
Renewal & Replacement - Contract	15,597	15,000	30,000	30,000	0	0.0%
Total Expense	954,624	458,464	978,595	995,269	16,674	1.7%
Current Year Surplus (Deficit)	-28,458	35,420	0	0		
Transfer to R&R	0	0	0	0		
Prior Year Surplus	256,136	227,678	256,136	259,019		
Accumulated Surplus	227,678	263,098	256,136	259,019		

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:



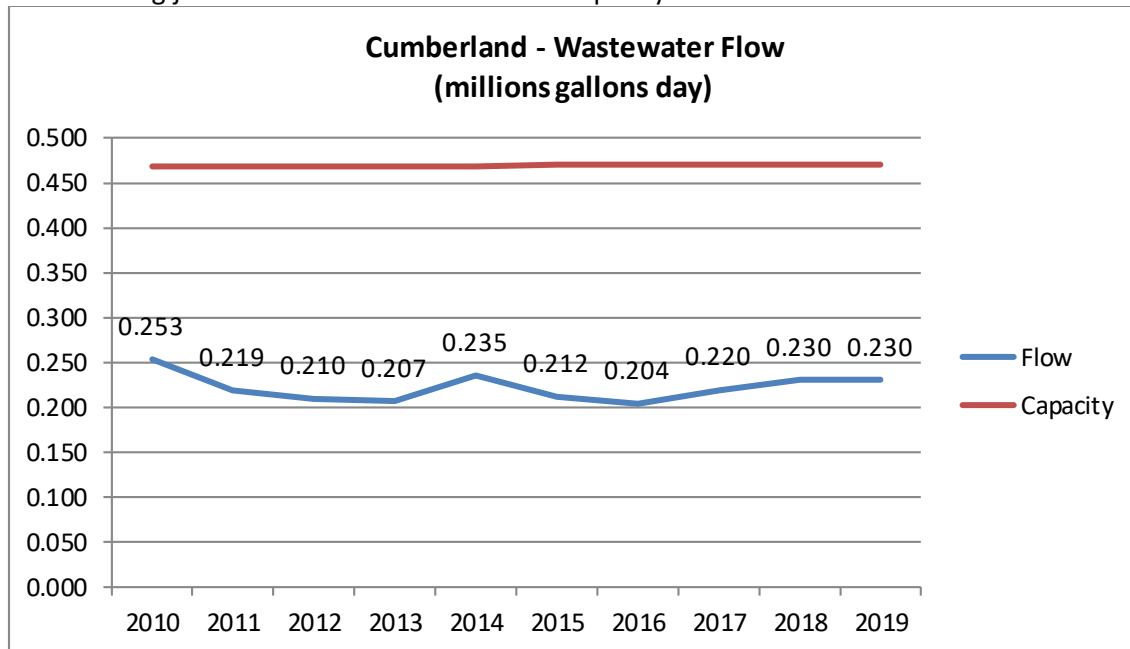
Operation Summary

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

Year	Cumberland Flow	Falmouth WWTF Flow	% Cumberland Flow
2019	0.23 mgd	0.95 mgd	19%

FWWTF Capacity	Cumberland Cap (30%)	% Capacity Used	Capacity Remaining
1.56 mgd	0.468 mgd	49%	0.24 mgd

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



Wastewater Conveyance – collectors, interceptors and pumping stations

Parameter	2020 Actual to Sept	2021 Projected
Preventive Work Orders	246	185
Corrective Work Orders	11	15
Wet wells cleaned	29	40
Debris removed (tons)	53.4	40
Dry Weather Overflows	2	0

Operation Summary (continued)

2020 Other Highlights

- All pump stations are continuously monitored with our SCADA system and dispatch service. Operations staff visit each station on a weekly basis.
- The Asset Management Program continues to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis unless experience dictates otherwise.
- A flow meter was installed on Route 1. Along with the Route 88 meter, this meter measures all flows to the Falmouth system. These flow monitors have increased the accuracy of flows sent to Falmouth and have aided in the sizing of pump stations, such as the Mill Creek Pump Station.

2021 Work Plan

- The Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis unless experience dictates otherwise.

Capital Summary

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

Expenditures by CIP Year:

2021 CIP

Projects:

WW Collection & Pumping

Pump Station R&R - 3136	\$ 20,000
Harris Road Culvert R&R -3242	\$ 100,000
Total by CIP Year	<u>\$ 120,000</u>

Source of Funds:

	<u>Regular</u>	<u>Contracted</u>
	<u>R&R Fund</u>	<u>R&R Fund</u>
Beginning Balance	\$ 221,862	\$ 21,750
2021 Contribution	\$ 40,000	\$ 30,000
Total R&R Balance Available	<u>\$ 261,862</u>	<u>\$ 51,750</u>
Projects:		
WW Collection & Pumping		
Pump Station R&R - 3136	\$ 20,000	\$ -
Harris Road Culvert R&R -3242	\$ 100,000	
WW Treatment		
Town of Falmouth - estimated expenses	\$ -	\$ 29,250
Total	<u>\$ 120,000</u>	<u>\$ 29,250</u>
Ending Balance	<u>\$ 141,862</u>	<u>\$ 22,500</u>

Projections for Rate-Making Purposes

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

Major Assumptions:

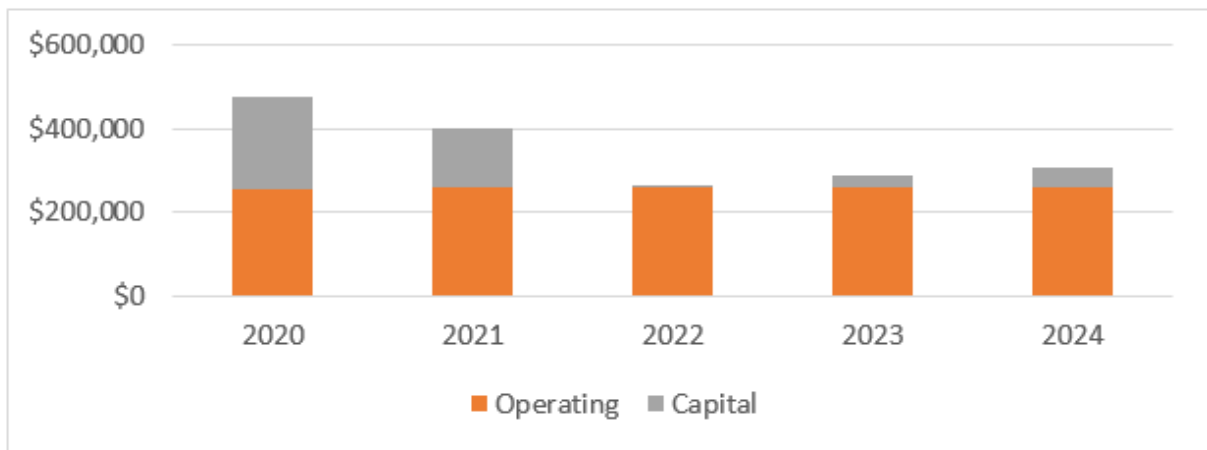
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Other expenses increase of 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life of 2.5% interest.

Summary of Projection Impact:

Assessment is projected to increase to \$1,033,802 in 2024, a 4.5% increase over 2021 Budget, with the most significant cost change related to debt service issued to finance capital projects. Operating Ratios are better than target and Operating Reserve balance and Capital R&R balance are below the target balances.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
33%	34%	31%	30%	31%	30%	30%

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

2018	2019	2020	2021	2022	2023	2024
103%	119%	128%	128%	126%	125%	126%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Assessment Income	965,292	989,268	1,009,089	1,025,369	1,033,802
Interest Income	13,303	6,001	6,001	6,001	6,001
Total Revenues	978,595	995,269	1,015,090	1,031,370	1,039,803
Operating Expenses:					
Salaries & Wages	70,672	72,811	74,267	75,752	77,267
Employee Benefits	31,926	33,548	35,225	36,986	38,835
Contracted Services	237,197	241,660	245,285	248,964	252,698
Deferred Cost W/O	0	0	0	0	0
Heat/Fuel Oil	332	332	337	342	347
Insurance	3,232	3,436	3,488	3,540	3,593
Materials & Supplies	7,750	12,050	12,231	12,414	12,600
Other Expense	0	0	0	0	0
Purchased Power	26,668	27,497	27,497	27,497	27,497
Tele/Other Utilities	2,160	2,370	2,406	2,442	2,479
Transportation	22,647	21,335	21,655	21,980	22,310
SS - Administration	114,257	117,843	120,936	124,111	127,369
SS - Engineering Services	34,079	37,893	38,878	39,889	40,926
SS - Wastewater Services	37,100	38,669	39,684	40,726	41,795
SS - Water Services	1,553	1,668	2,212	2,270	2,330
	589,573	611,112	624,101	636,913	650,046
Debt Service	303,578	300,121	306,953	310,421	305,721
Renewal & Replacement - Direct	40,000	40,000	40,000	40,000	40,000
Renewal & Replace - Indirect	45,444	44,036	44,036	44,036	44,036
Capital Finance Expense	389,022	384,157	390,989	394,457	389,757
Total Operating Expenses	978,595	995,269	1,015,090	1,031,370	1,039,803
Current Year Surplus(Deficit)	0	0	0	0	0
Prior Year Surplus	256,136	259,019	259,019	259,019	259,019
Accumulated Surplus	256,136	259,019	259,019	259,019	259,019
Target Balance(25% of budget)	244,649	248,817	253,773	257,843	259,951
Above/(Below)	11,487	10,202	5,246	1,176	-932

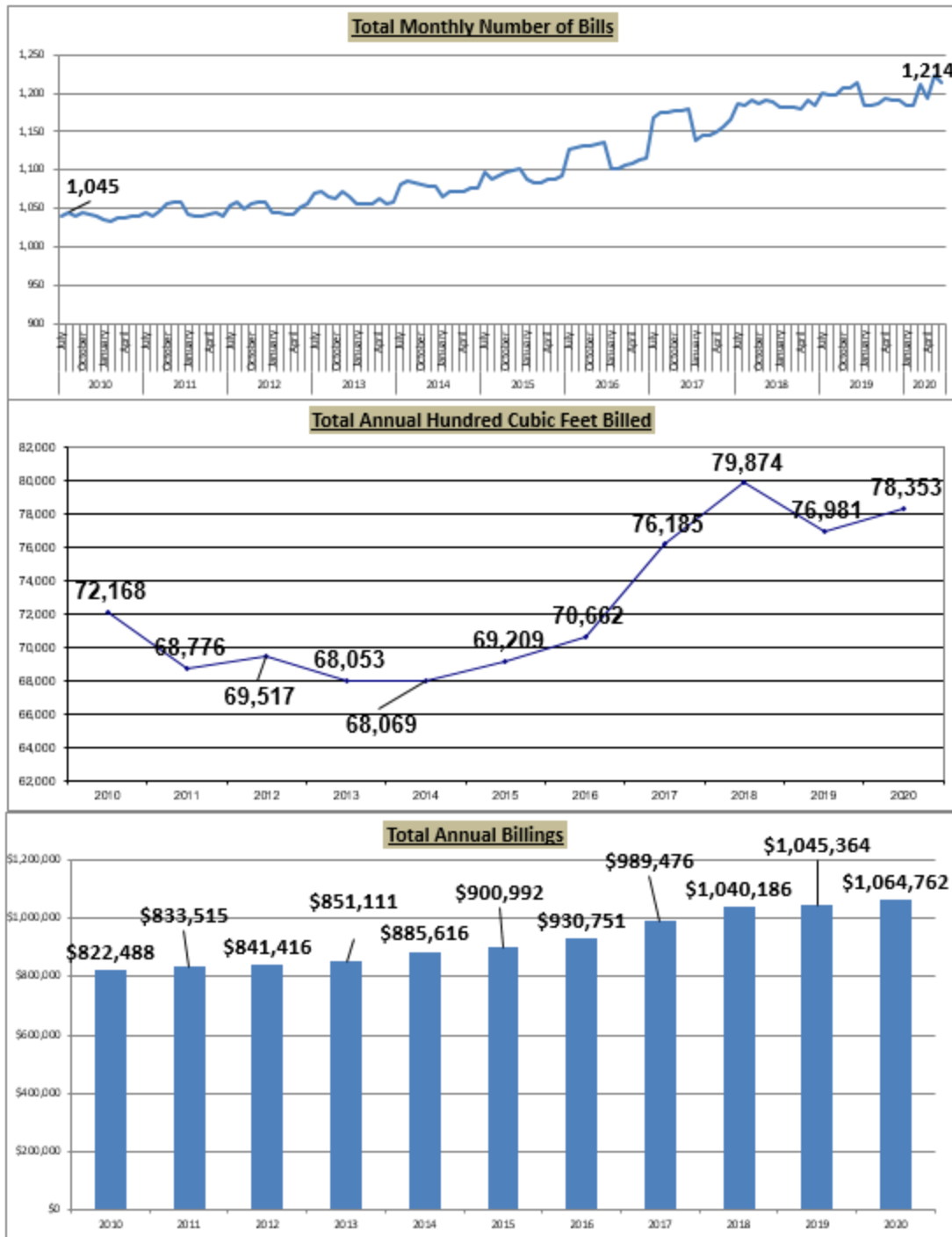
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$440,000

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
	<u>Budget</u>	<u>Forecast</u>	<u>Forecast</u>	<u>Forecast</u>
R&R Balance BOY	\$ 221,862	\$ 141,862	\$ 6,862	\$ 26,862
Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Withdrawals	\$ (120,000)	\$ (175,000)	\$ (20,000)	\$ (20,000)
R&R Balance EOY	\$ 141,862	\$ 6,862	\$ 26,862	\$ 46,862

Sewer Billing Statistics

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

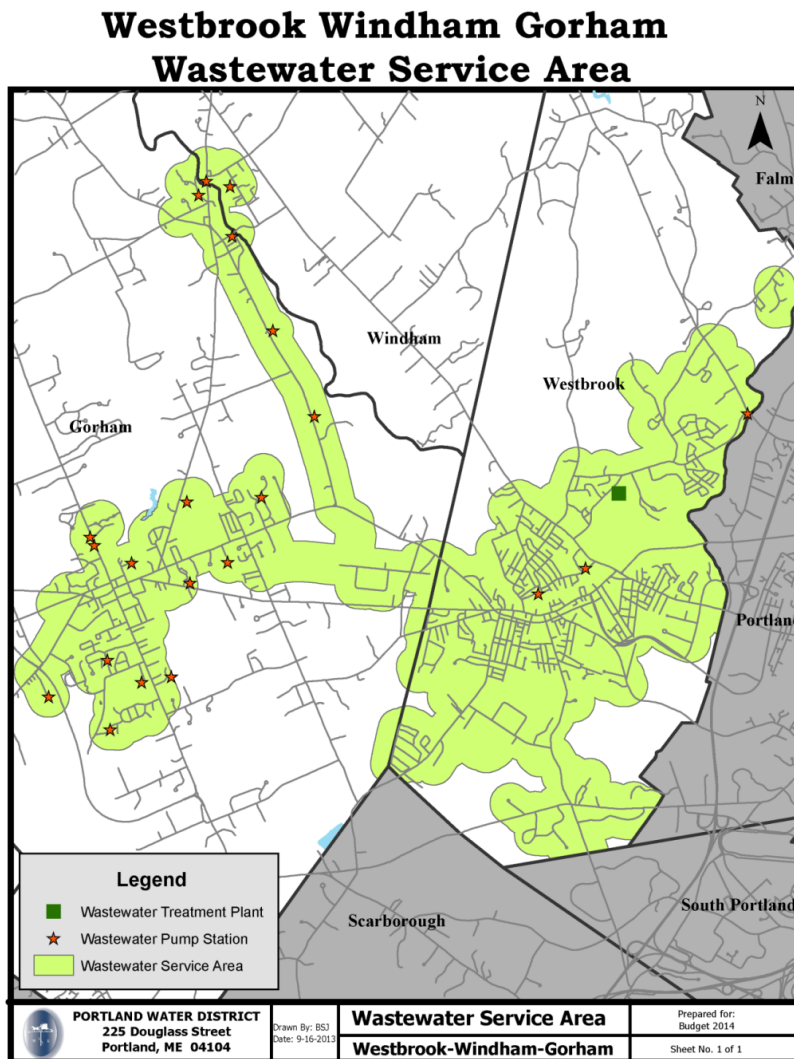
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater - Gorham

Background

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



Summary of Services

Provided:

Treatment

0.471 million
gallons/day

Collection System

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

Utility Billing

Annual Billings of
\$1,179,771 for 1,909
Customers (avg.
\$51.50/month)

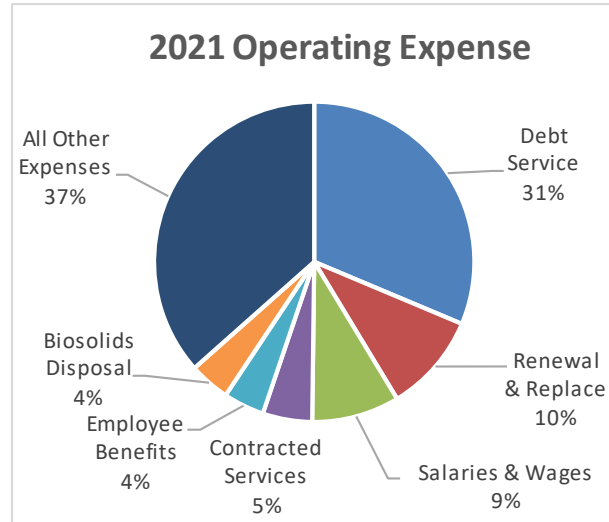
Fund: Wastewater - Gorham

2021 Financial Summary

The proposed assessment is \$1,188,840; this is a 2.4% increase over the prior year and is less than the forecasted assessment provided to the town last year.

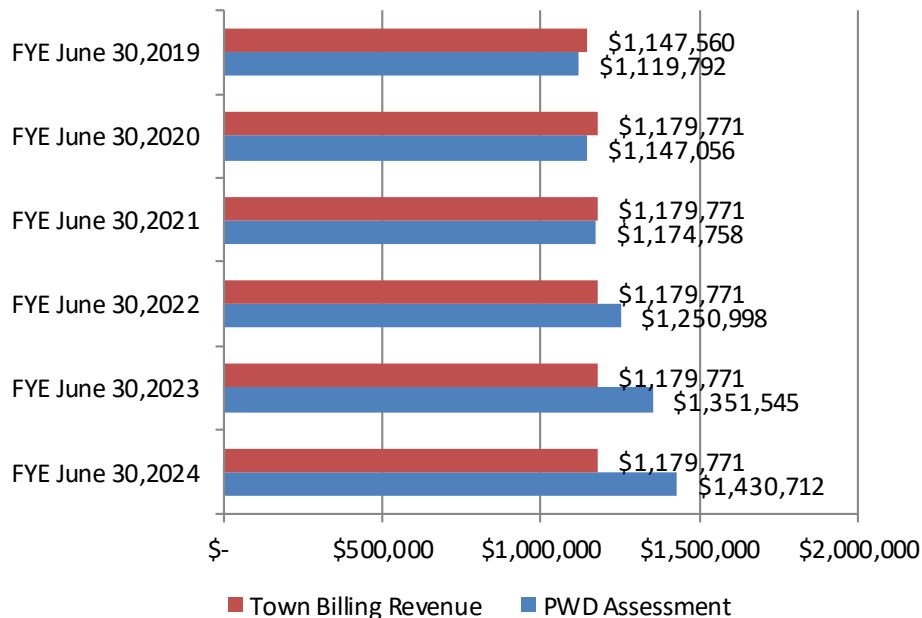
The proposed 2021 Operating Expense and Capital budgets are \$1,200,837 and \$135,500, respectively.

The Operating Expense budget increase is \$21,706 or 1.8%. Much of the Fund’s expense comes from joint use facilities with Westbrook and Windham. Gorham’s percentage of the wastewater flows were the same as 2020 for Westbrook but down 2.0% within the Little Falls area. The primary Capital project is improving the influent screening at the Cottage Place wastewater pump station. Gorham’s portion of this is \$61,600.



Assessment Compared to Ratepayers’ Billing

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



Revenue Assumptions:

- Consumption is the 12 months ending June 30, 2019

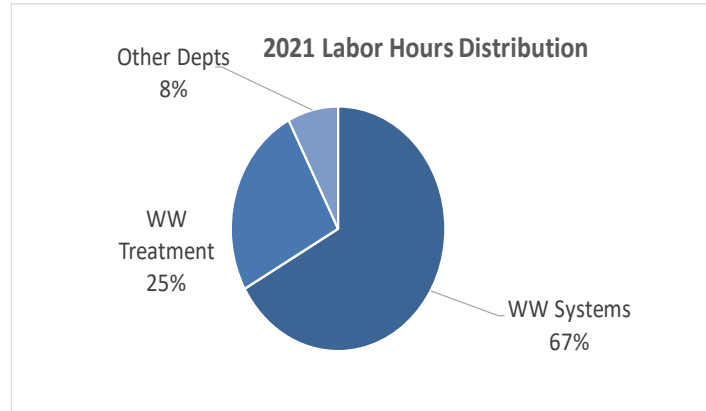
- Rates Assumed:

Effective Date:	Base/Per HCF
Nov 2006	\$13.74/6.29

No change in rates since 11/1/2006.

2021 Operating Expense Highlights

Salaries/Wages – The budget for salaries and wages is related to the labor required to deliver wastewater services. Treatment plant costs are allocated based on flows. The budget decreased \$1,429 (1.3%) to \$106,448. The average wage rate increased 2.8% but labor hours had a small decrease (111 hours).



Employee Benefits – The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses. Because of the decreased labor hours, employee benefits expense increased only \$900 (1.8%).

Biosolids Disposal – Biosolids expense at the Westbrook/Gorham/Windham Regional WWTF is projected to increase 26.7% due to an estimated increase in the disposal cost from \$71.05 to \$90.00/wet ton. The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. The volume disposed is expected to remain unchanged. Biosolids expense for Gorham is projected to increase \$10,417. Gorham's share of allocated treatment costs remained at 13.0%.

Contracted Services – The budget for snow removal was decreased \$4,579 to better reflect actual cost. The annual grit removal from the treatment plant was taken out of the 2021 Budget as this will be done as part of the upcoming aeration capital project. Overall, the expense was down \$6,452 (9.7%)

Purchased Power – This budget increased by \$830 (1.8%). Wastewater pump stations for Gorham only and joint Little Falls saw effective T&D rate increases of around 7%. Usage also increased 2,930 kWh and 5,944 kWh, respectively. Savings from reduced demand at Cottage Place PS and the Westbrook Regional WWTF offset these additional costs. A 3% assumption is included for future CMP rate changes.

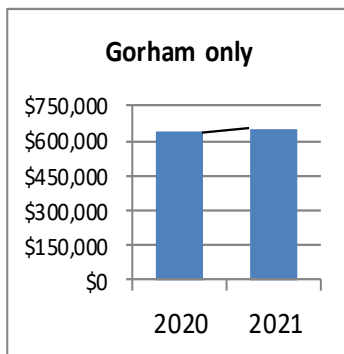
Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$7,190 or 2.3%.

The costs associated with Wastewater increased \$3,430 (5.4%) due to annual labor rate increase and higher employee benefit costs.

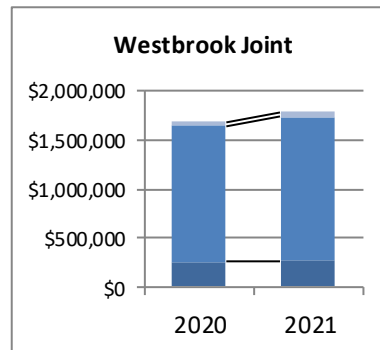
Debt Service - The annual principal and interest payments on bonds issued to finance capital projects. This item decreased 0.6% (\$2,288) to the decline in the outstanding bond balance.

Renewal & Replacement - Dollars put aside to fund smaller capital projects. A contribution of \$120,156 will be made in 2021.

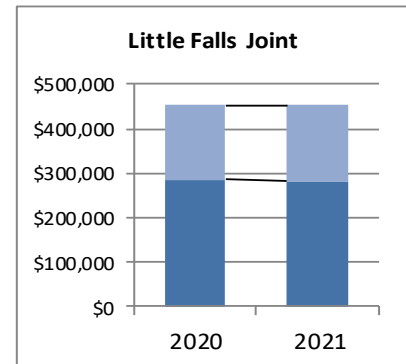
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$1,133,436	\$580,338	\$1,160,676	\$1,188,840	\$28,164	2.4%
Interest Income	43,185	22,904	18,455	11,997	-6,458	-35.0%
Other Income	119	318	0	0	0	n/a
Total Revenue	1,176,740	603,560	1,179,131	1,200,837	21,706	1.8%
Salaries & Wages	88,803	42,139	107,877	106,448	-1,429	-1.3%
Employee Benefits	40,796	19,645	48,712	49,612	900	1.8%
Biosolids Disposal	42,798	23,895	39,062	49,479	10,417	26.7%
Chemicals	20,767	11,047	16,098	17,484	1,386	8.6%
Contracted Services	61,669	20,242	66,482	60,030	-6,452	-9.7%
Heat/Fuel Oil	9,874	3,868	5,559	5,550	-9	-0.2%
Insurance	1,307	651	1,369	1,417	48	3.5%
Materials & Supplies	24,089	13,708	23,708	25,420	1,712	7.2%
Other Expense	460	680	269	1,019	750	278.8%
Purchased Power	46,568	25,645	45,527	46,357	830	1.8%
Regulatory/Taxes	590	545	585	585	0	0.0%
Tele/Other Utilities	3,094	1,324	3,042	3,172	130	4.3%
Transportation	22,238	7,957	21,642	23,389	1,747	8.1%
SS - Administration	135,205	65,280	145,888	147,850	1,962	1.3%
SS - Engineering Services	43,290	21,414	69,881	71,774	1,893	2.7%
SS - Environmental Services	24,925	13,450	24,891	24,641	-250	-1.0%
SS - Wastewater Services	58,378	36,035	64,093	67,523	3,430	5.4%
SS - Water Services	1,779	642	2,523	2,678	155	6.1%
Operating Expense	626,630	308,167	687,208	704,428	17,220	2.5%
Debt Service & Lease Expense	385,826	182,293	378,541	376,253	-2,288	-0.6%
Renewal & Replacement - Direct	100,000	45,400	90,800	100,000	9,200	10.1%
Renewal & Replace - Indirect	18,316	11,290	22,582	20,156	-2,426	-10.7%
Total Expense	1,130,772	547,150	1,179,131	1,200,837	21,706	1.8%
Current Year Surplus (Deficit)	45,968	56,410	0	0		
Transfer to Renewal/Replacement	-4,287	0	0	0		
Prior Year Surplus	253,102	294,783	294,783	339,048		
Accumulated Surplus	294,783	351,193	294,783	339,048		



Gorham Only – Up 1.9% or \$11.9k to \$650.8k.



WestbrookJT – Expense up 5.8%; Gorham's share of expense unchanged (13.0%), expense up \$13.6k to \$268.5k.



Little Falls JT – Expense down 0.1%, Gorham's share of expense was down (24.5% to 22.5%), fund expense down \$3.8k (1.3%).

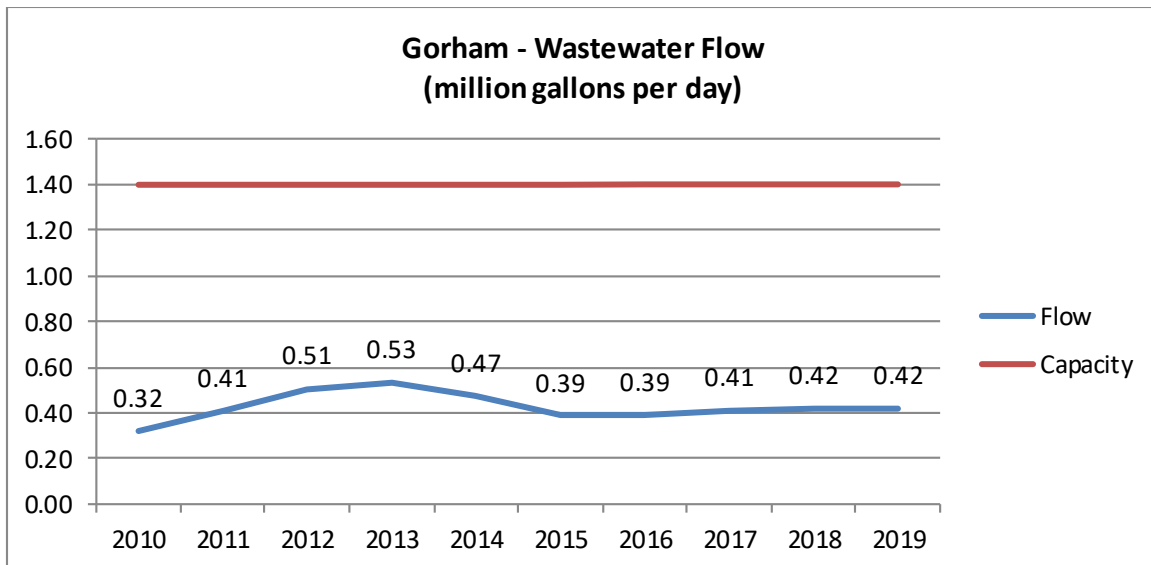
Operation Summary

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	2019 Gorham Flow	Westbrook WWTF Flow	% Gorham Flow
Total Gorham Flow	0.42 mgd	3.15 mgd	14%

WGWWTF Capacity	Gorham Capacity (30.8%)	2019 - % Capacity Used	Capacity Remaining
4.54 mgd	1.398 mgd	30%	0.98 mgd

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



Wastewater Conveyance – interceptors and pumping stations

Parameter	2020 Actual to Sept	2021 Projected
Preventive Work Orders	228	190
Corrective Work Orders	13	20
Wet wells cleaned	27	30
Debris removed (tons)	28.35	35
Dry Weather Overflows	0	0

Operation Summary (continued)

2020 Other Highlights

- The Asset Management Program continued to direct the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- The aeration system at the Westbrook/Gorham/Windham Regional WWTF was evaluated in 2015. Several possible approaches to design of the new system were identified and are dependent on future phosphorus permit limits. The loadings to the treatment facility have increased and are creating some operational challenges and additional costs. Design of the new system was completed in 2020. The construction of the upgraded system, which will take nearly 2 ½ years, will begin in early 2021.
- Recognizing the increased loading at the treatment plant and in anticipation of the aeration system upgrade in 2020, acceptance of septage at the plant has ceased until after the completion of the aeration upgrade. Septage is accepted at the East End WWTF in Portland.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- Emergency generators installed at existing pump stations, and the installation of generators as part of new installations have reduced the need to respond to these critical stations during system power failures, improving the level of service to customers.
- The odor control system at the Mallison Falls Pump Station has worked well since it was installed in the summer of 2012. We have received no odor complaints since its installation. We continue to maintain the system and replace the odor removing media on an annual basis.
- The new dewatering system (screw press) at the treatment facility was installed in 2018. Following an extended start-up, the Operations Team has been able to optimize the equipment and performance of the system has increased dramatically. This resulted in decreased costs related to the management of biosolids produced at the treatment plant.

2021 Work Plan

- The Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- The Gorham radio network enabling SCADA communication (control system) will be upgraded to replace the legacy system.
- The Westbrook/Gorham/Windham Regional WWTF will have major work on a number of process areas, including the dewatering conveyance system, odor control for the sludge storage tank and polymer system additions.
- Construction of the aeration system at the treatment plant will begin in 2021.

Capital Summary

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

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2021 CIP</u>	<u>Total</u>
Projects:			
WW Collection & Pumping			
Gorham Only Pump Station R&R - 3137		\$ 20,000	\$ 20,000
WW Treatment			
<u>Westbrook Treatment Plant</u>			
Aeration & Clarifier Design - 3022 (prorated)	\$ 231,000		\$ 231,000
Aeration & Clarifier Construction - 3023 (prorated)	\$ 3,465,000		\$ 3,465,000
Sludge Storage Odor Control - 3025 (prorated)	\$ 231,000		\$ 231,000
Treatment Plant R&R - 3132 (prorated)		\$ 15,400	\$ 15,400
Influent Screening Cottage Place - 3160 (prorated)		\$ 61,600	\$ 61,600
Biosolids Processing/Disposal Assessment - 3233 (prorated)		\$ 6,160	\$ 6,160
Total by CIP Year	\$ 3,927,000	\$ 103,160	\$ 4,030,160

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue 2021</u>	<u>Bond Issue > 2021</u>	<u>Funding Total</u>
Beginning Balance	\$ 712,600			
2021 Contribution	\$ 100,000			
Total R&R Balance Available	\$ 812,600			
Projects:				
WW Collection & Pumping	\$ 20,000			\$ 20,000
WW Treatment	\$ 83,160	\$ 1,694,000	\$ 2,233,000	\$ 4,010,160
Total	\$ 103,160	\$ 1,694,000	\$ 2,233,000	\$ 4,030,160
Ending Balance	\$ 709,440			

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

Projections for Rate-Making Purposes

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

Major Assumptions:

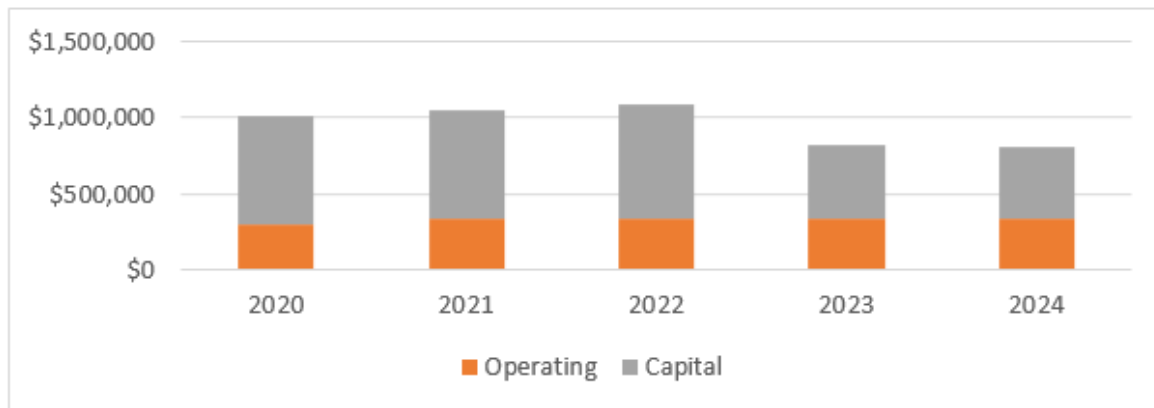
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Biosolids contract expires in 2021; assumed a \$90/wet ton price in 2021 with 1.2% increase in future years. Actual contract renewal price may result in a significant increase.
- Other expenses increase by 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life between 1% and 2.5% interest.

Summary of Projection Impact:

Assessment is projected to increase to \$1,471,489 in 2024, a 24% increase over 2021 Budget, with the most significant cost change related to debt service issued to finance capital projects. Debt Service Ratio is better than target for most years and Operating Reserve balance and Capital R&R balance are below the target balances. Debt Service as percent of budget is higher than target due to significant treatment plant upgrades.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
31%	34%	32%	31%	36%	39%	41%

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

2018	2019	2020	2021	2022	2023	2024
112%	125%	130%	132%	126%	123%	120%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Assessment Income	1,160,676	1,188,840	1,313,155	1,389,934	1,471,489
Interest Income	18,455	11,997	11,997	11,997	11,997
Other Income	0	0	0	0	0
Total Revenues	1,179,131	1,200,837	1,325,152	1,401,931	1,483,486
Operating Expenses:					
Salaries & Wages	107,877	106,448	108,577	110,749	112,964
Employee Benefits	39,062	49,612	52,093	54,698	57,433
Biosolids Disposal	48,712	49,479	50,073	50,674	51,282
Chemicals	16,098	17,484	18,009	18,549	19,105
Contracted Services	66,482	60,030	60,930	61,844	62,772
Deferred Cost W/O	0	0	0	0	0
Heat/Fuel Oil	5,559	5,550	5,633	5,717	5,803
Insurance	1,369	1,417	1,438	1,460	1,482
Materials & Supplies	23,708	25,420	25,801	26,188	26,581
Other Expense	854	1,604	1,628	1,652	1,677
Purchased Power	45,527	46,357	46,357	46,357	46,357
Tele/Other Utilities	3,042	3,172	3,220	3,268	3,317
Transportation	21,642	23,389	23,740	24,096	24,457
SS - Administration	145,888	147,850	151,731	155,714	159,801
SS - Engineering Services	69,881	71,774	73,640	75,555	77,519
SS - Environmental Services	24,891	24,641	25,288	25,952	26,633
SS - Wastewater Services	64,093	67,523	75,295	71,271	73,142
SS - Water Services	2,523	2,678	3,548	3,641	3,737
	687,208	704,428	727,001	737,385	754,062
Debt Service	378,541	376,253	474,574	540,969	605,847
Renewal & Replacement - Direct	90,800	100,000	100,000	100,000	100,000
Renewal & Replace - Indirect	22,582	20,156	23,577	23,577	23,577
Capital Finance Expense	491,923	496,409	598,151	664,546	729,424
Total Operating Expenses	1,179,131	1,200,837	1,325,152	1,401,931	1,483,486
Current Year Surplus/(Deficit)	0	0	0	0	0
Prior Year Surplus	294,783	339,048	339,048	339,048	339,048
Accumulated Surplus	294,783	339,048	339,048	339,048	339,048
Target Balance(25% of budget)	294,783	300,209	331,288	350,483	370,872
Above/(Below)	0	38,839	7,760	-11,435	-31,824

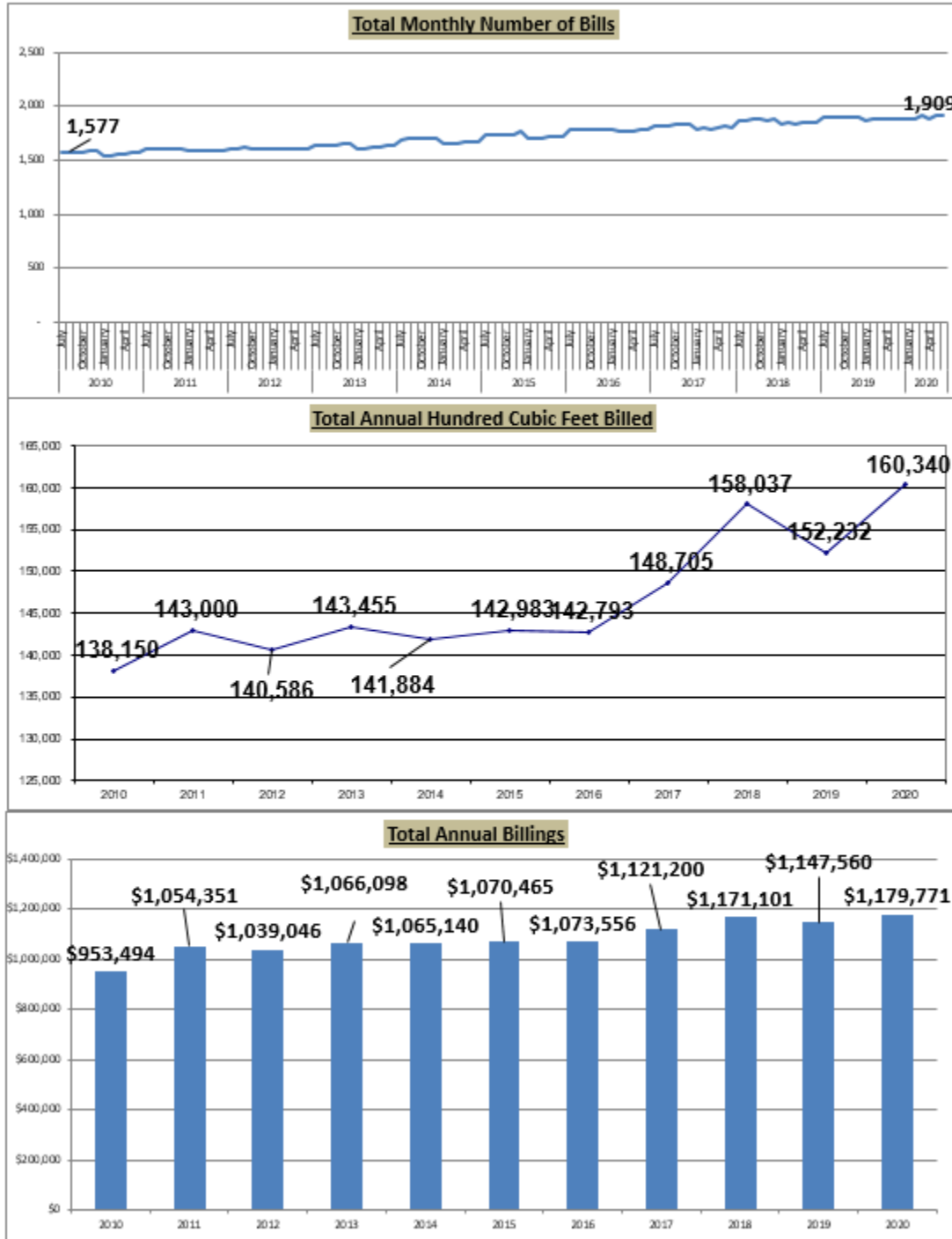
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$894,000

	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
R&R Balance BOY	\$ 712,600	\$ 709,440	\$ 743,240	\$ 477,840
Contribution	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Withdrawals	\$ (103,160)	\$ (66,200)	\$ (365,400)	\$ (104,700)
R&R Balance EOY	\$ 709,440	\$ 743,240	\$ 477,840	\$ 473,140

Sewer Billing Statistics

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

By Municipal Fiscal Year: Jul 1 to Jun 30

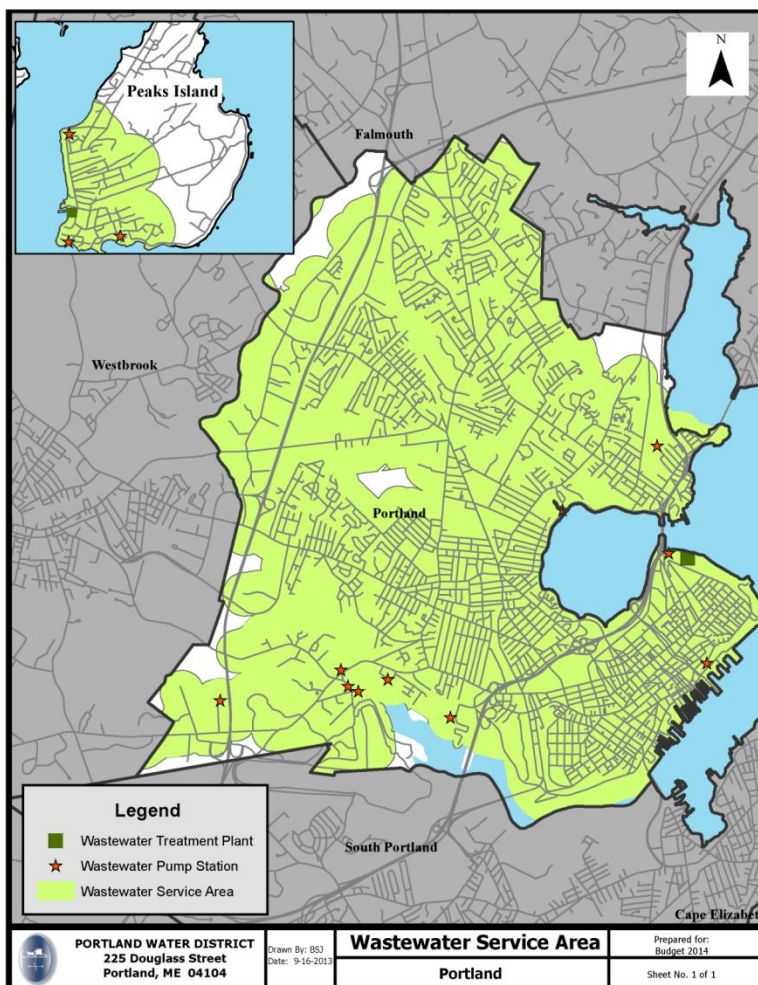


Fund: Wastewater - Portland

Background

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

Portland Wastewater Service Area



Summary of Services

Provided:

Treatment

Mainland: 18.07 million gallons/day

Peaks Island: 0.104 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
\$24,823,931 on 17,174
Customers (avg.
\$120.45/month)

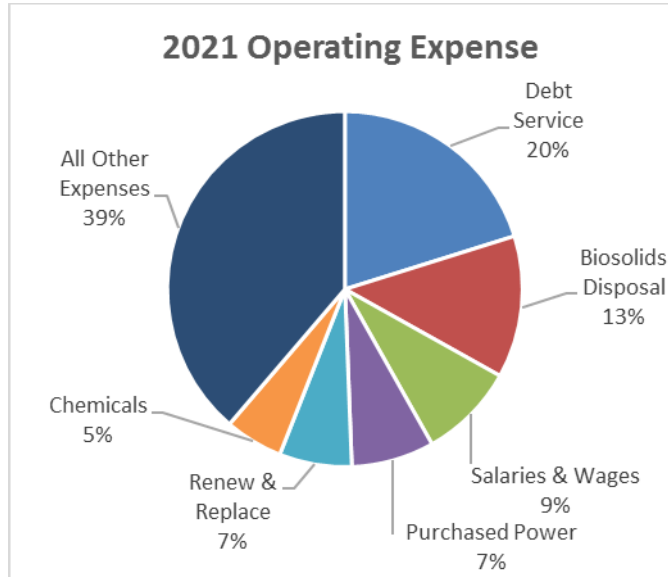
Fund: Wastewater - Portland

2021 Financial Summary

The city’s assessment will increase 4.5% or \$578,604 to \$13,441,944.

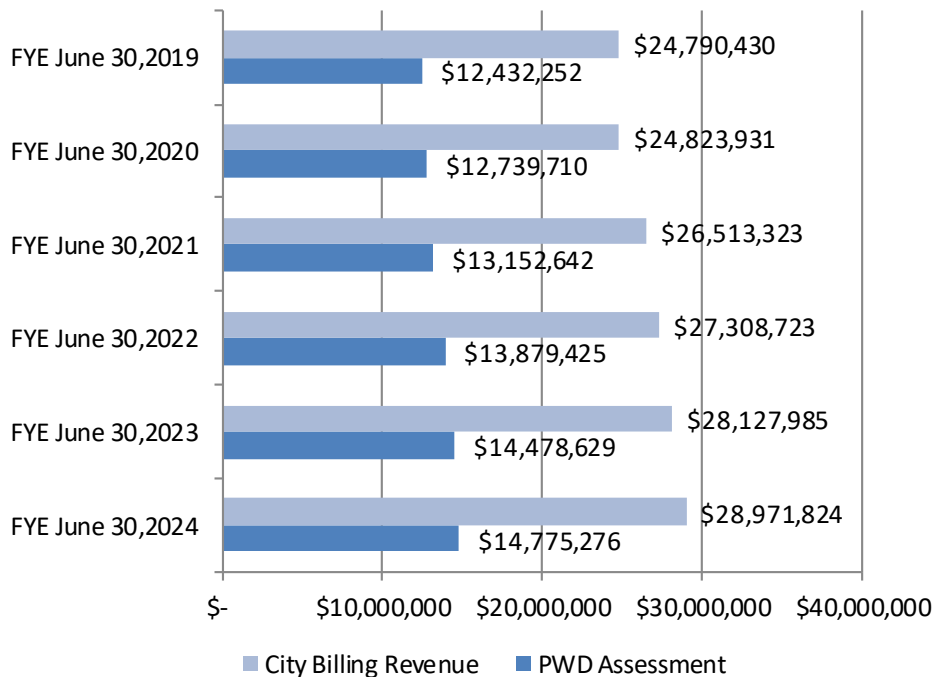
The proposed 2021 Operating Expense and Capital budgets are \$13,711,947 and \$2,460,000, respectively.

The Operating Expense budget is \$484,103 or 3.7%, higher than the previous year. Departmental expense increased by \$637,137 or 6.8%. Debt service increased \$257,831 (10.3%) and renewal & replacement (direct and indirect) will decrease \$410,865 to \$906,148. One focus of the Capital Plan is to upgrade the Garrison St. and Congress St. wastewater pump stations with a budget of \$1,500,000.



Assessment Compared to Ratepayers’ Billing

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



Revenue Assumptions:	
-	Consumption is the 12 months ending June 30, 2019
-	Rates Assumed:
Effective Date:	Base/Per HCF
Jul 1 2013	\$8.35
Jul 1 2014	\$8.81
Jul 1 2015	\$9.70
Jan 1 2016	\$8.20
Jan 1 2017	\$9.35
Jul 1 2017	\$9.65
Jul 1 2018	\$9.95
Jul 1 2019	\$10.40
Dec 1 2020	\$11.15
Assumed 3% increase in July 2021 to 2024.	

2021 Operating Expense Highlights

Salaries/Wages – Budgeted expenses increased 1.4% or \$16,361 to \$1,199,329. District labor rates increased an average of 2.8% while hours for this fund decreased 1.3% or 572 hours.

Employee Benefits – The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses. Overall, Employee Benefits expense increased 5.7% (\$29,585) due to less labor time allocated to Portland.

Biosolids Disposal – Biosolids expense at Portland’s East End WWTF is projected to increase 26.7% due to an estimated increase in the disposal cost from \$71.05 to \$90.00/wet ton. The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids.

The volume disposed is expected to remain unchanged. Total biosolids expense for Portland is budgeted to increase \$373,454.

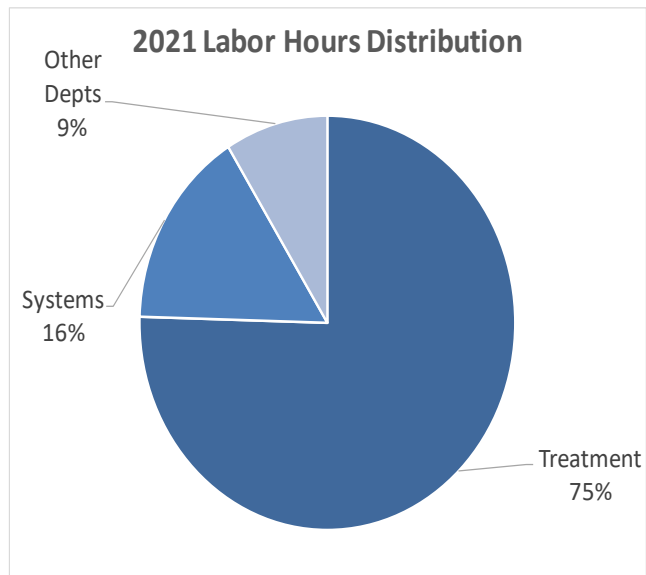
Chemicals – Overall, this category is up \$81,785 or 12.7%. This is mainly due to the 25% projected increase in the per unit cost of sodium hypochlorite (usage is projected to be unchanged) at the East End WWTF.

Heat/Fuel Oil – The majority of this category is pipeline delivered natural gas and container delivered propane at the East End WWTF. This budget decreased \$45,019 (28.9%) primarily due to projected reductions in the per unit cost of natural gas.

Purchased Power – Power is expected to decrease 2.7% (\$28,445). Portland accounts saw effective T&D rate increases between 1.6% - 7.8%. Overall reduced demand helped to offset some of these additional costs. However, the majority of the savings came by moving from our prior energy contract to a fixed rate that includes capacity and retail costs. This fixed rate of \$0.0618 applies to the East End WWTF and India St. pump station. A 3% assumption is also included for potential CMP rate changes in Summer 2021.

Telephone & Other Utilities – The budget increased \$14,184 (12.4%). Most of this increase is related to the approximately \$12,000 increase in data lines expense to support the new 100 megabits per second (mbps) optical fiber data line at the East End WWTF.

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. The combined Support Services costs increased 5.5% (\$177,010). Most of this increase can be traced to the overall labor rate and benefit cost increases in 2021. The higher overall increase in Environmental Services has to do with a shift in hours with the Wastewater Laboratory towards the Portland fund.



Debt Service – This is the annual principal and interest payments on bonds issued to finance capital projects. The expense will increase \$257,831 (10.3%) with the issuance of bonds to support Fore River WWPS, the East End WWTF HVAC and other projects.

Renewal and Replacement – This is the fund’s annual contribution to finance smaller capital projects. A contribution of \$906,148 will be made in 2021.

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$12,616,080	\$6,431,670	\$12,863,340	\$13,441,944	\$578,604	4.5%
Interest Income	247,678	107,858	164,504	60,003	-104,501	-63.5%
<u>Other Income</u>	<u>383,893</u>	<u>59,719</u>	<u>200,000</u>	<u>210,000</u>	<u>10,000</u>	<u>5.0%</u>
Total Revenue	13,247,651	6,599,247	13,227,844	13,711,947	484,103	3.7%
Salaries & Wages	1,150,110	545,649	1,182,968	1,199,329	16,361	1.4%
Employee Benefits	505,133	244,801	517,308	546,893	29,585	5.7%
Biosolids Disposal	1,468,512	688,127	1,400,356	1,773,810	373,454	26.7%
Chemicals	576,299	285,333	643,416	725,201	81,785	12.7%
Contracted Services	607,415	183,885	629,309	673,096	43,787	7.0%
Heat/Fuel Oil	120,450	54,523	155,721	110,702	-45,019	-28.9%
Insurance	27,510	13,939	29,305	30,666	1,361	4.6%
Materials & Supplies	204,604	116,980	315,500	307,400	-8,100	-2.6%
Other Expense	23,754	-6,868	2,305	-13,795	-16,100	-698.5%
Purchased Power	1,007,337	528,431	1,061,804	1,033,359	-28,445	-2.7%
Regulatory/Taxes	14,143	1,638	34,850	36,350	1,500	4.3%
Tele/Other Utilities	132,524	61,547	114,435	128,619	14,184	12.4%
Transportation	62,518	20,802	85,017	80,791	-4,226	-5.0%
SS - Administration	1,375,602	670,744	1,500,284	1,564,063	63,779	4.3%
SS - Engineering Services	309,067	153,889	487,739	513,993	26,254	5.4%
SS - Environmental Services	308,174	131,048	268,210	299,313	31,103	11.6%
SS - Wastewater Services	1,018,089	529,692	947,233	1,002,105	54,872	5.8%
<u>SS - Water Services</u>	<u>19,604</u>	<u>7,086</u>	<u>27,836</u>	<u>28,838</u>	<u>1,002</u>	<u>3.6%</u>
Operating Expense	8,930,845	4,231,246	9,403,596	10,040,733	637,137	6.8%
Debt Service & Lease Expense	2,518,279	1,213,782	2,507,235	2,765,066	257,831	10.3%
Renewal & Replacement - Direct	900,000	545,000	1,090,000	700,000	-390,000	-35.8%
<u>Renewal & Replace - Indirect</u>	<u>186,729</u>	<u>113,508</u>	<u>227,013</u>	<u>206,148</u>	<u>-20,865</u>	<u>-9.2%</u>
Total Expense	12,535,853	6,103,536	13,227,844	13,711,947	484,103	3.7%
Current Year Surplus (Deficit)	711,798	495,711	0	0		
Transfer to R&R	-125,000	0	0	0		
Return of Accumulated Surplus	0	-495,846	0	0		
<u>Prior Year Surplus</u>	<u>3,216,009</u>	<u>3,802,807</u>	<u>3,498,825</u>	<u>3,848,794</u>		
Accumulated Surplus	3,802,807	3,802,672	3,498,825	3,848,794		

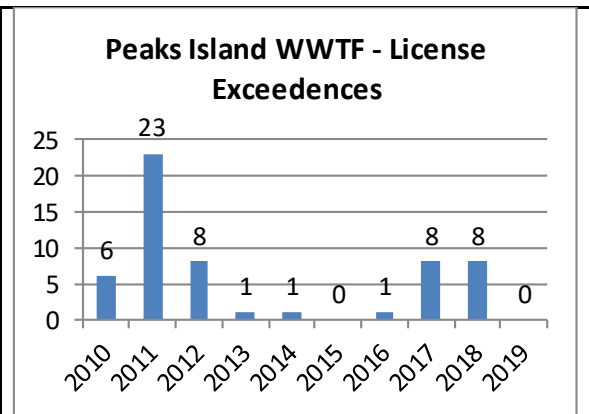
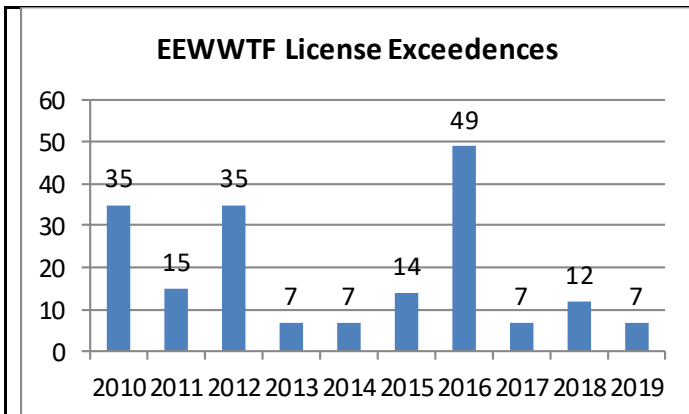
Operation Summary

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	2019 Facility Avg	2019 - % Capacity Used
Flow (million gallons per day)	19.8 mgd	14.90 mgd	75%
Biosolids Removed (wet tons/month)	N/A	1,793 wt/month	

Effluent Permit Requirements:

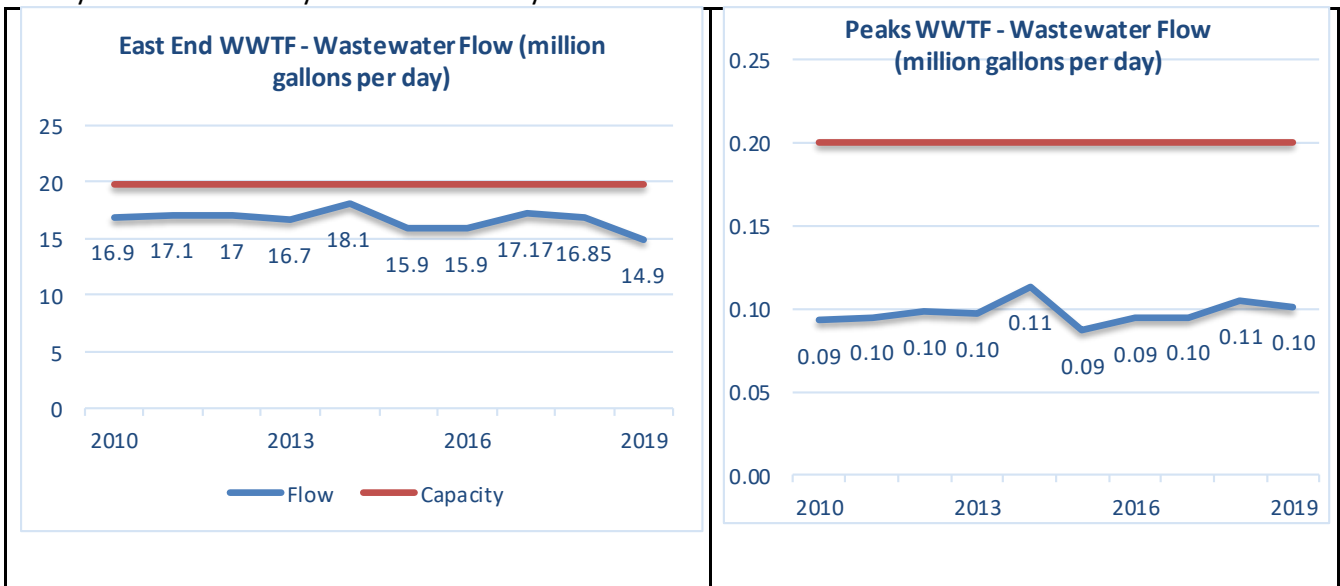
Parameter	Discussion
Biological Oxygen Demand (BOD)	Measure of organic material and the strength of pollution. The treatment plant removed 97% of the BOD; well above the required 85% removal. This is an increase in pollution removal efficiency and is related to the new diffused aeration system that was constructed over the past several years.
Total Suspended Solids (TSS)	Measure of suspended material in the incoming wastewater; also the strength of pollution. The treatment plant removed 97% of the TSS, well above the required 85% removal. This is an increase in pollution removal efficiency and is related to the new diffused aeration system that was constructed over the past several years.
Total Residual Chlorine	Used for disinfecting the treated effluent, chlorine must be removed before the effluent is discharged. The permit limit was met at all times.
Fecal Coliform Bacteria	Following disinfection with chlorine, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.
Effluent Nitrogen	Nitrogen is considered a pollutant that can contribute to water quality issues. The new 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. To date in 2020, the plant has demonstrated nearly 75% reduction in effluent nitrogen loading from historic levels from May to September. This is comparable to (but slightly higher) than the levels achieved in the past few years.



Operation Summary (continued)

The 5-year permit issued in 2017 asked PWD to submit an annual “nutrient optimization” report that includes effluent nitrogen results and our efforts to manage nitrogen. The new aeration system is anticipated to be able to achieve a 20 – 40% reduction in effluent nitrogen levels. The plant has demonstrated around a 70% reduction in effluent nitrogen loading from historic levels from May to September over the past few years. In 2020, the plant demonstrated a 75% seasonal reduction.

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 plants. 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	2020 Actual to Sept	2021 Projected
Preventive Work Orders	171	200
Corrective Work Orders	17	50
Wet wells cleaned	6	15
Debris removed (tons)	12.34	15
Dry Weather Overflows	2	0

Operation Summary (continued)

2020 Other Highlights

- Odor complaints related to the East End treatment plant have decreased due to the new aeration system, a new odor control unit at the Northeast Pump Station, and ongoing operational and maintenance efforts on existing plant odor control systems.
- Monthly CSO activities continue to be monitored and reported by PWD for regular distribution to stakeholders. Sites are continuously monitored by web-based software. In 2016, many of these decade-old units had reached the end of their service life and were replaced with newer models. This should ensure that the monitors continue to provide monitoring and alarming of CSO sites for the next 10 years.
- The diffused aeration system construction was completed in the summer of 2017. This system has had several operational benefits, including: improved sludge settleability, reduced odors from the aeration system, and the ability to attempt nutrient optimization in the warmer months. Treatment efficiency has improved as well, with an average of 96% of pollution removed by the facility.
- The aeration system has allowed the East End facility to manage nitrogen in the warmer months. To date in 2020, the seasonal loading has been reduced by 75% from historical levels. We worked with the supplier of an effluent nitrogen analyzer and the unit has reliably measured nitrogen levels in the effluent.
- The Fore River Pump Station Upgrade began in 2015 and design of the final phase was completed in 2019.
- Design of an upgrade to the Baxter Blvd. pump station was completed and construction will coincide with the City's CSO work.
- PWD has participated as a member of the City of Portland's Integrated Planning Team. This effort reviewed permitting and compliance obligations associated with the City's collection system, the City's stormwater system, and the Portland Water District's facilities.
- The second and third of three primary clarifiers were refurbished in 2020.

2021 Work Plan

- The Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders.
- The electrical master plan and HVAC evaluations were completed in 2017. These assessments resulted in a long-range plan for the replacement and refurbishment of these critical support systems. The upgrade of the plant's electrical distribution system will begin in 2021.
- The City of Portland has embarked on a two-year Integrated Planning effort to prioritize water quality commitments. This effort will assess combined sewer, stormwater, and wastewater treatment obligations and prioritize the use of resources to address the various efforts with a goal of improving receiving water quality. PWD remains engaged as a partner in this ongoing effort.
- An assessment of long-term biosolids management options will be completed in 2021. Contaminants of emerging concern, like PFAS, and instability in the solid waste management systems in Maine have created significant instability. This assessment will help determine future approaches to manage biosolids.
- The backbone of the radio monitoring and control network (SCADA) will be replaced in 2021. Reliable communication from the network of pump stations and our treatment plants is a critical component of our operations.
- Construction of bypass options in the headworks and our plant's effluent will further enhance reliability and allow for regular maintenance of related equipment to be more easily completed and managed.

Capital Summary

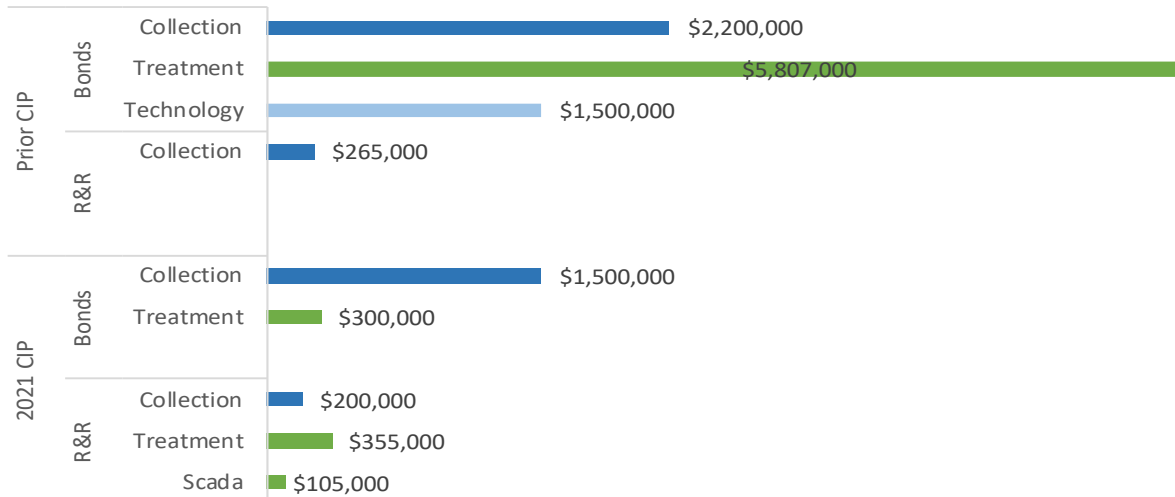
A five-year capital plan is updated each year. The projects are prioritized based on operational needs and financing availability. The table below indicates the projects scheduled for the next fiscal year and the funding source of those projects. Detailed descriptions of the projects can be found in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

Expenditures by CIP Year:

Projects:	Prior CIP	2021 CIP	Total
SCADA & Technology	\$ 1,500,000	\$ 105,000	\$ 1,605,000
WW Collection & Pumping	\$ 2,200,000	\$ 1,700,000	\$ 3,900,000
WW Treatment	\$ 5,807,000	\$ 655,000	\$ 6,462,000
Total by CIP Year	\$ 9,507,000	\$ 2,460,000	\$ 11,967,000

Source of Funds:

	R&R Fund	Bond Issue 2021	Bond Issue > 2021	Total Funding
Beginning Balance	\$4,481,417			
2021 Contribution	\$ 700,000			
Total R&R Balance Available	\$5,181,417			
Projects:				
SCADA & Technology	\$ 105,000	\$ 1,500,000		\$ 1,605,000
WW Collection & Pumping	\$ 200,000		\$ 3,700,000	\$ 3,900,000
WW Treatment	\$ 355,000	\$ 1,535,000	\$ 4,572,000	\$ 6,462,000
Total	\$ 660,000	\$ 3,035,000	\$ 8,272,000	\$ 11,967,000
Ending Balance	\$4,521,417			



Capital Summary (continued)**Projects:**

	<u>R&R Fund</u>	<u>Future Bond</u>	<u>Funding Total</u>	<u>Bond Issue Year</u>
SCADA & Technology				
Asset, Billing, Customer Relations System - 2542		\$ 1,500,000	\$ 1,500,000	2021
SCADA Radio Modem Replacement - 3125 (prorated)	\$ 105,000		\$ 105,000	
WW Collection & Pumping				
Portland Pump Station R&R - 3135	\$ 50,000		\$ 50,000	
Baxter Blvd PS Upgrades Design - 3144		\$ 250,000	\$ 250,000	2023
Baxter Blvd PS Construction - 3143		\$ 1,950,000	\$ 1,950,000	2023
Garrison St PS Upgrade to Submersible - 3184		\$ 750,000	\$ 750,000	2022
Congress St PS Upgrade to Submersible - 3185		\$ 750,000	\$ 750,000	2022
Forest Park Lane Pipe Rehabilitation - 3234	\$ 50,000		\$ 50,000	
Northeast PS VFD #1 Installation - 3235	\$ 100,000		\$ 100,000	
WW Treatment				
<u>East End Treatment Facility</u>				
Influent Screen, Effluent Meter, Piping - 2046		\$ 960,000	\$ 960,000	2021
Power Upgrade - 2711, 3010, 3014 (less emergency repairs)		\$ 4,272,000	\$ 4,272,000	2022
HVAC Upgrades 3rd Floor - 3017		\$ 575,000	\$ 575,000	2021
Process Gate Automation - 3020	\$ 50,000		\$ 50,000	
East End WWTF R&R - 3133	\$ 75,000		\$ 75,000	
Primary Sludge Handling & Gallery Upg - 3152		\$ 300,000	\$ 300,000	2022
Biosolids Processing/Disposal Assessment - 3233	\$ 80,000		\$ 80,000	
Replace Power Feed: Chlor/Dechlor - 3236	\$ 100,000		\$ 100,000	
<u>Peaks Island Treatment Facility</u>				
Peaks Island R&R - 3131	\$ 20,000		\$ 20,000	
SBR B Influent Valve Replacement - 3194	\$ 30,000		\$ 30,000	
Total	\$ 660,000	\$ 11,307,000	\$ 11,967,000	

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

Projections for Rate-Making Purposes

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

Major Assumptions:

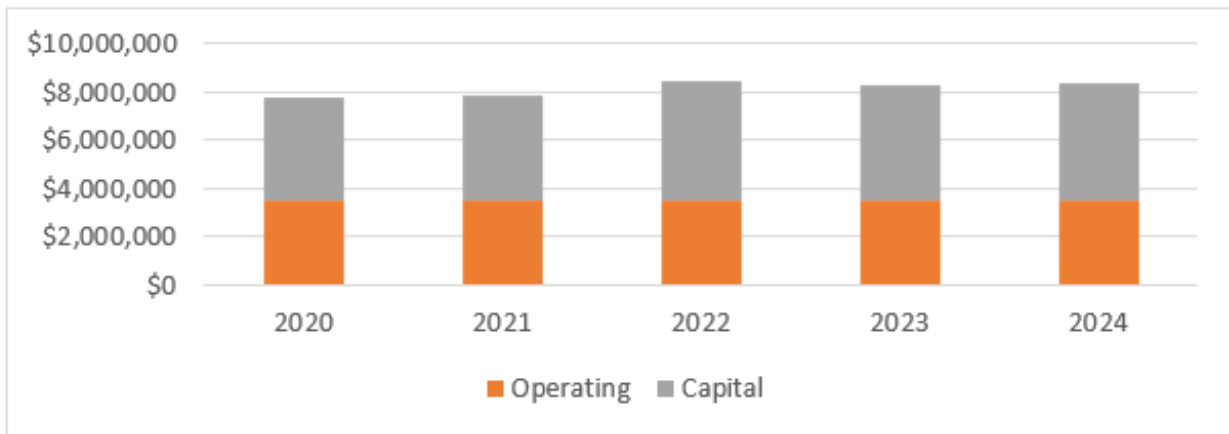
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Biosolids contract expires in 2021; assumed a \$90/wet ton price in 2021 with 1.2% increase in future years. Actual contract renewal price may result in a significant increase.
- Other expenses increase by 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life between 1% and 2.5% interest.

Summary of Projection Impact:

Assessment is projected to increase to \$14,910,200 in 2024, an 11% increase over 2021 Budget, with the most significant cost change related to debt service issued to finance capital projects. Operating Ratios and Operating Reserve Balance are better than target and Capital R&R balance are below the target balances.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
21%	20%	19%	20%	20%	21%	21%

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

2018	2019	2020	2021	2022	2023	2024
150%	136%	153%	133%	144%	141%	140%

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

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Assessment Income	12,863,340	13,441,944	14,316,905	14,640,352	14,910,200
Interest Income	164,504	60,003	60,003	60,003	60,003
Other Income	200,000	210,000	210,000	210,000	210,000
Total Revenues	13,227,844	13,711,947	14,586,908	14,910,355	15,180,203
Operating Expenses:					
Salaries & Wages	1,182,968	1,199,329	1,223,316	1,247,782	1,272,738
Employee Benefits	517,308	546,893	574,238	602,950	633,098
Biosolids Disposal	1,400,356	1,773,810	1,795,096	1,816,637	1,838,437
Chemicals	643,416	725,201	746,957	769,366	792,447
Contracted Services	629,309	673,096	683,192	693,440	703,842
Heat/Fuel Oil	155,721	110,702	112,363	114,048	115,759
Insurance	29,305	30,666	31,126	31,593	32,067
Materials & Supplies	315,500	307,400	312,011	316,691	321,441
Other Expense	37,155	22,555	22,893	23,236	23,585
Purchased Power	1,061,804	1,033,359	1,033,359	1,033,359	1,033,359
Tele/Other Utilities	114,435	128,619	130,548	132,506	134,494
Transportation	85,017	80,791	82,003	83,233	84,481
SS - Administration	1,500,284	1,564,063	1,605,120	1,647,254	1,690,494
SS - Engineering Services	487,739	513,993	527,357	541,068	555,136
SS - Environmental Services	268,210	299,313	307,170	315,233	323,508
SS - Wastewater Services	947,233	1,002,105	1,118,410	1,067,768	1,095,797
SS - Water Services	27,836	28,838	38,595	39,608	40,648
	9,403,596	10,040,733	10,343,754	10,475,772	10,691,331
Debt Service	2,507,235	2,765,066	2,956,204	3,147,633	3,201,922
Renewal & Replacement - Direct	1,090,000	700,000	1,100,000	1,100,000	1,100,000
Renewal & Replace - Indirect	227,013	206,148	186,950	186,950	186,950
Capital Finance Expense	3,824,248	3,671,214	4,243,154	4,434,583	4,488,872
Total Operating Expenses	13,227,844	13,711,947	14,586,908	14,910,355	15,180,203
Current Year Surplus(Deficit)	0	0	0	0	0
Prior Year Surplus	3,498,825	3,848,794	3,848,794	3,848,794	3,848,794
Accumulated Surplus	3,498,825	3,848,794	3,848,794	3,848,794	3,848,794
Target Balance(25% of budget)	3,306,961	3,427,987	3,646,727	3,727,589	3,795,051
Above/(Below)	191,864	420,807	202,067	121,205	53,743

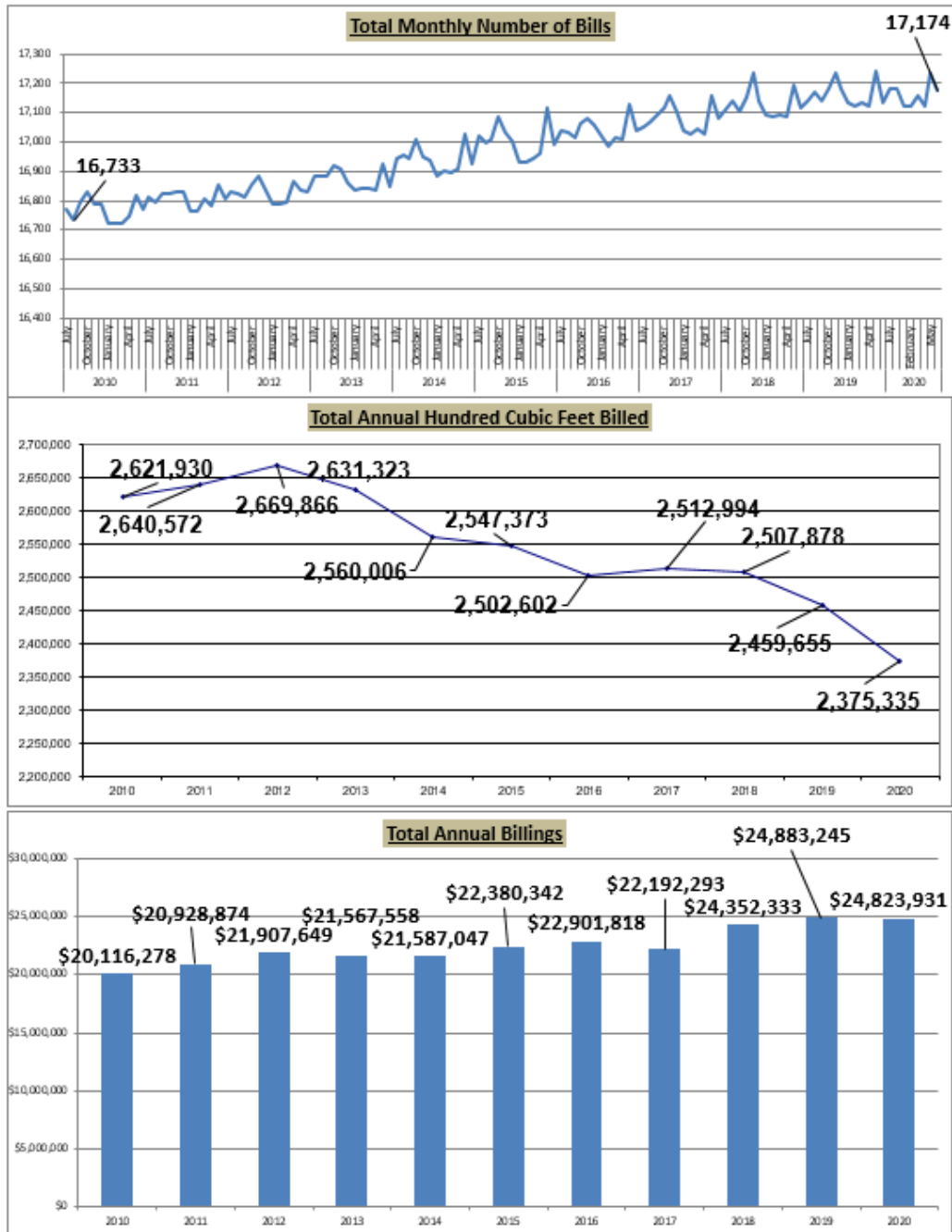
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$5,719,000

	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
R&R Balance BOY	\$ 4,481,417	\$ 4,521,417	\$ 5,101,417	\$ 4,956,417
Contribution	\$ 700,000	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000
Withdrawals	\$ (660,000)	\$ (520,000)	\$ (1,245,000)	\$ (1,020,000)
R&R Balance EOY	\$ 4,521,417	\$ 5,101,417	\$ 4,956,417	\$ 5,036,417

Sewer Billing Statistics

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

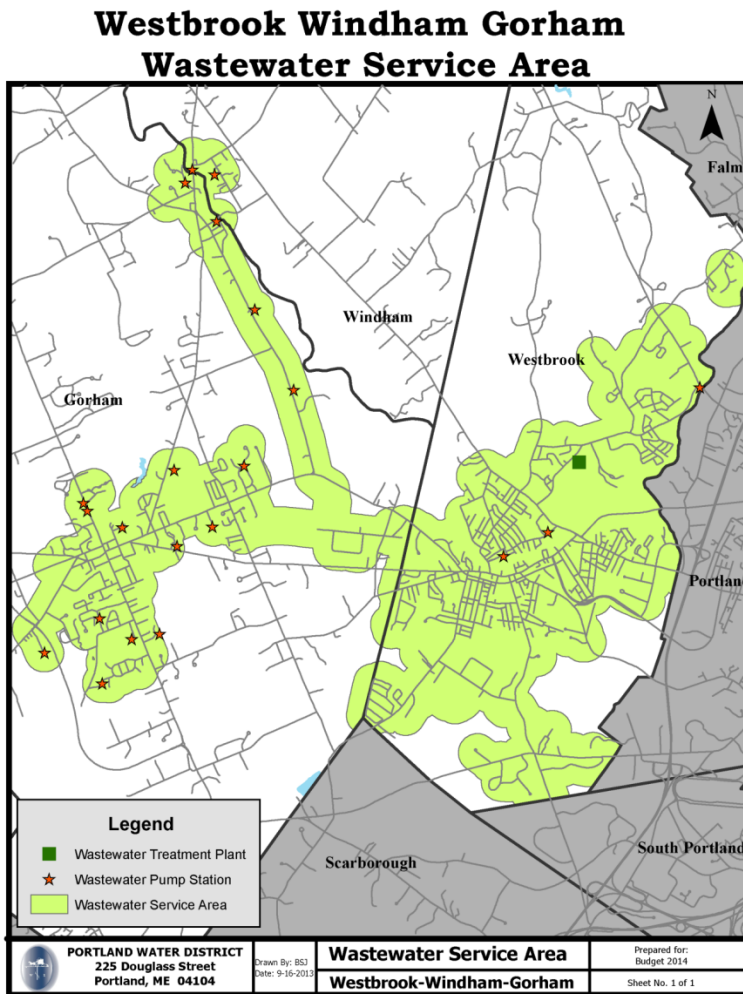
By Municipal Fiscal Year: Jul 1 to Jun 30



Fund: Wastewater - Westbrook

Background

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



Summary of Services Provided:

Treatment
2.397 million
gallons/day

Collection System
2 Westbrook only & 1
Joint use Pump Stations
with 9.2 miles of pipe

Utility Billing
Annual Billings of
\$4,478,314 on 4,697
Customers (avg.
\$79.45/month)

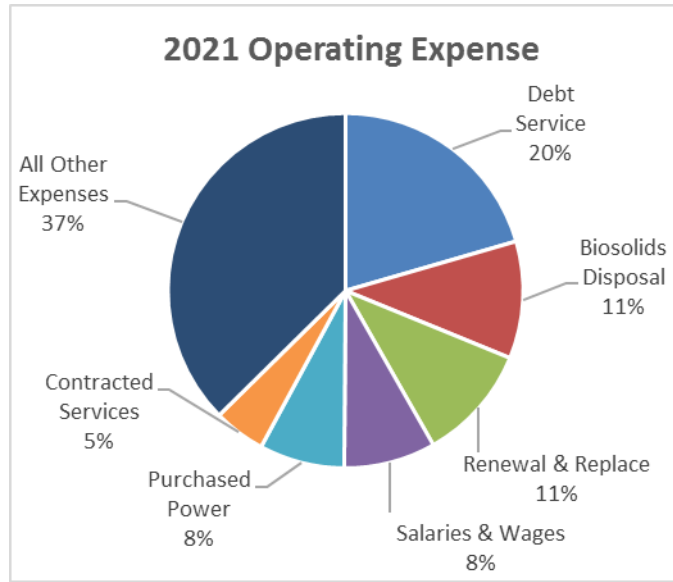
Fund: Wastewater - Westbrook

2021 Financial Summary

The proposed assessment of \$2,903,244 is 2.9% increase over the previous year. This assessment is less than the amount in the forecast provided to the City last year.

The proposed 2021 Operating Expense and Capital budgets are \$2,992,460 and \$461,350, respectively.

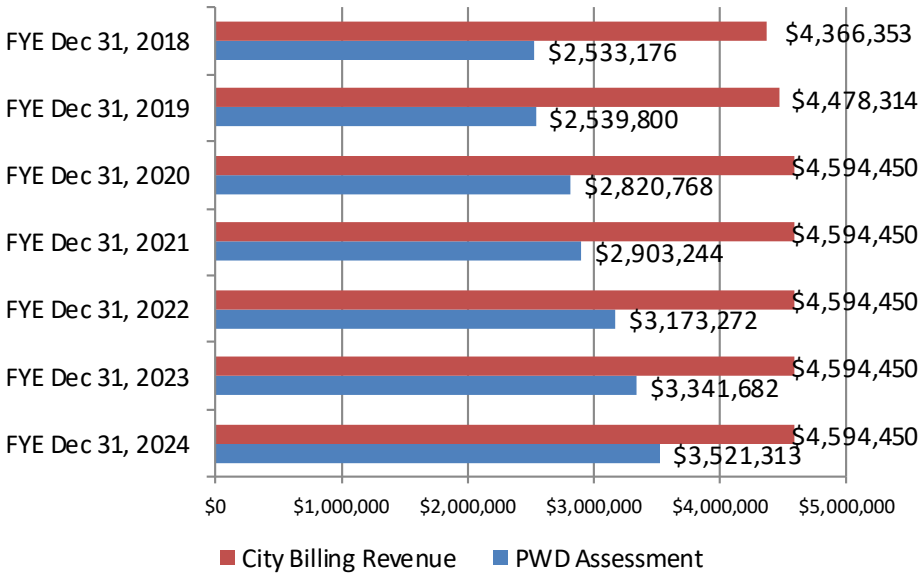
The Operating Expense budget is \$60,497 higher (2.1%) than the previous year. Departmental Expense increased by \$104,145 or 5.3%, Debt Service decreased 1.5% to \$613,592 and Renewal & Replacement (direct and indirect) funding decreased \$34,287 to \$316,780.



One focus of the 2021 Capital plan is to upgrade influent screening at the Cottage Place and East Bridge St. wastewater pump stations. Westbrook’s portion of these is \$133,200 and \$125,000, respectively.

Assessment Compared to Ratepayers’ Billing

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



Revenue Assumptions:

- Consumption assumed is based on consumption through December 31, 2019

- Rates Assumed:

Effective Base/Per HCF Date:

Jan 2013	\$11.13/\$6.13
Jan 2019	\$11.53/\$6.53
Jan 2020	\$11.93/\$6.93

2021 Operating Expense Highlights

Salaries/Wages – The expense decrease of 0.3% (\$803) has resulted in a budget amount of \$249,744. District labor rates increased an average of 2.8% while hours for this fund decreased 2.5% or 226 hours.

Employee Benefits – The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses. Because of the decreased labor hours, employee benefits expense increased only \$3,964 (3.5%).

Biosolids Disposal – Biosolids expense at the Westbrook/Gorham/Windham Regional WWTF is projected to increase 26.7% due to an estimated increase in the disposal cost from \$71.05 to \$90.00/wet ton. The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. The volume disposed is expected to remain unchanged. Biosolids expense for Westbrook is projected to increase \$67,309. Westbrook's share of allocated treatment costs remained at 84%.

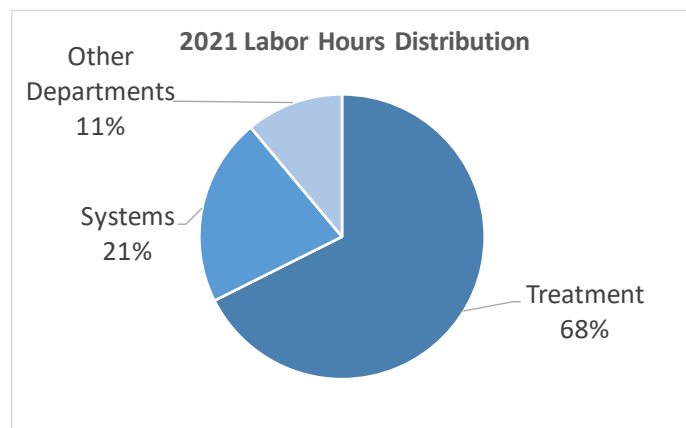
Chemicals – The 2021 budget for Chemicals has increased by \$10,521 or 12.4%. This is mainly due to the 25% projected increase in the per unit cost of sodium hypochlorite (usage is projected to be unchanged) at the Westbrook WWTF.

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 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 \$28,901 or 3.9%.

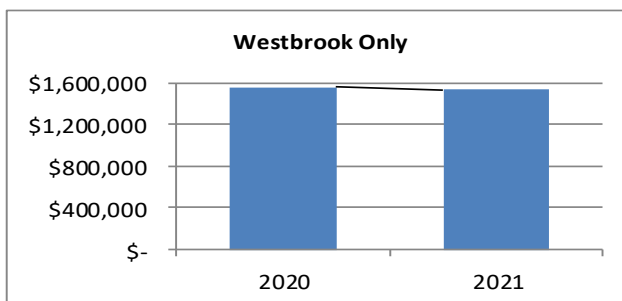
The allocation from Administration increased \$13,764 (4.1%) because of the annual average wage increase (2.8%), higher employee benefit expenses (pension) and the first year of computer support costs related to the new billing system. The costs associated with Wastewater increased \$12,861 (6.9%) due to the annual labor rate increase and higher employee benefit costs.

Debt Service – The annual principal and interest payments on bonds issued to finance capital projects. decreased 1.5% (\$9,361) due to the decline in outstanding bond balance.

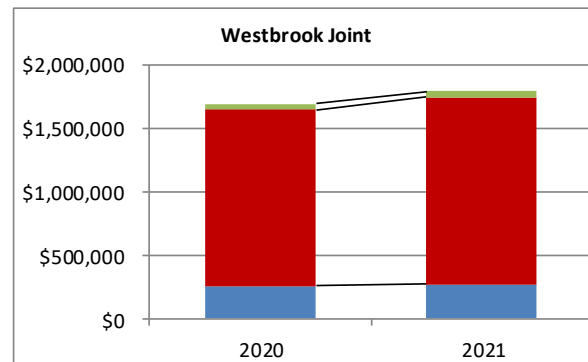
Renewal & Replacement – Dollars put aside to fund capital projects; the 2021 contribution is \$316,780.



	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$2,539,800	\$1,410,384	\$2,820,768	\$2,903,244	\$82,476	2.9%
Interest Income	138,235	72,742	72,695	41,216	-31,479	-43.3%
Other Income	<u>50,292</u>	<u>2,056</u>	<u>38,500</u>	<u>48,000</u>	<u>9,500</u>	<u>24.7%</u>
Total Revenue	2,728,327	1,485,182	2,931,963	2,992,460	60,497	2.1%
Salaries & Wages	227,492	99,317	250,547	249,744	-803	-0.3%
Employee Benefits	105,094	45,476	113,409	117,373	3,964	3.5%
Biosolids Disposal	276,539	154,399	252,403	319,712	67,309	26.7%
Chemicals	116,676	71,376	84,800	95,321	10,521	12.4%
Contracted Services	79,986	38,372	157,121	141,281	-15,840	-10.1%
Deferred Cost W/O	10,098	0	0	0	0	n/a
Heat/Fuel Oil	33,282	18,638	21,730	22,469	739	3.4%
Insurance	5,121	2,595	5,455	5,709	254	4.7%
Materials & Supplies	45,587	14,972	51,667	51,581	-86	-0.2%
Other Expense	2,740	3,669	1,422	5,622	4,200	295.4%
Purchased Power	229,537	124,907	232,496	232,623	127	0.1%
Regulatory/Taxes	3,650	3,523	3,780	3,780	0	0.0%
Tele/Other Utilities	28,094	14,230	24,819	25,713	894	3.6%
Transportation	9,314	2,797	9,331	13,296	3,965	42.5%
SS - Administration	305,061	150,816	337,849	351,613	13,764	4.1%
SS - Engineering Services	64,117	31,949	98,347	103,417	5,070	5.2%
SS - Environmental Services	120,345	61,198	119,933	116,805		
SS - Wastewater Services	172,084	103,577	185,992	198,853	12,861	6.9%
SS - Water Services	<u>4,820</u>	<u>1,742</u>	<u>6,842</u>	<u>7,176</u>	<u>334</u>	<u>4.9%</u>
Operating Expense	1,839,637	943,553	1,957,943	2,062,088	104,145	5.3%
Debt Service & Lease Expense	507,793	308,526	622,953	613,592	-9,361	-1.5%
Renewal & Replacement - Direct	300,000	150,000	300,000	270,000	-30,000	-10.0%
Renewal & Replace - Indirect	<u>40,863</u>	<u>25,535</u>	<u>51,067</u>	<u>46,780</u>	<u>-4,287</u>	<u>-8.4%</u>
Total Expense	2,688,293	1,427,614	2,931,963	2,992,460	60,497	2.1%
Current Year Surplus (Deficit)	40,034	57,568	0	0		
Transfer to R&R	0	0	0	0		
Return of Accumulated Surplus	0	-118,265	0	0		
Prior Year Surplus	<u>811,222</u>	<u>851,256</u>	<u>786,814</u>	<u>771,710</u>		
Accumulated Surplus	851,256	790,559	786,814	771,710		



Westbrook Only – Westbrook Only expenses were down \$20.9k (1.3%) due to Renewal & Replacement costs.

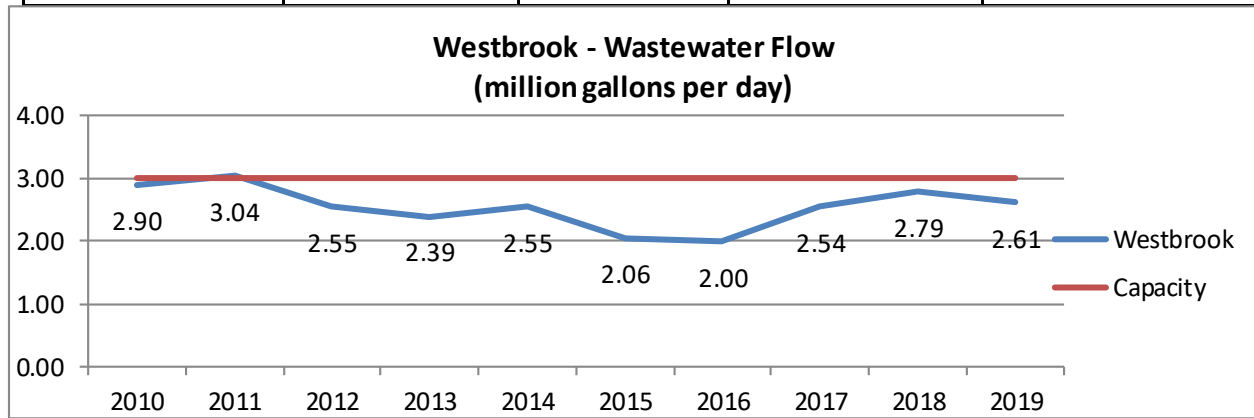


WestbrookJT – Expense up 5.8%; Westbrook's share of expense unchanged (84%), expense up \$81.3k to \$1.47 million.

Operation Summary

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)	2019 Flow (mgd)	% of 2019 WWTF Flow	Reserved Capacity (mgd)	% of Capacity Used
Westbrook (66.6%)	2.62	83.3 %	3.023	87 %
Gorham (30.8%)	0.42	13.3 %	1.398	30 %
Windham (2.6%)	0.11	3.4 %	0.118	93 %
Total Plant Flow	3.15		4.54	69 %



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

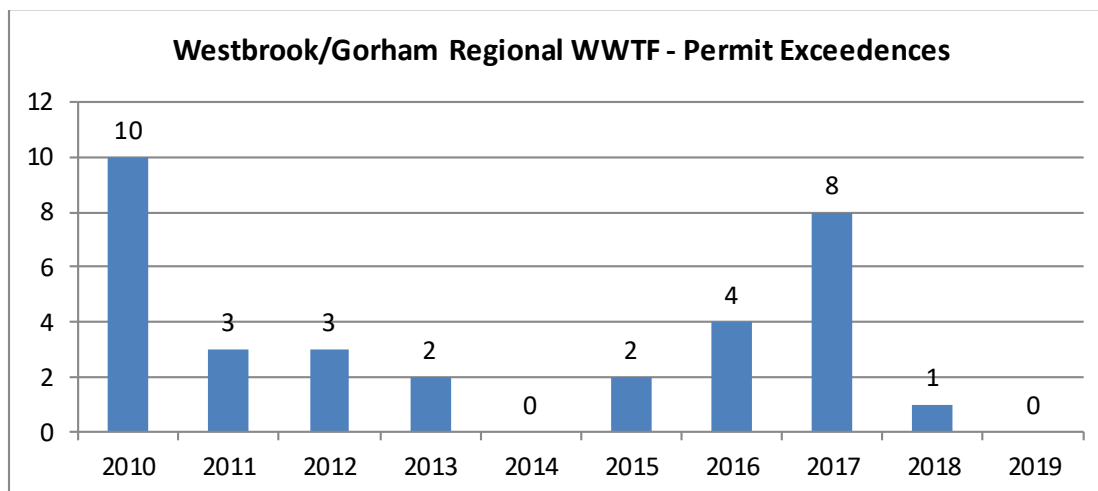
WGWTF Parameter	DEP Limit	2019 Facility Average
Biosolids Removed (wet tons/month)	N/A	499 wet ton/month

Parameter	Discussion
Biological Oxygen Demand (BOD)	Measure of organic material and the strength of pollution. The treatment plant removed 95% of the BOD, well above the required 85% removal.
Total Suspended Solids (TSS)	Measure of suspended material in the incoming wastewater. The treatment plant removed 93% of the TSS, well above the required 85% removal.
Total Residual Chlorine	Used for disinfecting the treated effluent, chlorine must be removed before the effluent is discharged. The permit limit was met at all times.
Fecal Coliform Bacteria	Following disinfection with chlorine, the fecal coliform level is monitored to confirm the treatment plant effluent was properly disinfected.
Phosphorus	The renewed 5-year permit includes a requirement to monitor phosphorus in the plant's effluent discharge. Phosphorus can contribute to water quality concerns that might include algae and low dissolved oxygen. The monitoring will likely create a baseline for consideration if effluent permit limitations are established in the future.

Operation Summary (continued)

Effluent Permit Requirements:

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



Wastewater Conveyance – interceptors and pumping stations

Parameter	2020 Actual to Sept	2021 Projected
Preventive Work Orders	46	72
Corrective Work Orders	10	20
Wet wells cleaned	1	3
Debris removed (tons)	2.25	6
Dry Weather Overflows	0	0

2020 Other Highlights

- The Asset Management Program continues to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations. The Maintenance Manager/Planner Scheduler position, which was created in 2018, has helped to increase reliance on our program and is helping to implement a new system.
- The aeration system at the Westbrook/Gorham/Windham Regional WWTF was evaluated in 2015. Several possible approaches to design of the new system were identified and are dependent on future phosphorus permit limits. The loadings to the treatment facility have increased and are creating some operational challenges. Design of the new system was completed in 2020. Construction will begin in early 2021. The upgrade is expected to take over 2 ½ years.

2020 Other Highlights (continued)

- Recognizing the increased loading at the treatment plant and in anticipation of the aeration system upgrade in 2021, acceptance of septage at the plant has ceased until after the completion of the aeration upgrade. Septage is being accepted at the East End WWTF in Portland.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis at the three pump stations in Westbrook.
- Construction of the recent upgrade of the Dana Court Pump Station took place in 2018-2019. This is the final of the three large stations in Westbrook to have an upgrade completed (Cottage Place and East Bridge St. upgrades were completed in the past). The upgrade included the installation of a new screening system that was similar to the system previously installed at the other pump stations in Westbrook.
- The new dewatering system (screw press) at the treatment facility was installed in 2018. Following an extended start-up, the Operations Team has been able to optimize the equipment and performance of the system has increased dramatically. Through September, the % total solids had increased from only 15.6 % the year before to 20.1% total solids in 2019. This results in the removal of roughly 1,466,000 lbs. of water from the biosolids managed by the facility. This has resulted in a savings in excess of \$50,000 over past years.
- Work continued to further optimize the dewatering system in 2020. There were some challenges, but consistency and % total solids have increased. Staff is also working to optimize and manage the chemicals used during the dewatering operation.

2021 Work Plan

- The Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- The Westbrook/Gorham/Windham Regional WWTF will have major work on a number of process areas, including the dewatering conveyance system and odor control for the sludge storage.
- The construction of the upgraded diffused aeration system will begin in 2021. This project will be carefully sequenced and is expected to take just over 2 ½ years to complete.
- The screens at our feeder pump stations (which supply all of the flow to the treatment plant) will be replaced with finer screens that will remove additional materials. This is expected to protect the equipment installed during the aeration system upgrade.
- An assessment of long-term biosolids management options will be completed in 2021. Contaminants of emerging concern, like PFAS, and instability in the solid waste management systems in Maine have created significant instability. This assessment will help determine future approaches to manage biosolids.

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.

	<u>Prior CIP</u>	<u>2021 CIP</u>	<u>Total</u>
Projects:			
WW Collection & Pumping			
Westbrook Pump Station R&R - 3134		\$ 20,000	\$ 20,000
CSO Master Plan Update - 3163		\$ 75,000	\$ 75,000
Flow Metering - 3230		\$ 50,000	\$ 50,000
WW Treatment			
Aeration & Clarifier Design - 3022 (prorated)	\$ 499,500		\$ 499,500
Aeration & Clarifier Construction - 3023 (prorated)	\$ 7,492,500		\$ 7,492,500
Sludge Storage Odor Control - 3025 (prorated)	\$ 499,500		\$ 499,500
Treatment Plant R&R - 3132 (prorated)		\$ 33,300	\$ 33,300
Influent Screening Cottage Place - 3160 (prorated)		\$ 133,200	\$ 133,200
Influent Screening East Bridge - 3160		\$ 125,000	\$ 125,000
Biosolids Processing/Disposal Assessment - 3233 (prorated)		\$ 13,320	\$ 13,320
Total by CIP Year	\$ 8,491,500	\$ 449,820	\$ 8,941,320

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue 2021</u>	<u>Bond Issue > 2021</u>	<u>Total Funding</u>
Beginning Balance	\$ 3,723,784			
2021 Contribution	\$ 270,000			
Total R&R Balance Available	\$ 3,993,784			
Projects:				
WW Collection & Pumping	\$ 70,000			\$ 70,000
WW Treatment	\$ 304,820	\$ 3,663,000	\$ 4,828,500	\$ 8,796,320
Total	\$ 374,820	\$ 3,663,000	\$ 4,828,500	\$ 8,866,320
Ending Balance	\$ 3,618,964			
Future Operating Budget	\$ 75,000			\$ 8,941,320

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

Projections for Rate-Making Purposes

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

Major Assumptions:

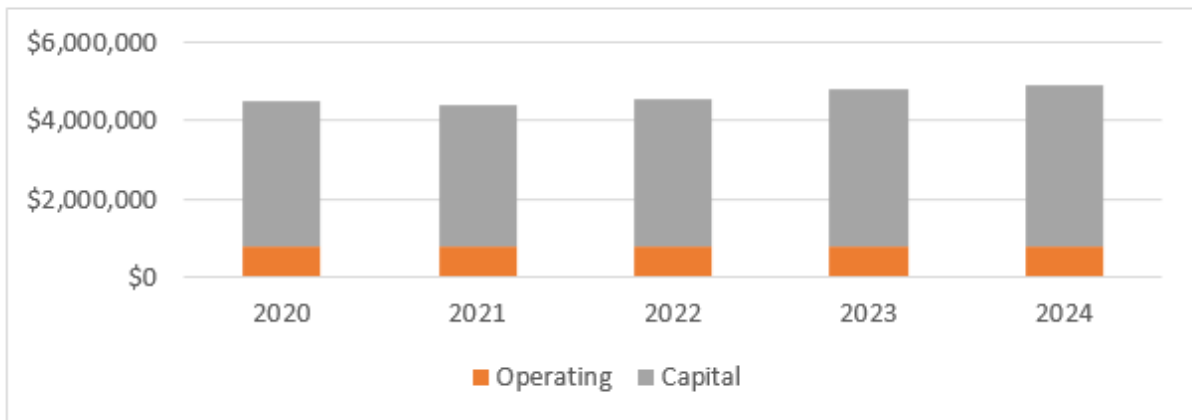
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Biosolids contract expires in 2021; assumed a \$90/wet ton price in 2021 with 1.2% increase in future years. Actual contract renewal price may result in a significant increase.
- Other expenses increase by 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life between 1% and 2.5% interest.

Summary of Projection Impact:

Assessment is projected to increase to \$3,521,313 in 2024, a 21% increase over 2021 Budget, with the most significant cost change related to debt service issued to finance capital projects. Operating Ratios are better than target and Operating Reserve balance and Capital R&R balance are close or above the target balances.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
17%	19%	21%	21%	24%	27%	30%

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

2018	2019	2020	2021	2022	2023	2024
181%	167%	156%	152%	141%	135%	130%

Projections for Rate-Making Purposes (continued)

Operating Fund:

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Assessment Income	2,820,768	2,903,244	3,173,272	3,341,682	3,521,313
Interest Income	72,695	41,216	41,216	41,216	41,216
Other Income	38,500	48,000	48,000	48,000	48,000
Total Revenues	2,931,963	2,992,460	3,262,488	3,430,898	3,610,529
Operating Expenses:					
Salaries & Wages	250,547	249,744	254,739	259,834	265,031
Employee Benefits	113,409	117,373	123,242	129,404	135,874
Biosolids Disposal	252,403	319,712	323,549	327,432	331,361
Chemicals	84,800	95,321	98,181	101,126	104,160
Contracted Services	157,121	141,281	143,400	145,551	147,734
Heat/Fuel Oil	21,730	22,469	22,806	23,148	23,495
Insurance	5,455	5,709	5,795	5,882	5,970
Materials & Supplies	51,667	51,581	52,355	53,140	53,937
Other Expense	5,202	9,402	9,543	9,686	9,831
Purchased Power	232,496	232,623	232,623	232,623	232,623
Tele/Other Utilities	24,819	25,713	26,099	26,490	26,887
Transportation	9,331	13,296	13,495	13,697	13,902
SS - Administration	337,849	351,613	360,843	370,315	380,036
SS - Engineering Services	98,347	103,417	106,106	108,865	111,695
SS - Environmental Services	119,933	116,805	119,871	123,018	126,247
SS - Wastewater Services	185,992	198,853	238,073	230,322	236,368
SS - Water Services	6,842	7,176	10,364	10,636	10,915
	1,957,943	2,062,088	2,141,084	2,171,169	2,216,066
Debt Service	622,953	613,592	797,827	936,152	1,070,886
Renewal & Replacement - Direct	300,000	270,000	300,000	300,000	300,000
Renewal & Replace - Indirect	51,067	46,780	23,577	23,577	23,577
Capital Finance Expense	974,020	930,372	1,121,404	1,259,729	1,394,463
Total Operating Expenses	2,931,963	2,992,460	3,262,488	3,430,898	3,610,529
Current Year Surplus(Deficit)	0	0	0	0	0
Prior Year Surplus	786,814	771,710	771,710	771,710	771,710
Accumulated Surplus	786,814	771,710	771,710	771,710	771,710
Target Balance(25% of budget)	732,991	748,115	815,622	857,725	902,632
Above/(Below)	53,823	23,595	-43,912	-86,015	-130,922

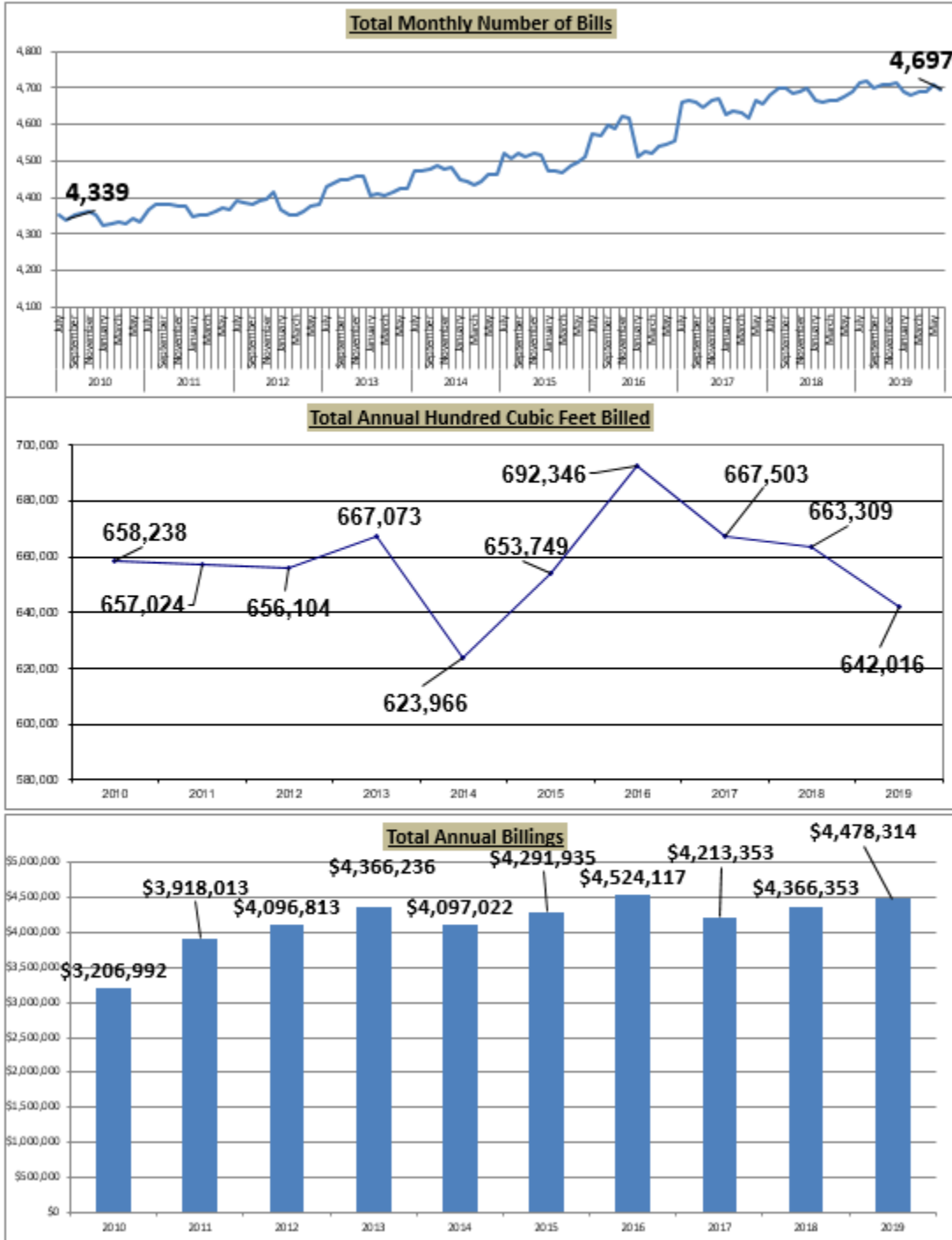
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$1,132,000

	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
R&R Balance BOY	\$ 3,723,784	\$ 3,618,964	\$ 3,799,064	\$ 4,045,764
Contribution	\$ 270,000	\$ 300,000	\$ 300,000	\$ 300,000
Withdrawals	\$ (374,820)	\$ (119,900)	\$ (53,300)	\$ (203,150)
R&R Balance EOY	\$ 3,618,964	\$ 3,799,064	\$ 4,045,764	\$ 4,142,614

Sewer Billing Statistics

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

By Municipal Fiscal Year: Jul 1 to Jun 30

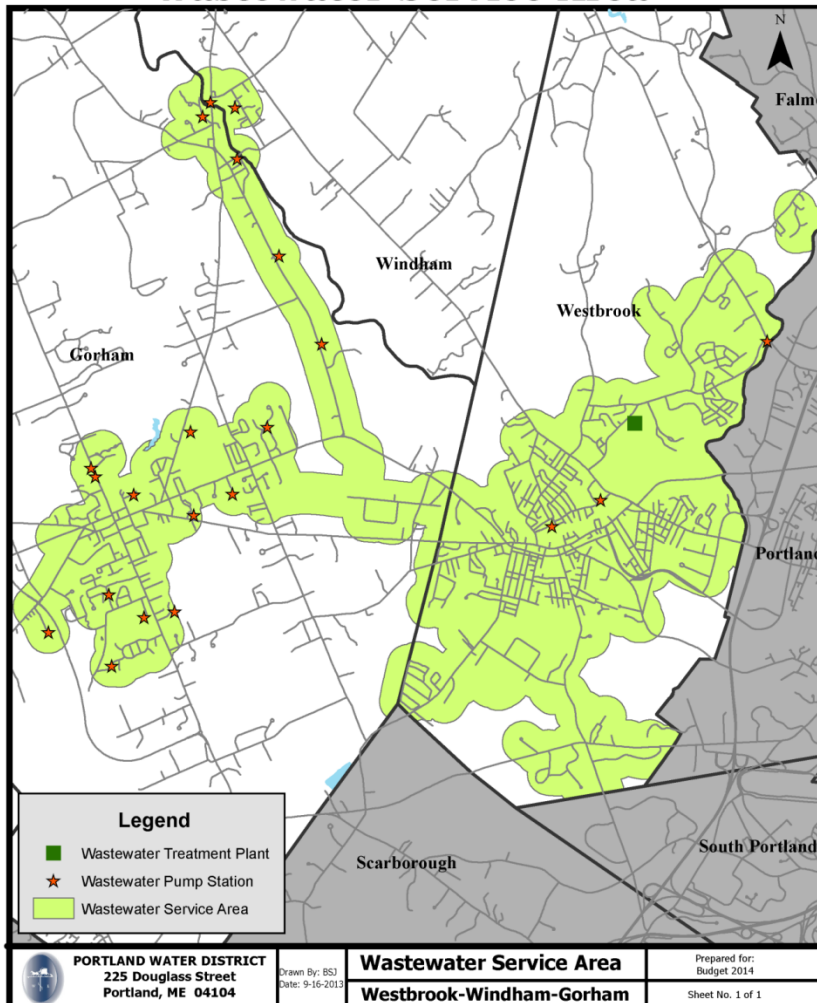


Fund: Wastewater – Windham

Background

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

Westbrook Windham Gorham Wastewater Service Area



Summary of Services Provided:

Treatment

0.11 Million gallons/day

Collection System

*2 Windham only & 3
Joint use Pump Stations
with 5.8 miles of pipe*

Utility Billing

*Annual Billings of
\$360,828 with 56
Customers*

Fund: Wastewater - Windham

2021 Financial Summary

The town’s proposed assessment of \$410,916 is 5.6% increase (\$21,912). That amount is lower than the forecast provided last year to the Town.

The proposed 2021 Operating Expense and Capital budgets are \$414,921 and \$44,750, respectively.

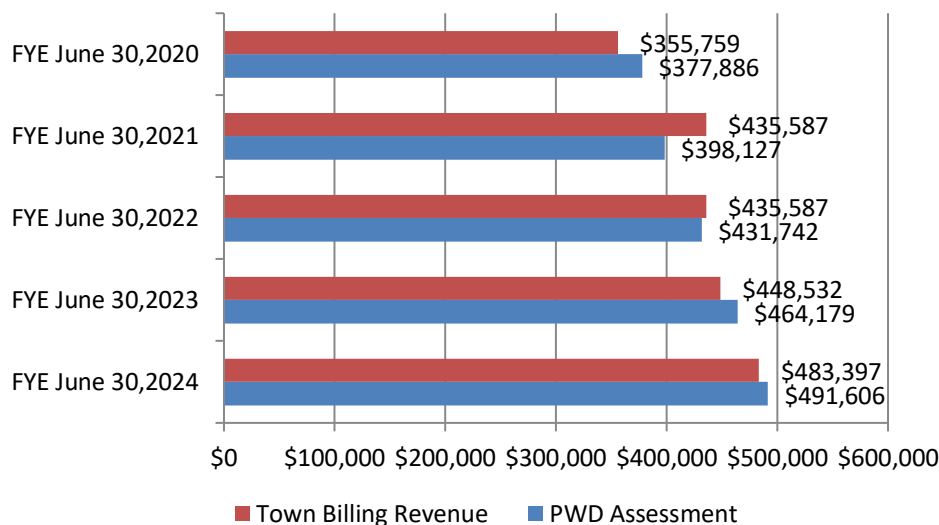
Operating Expense was up 4.5%. Windham flows increased in the Little Falls System (75.5% to 77.5%) and the Westbrook Regional WWTF remained at 3.0%.

The 2021 Capital Plan consists of smaller items as the focus remains on projects started in 2020, such as: Westbrook Regional WWTF Aeration, Depot St. WW pump station and the design of a treatment/collections system for North Windham.



Assessment Compared to Ratepayers’ Billing

The municipality’s fiscal year end is June 30, while the District’s is December 31. The chart below compares the cash as collected by the District for sewer billings on their behalf and the District’s ‘adjusted’ assessment for services rendered. The assessment was adjusted lower to reflect the costs related to the new proposed North Windham system, which will be funded by new user fees. The new system costs are \$3,667, \$62,917, \$77,725 and \$390,783 for years 2021 through 2024. The municipality determines whether to increase the sewer billing rates. Any shortfall of billing revenue is made up from the Town’s general funds.



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

2021 Operating Expense Highlights

Salaries/Wages – Wages were budgeted to increase 5.4% (\$2,132). The increase was due to a rise of 31 hours (2.2%), mostly in WW Systems, combined with the average 2.8% pay rate increase. This reflects the labor utilization trend over the past few years.

Employee Benefits – Overall, employee benefits expense increased \$1,696 (9.5%). The benefit rate (including FICA) increased from 48.39% in 2020 to 50.59% in 2021 due to higher pension expenses.

Biosolids Disposal – Biosolids expense at the Westbrook Regional WWTF is projected to increase 26.7% due to an estimated increase in the disposal cost from \$71.05 to \$90.00/wet ton. The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. The volume disposed is expected to remain unchanged. The impact is a \$2,404 increase in expense with the Windham flow allocation from the treatment plant remaining at 3.0% this year.

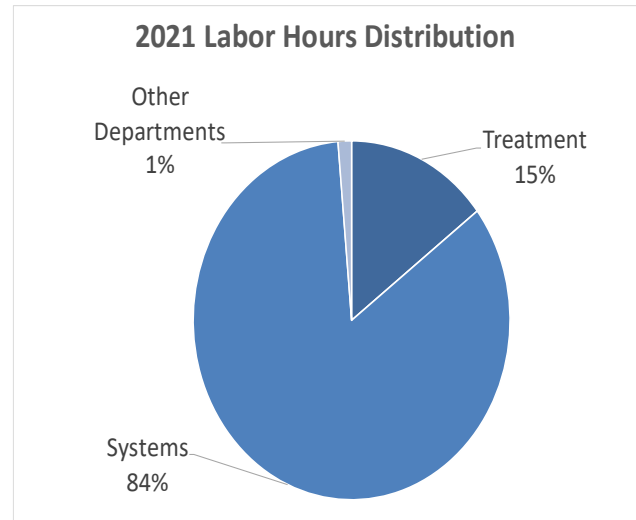
Chemicals – The 2021 budget for Chemicals has increased by \$619 or 5.1%. This is mainly due to the 25% projected increase in the per unit cost of sodium hypochlorite (usage is projected to be unchanged) at the Westbrook WWTF.

Contracted Services – The budget for this item decreased \$756 (4.6%) primarily due to the one time elimination of the annual grit removal from the WWTF as this will be done as part of the upcoming aeration capital project.

Purchased Power – This budget increased by \$1,396 (7.6%). Wastewater pump stations for Windham only and joint Little Falls saw effective T&D rate increases of around 7%. Joint Little Falls' usage increased by 5,944 kWh based on previous actuals. Savings from reduced demand at Cottage Place PS and the Westbrook Regional WWTF offset these additional costs. A 3% assumption is also included for potential CMP rate changes in Summer 2021.

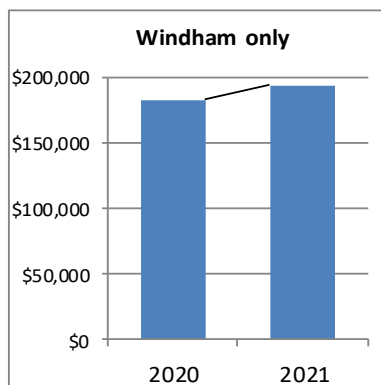
Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$4,579 or 5.6%. The costs associated with Wastewater increased \$2,253 (9.6%) due to the annual labor rate increase and higher employee benefit costs.

Debt Service - The annual principal and interest payments on bonds issued to finance capital projects. This item increased 2.1% (\$2,967) with issuance of new debt.

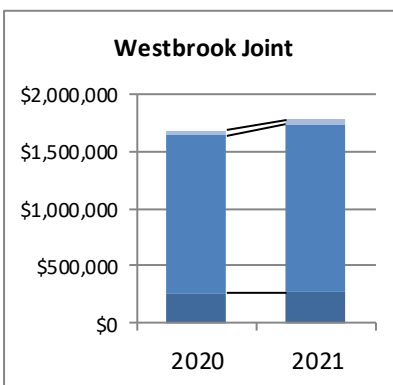


Renewal & Replacement - Dollars put aside to fund capital projects. A contribution of \$40,449 will be made in 2021.

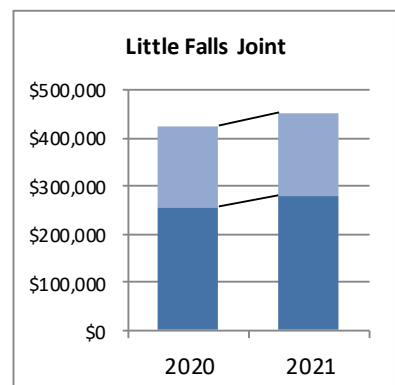
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$366,768	\$194,502	\$389,004	\$410,916	\$21,912	5.6%
Interest Income	13,983	6,531	8,103	4,005	-4,098	-50.6%
Other Income	28	73	0	0	0	n/a
Total Revenue	380,779	201,106	397,107	414,921	17,814	4.5%
Salaries & Wages	39,562	25,250	39,307	41,439	2,132	5.4%
Employee Benefits	18,429	11,928	17,878	19,574	1,696	9.5%
Biosolids Disposal	9,876	5,514	9,014	11,418	2,404	26.7%
Chemicals	11,133	2,549	12,193	12,812	619	5.1%
Contracted Services	17,295	4,824	16,582	15,826	-756	-4.6%
Heat/Fuel Oil	3,822	1,186	2,399	2,471	72	3.0%
Insurance	627	329	692	737	45	6.5%
Materials & Supplies	13,881	561	4,723	5,523	800	16.9%
Other Expense	88	230	39	189	150	384.6%
Purchased Power	16,950	8,656	18,326	19,722	1,396	7.6%
Regulatory/Taxes	130	126	135	135	0	0.0%
Tele/Other Utilities	562	251	571	601	30	5.3%
Transportation	12,522	3,492	12,861	15,003	2,142	16.7%
SS - Administration	36,939	17,926	39,764	40,606	842	2.1%
SS - Engineering Services	8,112	4,122	13,381	13,961	580	4.3%
SS - Environmental Services	5,359	2,344	4,673	5,486	813	17.4%
SS - Wastewater Services	21,933	13,284	23,555	25,808	2,253	9.6%
SS - Water Services	91	33	128	219	91	71.1%
Operating Expense	217,311	102,605	216,221	231,530	15,309	7.1%
Debt Service & Lease Expense	143,922	67,314	139,975	142,942	2,967	2.1%
Renewal & Replacement - Direct	25,849	17,925	35,849	35,849	0	0.0%
Renewal & Replace - Indirect	4,136	2,528	5,062	4,600	-462	-9.1%
Total Expense	391,218	190,372	397,107	414,921	17,814	4.5%
Current Year Surplus (Deficit)	-10,439	10,734	0	0		
Prior Year Surplus	64,276	53,837	42,317	56,761		
Accumulated Surplus	53,837	64,571	42,317	56,761		



Windham Only – Expense up \$11.3k (6.2%).



Westbrook JT – Expense up 5.8%; Windham's share of expense unchanged (3%), expense up \$3.1k to \$47.9k.



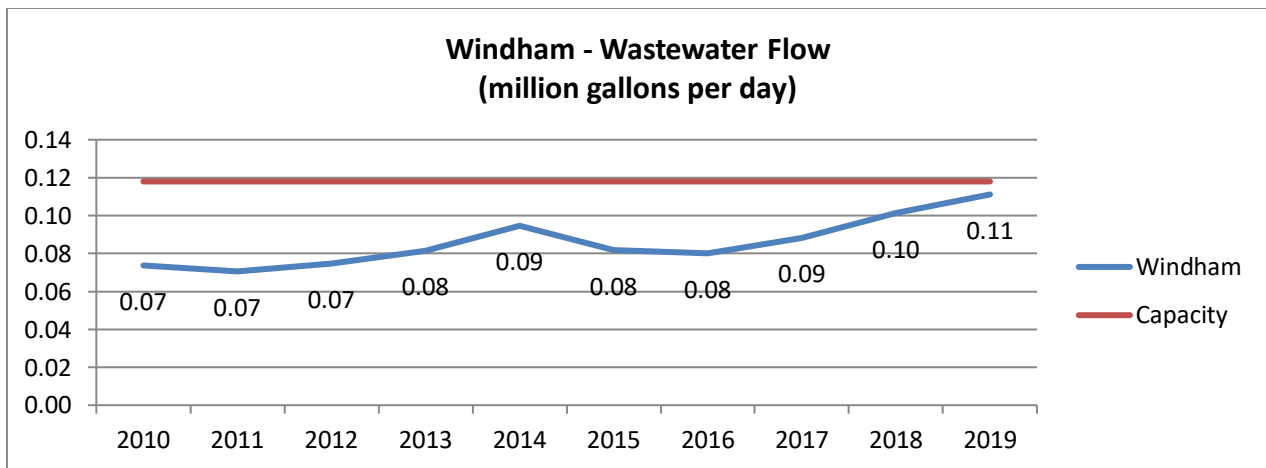
Little Falls JT – Expense down 0.1%, Windham's share of expense was up (75.5% to 77.5%), fund expense up \$3.4k (2.0%).

Operation Summary

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	2019 Windham Flow	Westbrook WWTF Flow	% Windham Flow
Windham	0.11 mgd	3.15 mgd	3.5%
WGWTF Capacity	Windham Capacity (2.6%)	% Capacity Used	Capacity Remaining
4,540,000 gal/day	0.118 mgd	93 %	0.008 mgd



Wastewater Conveyance – collectors, interceptors and pumping stations

Parameter	2020 Actual to Sept	2021 Projected
Preventive Work Orders	77	74
Corrective Work Orders	4	5
Wet wells cleaned	15	15
Debris removed (tons)	14.93	10
Dry Weather Overflows	0	0

Operation Summary (continued)

2020 Other Highlights

- Preventive maintenance work continues to be a main focus of system staff.
- Wet well and siphon cleaning were performed on a regular schedule using our Hansen scheduled maintenance program. This effort is in response to odor concerns in the area and the need to regularly clean the siphon to ensure the system operates properly. Staff inspects the siphon weekly.
- Design of a new pump station in the Depot Street area was completed in 2020. This pump station would eliminate the siphon and the associated work to inspect and clean the siphon inlet regularly. Construction will take place in 2021.
- In response to odor concerns at the Mallison St. Pump Station, an odor control system was installed. There have been no complaints of odor since the system was installed in the summer of 2012.
- A passive odor control unit was installed at the Little River Pump Station (which is jointly used by Windham and Gorham). A more costly and potentially more effective unit could be installed in the future, if it becomes necessary.
- Recognizing the increased loading at the treatment plant and in anticipation of the aeration system upgrade in 2020, acceptance of septage at the plant has ceased until after the completion of the aeration upgrade. Septage is being accepted at the East End WWTF in Portland.
- The new dewatering system (screw press) at the treatment facility was installed in 2018. Following an extended start-up, the Operations Team has been able to optimize the equipment and performance of the system has increased dramatically.

2021 Work Plan

- All pump stations will be continuously monitored with our SCADA system and dispatch service. Operations staff will visit each station on a weekly basis.
- Asset Management Software will drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders.
- A new pump station on Depot St. to serve the Windham Little Falls area is planned for installation in 2021.
- Wet wells are scheduled for cleaning on a quarterly basis unless experience dictates otherwise.
- The Routine Renewal and Replacement capital account will be used to address any unanticipated equipment issues.
- The construction of the upgraded diffused aeration system at the Westbrook/Gorham/Windham Regional WWTF will begin in 2021. This project will be carefully sequenced and is expected to take just over 2 ½ years to complete.
- An assessment of long-term biosolids management options will be completed in 2021. Contaminants of emerging concern, like PFAS, and instability in the solid waste management systems in Maine have created significant instability. This assessment will help determine future approaches to manage biosolids.

Capital Summary

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

Expenditures by CIP Year:

	<u>Prior CIP</u>	<u>2021 CIP</u>	<u>Total</u>
Projects:			
WW Collection & Pumping			
Windham Only Pump Station R&R - 3138		\$ 20,000	\$ 20,000
Depot St PS Upgrades Phase 1 - 3139**	\$ 610,000		\$ 610,000
Rte 202 PS Easement & Stdby Generator Design - 3228		\$ 15,000	\$ 15,000
WW Treatment			
<u>Westbrook Treatment Plant</u>			
Aeration & Clarifier Upgrade Design - 3022 (prorated)	\$ 19,500		\$ 19,500
Aeration & Clarifier Construction - 3023 (prorated)	\$ 292,500		\$ 292,500
Sludge Storage Odor Control - 3025 (prorated)	\$ 19,500		\$ 19,500
Treatment Plant R&R - 3132 (prorated)		\$ 1,300	\$ 1,300
Influent Screening Cottage Place - 3160 (prorated)		\$ 5,200	\$ 5,200
Biosolids Processing/Disposal Assessment - 3233 (prorated)		\$ 520	\$ 520
Total by CIP Year	\$ 941,500	\$ 42,020	\$ 983,520

Source of Funds:

	<u>R&R Fund</u>	<u>Bond Issue 2021</u>	<u>Bond Issue > 2021</u>	<u>Funding Total</u>
Beginning Balance	\$ 229,022			
2021 Contribution	\$ 35,849			
Total R&R Balance Available	\$ 264,871			
Projects:				
WW Collection & Pumping	\$ 35,000	\$ 610,000		\$ 645,000
WW Treatment	\$ 7,020	\$ 143,000	\$ 188,500	\$ 338,520
Total	\$ 42,020	\$ 753,000	\$ 188,500	\$ 983,520
Ending Balance	\$ 222,851			

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

** Total project cost is estimated at \$860k with \$250k expected from a grant.

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:

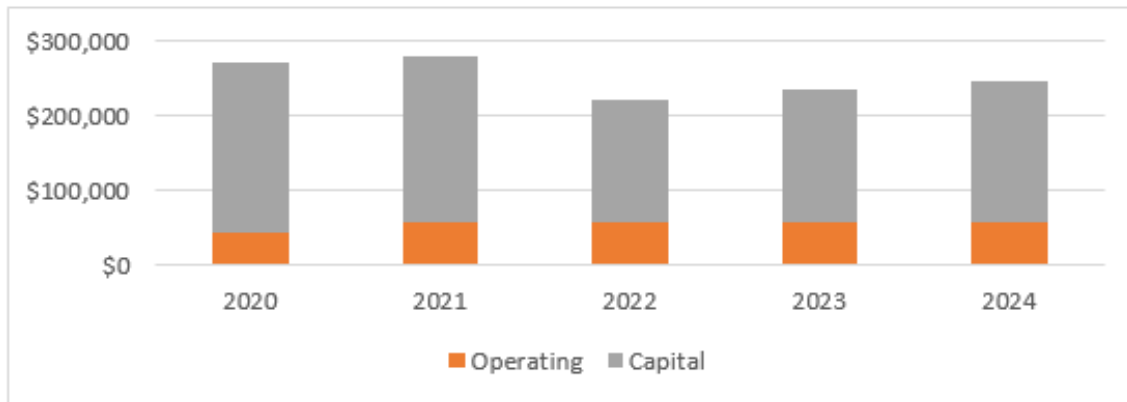
The assumptions incorporated in the projections are as follows:

- Salary increases of 3.0% in 2020 and 2% in other years. No change in number of employees.
- Benefit increases of 5% each year.
- Biosolids contract expires in 2021; assumed a \$90/wet ton price in 2021 with 1.2% increase in future years. Actual contract renewal price may result in a significant increase.
- Other expenses increase by 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. New debt assumed a 20-year life between 1% and 2.5% interest.
- Sewer fees/operating costs from new North Windham system was not included and any grants for either project not assumed. The North Windham debt service included for the years 2021 to 2024 were \$3,667, \$62,917, \$77,725 and \$390,783, respectively.

Summary of Projection Impact:

Assessment is projected to increase to \$901,872 in 2024, a 220% increase over 2021 Budget, including the impact of the new North Windham Treatment Plant and Depot Street projects, both requested by the Town.

Reserve Fund Balances



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

2018	2019	2020	2021	2022	2023	2024
35%	38%	35%	34%	47%	49%	68%

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

2018	2019	2020	2021	2022	2023	2024
96%	119%	129%	128%	116%	115%	106%

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

	<u>2020 Budget</u>	<u>2021 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
Revenues:					
Assessment Income	389,004	410,916	519,152	549,848	901,872
Interest Income	8,103	4,005	4,005	4,005	4,005
Other Income	0	0	0	0	0
Total Revenues	397,107	414,921	523,157	553,853	905,877
Operating Expenses:					
Salaries & Wages	39,307	41,439	42,268	43,113	43,975
Employee Benefits	17,878	19,574	20,553	21,581	22,660
Biosolids Disposal	9,014	11,418	11,555	11,694	11,834
Chemicals	12,193	12,812	13,196	13,592	14,000
Contracted Services	16,582	15,826	16,063	16,304	16,549
Heat/Fuel Oil	2,399	2,471	2,508	2,546	2,584
Insurance	692	737	748	759	770
Materials & Supplies	4,723	5,523	5,606	5,690	5,775
Other Expense	174	324	329	334	339
Purchased Power	18,326	19,722	19,722	19,722	19,722
Tele/Other Utilities	571	601	610	619	628
Transportation	12,861	15,003	15,228	15,456	15,688
SS - Administration	39,764	40,606	41,672	42,766	43,889
SS - Engineering Services	13,381	13,961	14,324	14,696	15,078
SS - Environmental Services	4,673	5,486	5,630	5,778	5,930
SS - Wastewater Services	23,555	25,808	26,537	27,182	27,896
SS - Water Services	128	219	325	334	343
	216,221	231,530	236,874	242,166	247,660
Debt Service	139,975	142,942	246,338	271,742	618,272
Renewal & Replacement - Direct	35,849	35,849	35,849	35,849	35,849
Renewal & Replace - Indirect	5,062	4,600	4,096	4,096	4,096
Capital Finance Expense	180,886	183,391	286,283	311,687	658,217
Total Operating Expenses	397,107	414,921	523,157	553,853	905,877
Current Year Surplus(Deficit)	0	0	0	0	0
Prior Year Surplus	42,317	56,761	56,761	56,761	56,761
Accumulated Surplus	42,317	56,761	56,761	56,761	56,761
Target Balance(25% of budget)	99,277	103,730	130,789	138,463	226,469
Above/(Below)	-56,960	-46,969	-74,028	-81,702	-169,708

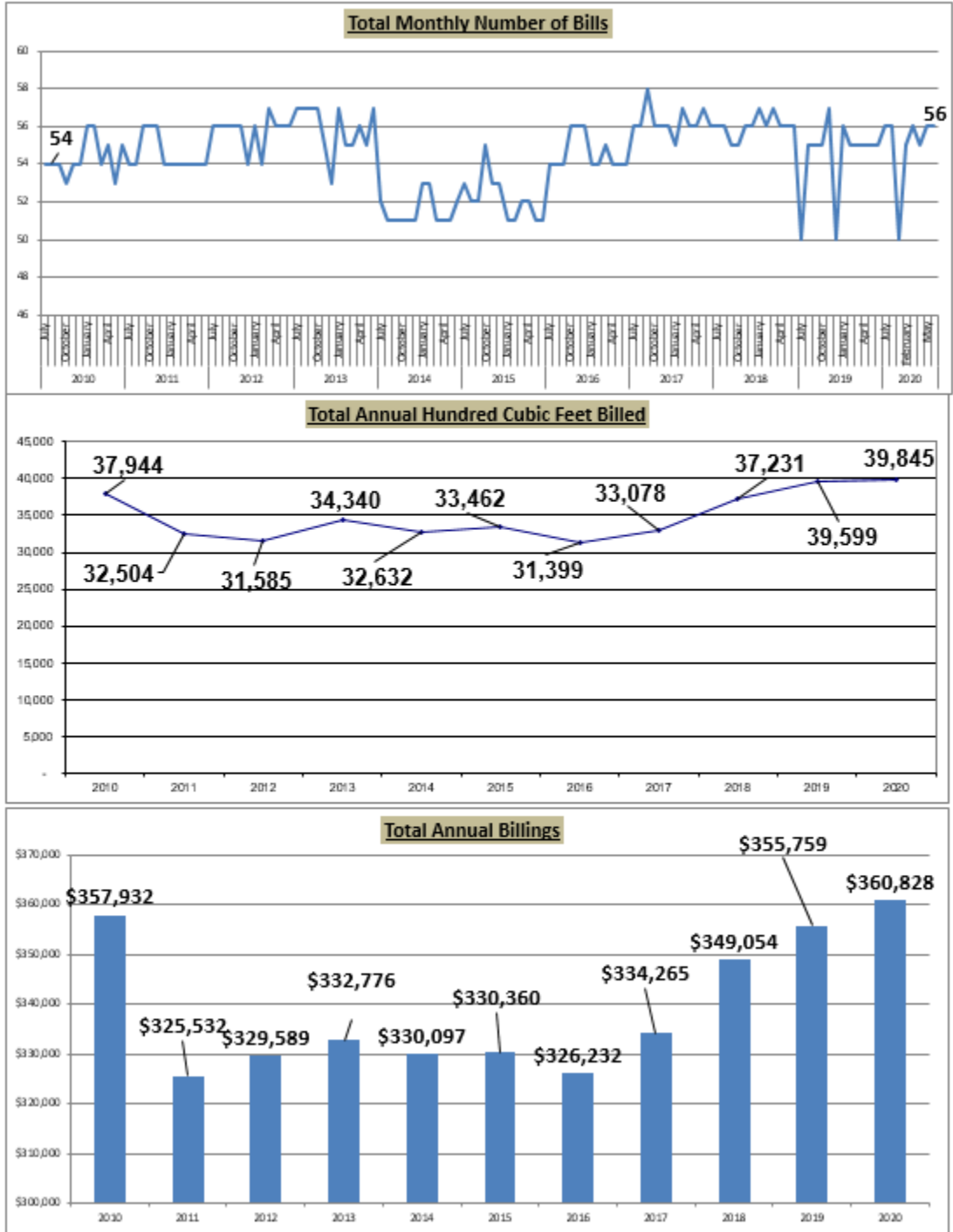
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$152,000

	<u>2020 Budget</u>	<u>2022 Forecast</u>	<u>2023 Forecast</u>	<u>2024 Forecast</u>
R&R Balance BOY	\$ 229,022	\$ 222,851	\$ 164,800	\$ 179,349
Contribution	\$ 35,849	\$ 35,849	\$ 35,849	\$ 35,849
Withdrawals	\$ (42,020)	\$ (93,900)	\$ (21,300)	\$ (27,150)
R&R Balance EOY	\$ 222,851	\$ 164,800	\$ 179,349	\$ 188,048

Sewer Billing Statistics

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

By Municipal Fiscal Year: Jul 1 to Jun 30



Falmouth Assessment and Scarborough and South Portland Contracted Services

Background

By contract, the district provides utility billing and collection services for Falmouth, Scarborough and South Portland. Wastewater services are provided in the towns of Falmouth and Scarborough by their towns' Sanitary District, both independent wastewater utilities, and in the city of South Portland by Water Resource Protection, a department of the City of South Portland.

For Scarborough and South Portland, the district estimates the cost to provide the billing and payment collection service as documented in the annual budget and bills the municipalities the estimated cost. The amount is billed to the municipality in equal monthly payments.

For Falmouth, in addition to the billing and payment collection service costs, the District will assess the town for debt service costs related to the bond that the District issued on behalf of Falmouth. The debt and the related assets will be part of the District's balance sheet but Falmouth will operate and maintain the assets.

The municipality determines the system user fees to pay the district bill and any municipal costs related to the sewer system. The district includes the sewer user fees on the monthly water utility bill sent to customers. Sewer user fees collected from users are remitted to the municipality on a weekly basis.

Sewer user fees are based on water consumption in South Portland and Scarborough, with a 1 HCF (hundred cubic feet) minimum fee plus an additional fee for each HCF used above the minimum. Falmouth user fees are based on a flat rate per month for residential homeowners and commercial customers are billed a flat rate plus a fee based on the number of fixtures and number of units at the location.

2021 Summary

The District is proposing the same assessment as last year, \$314,112 in Falmouth and \$201,132 in South Portland. Scarborough's annual assessment increased by 3.0% increased to \$11,664, a \$336 increase.

Total expense for Scarborough is up \$536 (4.7%) due to higher meter related expenses. Falmouth is relatively flat with an increase in operating expense (\$2,264) offset by the decline in debt service (\$2,499). South Portland's expense is up 4.7% (\$9,805) mostly due to higher meter related expenses.

Falmouth Assessment and Scarborough and South Portland Contracted Services

Falmouth:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Assessment Income	\$314,112	\$157,056	\$314,112	\$314,112	\$0	0.0%
Interest Income	<u>2,826</u>	<u>1,432</u>	<u>1,100</u>	<u>1,000</u>	<u>-100</u>	<u>-9.1%</u>
Total Revenue	316,938	158,488	315,212	315,112	-100	0.0%
Operating Expense	11,447	5,619	14,780	17,044	2,264	15.3%
Debt Service & Lease Expense	<u>294,685</u>	<u>141,365</u>	<u>292,520</u>	<u>290,021</u>	<u>-2,499</u>	<u>-0.9%</u>
Total Expense	306,132	146,984	307,300	307,065	-235	-0.1%
Current Year Surplus (Deficit)	10,806	11,504	7,912	8,047		
Prior Year Surplus	<u>4,331</u>	<u>15,137</u>	<u>14,898</u>	<u>27,209</u>		
Accumulated Surplus	15,137	26,641	22,810	35,256		

Scarborough:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Contracted Billing Income	\$11,256	\$5,664	\$11,328	\$11,664	\$336	3.0%
Interest Income	<u>201</u>	<u>117</u>	<u>103</u>	<u>0</u>	<u>-103</u>	<u>n/a</u>
Total Revenue	11,457	5,781	11,431	11,664	233	2.0%
Operating Expense	1,547	589	2,115	2,213	98	4.6%
Debt Service & Lease Expense	5,808	2,451	4,902	5,158	256	5.2%
Renewal & Replace - Indirect	<u>3,285</u>	<u>2,207</u>	<u>4,414</u>	<u>4,596</u>	<u>182</u>	<u>4.1%</u>
Total Expense	10,640	5,247	11,431	11,967	536	4.7%
Current Year Surplus (Deficit)	817	534	0	-303		
Prior Year Surplus	<u>6,996</u>	<u>7,813</u>	<u>7,589</u>	<u>8,756</u>		
Accumulated Surplus	7,813	8,347	7,589	8,453		

South Portland:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Contracted Billing Income	\$201,132	\$100,566	\$201,132	\$201,132	\$0	0.0%
Interest Income	<u>4,189</u>	<u>2,616</u>	<u>500</u>	<u>1,000</u>	<u>500</u>	<u>100.0%</u>
Total Revenue	205,321	103,182	201,632	202,132	500	0.2%
Operating Expense	114,325	55,341	137,996	147,317	9,321	6.8%
Debt Service & Lease Expense	45,848	19,545	39,088	39,971	883	2.3%
Renewal & Replace - Indirect	<u>25,309</u>	<u>16,864</u>	<u>33,727</u>	<u>33,328</u>	<u>-399</u>	<u>-1.2%</u>
Total Expense	185,482	91,750	210,811	220,616	9,805	4.7%
Current Year Surplus (Deficit)	19,839	11,432	-9,179	-18,484		
Prior Year Surplus	<u>133,779</u>	<u>153,618</u>	<u>52,279</u>	<u>53,619</u>		
Accumulated Surplus	153,618	165,050	43,100	35,135		

Introduction

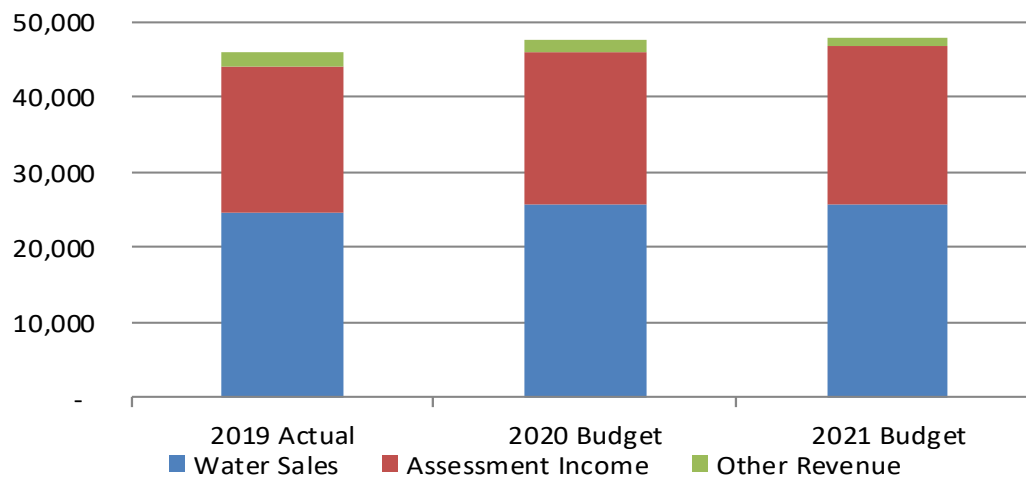
Revenue is obtained from two major sources: payments by individual customers for water services (Water Revenue, 53.5%) and payments from municipalities for wastewater services (Wastewater Assessments, 43.9%). Water revenues in 2021 are projected to decrease 0.1% from last year's budget due to the cancelling of the 3.5% proposed rate increase scheduled for May 1, 2020 due to the COVID-19 pandemic and the 3.4% rate increase to take effect in December 2020. The Wastewater Assessments for Cape Elizabeth, Cumberland, Gorham, Westbrook, Windham, and Portland increased to cover estimated 2021 costs.

Contracted Billing Income (0.44% of budgeted revenue) is revenue paid by the City of South Portland and Town of Scarborough for wastewater billing services.

Other Water and Wastewater revenue (1.44% of budgeted revenue) is derived from other activities, such as interest income, cross connection fees, leased property, customer connection and activation fees, jobbing surcharge and septage haulers fees, which are further detailed in this section.

	2019 Actual	2020 Actual		2021 Budget	\$-Diff.	%Diff.
		Jan-Jun	2020 Budget			
Water Sales	\$24,566,977	\$11,513,750	\$25,686,370	\$25,660,964	-\$25,406	-0.1%
Assessment Income	19,448,472	10,109,286	20,218,572	21,083,736	865,164	4.3%
Contracted Billing Income	212,388	106,230	212,460	212,796	336	0.2%
Interest Income	973,933	532,698	707,747	276,655	(431,092)	-60.9%
Other Income	897,732	249,071	584,850	611,542	26,692	4.6%
Lease Revenue	-	-	79,940	79,940	-	0.0%
Total Revenues	\$46,099,502	\$22,511,035	\$47,489,939	\$47,925,633	\$435,694	0.9%

Total District Revenue
(\$,000)



Water Sales

Water sales consist of:

- **Metered Revenue** from residential, governmental, industrial and commercial customers. Customers are billed a monthly minimum based on meter size, which includes 1 hundred cubic feet (HCF) of water (748 gallons). For amounts greater than 1 HCF, customers pay based on a four-tier declining block. Member rates effective December 1, 2020 are expected to be :

Monthly Water Usage:		
From	To	Rate
1 HCF	30 HCF	\$2.51
30 HCF	100 HCF	\$2.23
100 HCF	500 HCF	\$1.96
Greater than 500 HCF		\$1.11

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

The 2021 Budget of \$25,660,964 reflects an assumed rate of usage determined on subsequent pages.

Water Sales rates have been adjusted annually. Average rate adjustments of 3.4% and 4.4% were made on Dec 2020 and May 2019, respectively. PWD did have plans of a 3.5% increase in May 2020 but due to the national pandemic we delayed the increase to December to ease financial burden of customers. Prior to 2016, all water rate adjustments were subject to review and approval by the Maine Public Utilities Commission. Starting in 2016, the District's Board of Trustees can approve rate adjustments solely through their actions. The Board will continue to follow the same public input process before authorizing rate changes.

	2019 Actual	2020 Actual Jan-Jun	2020 Budget	2021 Budget	\$-Diff.	%-Diff.
Metered Revenue	\$21,851,709	\$10,168,476	\$22,914,091	\$22,851,652	(62,439)	-0.3%
Public Fire Protection	1,438,674	730,842	1,495,850	1,511,988	16,138	1.1%
Private Fire Protection	1,116,887	577,263	1,158,429	1,208,700	50,271	4.3%
Other Water Revenue	159,707	37,169	118,000	88,624	(29,376)	-24.9%
Total Water Sales	\$24,566,977	\$11,513,750	\$25,686,370	\$25,660,964	(25,406)	-0.1%

Water Sales - Cost of Service Study

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

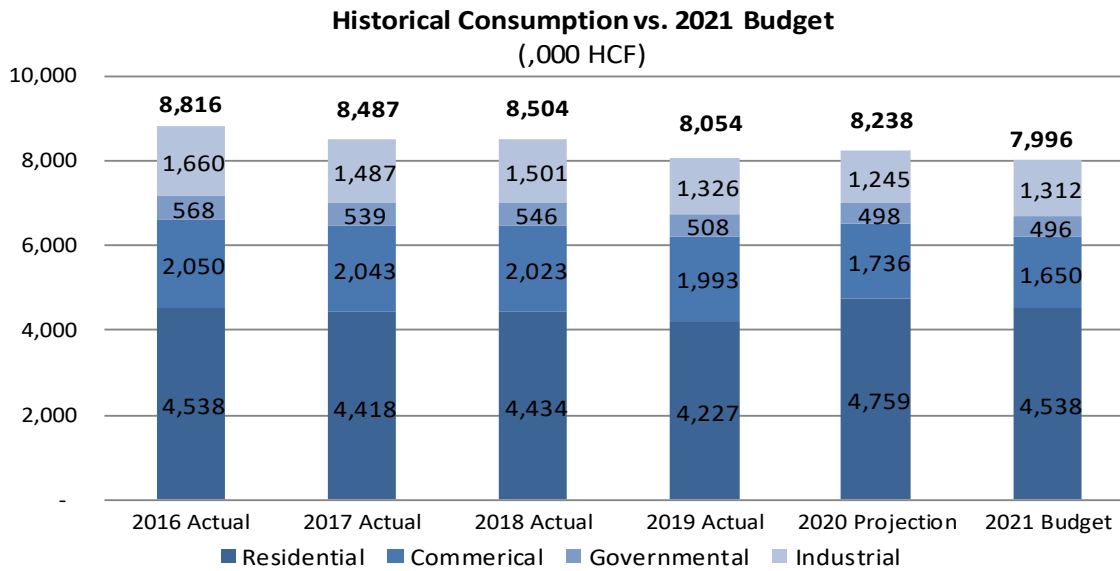
1. Costs are first assigned to various functions such as supply, treatment, pumping and distribution. The District’s accounting system readily provides this functional breakdown.
2. The functional costs are then allocated to various types of service provided by the water utility or cost components. The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

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

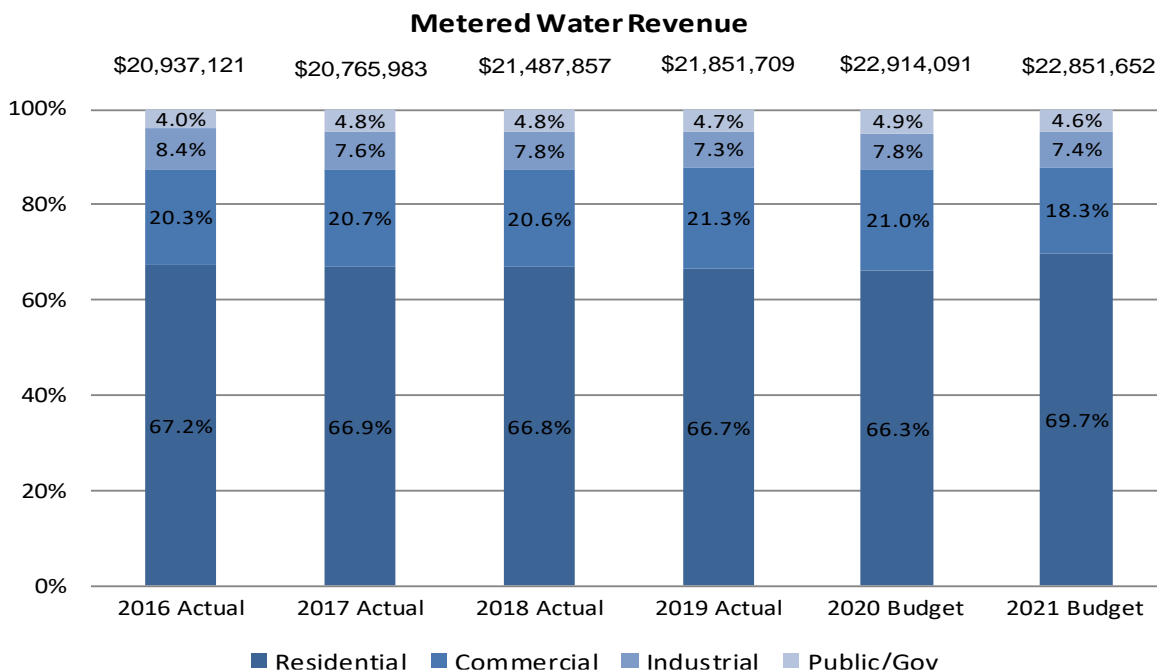
The last study was conducted in 2016. The study indicated that industrial and commercial customers were not paying the full cost of service. Because the rate change needed to those customers would create rate shock and impact economic development, a policy was established to gradually increase the rates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

Water Sales – Metered Revenue

Metered water revenue has risen from \$20.9 million in 2016 to the 2021 budgeted amount of \$22.8 million (9.7% increase). The small decrease in revenue of the 2021 Budget was the result of a delayed, smaller rate increase in 2020 paired with lower metered water usage. The District measures metered consumption by four customer classes: Residential, Commercial, Industrial, and Governmental/Public. The consumption patterns of each of these customer classes vary from one another and these variations have been taken into consideration in estimating the consumption used for the budget (see detailed discussion on subsequent pages).



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

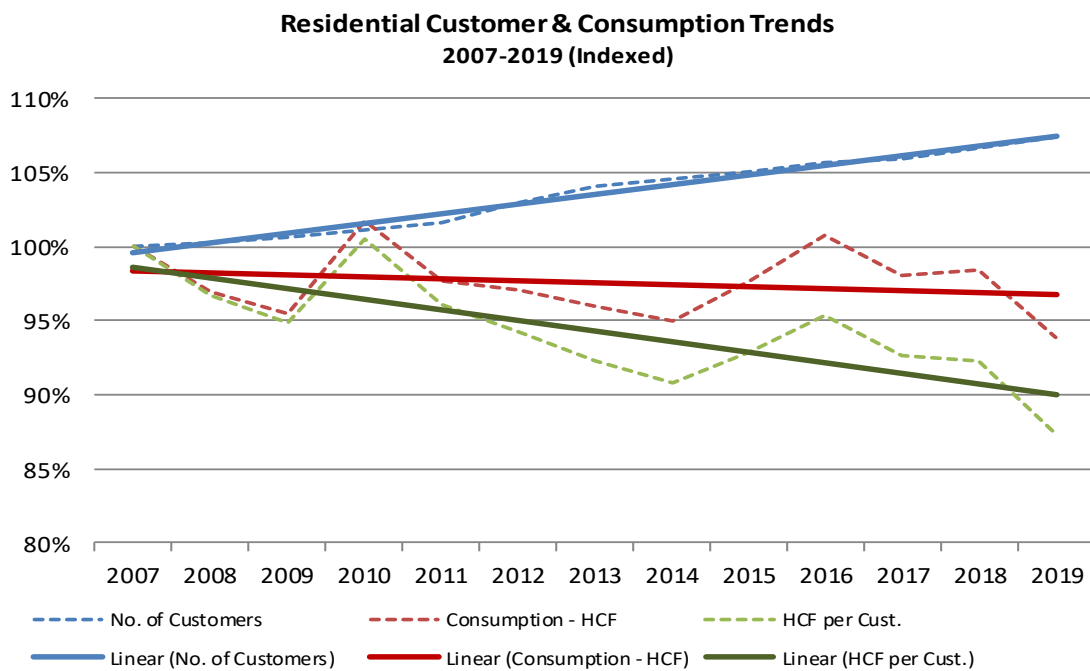


Water Sales – Metered Revenue - Consumption

Residential

Residential consumption makes up about 57% of total metered consumption and generates roughly 69.7% of the District's total metered water revenue. The two segments of residential consumption are monthly billed and seasonal customers. Monthly billed customers receive bills year round on a monthly basis. Seasonal customers receive a bill in the spring for the minimum consumption level and a bill in the fall for any excess usage above the minimum.

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

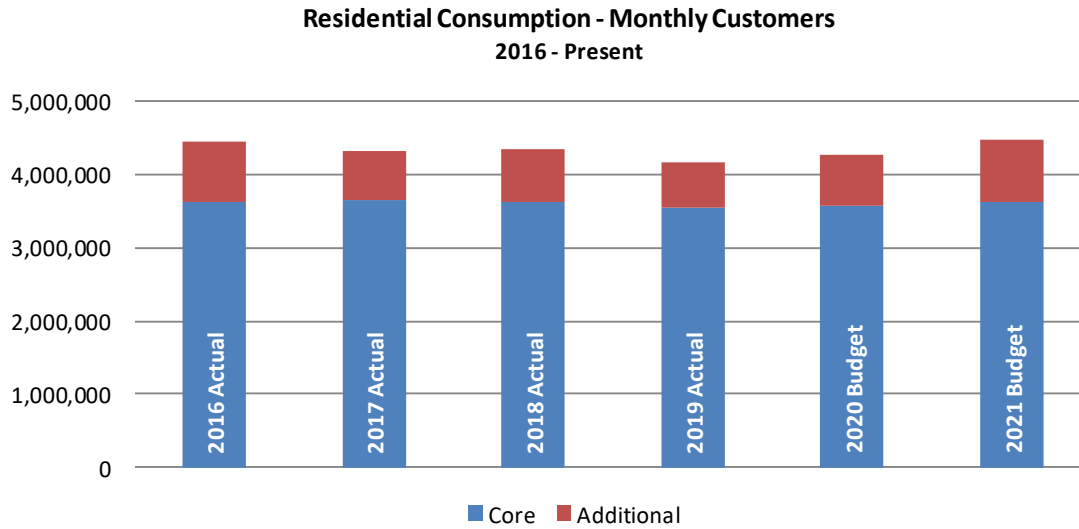


As shown above, overall consumption (red line) has been relatively flat over the last 10 years, even though the number of customers (blue) has been increasing. Therefore, the consumption per customer (green) has also been declining. These trends were taken into account when estimating the residential core usage for 2020.

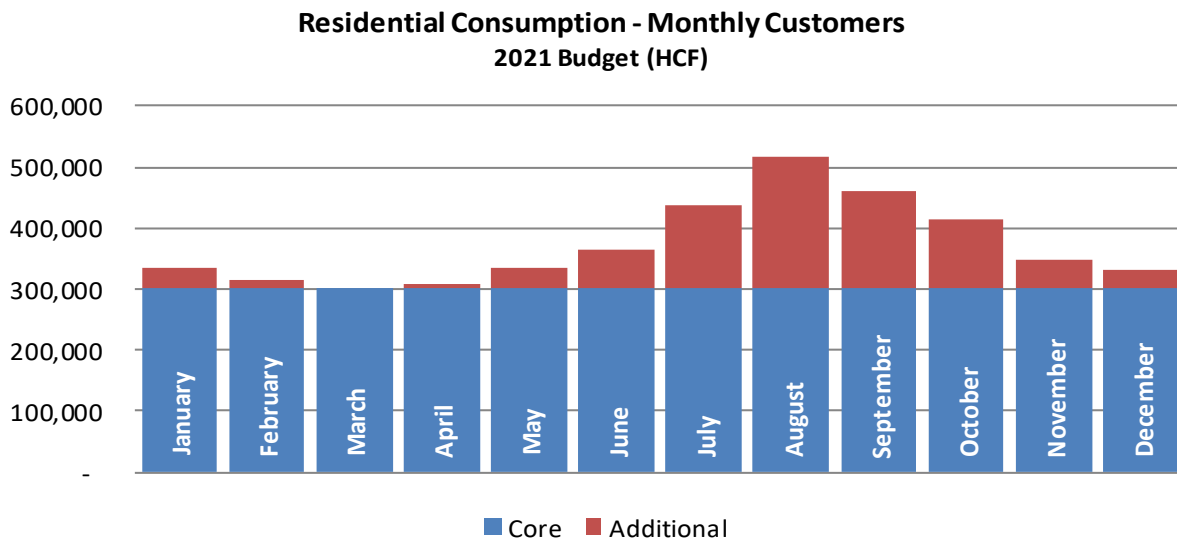
The additional usage was determined by averaging the percentage of additional consumption over the core in the sample years. For the 2021 budget, the core consumption was approximately 3.6 million HCF (hundred cubic feet) and the additional usage was 23% of the core. This falls in line with historical data.

Water Sales – Metered Revenue - Consumption

Residential (continued)



The monthly additional consumption was determined based on the average monthly consumption from a rolling three-year period ending December 2019. Approximately three-fourths of the additional consumption is used between the months of June through September.



Consumption by seasonal customers makes up only 1.44% of total residential consumption. Residential seasonal consumption for the budget was based on a three-year period from 2017-2019 and is approximately 65,000 HCF for the year.

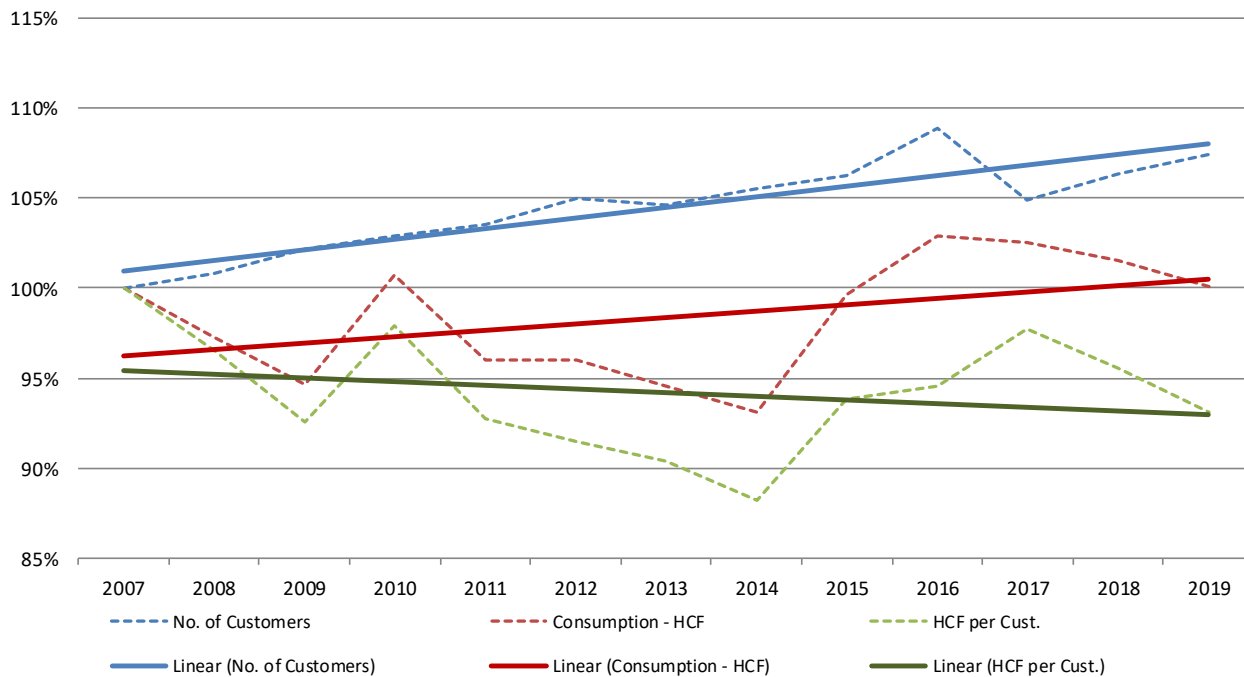
Water Sales – Metered Revenue - Consumption

Commercial

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

In the same manner as residential consumption, monthly customer consumption has been calculated by determining the core level of consumption, then estimating the amount of additional usage. The monthly core level was reached by taking the average of the lowest three months of each year in the sample data and annualizing that value. The rate of increase in customers is greater for this class than residential, but the decrease in consumption per customer is more gradual than residential. However, overall consumption has been trending up slightly and this was factored into establishing a core usage amount for the commercial class for 2021.

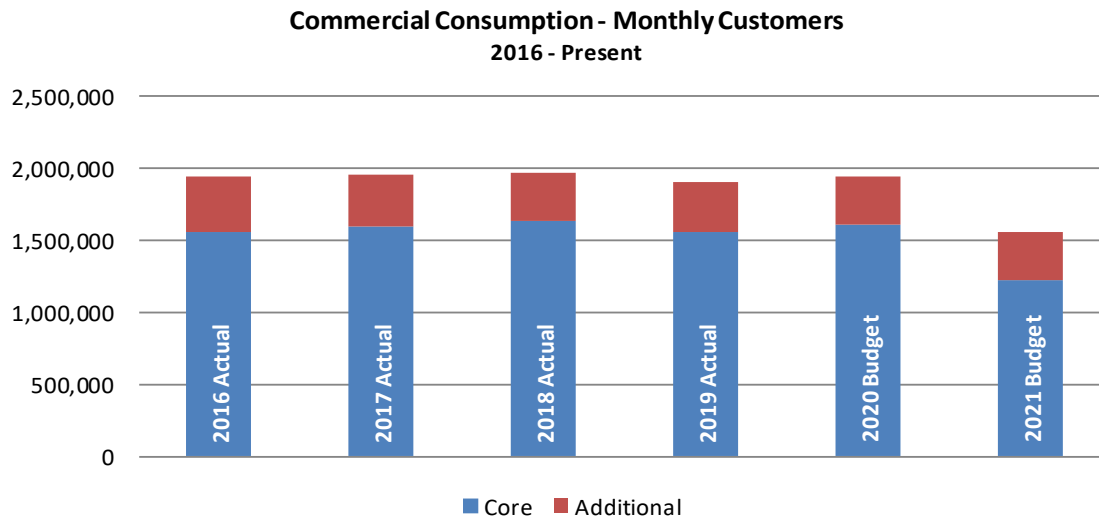
**Commercial Customer & Consumption Trends
2007-2019 (Indexed)**



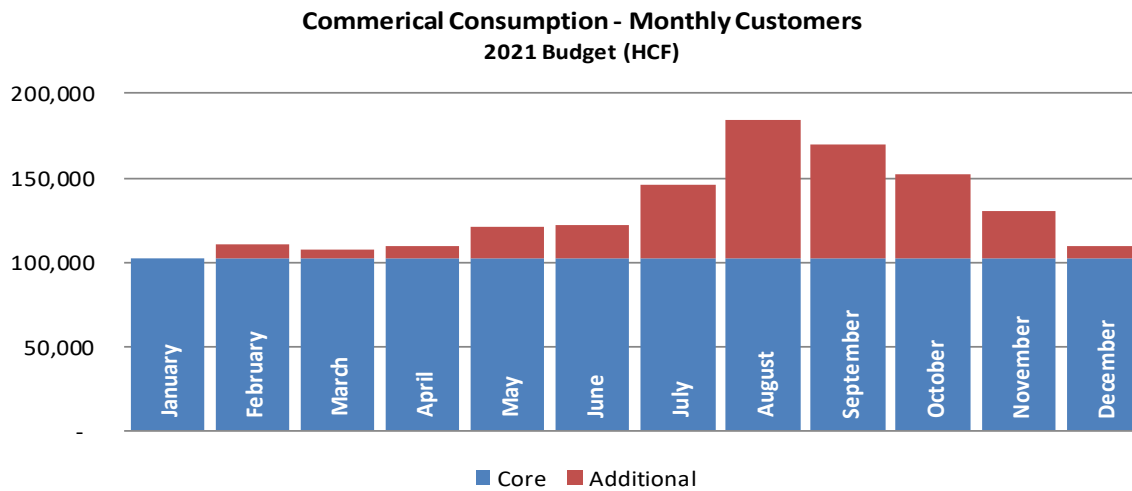
Additional usage was then determined by averaging the percentage of additional consumption over the core in the sample years. For the 2021 budget, the core consumption declined from last year to 1.22 million HCF. The additional usage budgeted for 2021 is 28% of the core.

Water Sales – Metered Revenue - Consumption

Commercial (continued)



The monthly additional consumption was determined based on the average monthly consumption from a rolling three-year period ending December 2019. Approximately two-thirds of the additional consumption is used between the months of June through September.



Consumption by seasonal customers makes up only 5.17% of total commercial consumption. Commercial seasonal consumption for the budget was based on a three-year period from 2017-2019 and is approximately 85,000 HCF for the year.

Water Sales – Metered Revenue - Consumption

Industrial

Historically, approximately 90% of industrial usage has come from just five customers: Calpine, Texas Instruments, Sappi Fine Paper, ON Semiconductor, and B&G Foods. The District makes an effort every year to contact these customers to get an estimate of their expected water needs for the coming year. Overall Industrial usage is budgeted at 1.3 million HCF for 2021.

Calpine

The Calpine power plant is the District's largest customer. Located in Westbrook, Calpine uses two combustion turbines routed to two heat recovery steam generators that provide steam to a turbine. This facility produces enough electric power to meet the needs of more than 500,000 homes throughout New England. The energy market can significantly impact production at the plant. In 2018 and 2019, Calpine had some substantial breaks in usage when the plant was offline due to lack of demand and to save on overhead costs. Usage trend for Calpine has been highly variable with no clear trend and coming under budget several years in a row. We plan to lower the usage by 50,000 from last years' budget to 350,000 HCF. We have taken into consideration actual usage for 2020 and possible shutdowns of the plant to stay conservative.

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, so we are using a three year average and weighing in how the 2020 projection is shaping up to be. Therefore the 2021 Budgeted usage has increased 10,000 to 300,000 HCF (3.3%).

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. After discussion with employees, they expect 2021 to follow along the lines of 2019 and 2020 budgets and will keep it at 300,000 HCF.

ON Semiconductor (formerly Fairchild Semiconductor)

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

B&G Foods

B&G Foods and its subsidiaries manufacture, sell, and distribute a diversified portfolio of high-quality, branded shelf-stable foods across the United States, Canada and Puerto Rico. They own B&M Beans that operates a bean cannery in Portland. 2021 usage is determined by using the trend over the last few years which is consistently in the 70-80 thousand HCF range with last year at 77,000 HCF.

Water Sales – Metered Revenue - Consumption

Public/Governmental

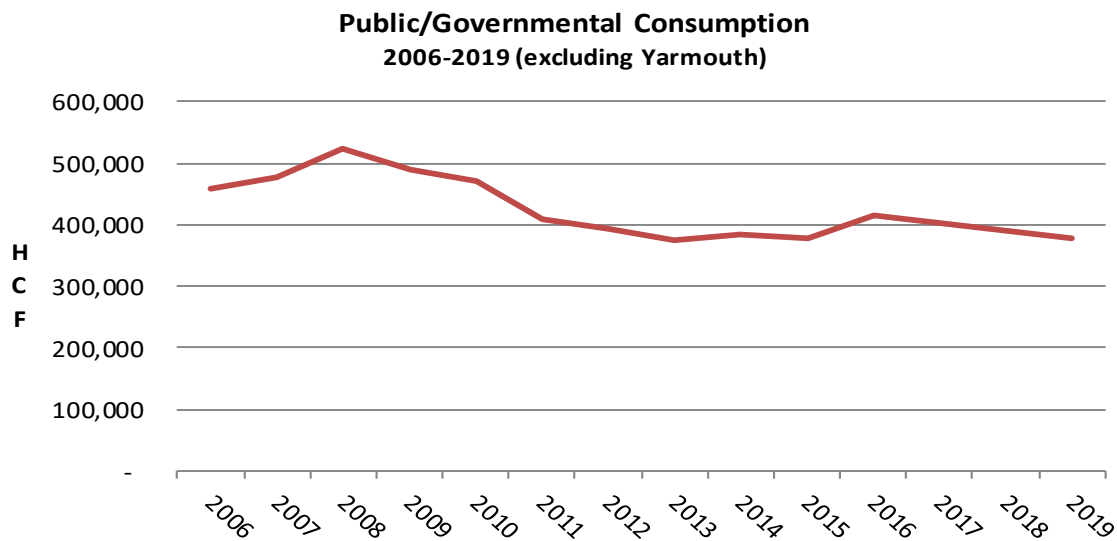
Yarmouth Water District

Approximately 25% of public/governmental consumption comes from usage by the Yarmouth Water District that provides water almost entirely to the Wyman Power Plant on Cousins Island. Wyman Power Plant is a spot producer of power for the Northeast and is only used during peak energy demand because, as an oil-fired generator, it has become obsolete. Because of low oil prices and the high price of electricity in the Northeast, the plant remains online.

Wyman ran consistently over the recent years because it supplements with natural gas fired units in New England. They generate roughly half the region's power and are much cheaper to operate. We are creating the budget off a 3 year actual average (2017-2019) as well as heavily considering the projection of 2020 to bring it down from last years' budget of 155,000 hundred cubic feet to 140,000 HCF.

Other Public/Governmental Customers

Public/Governmental consumption has been in decline since the economic downturn. Government entities have sought out ways to decrease expenditures including their water and sewer bill. As a result, it is not anticipated that usage will return. In 2021 we have predicted that the usage will continue to fall similar to last year.



Water Sales – Metered Revenue – Rates

Water Rate Schedule

A 3.4% increase is proposed to be implemented effective 12/1/2020. Board of Trustees will review and approve any rate adjustment in October of 2020.

Current Rates: Effective 12/1/2020

Meter or Service Line Size	Member Rate	Non-member Rate
<u>Private Fire Monthly Fee</u>		
2	\$4.04	\$4.64
3	9.04	10.38
4	16.12	18.54
6	38.53	44.30
8	64.51	74.15
10	100.76	115.95
12	145.09	166.87
16	257.94	296.65
<u>Minimum Monthly Charges</u>		
5/8	\$10.04	\$11.55
3/4	11.83	13.59
1	15.35	17.67
1 1/2	27.27	31.36
2	39.29	45.16
3	71.29	81.95
4	107.31	123.39
6	207.33	238.42
8	327.34	376.45
10	473.96	545.06
12	627.41	721.50
Low income	2.51	2.89
<u>Monthly Volume Charge</u>		
First 100 Cf	minimum	minimum
Next 2,900 Cf	\$2.51	\$2.89
Next 7,000 Cf	2.23	2.57
Next 40,000 Cf	1.96	2.25
Over 50,000 Cf	1.11	1.28

Typical Customer Increases		Current	Proposed 3.5%	\$	%
Residential (per month)	.62" meter, 7 HCF	\$24.39	\$25.10	\$0.71	2.91%
Commercial (per month)	.75" meter, 80 HCF	188.75	196.12	7.37	3.90%
Small Industrial (per month)	2" meter, 1,300 HCF	1,857.46	1,940.18	\$82.72	4.45%
Large Industrial (per month)	8" meter, 56,000 HCF	60,115.10	62,945.23	2,830.13	4.71%
Sprinkler (per year)	6" meter	447.24	462.36	\$15.12	3.38%
Public Fire (per year)		1,461,684	1,511,988	50,304	3.44%
Seasonal (per year)	.62" meter	234.84	242.78	\$7.94	3.38%

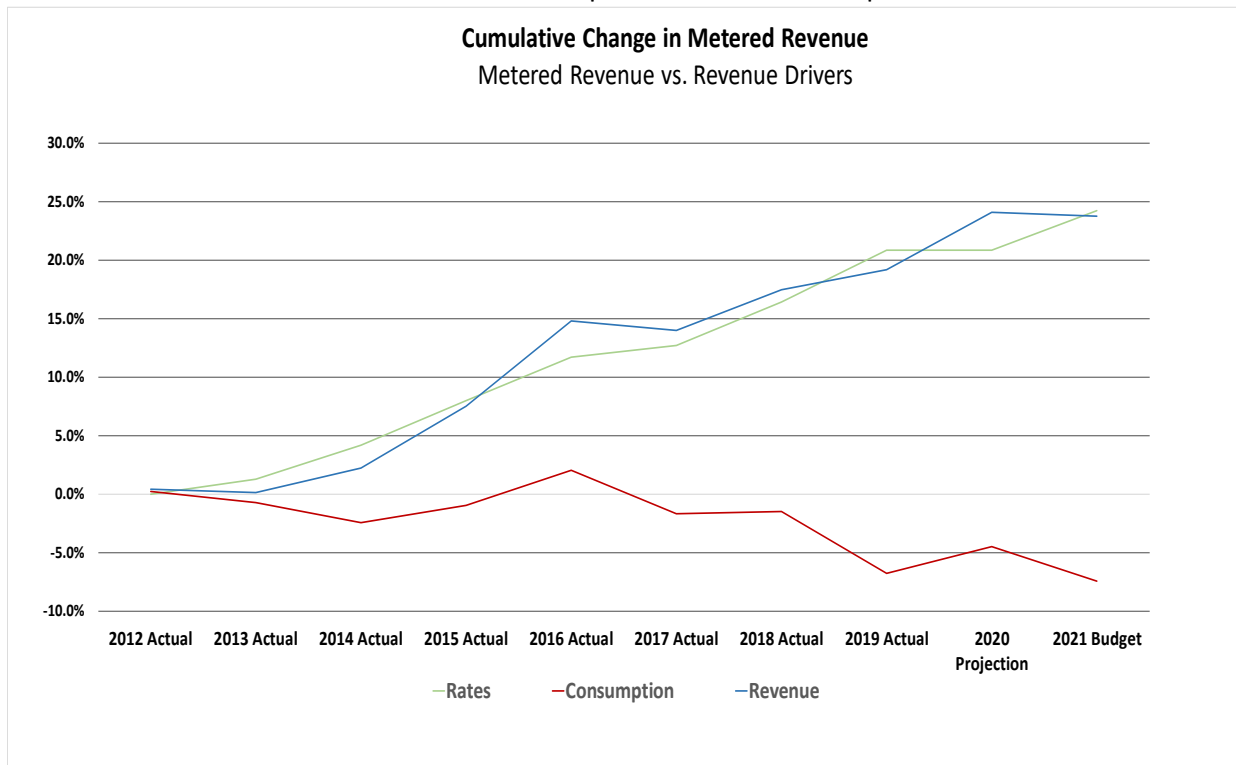
Water Sales – Metered Revenue - Rates

Water Rate Schedule (continue)

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

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

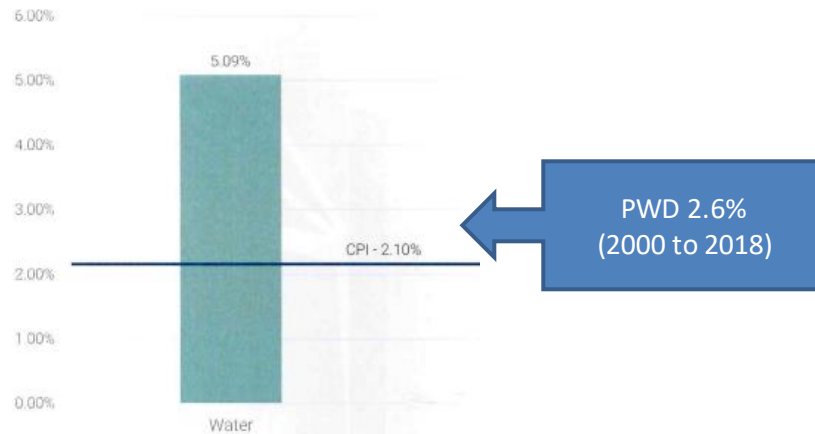
Changes in metered revenue are strongly correlated to changes in rates. There is also a relationship between metered revenue growth and changes in consumption. The graph below reflects this correlation. The revenue line runs closely to rates, while changes in its slope correspond to changes in consumption. The 0.3% decrease in water revenue from 2020 Projection to 2021 Budget was a result of 3.4% increase in metered rates and a 2.9% drop in forecasted consumption.



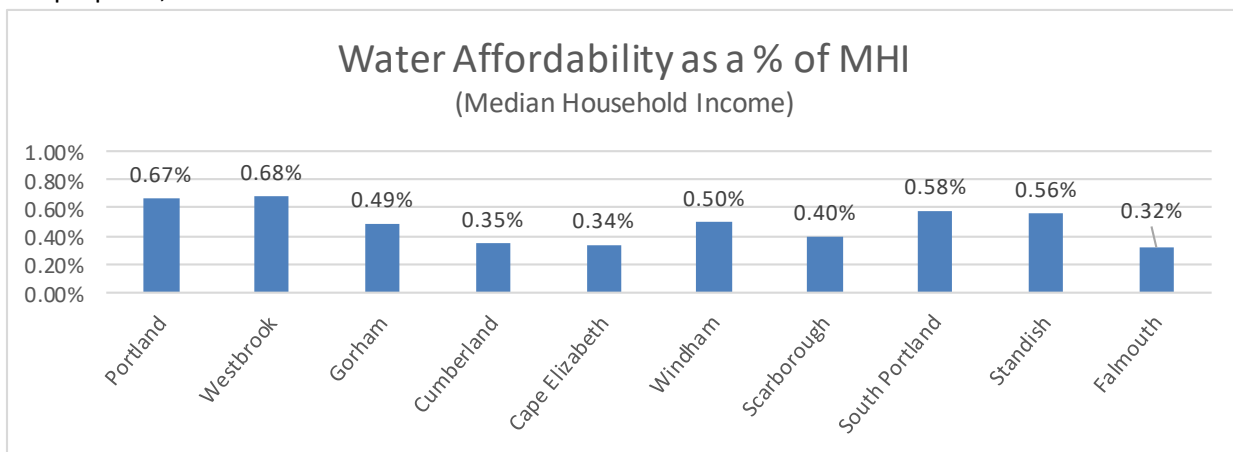
Water Sales - Rate Affordability Study

Though average water rate adjustments since 2004 increased close to the rate of change in the consumer price index (CPI), the past 5 years rate adjustments have exceeded CPI (3.2% vs 1.7%) and the 5-year financial forecast indicates an average annual rate adjustment of 5.0% - closer to the national average increase. Higher rate adjustments are needed to fund necessary replacements and upgrade to water infrastructure. As the chart indicates below, Portland Water District's rate adjustments have been lower than other water utilities since 2004 despite significantly investing in our infrastructure. The operational efficiencies that enabled the lower rate adjustments will not be available in future years and rates adjustments will trend closer to the industry average.

Annualized Rate Increases from 2004 to 2018
(AWWA/Raftelis – 2019 Water and Wastewater Rate Survey)



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



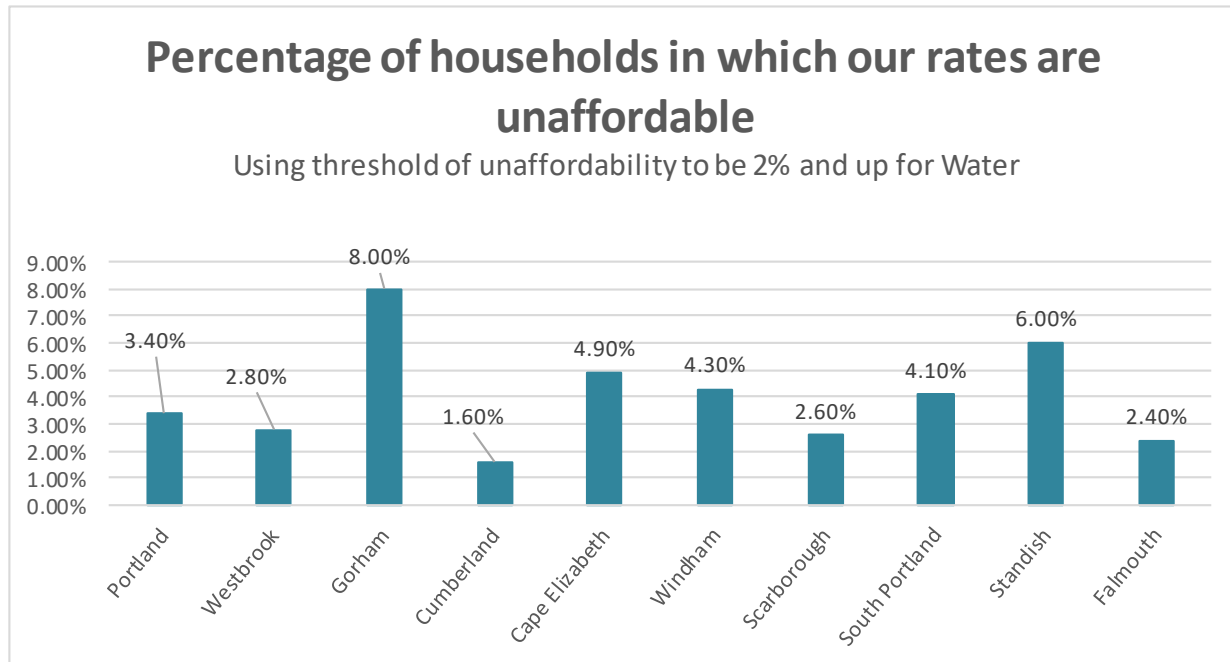
Water Sales - Rate Affordability Study (continued)

The table below indicates most 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).

Water

Household Income	Value	Annual Bill as Percentage of Household Income by Household 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		0.88%	1.41%	1.76%	2.29%	2.64%	3.00%	3.52%	3.88%	4.40%
40th Percentile	\$ 37,200		0.41%	0.65%	0.81%	1.05%	1.21%	1.38%	1.62%	1.78%	2.02%
Median	\$ 48,300		0.31%	0.50%	0.62%	0.81%	0.94%	1.06%	1.25%	1.37%	1.56%
60th Percentile	\$ 61,000		0.25%	0.40%	0.49%	0.64%	0.74%	0.84%	0.99%	1.09%	1.23%
80th Percentile	\$ 99,400		0.15%	0.24%	0.30%	0.39%	0.45%	0.52%	0.61%	0.67%	0.76%

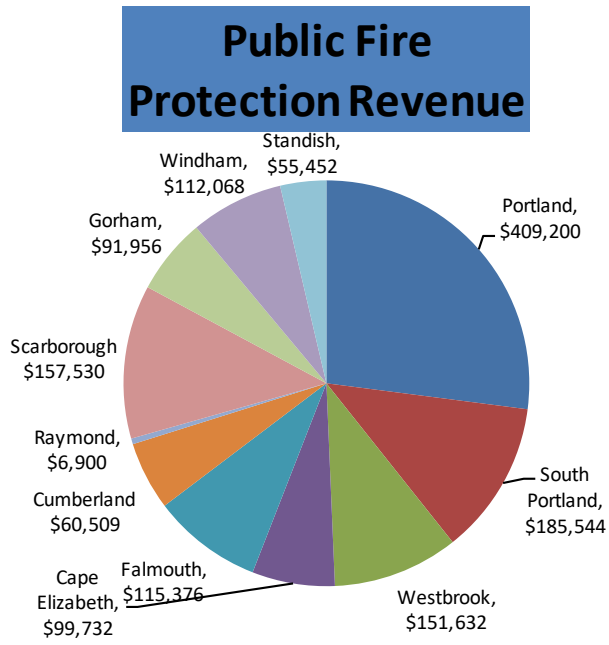
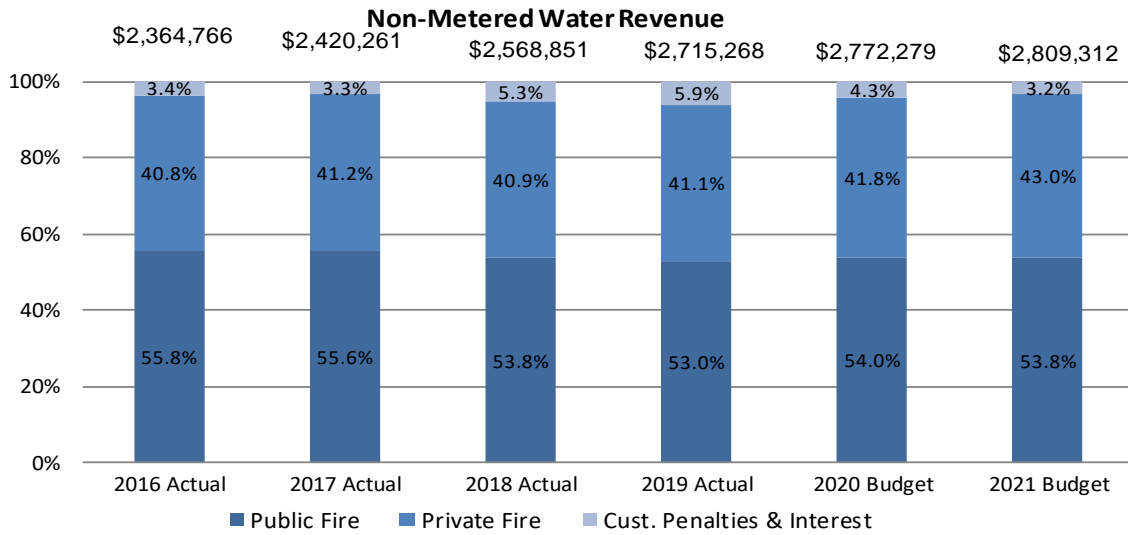
Using an alternative tool (Affordability Assessment Tool created by the University of North Carolina), an estimated number of households having unaffordable water bills was calculated. The tool uses information from the 2018 U.S. Census Bureau Website.



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

Water Sales – Non-Metered Revenue

Non-metered water revenue has risen from \$2.3 million in 2016 to the budgeted amount of \$2.8 million (18.8%) for 2021. The large rise in Customer Penalties and Interest budget was due to a newly implemented penalty fee for disconnection of multi-unit properties.



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

Private Fire Protection Revenue

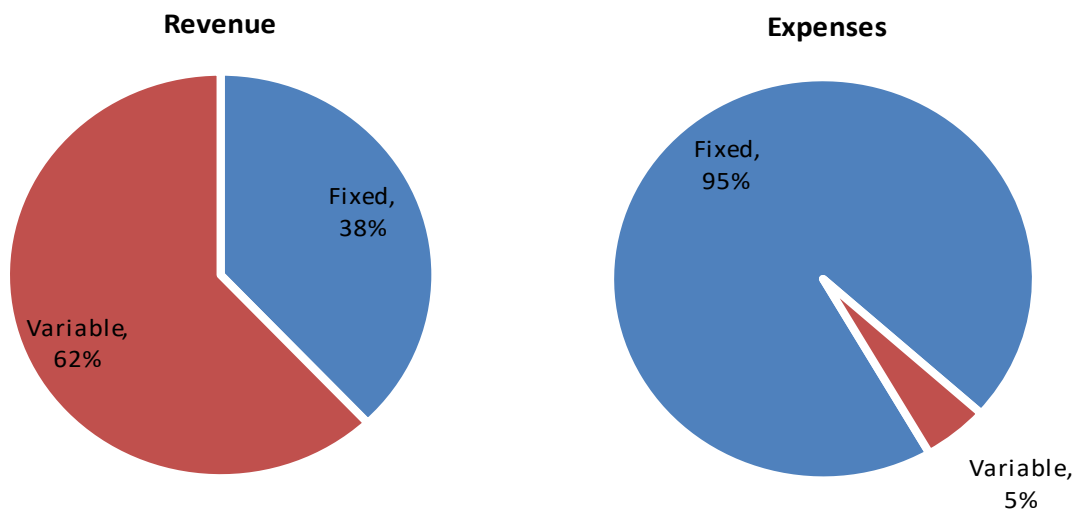
Service Line Size (inches)	Annual Fee	Number of Customers
2	\$ 48.48	361
3	\$ 108.48	0
4	\$ 193.44	238
6	\$ 462.36	1255
8	\$ 774.12	606
10	\$1,209.12	37
12	\$1,741.08	21
16	\$3,095.28	1

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

Water Sales - Long-Term Considerations

Revenue & Expense: Fixed vs. Variable

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



Slow Customer Growth

Population growth in the District's service area is lower than in other parts of the country and is not expected to increase much. Customers in 2019 total versus 2018 had been increased by an average of 0.6% due to Residential increasing by 288 and Commercial customers increased by 29 accounts.

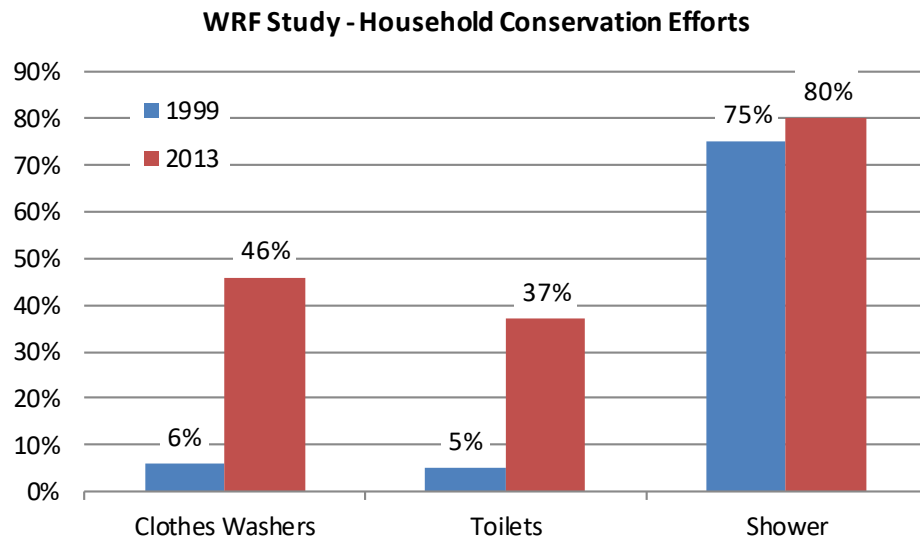
Cost of Service Gap

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

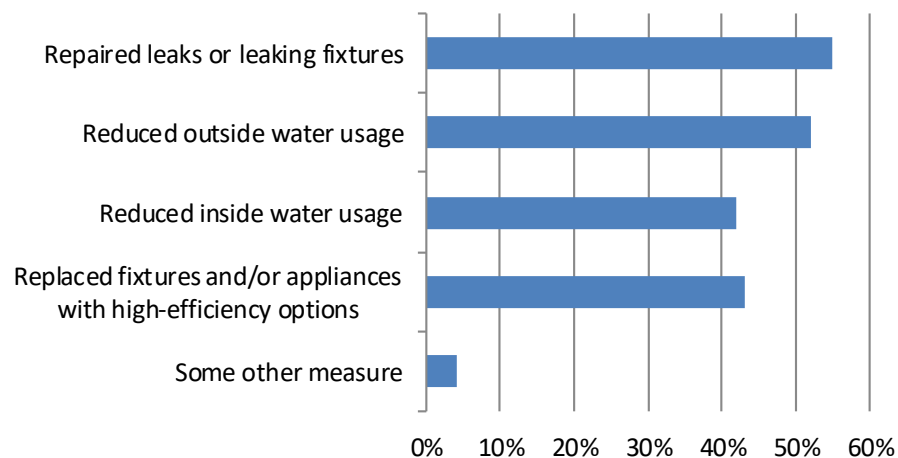
Water Sales - Long-Term Considerations (continued)

Decline in Consumption

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



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



Wastewater Assessment & Contracted Billing Income

Wastewater Assessments are amounts payable by each municipality for wastewater services provided by the District. The assessments cover the operating and debt service costs of operating wastewater facilities maintained by the District. The assessments are billed in monthly installments. In 2021, the assessments for each municipality were increased excluding Falmouth (see table below).

Wastewater Assessments

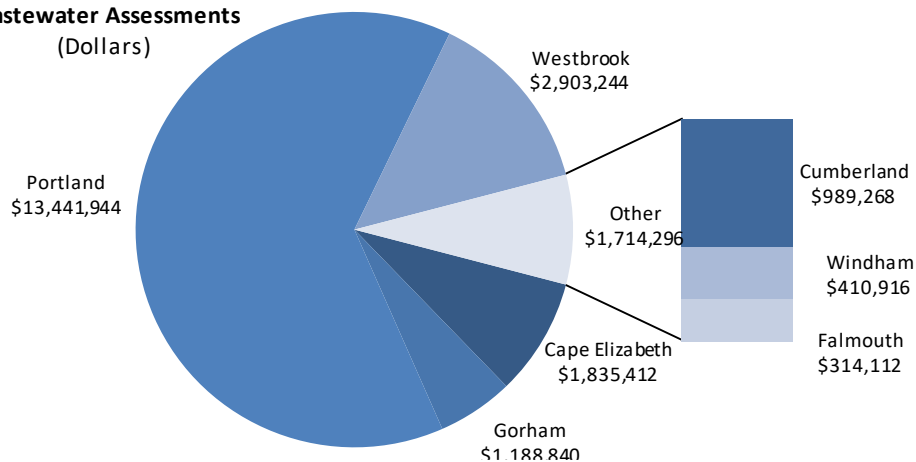
	2020 Actual		2020 Budget	2021 Budget	\$-Diff.	%Diff.
	2019 Actual	Jan-Jun				
Cape Elizabeth	\$1,572,912	\$852,690	\$1,705,380	\$1,835,412	\$130,032	7.6%
Cumberland	905,364	482,646	965,292	989,268	23,976	2.5%
Falmouth	314,112	157,056	314,112	314,112	-	0.0%
Gorham	1,133,436	580,338	1,160,676	1,188,840	28,164	2.4%
Portland	12,616,080	6,431,670	12,863,340	13,441,944	578,604	4.5%
Westbrook	2,539,800	1,410,384	2,820,768	2,903,244	82,476	2.9%
Windham	366,768	194,502	389,004	410,916	21,912	5.6%
	\$19,448,472	\$10,109,286	\$20,218,572	\$21,083,736	\$865,164	4.3%

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. The District only provides billing-related services for those communities.

Contracted Billing Income

	2020 Actual		2020 Budget	2021 Budget	\$-Diff.	%Diff.
	2019 Actual	Jan-Jun				
Scarborough	11,256	5,664	11,328	11,664	336	3.0%
South Portland	201,132	100,566	201,132	201,132	-	0.0%
	\$212,388	\$106,230	\$212,460	\$212,796	\$ 336	0.2%

Wastewater Assessments (Dollars)

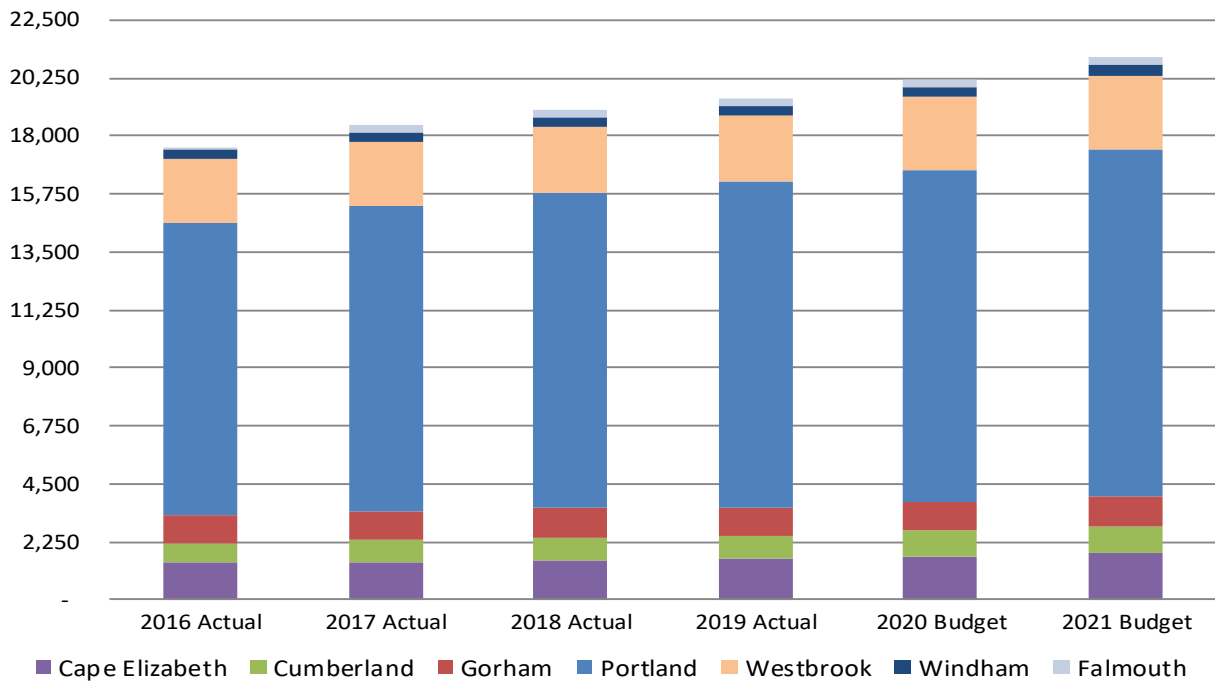


Wastewater Assessments Revenue Trend

Wastewater assessments rose from \$17.5 million in 2016 to a budgeted \$21.1 million in 2021 (an increase of 20.3%). 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.

	Cape Eliz.	Cumberland	Gorham	Portland	Westbrook	Windham	Falmouth	Total
2016 Actual	1,443,408	750,072	1,106,148	11,308,040	2,533,176	351,756	36,012	17,528,612
2017 Actual	1,468,692	844,584	1,106,148	11,841,972	2,533,176	360,528	263,604	18,418,704
2018 Actual	1,539,840	905,364	1,106,148	12,248,424	2,533,176	360,528	310,056	19,003,536
2019 Actual	1,572,912	905,364	1,133,436	12,616,080	2,539,800	366,768	314,112	19,448,472
2020 Budget	1,705,380	965,292	1,160,676	12,863,340	2,820,768	389,004	314,112	20,218,572
2021 Budget	1,835,412	989,268	1,188,840	13,441,944	2,903,244	410,916	314,112	21,083,736

Assessments by Fund (2016-Present)
(\$,000)



Current Municipal Wastewater Rates

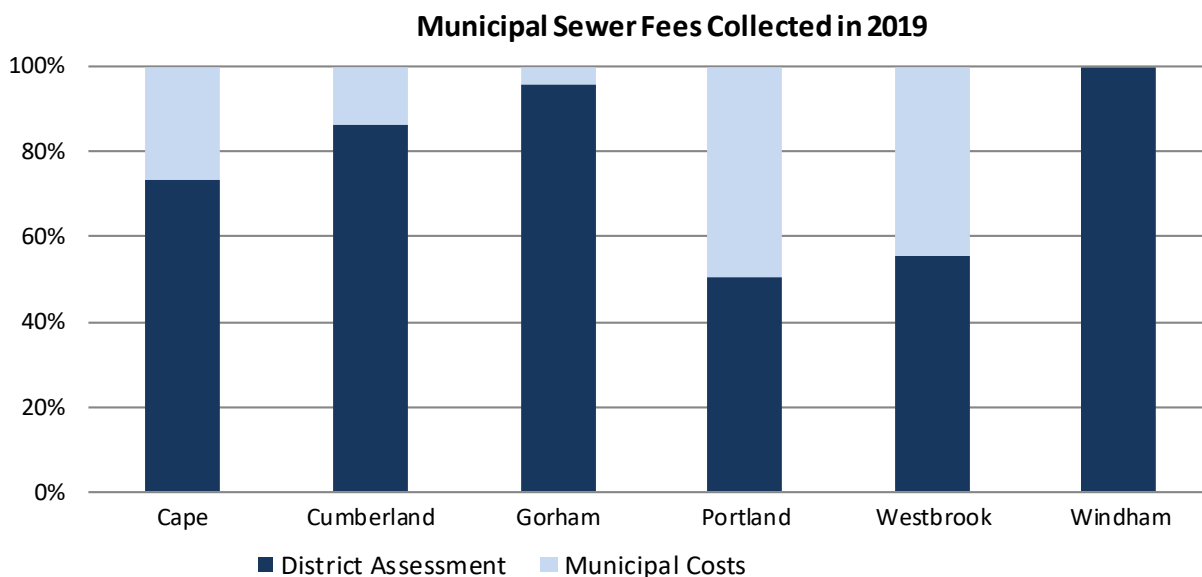
Wastewater rates are established by each municipality. The rates are designed to cover the municipal costs, including the District's annual assessment. The table below indicates the municipal sewer fees for municipalities for whom the District provides billing services. These fees are included on the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

Sewer Rates as of 10/1/2020

	Minimum HCF	Minimum Charge	Additional HCF
Portland	1	\$11.15	\$11.15
Cumberland	0	36.92	5.52
South Portland	1	5.38	5.38
Cape Elizabeth	1	49.50	5.68
Westbrook	1	11.93	6.93
Gorham	1	13.74	6.29
Windham	5	48.84	7.00

HCF= Hundred Cubic Feet (748 gallons)

The chart below indicates the percent of sewer fees collected in 2019 that the municipalities used to pay the District's assessment and their internal costs. In 2019, Windham's sewer fees were less than the District's assessment by \$29,867. The shortfall was covered by the town's prior year surplus or general fund appropriation.



Interest Income

The District's investment policy limits investments to US Government obligations, certificates of deposit that are fully insured or collateralized, and other similar issues with the goal of protecting the District's principal balances. The budgeted rate of return on investments was based on the current annual returns as of July 2020 and cash balances as of June 2020. Rates of return have plummeted quickly this past year due to the impact of the global pandemic.

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 \$4,219 from that loan in 2021.

	2019 Actual	2020 Actual Jan-Jun	2020 Budget	2021 Budget	\$-Diff.	%-Diff.
Water Fund	\$472,511	\$294,168	\$408,100	\$143,433	-\$264,667	-64.9%
Wastewater Operating Funds:						
Cape Elizabeth	30,323	13,092	20,884	8,000	(12,884)	-61.7%
Cumberland	20,802	11,238	13,303	6,001	(7,302)	-54.9%
Falmouth	2,826	1,432	1,100	1,000	(100)	-9.1%
Gorham	43,185	22,904	18,455	11,997	(6,458)	-35.0%
Portland	247,678	107,585	164,504	60,003	(104,501)	-63.5%
Westbrook	138,235	72,742	72,695	41,216	(31,479)	-43.3%
Windham	<u>13,983</u>	<u>6,531</u>	<u>8,103</u>	<u>4,005</u>	<u>(4,098)</u>	<u>-50.6%</u>
	497,032	235,524	299,044	132,222	(166,822)	-55.8%
Contracted Billing:						
Scarborough	201	117	103	0	(103)	-100.0%
South Portland	<u>4,189</u>	<u>2,616</u>	<u>500</u>	<u>1,000</u>	<u>500</u>	<u>100.0%</u>
	4,390	2,733	603	1,000	397	65.8%
Total	\$ 973,933	\$ 532,425	\$ 707,747	\$ 276,655	\$ (431,092)	-60.9%

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

Water Fund:	2019 Actual	2020 Actual Jan-Jun	2020 Budget	2021 Budget	\$-Diff.	%-Diff.
Cross Connection Fees	\$40,635	\$15,700	\$50,000	\$45,000	(\$5,000)	-10.0%
Customer Connection Fees	92,915	25,522	82,000	82,000	-	0.0%
Customer Activation Fee	81,293	31,824	80,000	75,000	(5,000)	-6.3%
Jobbing Surcharge	68,538	21,254	50,000	55,000	5,000	10.0%
Miscellaneous Income	180,019	92,605	164,290	176,482	12,192	7.4%
Total Water Division	\$463,400	\$186,905	\$426,290	\$433,482	\$7,192	1.7%

Wastewater Funds:	2019 Actual	2020 Actual Jan-Jun	2020 Budget	2021 Budget	\$-Diff.	%-Diff.
Septage - Gorham	\$119	\$318	\$0	\$0	\$0	0.0%
Septage - Portland	257,343	57,019	200,000	210,000	10,000	5.0%
Septage - Westbrook	771	2,056	0	0	0	0.0%
Septage - Windham	28	73	0	0	0	0.0%
Miscellaneous Income	176,071	2,700	38,500	48,000	9,500	24.7%
Total Wastewater Division	434,332	62,166	238,500	258,000	19,500	8.2%
Total Water & Wastewater	\$897,732	\$249,071	\$664,790	\$691,482	\$26,692	4.0%

Fund Balance

Fund Balance, or Surplus, is the excess of revenues over expenses on a budgetary basis (see Financial Policy section for differences between budgetary and generally accepted accounting principles). In addition, a portion of water net income is reserved in a watershed protection land fund and debt service on capital projects (Capital Reserve). Also, a portion of revenue from the Portland Wastewater fund is reserved for potential expansion of capacity at the Westbrook Wastewater fund's treatment plant.

Additionally, the Board ordered that the proceeds from the sales of certain surplus properties be reserved in the Land Cash Reserve used for watershed protection. In 2009, the District's Board of Trustees (BOT) adopted a policy setting targets for operating fund balances (25% of net budget) and the watershed protection reserve (15% of water revenues). These policies do not apply to the Contracted Billing municipalities. It is projected that all of the funds with the exception of Windham (13.7%) will be above the operating fund target of 25.0% at the end of 2021. The balances of the renewal and replacement funds and water main capital reserve fund are listed in the Capital Finance section.

	Balance 01/01/20	Projected 2020	Budget 2021	Balance 12/31/21	Target Balance	Projection %
Water	\$6,824,529	\$54,684	\$0	\$6,879,213	\$6,559,470	26.2%
Cape Elizabeth	430,575	25,969	-	456,544	460,853	24.8%
Cumberland	227,678	31,341	-	259,019	248,817	26.0%
Gorham	294,783	44,265	-	339,048	300,209	28.2%
Portland	3,802,807	45,987	-	3,848,794	3,427,987	28.1%
Westbrook	851,256	(79,546)	-	771,710	748,115	25.8%
Windham	53,837	2,924	-	56,761	103,730	13.7%
	<u>\$12,485,465</u>	<u>\$125,624</u>	<u>\$0</u>	<u>\$12,611,089</u>	<u>\$11,849,181</u>	<u>26.6%</u>

Falmouth & Contracted Billing Operating Surpluses:

	Balance 01/01/20	Projected 2020	Budget 2021	Balance 12/31/21
Falmouth	\$15,137	\$12,072	\$8,047	\$35,256
Scarborough	7,813	943	(303)	8,453
So. Portland	<u>153,618</u>	<u>(99,999)</u>	<u>(18,484)</u>	<u>35,135</u>
	<u>\$176,568</u>	<u>(\$86,984)</u>	<u>(\$10,740)</u>	<u>\$78,844</u>

Combined Surpluses **\$12,662,034** **\$38,640** **(\$10,740)** **\$12,689,933**

Watershed Protection Land Funds (Goal 15.0%)

	Balance 01/01/20	Projected 2020	Budget 2021	Balance 12/31/21	Target Balance	Projection %
Watershed Reserve	\$1,381,590	\$13,820	(\$273,020)	\$1,122,390	\$3,722,639	4.5%
Land Cash Reserve	<u>639,517</u>	<u>(111,055)</u>	<u>(76,288)</u>	<u>452,174</u>		
	<u>\$2,021,107</u>	<u>(\$97,235)</u>	<u>(349,308)</u>	<u>\$1,574,564</u>	<u>\$3,722,639</u>	<u>6.1%</u>

Other Reserves:

	Balance 01/01/20	Projected 2020	Budget 2021	Balance 12/31/21
Capital Reserve	\$745,959	\$130,779	-\$45,233	\$831,505
Portland Wastewater	<u>\$76,894</u>	<u>\$7,500</u>	<u>\$7,500</u>	<u>\$91,894</u>

Fee Schedule for Non-Water Tariff Services

Schedule of latest fees adopted by the Board of Trustees effective August 1, 2018.

	Description	Fee
A. Water		
1. Winter hydrant inspection	Inspection of private hydrants to verify the operability of hydrant during winter months	\$3 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 (see policy 6.20-03)	Consistent with the 'Acceptance Fee Schedule' included in Policy 6.20-03.
3. Submeter Fee -Monthly	Covers the operating and capital cost of the submeter program	\$2 per month at the request of Cumberland, Gorham, South Portland and Westbrook
4. Submeter Fees -Other	The cost to investigate why a submeter cannot be read after the initial installation of meter/Encoder Receiver Transmitter (ERT).	Sub meter verification fee \$19
5. Submeter Fees – Portland Only	Costs or replacing submeters for Portland residents.	Submeter Replacement ERT & Meter \$150 Submeter ERT Only Upgrade fee \$105 Fees are per City's request.
C. General		
1. Purchases from Stock Room	Qualified third-parties and employees may purchase items from the stockroom – see policy 7.15-02.	Inventory value plus a 50% mark up (See Policy 7.15-02).
2. Freedom of Information Request	Members of the Public requesting access to public records (see policy 7.05-05).	\$1 for first page, \$0.50 for each additional page, optional \$15/hour to compile data. Payment in advance may be required. (See Policy 7.05-05)

Introduction

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

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

2021 Financial Summary by Category

	2020 Budget	2021 Budget	Diff \$	Diff %
Salaries & Wages	\$12,149,805	\$12,516,650	\$366,845	3.0%
Employee Benefits	5,577,447	5,979,151	401,704	7.2%
Biosolids Disposal	1,722,166	2,181,420	459,254	26.7%
Chemicals	1,221,909	1,363,231	141,322	11.6%
Contracted Services	4,521,570	4,449,292	(72,278)	-1.6%
Heat/Fuel Oil	386,485	328,901	(57,584)	-14.9%
Insurance	211,175	222,707	11,532	5.5%
Materials & Supplies	1,760,135	1,722,510	(37,625)	-2.1%
Other Expense	792,365	769,906	(22,459)	-2.8%
Purchased Power	1,930,289	1,896,317	(33,972)	-1.8%
Regulatory/Taxes	288,430	300,696	12,266	4.3%
Tele/Other Utilities	365,099	386,574	21,475	5.9%
Transportation	1,167,423	1,197,317	29,894	2.6%
Dept Expense	32,094,298	33,314,672	1,220,374	3.8%
Trans Offset	(840,466)	(803,190)	37,276	-4.4%
Fund Expense	31,253,832	32,511,482	1,257,650	4.0%

2021 Financial Summary by Department

	Number of Employees	2020 Budget	Number of Employees	2021 Budget	Budget Diff \$	Budget Diff %
Water Services	56	\$9,207,119	56	\$9,262,055	\$54,936	0.6%
Wastewater Services	39	10,149,276	39	10,889,691	740,415	7.3%
Environmental Services	16	2,124,837	16	2,144,175	19,338	0.9%
Engineering Services	31	4,259,770	31	4,327,806	68,036	1.6%
Administration	44	6,064,147	44	6,368,680	304,533	5.0%
Non-Departmental	0	289,149	0	322,265	33,116	11.5%
	186	32,094,298	186	33,314,672	1,220,374	3.8%

Departmental Expense by Category

Salaries/Wages:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
660111 - SALARIES/WAGES NON-UNION	\$4,396,759	\$2,236,266	\$4,781,060	\$4,925,510	\$144,450	3.0%
660112 - WAGES/OVERTIME NON-UNION	317	118	-	-	-	n/a
660121 - WAGES/REGULAR UNION	5,897,808	3,000,606	6,375,012	6,555,733	180,721	2.8%
660122 - WAGES/OVERTIME UNION	473,202	216,215	557,763	570,036	12,273	2.2%
660123 - WAGES/DOUBLETIME UNION	53,699	22,909	67,408	70,734	3,326	4.9%
660124 - WAGES/STANDBY TIME UNION	149,914	85,980	163,272	186,757	23,485	14.4%
660131 - WAGES - REGULAR - TEMPS	123,294	23,560	178,290	180,880	2,590	1.5%
660132 - WAGES - OVERTIME- TEMPS	53	-	-	-	-	n/a
660136 - CONTRACTED - TEMP	14,095	24,620	-	-	-	n/a
66014 - VACATION ACCRUAL	64,520	-	-	-	-	n/a
660141 - TRUSTEES COMPENSATION	23,275	13,625	27,000	27,000	-	0.0%
66015 - SICKTIME ACCRUAL	90,583	-	-	-	-	n/a
Salaries & Wages Total	11,287,519	5,623,898	12,149,805	12,516,650	366,845	3.0%

Labor rates for Non-Union employees were assumed to be 2.8% higher than the rates paid on July 1, 2020.

The Union contract calls for an increases of 3.0% in November 2020, the current agreement expires at the end of October 2021. A 1% increase effective in November 2021 is assumed.

Combined, the two regular labor accounts (660111 & 660121) increased \$325,171 (2.9%). Total hours increased 706 (0.2%) due to the Employee Services position added in Q2 2020 being budgeted for a full year and a small shift in operational hours from capital work to operating expense. 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 decreased from 3.1% of total labor in 2020 to 3.0% in 2021.

Budgeted hours for overtime/double-time decreased by 31 (0.2%) while standby rose by 93 hours (1.5%) and temporary employee hours increased by 185 hours (1.5%).

District's overall regular (non-temporary) headcount remained at 186.

Positions	2020 Budget	2021 Budget	Change
Full Time	185	185	0
Part Time	1	1	0
Total	186	186	0

The Human Resources section has additional details.

Departmental Expense by Category (continued)

Employee Benefits:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
660401 - FICA - EMPLOYERS' SHARE	\$839,711	\$429,293	\$929,460	\$957,518	\$28,058	3.0%
660405 - SAFETY/WHY PROGRAM ITEMS	39,303	8,667	40,725	41,325	600	1.5%
660411 - MEALS ALLOWANCE	9,633	5,000	9,610	10,100	490	5.1%
660413 - PWD TRAINING PROGRAM	160	34	-	-	-	n/a
6604151 - FIELD UNIFORMS	1,867	-	1,290	1,290	-	0.0%
660418 - STIPENDS	11,800	11,500	15,400	13,300	(2,100)	-13.6%
660419 - EMPLOYEE BENEFITS-MISC OTH	39,163	3,531	35,920	26,880	(9,040)	-25.2%
660491 - FRINGE BENEFITS-REG/SAL	4,263,007	2,158,396	4,545,042	4,928,738	383,696	8.4%
Employee Benefits Total	5,204,644	2,616,420	5,577,447	5,979,151	401,704	7.2%

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

The largest item (Fringe Benefits - 660491) covers the District's portion of employee benefits, most notably health insurance and pension. This charge is applied as a percentage of regular labor (excluding overtime, double time, etc.) charges. In the 2021 Budget, the percentage was 42.94%, which is an increase from 2020's percentage of 40.74% mostly due to higher benefit costs related to higher pension and health insurance.

The Human Resource section has additional details.

Biosolids Disposal:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
663571 - BIOSOLIDS DISPOSAL	\$1,809,983	\$880,621	\$1,722,166	\$2,181,420	\$459,254	26.7%
Biosolids Disposal Total	1,809,983	880,621	1,722,166	2,181,420	459,254	26.7%

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	2020	2021	Change	%	2019 % Solids	2020 % Solids
Portland (East End)	19,650	19,650	0	0.0%	21.0%	21.0%
Westbrook	4,229	4,229	0	0.0%	21.0%	21.0%
Cape Elizabeth	300	300	0	0.0%	21.0%	21.0%
Peaks Island	59	59	0	0.0%	21.0%	21.0%
Total	24,238	24,238	0	0.0%		

The agreement with the District's disposal vendor expires at the end of 2020. It is anticipated that the new contract, which has yet to be negotiated, will have significantly higher rate. The budget assumes a disposal rate of \$90/wet ton, that is a 26.7% increase over the 2020 Budget assumption of \$71.05.

The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids.

Departmental Expense by Category (continued)

Contracted Services:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
662063 - COPIER MAINTENANCE/TONER	\$15,314	\$9,661	\$15,000	\$15,000	\$0	0.0%
6631 - ENGINEERING SERVICES	190,965	23,697	217,075	71,000	(146,075)	-67.3%
6632 - ACCOUNTING SERVICES	35,500	35,000	37,500	38,500	1,000	2.7%
66331 - LEGAL - LABOR RELATIONS	48,160	15,885	65,000	65,000	-	0.0%
66333 - BOND COUNSEL	7,500	-	7,500	7,500	-	0.0%
66339 - LEGAL - OTHER	14,347	-	19,500	20,000	500	2.6%
66352 - CONSTRUCTION SERVICES	-	-	3,500	-	(3,500)	-100.0%
663521 - TRAFFIC CONTROL	101,400	87,764	72,800	82,800	10,000	13.7%
6635221 - PAVING - MINOR REPAIR	442,992	148,950	526,000	526,000	-	0.0%
663523 - SIDEWALK	14,477	5,665	18,500	18,500	-	0.0%
663524 - STREET OPENING	65,415	25,855	61,100	61,100	-	0.0%
663525 - CONTRACTOR CONSTRUCTION	389,784	184,546	633,500	583,500	(50,000)	-7.9%
66353 - REPAIR SERVICES	120,712	11,279	63,000	124,900	61,900	98.3%
66354 - MAINTENANCE SERVICES	666,242	262,911	786,666	766,524	(20,142)	-2.6%
663542 - LARGE METER TESTING	-	6,443	6,500	10,000	3,500	53.8%
663543 - CSO FLOW MONITORING	90,923	21,799	156,375	154,000	(2,375)	-1.5%
663544 - MAINT SERVICES - CCTV	51,600	24,525	61,250	61,250	-	0.0%
663545 - RADIO SERVICING AND EQUIP	3,241	597	4,000	3,000	(1,000)	-25.0%
663546 - MAINTENANCE - SNOW REMOVL	102,423	83,556	129,890	128,353	(1,537)	-1.2%
663547 - WASTE SLUDGE TRANSPORT	34,451	11,664	33,800	49,800	16,000	47.3%
663551 - LAB ANALYSIS	33,305	14,867	51,445	32,190	(19,255)	-37.4%
663553 - PHOTOGRAPHY SERVICES	400	-	850	600	(250)	-29.4%
663561 - COMPUTER LICENSES	91,429	88,304	91,945	101,431	9,486	10.3%
663562 - COMPUTER MAINTENANCE	290,450	149,161	288,006	418,377	130,371	45.3%
663563 - COMPUTER CONSULTING/OTHER	34,149	815	25,600	23,600	(2,000)	-7.8%
663572 - GRIT & SCREENS DISPOSAL	45,119	19,463	74,450	65,650	(8,800)	-11.8%
663573 - GREASE DISPOSAL	22,220	14,452	30,700	30,700	-	0.0%
663582 - PAYMENT PROCESSING	159,746	71,736	154,630	152,300	(2,330)	-1.5%
663583 - RECEIVABLE COLLECTIONS	8,428	2,074	10,000	10,000	-	0.0%
663584 - BANK SERVICE CHARGES	24,615	5,709	26,400	25,200	(1,200)	-4.5%
663585 - TREATMENT CONTRACT SERVIC	412,990	205,235	410,470	435,600	25,130	6.1%
6635851 - WW DEWATERING SERVICES	3,237	2,478	5,020	9,062	4,042	80.5%
6635852 - WW DEWATERING SRVS CREDIT	(3,237)	(2,478)	(5,000)	(5,000)	-	0.0%
663587 - COURIER SERVICES	22,811	9,521	24,300	23,600	(700)	-2.9%
663588 - EQUIPMENT MAINTENANCE	16,577	3,721	17,520	15,000	(2,520)	-14.4%
663589 - SECURITY SERVICES	84,793	18,540	30,000	-	(30,000)	-100.0%
663592 - RECRUITING SERVICES	3,760	2,228	7,000	6,000	(1,000)	-14.3%
663594 - DIGSAFE	36,007	17,713	63,000	63,000	-	0.0%
663595 - OUTPLACEMENT SERVICES	-	-	1,000	500	(500)	-50.0%
663598 - HR CONSULTANT SERVICES	7,583	1,444	45,000	8,000	(37,000)	-82.2%
6635982 - TREE TRIMMING / REMOVAL	-	-	7,000	5,000	(2,000)	-28.6%
6635984 - LANGUAGE INTERPRETATION	178	-	355	355	-	0.0%
6635985 - VEHICLE FLEET GPS SERVICE	21,560	10,780	25,000	25,000	-	0.0%
663599 - MISC OTHER SERVICES	55,604	29,618	33,800	38,140	4,340	12.8%
6636 - TECHNICAL SERVICES	15,144	6,429	46,250	35,300	(10,950)	-23.7%
Contracted Services Total	3,893,337	1,683,873	4,521,570	4,449,292	(72,278)	-1.6%

Departmental Expense by Category (continued)

Contracted Services, which had a budget decrease of \$72,278 or 1.6%, covers a large variety of services provided by outside vendors. The budgeted expenditures for 2021 were \$4.45 million. Budget changes of note include:

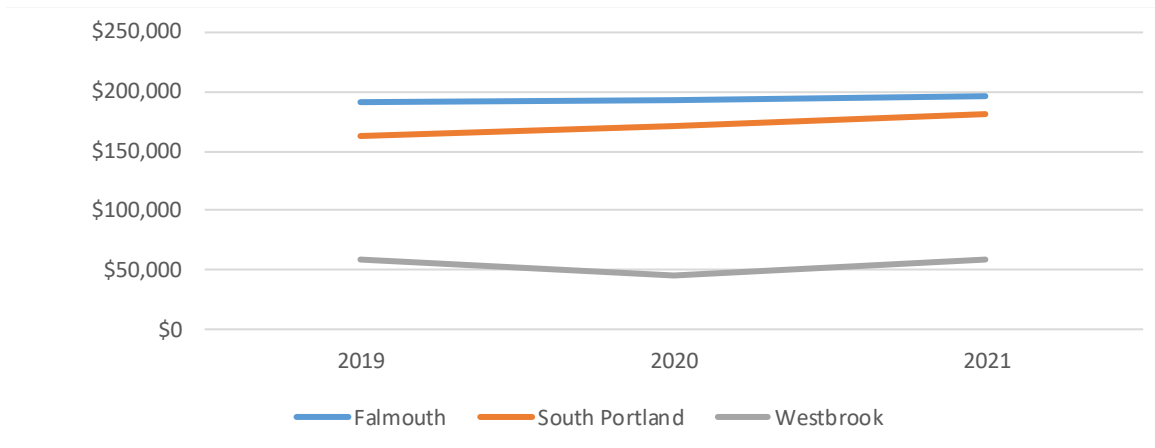
6631 - Engineering Services (down \$146,000 or 67.3%) – Water Services eliminated the \$100,000 transmission main assessment they had in the 2020 Budget. In addition, Wastewater Services eliminated \$50,000 in consulting services in a general effort to reduce expenses in light of the COVID-19 situation.

663525 – Contractor Construction (down \$50,000) – Water Services reduced the dollars budgeted for valve box maintenance from \$300,000 in 2020 to \$250,000 in 2021.

66353 – Repair Services (up \$61,900 or 98.3%) – The Portland Wastewater fund budgeted \$75,000 for the repair involving the East End WWTF’s primary clarifier.

663562 - Computer Maintenance (up \$130,371 or 45.3%) - These are the costs associated with maintenance agreements with vendors on the District’s computer systems. The costs increased by \$130,000 due to the anticipated go live dates of the Asset (Lucity) and Billing (Cayenta) in 2021.

663585 - Treatment Contracted Services (up \$25,130 or 6.1%) – This item was budgeted for \$435,600 in 2021. South Portland and Falmouth treat the wastewater flows from Cape Elizabeth and Cumberland, respectively. The District is assessed and pays an annual fee to those communities for that service. Portland also pays Westbrook for flows from the Riverside area. Costs for debt service related to the upgrades of the Mill Creek Wastewater Pump Station and related force main are reflected under the debt service totals for Cumberland and Falmouth.



Departmental Expense by Category (continued)

Heat/Fuel Oil:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
66161 - HEATING OIL	\$94,412	\$64,371	\$106,701	\$87,265	(\$19,436)	-18.2%
661621 - PIPELINE DELIVERED PROPAN	110,205	92,553	160,016	137,559	(22,457)	-14.0%
661622 - CONTAINER DELIVERED	90,013	45,843	95,718	80,027	(15,691)	-16.4%
66166 - UNLEADED GAS	21,820	4,972	24,050	24,050	-	0.0%
Heat/Fuel Oil Total	316,450	207,739	386,485	328,901	(57,584)	-14.9%

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

	2020 Assumption		2021 Assumption		% Change	
	Units	Per Unit	Units	Per Unit	Units	Per Unit
Heating Oil:						
Water Treatment/Ozone Plant	35,650	\$2.15	35,225	\$1.69	-1.2%	-21.4%
Westbrook WWTF	6,000	\$2.10	8,500	\$1.69	41.7%	-19.5%
Cape Elizabeth WWTF	3,288	\$2.08	3,288	\$1.69	0.0%	-18.8%
Peaks Island WWTF	2,240	\$3.19	2,240	\$2.81	0.0%	-11.9%
Water - Throttling Valve Building	1,100	\$2.20	840	\$1.81	-23.6%	-17.7%
	48,278	\$2.19	50,093	\$1.74	3.8%	-20.4%
Natural Gas:						
Portland (East End) WWTF	84,658	\$1.21	74,256	\$0.99	-12.3%	-18.2%
Dana Court WWPS (Westbrook)	2,479	\$1.21	2,804	\$1.07	13.1%	-11.6%
Douglass Street	47,658	\$1.21	55,000	\$1.07	15.4%	-11.6%
	132,316	\$1.21	129,256	\$1.02	-2.3%	-15.4%

Insurance:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
6656 - VEHICAL INSURANCE	\$29,628	\$17,605	\$30,888	\$38,731	\$7,843	25.4%
6657 - GEN LIABILITY INSURANCE	54,739	25,529	59,884	56,163	(3,721)	-6.2%
66592 - DAMAGES & CLAIMS-GOODWILL	12,903	3,425	4,500	5,500	1,000	22.2%
66593 - UMBRELLA INSURANCE COVER	9,668	4,902	10,297	10,783	486	4.7%
66594 - PROFESSION/CRIME BONDING	26,213	13,543	27,736	29,794	2,058	7.4%
66599 - PROPERTY & BOILER INSUR	73,156	38,242	77,870	81,736	3,866	5.0%
Insurance Total	206,305	103,246	211,175	222,707	11,532	5.5%

Insurance costs include premiums paid on coverage for District property as well as small claims paid directly to outside parties.

Departmental Expense by Category (continued)

Materials & Supplies:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
6619 - ASSET PURCHASES	\$204,593	\$95,428	\$281,075	\$287,775	\$6,700	2.4%
662012 - CRUSHED GRAVEL	4,432	84	1,750	1,750	-	0.0%
662016 - SAND	-	-	3,820	3,820	-	0.0%
662017 - SAND AND SALT	2,940	900	3,452	3,452	-	0.0%
662018 - BANKRUN GRAVEL	454	317	2,000	2,000	-	0.0%
662019 - GRAVEL - TYPE A (DOT)	3,056	1,012	2,000	2,000	-	0.0%
66202 - TOOLS	46,689	8,567	43,500	42,850	(650)	-1.5%
66203 - VENDOR PURCHASED SUPPLIES	408,829	207,457	524,968	478,344	(46,624)	-8.9%
662041 - MATERIALS INVENTORY	191,833	87,703	220,075	229,980	9,905	4.5%
662042 - SUPPLIES INVENTORY	100,348	61,119	94,435	95,475	1,040	1.1%
66204201 - INVENTORY - QPR	2,032	159	2,500	2,500	-	0.0%
66204202 - INVENTORY - BNKRUN GRAVEL	14,355	6,008	14,500	14,500	-	0.0%
66204203 - INVENTORY - CRUSHD GRAVEL	9,869	2,962	18,750	18,750	-	0.0%
66204204 - INVENTORY - CRUSHED STONE	4,428	668	2,250	2,250	-	0.0%
66204205 - INVENTORY - LOAM	2,906	(77)	1,250	1,250	-	0.0%
66204206 - INVENTORY - TYPE A GRAVEL	22,378	10,004	-	20,000	20,000	n/a
662043 - TOOL INVENTORY	98,724	36,283	94,025	95,875	1,850	2.0%
66204301 - INVENTORY - TONER	3,597	1,198	500	1,000	500	100.0%
66204302 - INVENTORY - PAPER	3,360	1,505	4,300	4,300	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	11,557	8,823	20,452	15,575	(4,877)	-23.8%
662044 - METER INVENTORY	1,318	(28,887)	17,850	6,100	(11,750)	-65.8%
662046 - HYDRANT INVENTORY	32,328	35,227	59,000	61,500	2,500	4.2%
662047 - GARAGE INVENTORY	16,023	6,741	15,750	17,050	1,300	8.3%
66204701 - INVENTORY - UNLEADED GAS	107,757	59,024	102,850	84,620	(18,230)	-17.7%
66204702 - INVENTORY - DIESEL	45,869	19,874	48,741	36,895	(11,846)	-24.3%
66204703 - INVENTORY - TIRES	15,876	7,355	15,000	15,000	-	0.0%
66205 - CONSUMABLE SUPPLIES	86,888	30,374	93,200	92,750	(450)	-0.5%
66206 - COMPUTER RELATED EQUIP	43,512	14,936	72,142	85,149	13,007	18.0%
Materials & Supplies Total	1,485,953	674,764	1,760,135	1,722,510	(37,625)	-2.1%

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 District assets. The 2021 Budget decreased \$37,625 or 2.1%. Vehicle fuel prices (see below) dropped, as the District was able to lock in lower costs for most of 2021.

The assumptions for vehicle fuel were:

Fuel Type	2020 Assumption		2021 Assumption		% Change	
	Units	Per Unit	Units	Per Unit	Units	Per Unit
Diesel	23,100	\$2.11	23,500	\$1.57	1.7%	-25.6%
Unleaded Gas	55,000	\$1.87	53,220	\$1.59	-3.2%	-15.0%
	78,100		76,720		-1.8%	

Departmental Expense by Category (continued)

Other Expense:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
6641 - BUILDING/REAL PROP RENT	\$6,160	\$0	\$6,600	\$6,600	\$0	0.0%
66411 - INTERNAL RENTAL CHARGES	51,030	25,515	51,030	51,030	-	0.0%
6642 - EQUIPMENT RENT	33,109	6,750	20,000	21,140	1,140	5.7%
66601 - PUBLIC RELATIONS	9,186	762	19,050	13,150	(5,900)	-31.0%
66609 - OTHER ADVERTISING	6,864	6,120	10,750	9,100	(1,650)	-15.3%
6670 - BAD DEBT EXPENSE	(7,506)	63,750	27,500	50,000	22,500	81.8%
6675111 - INSTATE TRAINING/CONF	79,266	35,088	105,845	98,855	(6,990)	-6.6%
6675112 - OUT OF STATE TRAINING/CON	70,613	9,751	59,150	51,550	(7,600)	-12.8%
667513 - DUES	81,145	33,620	95,178	95,786	608	0.6%
667514 - PROFESSIONAL LICENSES	13,356	1,847	13,000	16,650	3,650	28.1%
667515 - PERIODICAL SUBSCRIPTIONS	6,078	2,677	9,665	8,305	(1,360)	-14.1%
667517 - PLANT OPER LICENSE FEES	-	-	75	75	-	0.0%
667521 - POSTAGE - THIRD PARTY	181,713	109,900	250,691	269,233	18,542	7.4%
667522 - POSTAGE - INTERNAL	15,911	4,862	16,816	17,016	200	1.2%
667523 - POSTAGE - EXPRESS DELIVER	2,676	999	2,550	2,475	(75)	-2.9%
667531 - PRINTING COSTS	58,140	9,532	73,276	65,776	(7,500)	-10.2%
667533 - FORMS STOCK	746	789	1,325	1,325	-	0.0%
667552 - SAFETY TRAINING	1,110	72	6,450	4,350	(2,100)	-32.6%
667553 - DOT SUBSTANCE ABUSE	2,994	1,249	2,000	2,000	-	0.0%
667554 - EPA / OSHA COMPLIANCE	-	-	2,000	-	(2,000)	-100.0%
667555 - SAFETY EXPENSES	43,970	16,422	69,170	44,370	(24,800)	-35.9%
667556 - FREIGHT CHARGES (STOCK)	-	-	5,000	3,000	(2,000)	-40.0%
667561 - WATERSHED GRANTS/SUPPORT	47,681	27,000	43,300	41,450	(1,850)	-4.3%
667581 - ANNUAL LAND CONTRIB CAPE	2,500	4,000	-	-	-	n/a
667591 - UNIFORMS	2,914	968	2,300	2,300	-	0.0%
667592 - FOOD SUPPLIES	8,431	1,606	9,060	9,060	-	0.0%
667593 - VENDOR INTEREST CHARGES	(4,372)	-	-	(4,500)	(4,500)	n/a
667598 - GEN MANAGER CONTINGENCY	-	-	50,000	44,500	(5,500)	-11.0%
6675981 - GEN MNG - TRUSTEES	14,338	5,735	12,750	14,350	1,600	12.5%
6675982 - GEN MNG - COMMUNITY	18,580	7,736	27,215	32,900	5,685	20.9%
667599 - OTHER MISCELLANEOUS	10,490	3,652	2,149	2,050	(99)	-4.6%
6676 - EXPENSE OFFSET	(199,161)	(108,988)	(218,530)	(220,990)	(2,460)	1.1%
6706 - AMORT OF U P ACQ ADJUSTS	17,000	8,500	17,000	17,000	-	0.0%
Other Expense Total	574,963	279,914	792,365	769,906	(22,459)	-2.8%

Other expenses include postage (\$288,724, up \$18,667 or 6.9%), training and conferences (\$150,405, down \$14,500 or 8.8%) and dues (\$95,786, up \$608 or 0.6%). Postage expense is higher partly due to the planned implementation of the Billing (Cayenta) system. The implementation will potentially require customer to re-register for paperless bill delivery resulting in an increase in the number of bills to be mailed until customer re-register. Training was lower due to anticipated drops in travel due to COVID-19.

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

Departmental Expense by Category (continued)

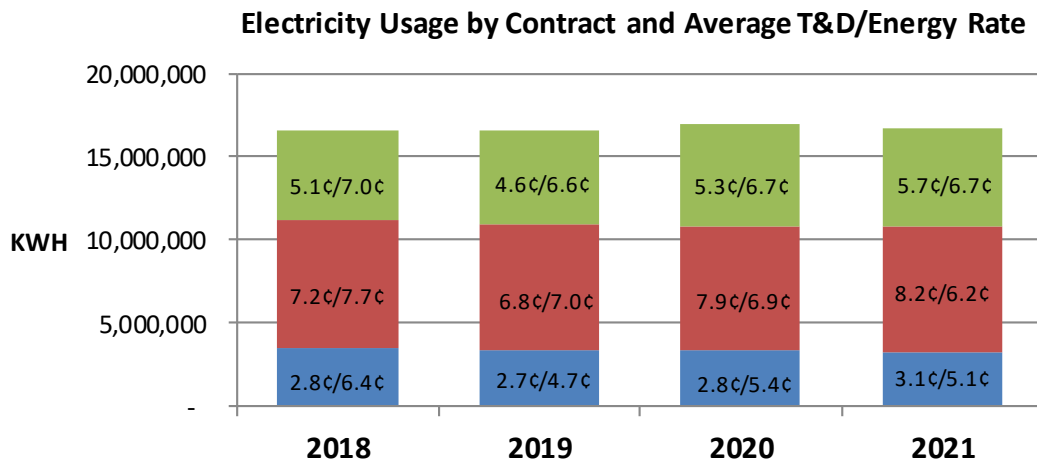
Purchased Power:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
66151 - POWER - LARGE ENERGY	\$445,580	\$243,732	\$512,038	\$628,081	\$116,043	22.7%
66152 - POWER - LARGE T&D	449,484	227,087	506,079	532,721	26,642	5.3%
66153 - POWER - MEDIUM ENERGY	348,798	196,333	347,020	337,620	(9,400)	-2.7%
66154 - POWER - MEDIUM T&D	241,151	130,490	253,427	260,124	6,697	2.6%
66155 - POWER - SMALL ENERGY	57,291	33,170	61,912	64,593	2,681	4.3%
66156 - POWER - SMALL T&D	66,824	38,627	73,195	81,442	8,247	11.3%
66157 - POWER - OTHER CHARGES	85,026	48,080	97,108	-	(97,108)	-100.0%
66158 - LOAD RESPONSE	(13,321)	(3,737)	(10,300)	(8,264)	2,036	-19.8%
66159 - POWER - CAPACITY	119,294	43,342	89,810	-	(89,810)	-100.0%
Grand Total	1,800,127	957,124	1,930,289	1,896,317	(33,972)	-1.8%

Electricity is delivered through the Central Maine Power transmission & distribution (T&D) system. The average 2021 rate per kwh ranges from \$0.050 to \$0.084.

The District purchases its electricity from Constellation Energy through an energy aggregation group - Maine Power Option. Energy contracts for small and medium accounts have been signed through December 2022. The contract for the Water Treatment Plant has been signed through December 2022 and the contracts for the East End Wastewater Treatment Plant and India Street Pump Station are in effect through November 2022. These three large accounts recently went to fixed rates that include capacity costs and other costs. The impact of this change can be seen in the table above.

The chart below shows the average rates for these 3 large accounts as well as the remaining 106 small and medium sized accounts.



- All Other Accounts
- Portland WW Treatment Plant & India Street Pump Station
- Water Treatment Plant

Departmental Expense by Category (continued)

Regulatory/Taxes:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
667516 - PERMITS	\$25,855	\$7,335	\$29,781	\$31,431	\$1,650	5.5%
667518 - REGULATORY REQUIRED FEES	11,248	706	14,000	14,000	-	0.0%
667519 - REGULATORY FINES	(16,500)	-	-	-	-	n/a
670821 - STANDISH REAL ESTATE TAX	50,358	26,655	50,500	55,930	5,430	10.8%
670822 - OTHER R/E TAX(NON-STANDI)	8,411	5,373	8,874	9,060	186	2.1%
670823 - PUC ASSESSMENT	94,327	112,996	90,000	95,000	5,000	5.6%
670824 - ME DRINKING WTR PROGRAM	82,438	82,438	80,275	80,275	-	0.0%
670825 - PUC PUBLIC ADVOCATE	19,551	-	15,000	15,000	-	0.0%
Regulatory/Taxes Total	275,688	235,502	288,430	300,696	12,266	4.3%

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

Telephone/Other Utilities:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
66101 - WATER	\$100,301	\$41,970	\$95,659	\$97,073	\$1,414	1.5%
66102 - WASTEWATER	82,371	33,055	80,438	77,798	(2,640)	-3.3%
66103 - STORMWATER CHARGES	34,987	17,725	32,283	32,939	656	2.0%
66111 - TELEPHONE LINES	25,305	15,152	25,712	25,712	-	0.0%
66112 - DATA LINES	115,896	51,602	89,504	108,558	19,054	21.3%
66113 - CELLULAR PHONES	56,357	17,816	41,503	44,494	2,991	7.2%
Tele/Other Utilities Total	415,216	177,320	365,099	386,574	21,475	5.9%

The category is up \$21,475 (5.9%) in 2021. A large part of the increase is associated with the upgrade of the new 100 megabits per second (mbps) optical fiber data line at Portland East End WWTF.

Transportation:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
66501 - TRANSPORTATION - INTERNAL	\$564,727	\$228,942	\$731,875	\$726,041	(\$5,834)	-0.8%
665019 - TRANS INTERNAL INACTIVE	394,284	228,443	353,083	386,400	33,317	9.4%
66502 - TRANSPORTATION - EXTERNAL	53,377	14,107	58,050	59,300	1,250	2.2%
66503 - MILEAGE REIMBURSEMENT	23,321	4,945	24,415	25,576	1,161	4.8%
Transportation Total	1,035,709	476,437	1,167,423	1,197,317	29,894	2.6%

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). Transportation external (66502) involves ferries to go the islands and vehicles rented from outside vendors. Mileage Reimbursement (66503) is paid to employees who use their own vehicles when conducting District business.

Water Services – Purpose Statement

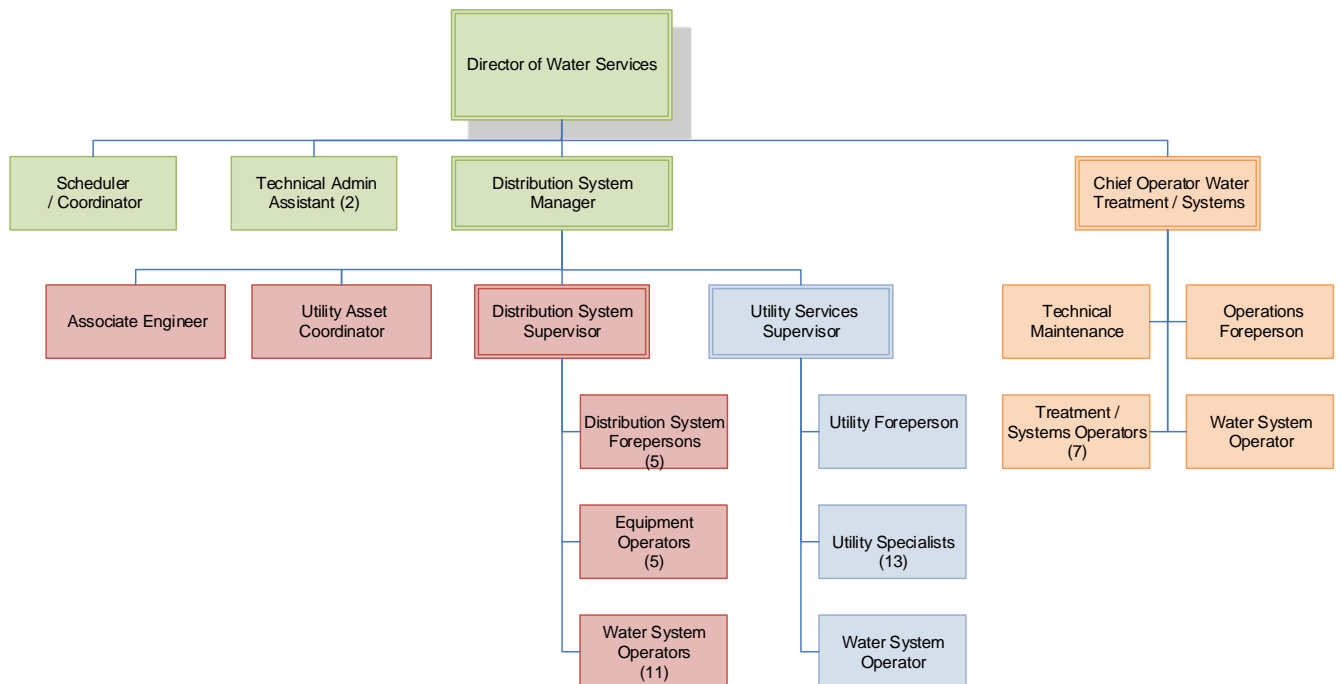
To operate and maintain water system infrastructure including the treatment, water storage and distribution systems.

Core Services

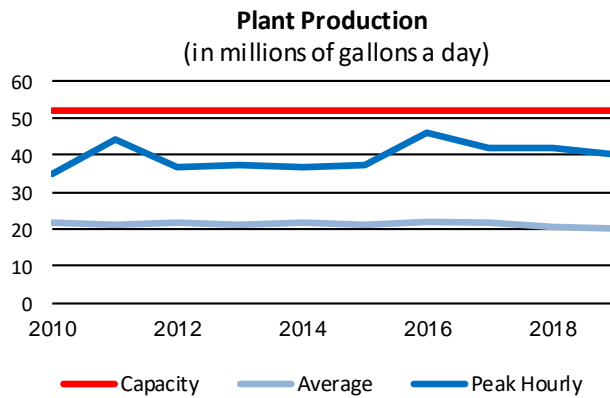
Water Operations is responsible for operating and maintaining the Sebago Lake and Steep Falls Well treatment and water distribution systems by providing the following services:

- Operation and maintenance of distribution system including emergency response, contractor inspection (Transmission/Distribution Group – A2; **red** in the organization chart). Two additional positions added in 2020 – Equipment and Water System Operators.
- 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).

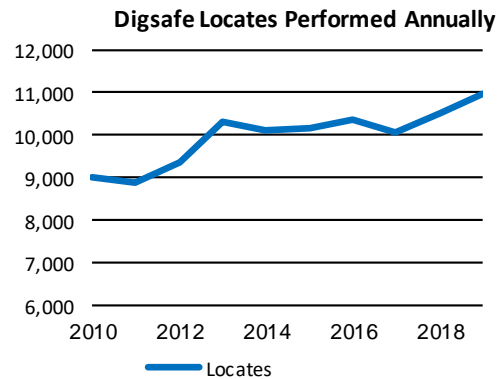
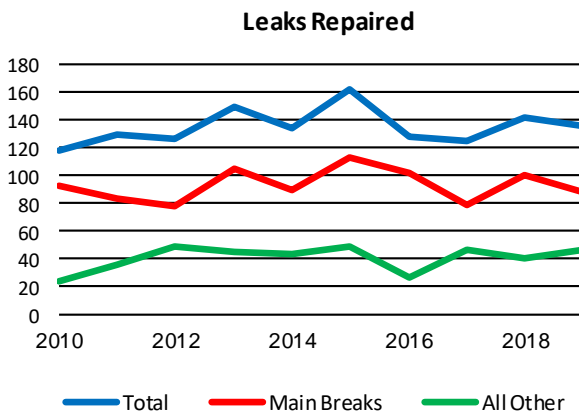
Water Operations has a five-person group (Administration Group- A1; **green** in organization chart) that directs, oversees and provides administrative support.



Key Statistics



Water Supply	Surface – 99%
	Groundwater -1%
Water Treatment	Ozone, Ultraviolet, Chloramination, Corrosion Control, Fluoridation
Water Mains	1007 miles
Valves	12,062
Hydrants	5,169
Service Lines	55,686
Water Storage	10 (+2 non-active)
Booster Stations	6
Backflow Devices	4,980

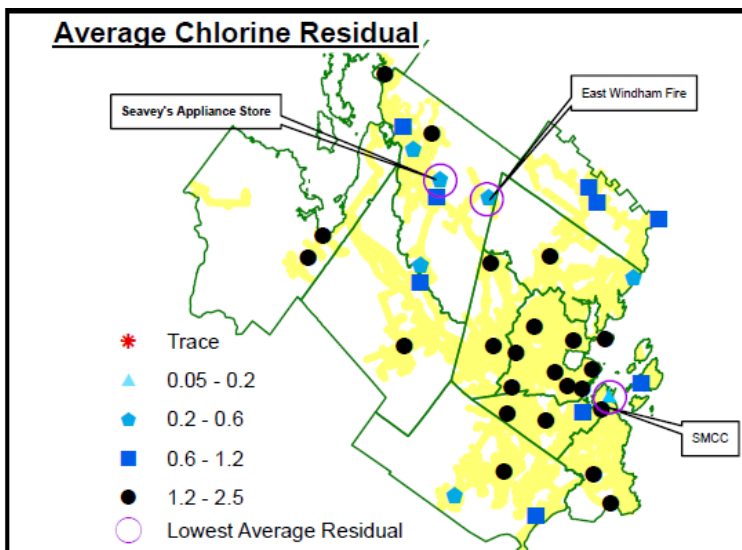


- Leaks repaired each year vary by number/severity of leaks and is a significant budgetary variable.
- Digsafe locates include marking of water and wastewater infrastructure for others who are working near our assets.

Performance Benchmarks

	2019 Actual	2020 Projected	2021 Goal
Corporate Goal – Public Health			
Compliance of Water Regulations	100%	100%	100%
95% of Distribution System Chlorine Residuals	0.55 mg/l	0.50 mg/l	> 0.50 mg/l
Corporate Goal – Public Safety			
Meeting with Municipal Fire Chiefs	1	2	2
Hydrant Outage Index	2.9	3.0	3.0
Corporate Goal – Reliability			
Water Outage Index	11.2	< 20	< 20
Leaks per 100 mile of main	9.6	< 10	< 10
Transmission valves exercised	449	425	425
Distribution valves exercised	54	50	100
Customer Appointments On-time	99.95%	99.9%	100%
Corporate Goal – Affordability			
Water Facility Maintenance Ratio	75% / 25%	75% / 25%	75% / 25%
Department Cost / million gal	\$1,098	\$1,202	\$1,197
Treatment Cost / million gal	\$313	\$337	\$331
Unaccounted for Water %	15%	14.5%	14%
Corporate Goal – Employees and Work Environment			
Employee Training Hours	145	80	80

Distribution System Chlorine Residuals
(monthly report indicating the average for the month)



Past Accomplishments

Water Field (A2 and A6)

- Many of the 2020 operational projects were pushed to 2021 due to Covid-19 impacts and staffing issues. Staff focused on maintenance initiatives and backlog work.
- Mass Ave transmission valve replacement is one of the few projects to get off the ground in 2020. This critical valve would not operate and is needed to avoid a large shut down in a dense commercial zone.
- Highway transmission main crossings work and coordination with Maine Turnpike Authority (MTA)
 - Continue to locate ends of casings, GPS each location, and measure distances to determine level of impact the widening will have on PWD mains
 - Prep for Cummings Rd work and associated impacts.
- Water Operations added another Equipment Operator and a Water System Operator in 2020. The main drivers for these additions included increased contractor inspection support for water main renewal, the backlog of maintenance work, and increased coverage needed for on-call and vacation time.
- The Utility Services department has had a busy year even though some of the work was shut down due to COVID-19. Even after slowing some of the workload because of the pandemic the Utility Specialists have still completed a large amount work. Below is a glimpse of year to date as of August 2020 for this department.
 - Work Requests – 11,913 COMPLETED
 - Dig Safe Locates- YTD 7,857 (includes cancels & duplications) 7,141 (excludes cancels & dups) (includes 64 Locate & Mark) COMPLETED
 - Water Quality Inquiry – 130 COMPLETED
 - Work Orders – 18,093 COMPLETED

Past Accomplishments (continued)

- Meter Testing Program

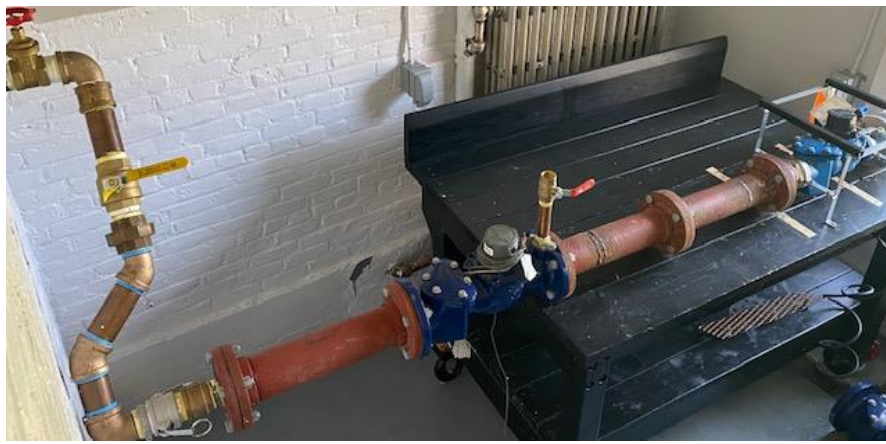


OMNI Meter



V2 water meter tester

- We have tested 19 meters to date. The goal was 50 which we are still going to try to achieve
 - We started the year wanting to test as many large meters as we could early before our busy season started in the summer. We were ahead of schedule and then unfortunately had to stop the meter testing due to the pandemic. As of today August 21, 2020 we are starting the large meter testing program back up.
- We are sending out meters to Sensus to compare results, and are trying to streamline our process.
 - We have recently had flow controllers manufactured for the testing bench. The flow controllers cause less turbulence in the water flowing which gives more accurate results.
- The end goal is to be doing 100% of all 3" and 4" large meter tests in house.



Portland Water District testing bench

Past Accomplishments (continued)

- PWD terminated its contract with Zenner due to multiple issues:
 - They sent bad data files. Which could have caused billing issues if it wasn't caught. We spent many of our own employees hours correcting this issue
 - Multiple 2" meters failing shortly after install.
- PWD now has a 1 year contract with Sensus we will be using their AccuStream meters for meters sizes 5/8"-1" and will be using Sensus OMNI R2 meters for 1" and up for residential installs.



SENSUS OMNI R2



SENSUS ACCUSTREAM

- We will be sending more meters to Sensus so we can compare large meter testing numbers
- Upgrade older locators and work on leak detection program
- Outfit WSO van with equipment and tools

Water Plant (A3)

- Zero reportable accidents or lost time injuries.
- Met all Primary and Secondary Regulations associated with the Surface Water Treatment Rules, including 100% compliance with ozone treatment regulations. SLWTF also achieved >99.99% compliance with UV treatment regulation associated to Long Term 2 Enhanced Surface Water Treatment Regulations, easily surpassing EPA's 95% compliance requirement. With 1748 Total Coliform Rule (TCR) samples collected in 2019 and 1172 so far in 2020, there were zero positive coliform TCR sample results.

-

Past Accomplishments (continued)

- Continued to make improvements in distribution water quality, as evident by PWD's ability to surpass goals for 5th percentile chlorine residual and 10th percentile pH measured at TCR sample sites throughout the year. PWD surpassed the 5th percentile goal for chlorine residual, which is 0.50 mg/L, by achieving a 0.55 mg/L in 2019. Similarly, the PWD 10th percentile goal for pH is 7.2, and PWD achieved a 7.3 in 2019. The average chlorine residual of all TCR samples collected for 2019 was 1.43 mg/L, which, according to Partnership for Safe Water standards, is a strong indication of excellent distribution system water quality. Through mid-September 2020, the sample TCR results indicate the goals for distribution system chlorine residual and pH will be easily met again.

- Standby Generator #1 Catalytic Converter Installation: The installation of a catalytic converter will give SLWTF operation group the ability to “go off the grid” and generate power during “Demand Response Events” and “Forward Capacity Peak Annual Hour” events to save significantly our the plant power bill.



- Completed the inspection, cleaning, and condition assessment reporting of two significant water storage facilities: Rocky Hill Junior Reservoir and Cumberland Reservoir

- Raw Water #4 Pump Motor Rebuild: As part of an annual maintenance program, PWD contracts with Predictive Maintenance to conduct motor and pump vibration analysis in an effort identify assets approaching potential failure. The latest round of analysis conducted in the spring of 2020 identified the #4 Raw Water Pump Motor in need of a bearing replacement. Once the motor was disassembled, the bearing failure was attributed to corrosion caused by stray current, which will addressed during the repair process by installing shaft grounding ring.



- Completed Lead and Copper Rule (LCR) sampling and analysis, which resulted in a PWD 90th percentile for lead at 3.3 parts per billion, less than third of the current Action Level for lead, which is 15 PPB.

Past Accomplishments (continued)

- Corporate Initiative
 - After the initial operator training and test run of the Emergency Pumper, which took place in September 2019, Operations scheduled an October 2020 field exercise at the interface of the 267 and 407 Pressure Zones, located on Route 202 in Windham



2021 Projects and Initiatives

Corporate Goal – Public Health

- Corporate Initiative
 - Continuously improve water quality in the Distribution System, using guidelines and action plans developed through the AWWA Partnership for Safe Water (PSW) for Distribution Systems. PWD on track in 2019 to meet PSW guidelines for distribution system chlorine residual (> 0.50 mg/L for 95% of all TCR samples collected in the Distribution System) for the second consecutive year. PWD continues to realize improved water quality at the far ends of the Distribution system because of the dual primary disinfectants (ozone and UV light) being applied at the SLWTF.
- Departmental Initiatives
 - Continue to meet 100% of all Primary and Secondary Surface Water Treatment Rules.
 - Complete the 2020 initiative on programming SCADA control strategy for the use of hypochlorite for emergency 4-log virus disinfection in the event of an ozone system failure. PWD has been working with Woodard and Curran, who has been contracted to develop and integrate the plan into SCADA. A Control Strategy has been developed, but it still needs to be programmed, vetted, and tested in a real world scenario.

2021 Projects and Initiatives (continued)

Corporate Goal – Reliability (continued):

- Corporate Initiative
 - Raw Water Pump #1 Pump & Motor Rebuild: Once the RWP#4 Pump Motor rebuild project is completed, The #1 RWP Pump & Motor rebuild project will be initiated. This was another project identified by Predictive Maintenance through annual vibration analysis reports.
 - Work with the selected Engineer, Hazen, to move forward with the Design and Build Project of replacing the Windham Center Tank. The existing 200,000 gallon was identified by the CWSP study as being undersized and the elevated tank has long since outlived its useful life. This project will replace the water storage facility with a 1 million gallon standpipe that should meet the water demand of the Windham Center community for many needs to come, as well as provide adequate fire flows and eventually backup for the Gorham 407 boosted pressure zone.
- Departmental Initiatives
 - Continue training on the vactor equipment and increase efficiencies to support a reduction in backlog maintenance work.
 - Extend Right-of-Way Maintenance Program into the more developed areas; initiate tracking of current conditions and make plans to repair significant deficiencies. Maintain areas that have already been cleared.

- Continue to replace 1-2 transmission valves each year.

Transmission valves are 16 inches in diameter or larger.



- maintenance plan for Storage Facilities to meet AWWA and Partnership for Safe Water standards to insure cost effective reliability, viability, and water quality.

2021 Projects and Initiatives (continued)

Corporate Goal – Affordability

- Departmental Initiatives
 - Test at least 50 large water meters, meters that are 3” in diameter and larger, during 2020, while ensuring accuracy of the testing. Consider changes to terms and conditions to compel large customers to accommodate timely testing and meter changes.
- Fleet Right Sizing
 - Purchase another small excavator similar to our current Volvo ECR88 with trailer.
 - Increased efficiency over using a rubber tired backhoe, safer and prevents full lane closures to help traffic, and allows more versatility to handle the work load.



- Replace a F-550 Crew Truck
 - All Aluminum bodies with LED safety lighting. We are able to use the body on two trucks.
- Replace the older Doosan 185 CFM Air Compressor
 - Switching back to diesel models because of the increased run times they have as compared to gas models. This will prevent us from needed to refuel in the middle of a standard job.

2021 Projects and Initiatives (continued)

Corporate Goal – Employees and Work Environment

- Corporate Initiatives
 - Maintain an average of 80 hours of training per employee

- Departmental Initiatives
 - SLWTF will improve Fall Protection and Chemical Handling Safety through purchase of proper safety equipment, including individualized chemical suits and PAPRs for operators, as well as operator training. PWD will move forward with an initiative to bring Standish Tank in line with current OSHA fall protection standards, which will include a new ladder with a proper fall arrest device, and a guard rail encompassing the circumference of the top of the tank.

- Departmental Initiatives
 - Active staff participation in safety initiatives, such as a District wide effort to train employees on Confined Space Entry

Financial Overview

The Water Services Budget for 2021 has increased 0.6% or \$54,936. The majority of the increases are for wages & benefits and chemicals. Supervisors worked carefully to reduce expenses, in anticipation of lower revenues due to COVID-19.

A1 – The Water Administration area increased 3.8%, or \$20,960. The increase is almost entirely in labor and benefits.

A2- The Water Transmission & Distribution budget is down \$622, essentially a 0% increase. Significant increase include labor and benefits of \$94,288, and \$40,825 in materials and supplies. While much of this areas budgeting is based on 3-year averages, the scope of various projects also dictate the total expenses. In recent years, assistance from contractors has become more difficult to obtain, as most are very busy with their own projects. Assuming this trend will continue in 2021, reductions totaling \$140,000 were made in the Contractor Construction area.

A3 – The requested Water Treatment 2021 Budget has decreased by 0.8%, or -\$20,517, compared to 2020. Some of the decrease can be associated to the heat/fuel oil budget, which has decreased by \$18,801 due to cost per unit (\$0.50/gallon cheaper in 2021) for the Low Sulfur diesel, used to the heat the SLWTF. Purchased power will be budgeted at 5.4% less than 2020, or -\$20,857, due to favorable purchased power agreements negotiated by PWD staff, as well as continued efforts on the part of A3 Operations to use power more cost effectively. Material/Supplies budget will see a 20.3% (-\$30,541) decrease in 2021 because most of the required spare parts necessary to insure reliable operation of the UV and Ozone systems, as well as routine replacement parts, have already been purchased over the last several years. One portion of the A3 budget where there will be a significant increase due to rising labor and trucking costs, is the chemical budget. A market analysis indicated an anticipated increase of 9.8%, or \$44,450, in cost of water treatment chemicals. Salary and wages will be up 2.2%, which is line with negotiated Union workforce wage increases.

A6 – The Utility Services 2021 budget is increasing by \$55,115 or 3.2%. Wages (\$25,598) are increasing due to the need for more overtime. Contracted Services has also increased by (\$6,480) because we are sending large meters back to the vendor for testing so we can compare results and be sure our methods and testing procedures are 100% accurate. Asset Purchases remain the same we so can outfit the spare vans with needed equipment.

Water Services: Total**Financial Summary:**

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
A1 - Water Administration	\$532,833	\$258,716	\$551,078	\$572,038	\$20,960	3.8%
A2 - Wtr Transmission/Distrib	3,652,945	1,807,664	4,358,891	4,358,269	-622	0.0%
A3 - Water Treatment	2,280,549	1,093,870	2,578,212	2,557,695	-20,517	-0.8%
A6 - Water Utility Services	1,495,068	750,672	1,718,938	1,774,053	55,115	3.2%
Grand Total	7,961,394	3,910,922	9,207,119	9,262,055	54,936	0.6%
Expense Type:						
Salaries & Wages	\$3,194,047	\$1,606,100	\$3,495,009	\$3,604,352	\$109,343	3.1%
Employee Benefits	1,384,993	706,302	1,499,604	1,597,507	97,903	6.5%
Chemicals	429,782	210,669	451,897	496,347	44,450	9.8%
Contracted Services	1,193,911	560,304	1,679,234	1,522,133	-157,101	-9.4%
Heat/Fuel Oil	86,771	58,495	103,044	84,863	-18,181	-17.6%
Insurance	24,344	12,670	24,944	26,150	1,206	4.8%
Materials & Supplies	572,967	254,004	634,717	641,163	6,446	1.0%
Other Expense	35,904	10,814	89,014	72,164	-16,850	-18.9%
Purchased Power	309,833	157,938	383,631	362,774	-20,857	-5.4%
Regulatory/Taxes	430	0	781	781	0	0.0%
Tele/Other Utilities	95,187	34,371	83,217	84,300	1,083	1.3%
Transportation	633,225	299,256	762,027	769,521	7,494	1.0%
Grand Total	7,961,394	3,910,922	9,207,119	9,262,055	54,936	0.6%
Headcount:						
Full Time	54	56	56	56	0	0.0%
Part Time	0	0	0	0	0	n/a

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$569,288	\$292,198	\$597,709	\$609,932	\$12,223	2.0%
660121 - WAGES/REGULAR UNION	2,126,070	1,081,929	2,312,321	2,376,574	64,253	2.8%
660122 - WAGES/OVERTIME UNION	296,684	145,694	350,768	362,732	11,964	3.4%
660123 - WAGES/DOUBLETIME UNION	37,749	18,257	45,288	48,070	2,782	6.1%
660124 - WAGES/STANDBY TIME UNION	112,035	68,021	121,723	139,844	18,121	14.9%
660131 - WAGES - REGULAR - TEMPS	24,343	-	67,200	67,200	-	0.0%
660132 - WAGES - OVERTIME- TEMPS	53	-	-	-	-	n/a
66014 - VACATION ACCRUAL	13,039	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	14,788	-	-	-	-	n/a
Salaries & Wages Total	3,194,047	1,606,100	3,495,009	3,604,352	109,343	3.1%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	238,866	123,956	267,364	275,735	8,371	3.1%
660405 - SAFETY/WHY PROGRAM ITEMS	15,767	3,700	14,920	16,750	1,830	12.3%
660411 - MEALS ALLOWANCE	9,303	4,940	8,960	9,450	490	5.5%
660413 - PWD TRAINING PROGRAM	-	14	-	-	-	n/a
660418 - STIPENDS	5,100	4,500	6,300	5,300	(1,000)	-15.9%
660419 - EMPLOYEE BENEFITS-MISC OTH	10,666	528	16,500	8,200	(8,300)	-50.3%
660491 - FRINGE BENEFITS-REG/SAL	1,105,291	568,663	1,185,560	1,282,072	96,512	8.1%
Employee Benefits Total	1,384,993	706,302	1,499,604	1,597,507	97,903	6.5%
Chemicals						
66181 - AMMONIA	22,570	10,123	21,080	22,730	1,650	7.8%
66182 - CAUSTIC SODA	90,554	31,421	85,166	85,332	166	0.2%
66183 - FLUORINE COMPOUND	33,560	15,770	33,164	37,562	4,398	13.3%
66184 - ZINC ORTHOPHOSPHATE	66,778	32,340	80,318	76,966	(3,352)	-4.2%
66185 - SODIUM HYPOCHLORITE	134,929	75,053	143,269	182,077	38,808	27.1%
661892 - LIQUID OXYGEN (LOX)	81,391	45,962	88,900	91,680	2,780	3.1%
Chemicals Total	429,782	210,669	451,897	496,347	44,450	9.8%
Contracted Services						
6631 - ENGINEERING SERVICES	-	-	112,075	6,000	(106,075)	-94.6%
66352 - CONSTRUCTION SERVICES	-	-	3,500	-	(3,500)	-100.0%
663521 - TRAFFIC CONTROL	99,182	87,764	72,000	82,000	10,000	13.9%
6635221 - PAVING - MINOR REPAIR	442,673	148,950	526,000	526,000	-	0.0%
663523 - SIDEWALK	14,477	5,665	18,500	18,500	-	0.0%
663524 - STREET OPENING	65,415	25,855	61,100	61,100	-	0.0%
663525 - CONTRACTOR CONSTRUCTION	367,495	181,611	588,000	541,500	(46,500)	-7.9%
663527 - EMERGENCY RESPONSE- FEMA	425	450	-	-	-	n/a
66353 - REPAIR SERVICES	10,254	3,132	30,500	17,000	(13,500)	-44.3%
66354 - MAINTENANCE SERVICES	116,422	50,533	172,334	157,352	(14,982)	-8.7%
663542 - LARGE METER TESTING	-	6,443	6,500	10,000	3,500	53.8%
663546 - MAINTENANCE - SNOW REMOVL	32,109	26,116	41,090	45,860	4,770	11.6%
663561 - COMPUTER LICENSES	18,988	17,208	18,725	28,031	9,306	49.7%
663574 - DISPOSAL SERVICES	4,461	1,464	6,990	6,990	-	0.0%
663587 - COURIER SERVICES	2,281	952	2,400	2,300	(100)	-4.2%
663588 - EQUIPMENT MAINTENANCE	14,847	3,721	10,520	13,500	2,980	28.3%
663594 - DIGSAFE	2,500	500	-	-	-	n/a
6635982 - TREE TRIMMING / REMOVAL	-	-	7,000	5,000	(2,000)	-28.6%
663599 - MISC OTHER SERVICES	2,383	(60)	2,000	1,000	(1,000)	-50.0%
Contracted Services Total	1,193,911	560,304	1,679,234	1,522,133	(157,101)	-9.4%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Heat/Fuel Oil						
66161 - HEATING OIL	\$61,813	\$42,249	\$79,066	\$61,050	(\$18,016)	-22.8%
661622 - CONTAINER DELIVERED	24,958	16,246	23,978	23,813	(165)	-0.7%
Heat/Fuel Oil Total	86,771	58,495	103,044	84,863	(18,181)	-17.6%
Insurance						
66592 - DAMAGES & CLAIMS-GOODWILL	917	784	-	-	-	n/a
66599 - PROPERTY & BOILER INSUR	23,427	11,886	24,944	26,150	1,206	4.8%
Insurance Total	24,344	12,670	24,944	26,150	1,206	4.8%
Materials & Supplies						
6619 - ASSET PURCHASES	51,059	9,275	64,325	73,825	9,500	14.8%
662012 - CRUSHED GRAVEL	3,548	-	1,750	1,750	-	0.0%
662014 - CRUSHED STONE	879	84	-	-	-	n/a
662016 - SAND	-	-	3,820	3,820	-	0.0%
662017 - SAND AND SALT	2,940	900	3,452	3,452	-	0.0%
662018 - BANKRUN GRAVEL	454	317	2,000	2,000	-	0.0%
662019 - GRAVEL - TYPE A (DOT)	3,056	1,012	2,000	2,000	-	0.0%
66202 - TOOLS	21,846	1,214	25,850	25,850	-	0.0%
66203 - VENDOR PURCHASED SUPPLIES	122,333	58,589	116,368	91,444	(24,924)	-21.4%
662041 - MATERIALS INVENTORY	148,243	62,546	164,350	169,380	5,030	3.1%
662042 - SUPPLIES INVENTORY	44,783	29,752	42,350	44,200	1,850	4.4%
66204201 - INVENTORY - QPR	1,496	159	2,500	2,500	-	0.0%
66204202 - INVENTORY - BNKRUN GRAVEL	13,966	6,008	14,500	14,500	-	0.0%
66204203 - INVENTORY - CRUSHD GRAVEL	6,852	2,962	18,750	18,750	-	0.0%
66204204 - INVENTORY - CRUSHED STONE	2,786	668	2,250	2,250	-	0.0%
66204205 - INVENTORY - LOAM	2,911	(77)	1,250	1,250	-	0.0%
66204206 - INVENTORY - TYPE A GRAVEL	23,393	10,004	-	20,000	20,000	n/a
662043 - TOOL INVENTORY	69,720	28,829	65,050	65,050	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	1,533	1,521	1,113	950	(163)	-14.6%
662044 - METER INVENTORY	(2,236)	104	17,850	6,100	(11,750)	-65.8%
662045 - TRUCK INVENTORY	4,114	-	-	-	-	n/a
662046 - HYDRANT INVENTORY	33,798	35,550	59,000	61,500	2,500	4.2%
662047 - GARAGE INVENTORY	3,054	1,606	3,150	3,900	750	23.8%
66205 - CONSUMABLE SUPPLIES	6,171	1,517	10,550	7,450	(3,100)	-29.4%
66206 - COMPUTER RELATED EQUIP	6,263	1,464	12,489	19,242	6,753	54.1%
662011 - CONCRETE	5	-	-	-	-	n/a
Materials & Supplies Total	572,967	254,004	634,717	641,163	6,446	1.0%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Other Expense						
6641 - BUILDING/REAL PROP RENT	\$6,160	\$0	\$6,600	\$6,600	\$0	0.0%
6642 - EQUIPMENT RENT	1,240	2,246	11,950	12,190	240	2.0%
6675111 - INSTATE TRAINING/CONF	25,784	17,286	35,145	36,155	1,010	2.9%
6675112 - OUT OF STATE TRAINING/CONF	5,814	-	11,500	9,000	(2,500)	-21.7%
667513 - DUES	1,000	1,000	2,950	1,950	(1,000)	-33.9%
667514 - PROFESSIONAL LICENSES	3,255	(80)	4,595	4,595	-	0.0%
667515 - PERIODICAL SUBSCRIPTIONS	99	-	200	100	(100)	-50.0%
667521 - POSTAGE - THIRD PARTY	89	38	4,378	4,378	-	0.0%
667522 - POSTAGE - INTERNAL	154	12	100	100	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	497	89	200	200	-	0.0%
667531 - PRINTING COSTS	8,175	1,160	8,676	8,676	-	0.0%
667552 - SAFETY TRAINING	388	-	-	-	-	n/a
667554 - EPA / OSHA COMPLIANCE	-	-	2,000	-	(2,000)	-100.0%
667555 - SAFETY EXPENSES	6,731	967	26,720	14,220	(12,500)	-46.8%
667592 - FOOD SUPPLIES	1,964	801	460	460	-	0.0%
667599 - OTHER MISCELLANEOUS	1,015	525	-	-	-	n/a
6676 - EXPENSE OFFSET	(26,460)	(13,230)	(26,460)	(26,460)	-	0.0%
Other Expense Total	35,904	10,814	89,014	72,164	(16,850)	-18.9%
Purchased Power						
66151 - POWER - LARGE ENERGY	112,486	54,629	149,293	163,482	14,189	9.5%
66152 - POWER - LARGE T&D	77,907	39,272	92,561	99,411	6,850	7.4%
66153 - POWER - MEDIUM ENERGY	39,005	19,921	47,561	38,836	(8,725)	-18.3%
66154 - POWER - MEDIUM T&D	37,782	18,955	43,423	40,361	(3,062)	-7.1%
66155 - POWER - SMALL ENERGY	11,776	7,300	12,625	11,819	(806)	-6.4%
66156 - POWER - SMALL T&D	15,096	9,005	16,064	16,621	557	3.5%
66157 - POWER - OTHER CHARGES	21,465	11,833	30,234	-	(30,234)	-100.0%
66158 - LOAD RESPONSE	(12,975)	(3,393)	(9,000)	(7,756)	1,244	-13.8%
66159 - POWER - CAPACITY	7,292	416	870	-	(870)	-100.0%
Purchased Power Total	309,833	157,938	383,631	362,774	(20,857)	-5.4%
Regulatory/Taxes						
667516 - PERMITS	-	-	781	781	-	0.0%
667518 - REGULATORY REQUIRED FEES	430	-	-	-	-	n/a
Regulatory/Taxes Total	430	-	781	781	-	0.0%
Tele/Other Utilities						
66101 - WATER	4,239	1,577	4,000	4,250	250	6.3%
66102 - WASTEWATER	14,453	4,594	20,000	16,950	(3,050)	-15.3%
66103 - STORMWATER CHARGES	-	(907)	-	-	-	n/a
66111 - TELEPHONE LINES	5,985	2,390	4,920	4,920	-	0.0%
66112 - DATA LINES	52,473	20,373	39,720	41,880	2,160	5.4%
66113 - CELLULAR PHONES	18,038	6,345	14,520	16,300	1,780	12.3%
66114 - PAGERS	-	-	57	-	(57)	-100.0%
Tele/Other Utilities Total	95,187	34,371	83,217	84,300	1,083	1.3%
Transportation						
66501 - TRANSPORTATION - INTERNAL	370,120	155,525	512,400	494,309	(18,091)	-3.5%
665019 - TRANS INTERNAL INACTIVE	228,661	133,422	206,912	231,756	24,844	12.0%
66502 - TRANSPORTATION - EXTERNAL	29,610	8,791	38,100	39,350	1,250	3.3%
66503 - MILEAGE REIMBURSEMENT	4,835	1,519	4,615	4,106	(509)	-11.0%
Transportation Total	633,225	299,256	762,027	769,521	7,494	1.0%
Grand Total	7,961,394	3,910,922	9,207,119	9,262,055	54,936	0.6%

Water Services: Water Administration (A1)

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$347,072	\$171,137	\$364,460	\$373,465	\$9,005	2.5%
Employee Benefits	170,914	83,968	174,348	186,837	12,489	7.2%
Materials & Supplies	2,273	316	1,713	4,500	2,787	162.7%
Other Expense	7,172	1,654	8,140	4,750	-3,390	-41.6%
Tele/Other Utilities	4,647	1,583	1,752	1,980	228	13.0%
Transportation	755	58	665	506	-159	-23.9%
Grand Total	532,833	258,716	551,078	572,038	20,960	3.8%
Programs:						
96 - Pandemic Costs	\$0	\$271	\$0	\$0	\$0	n/a
98 - Training	39,890	8,034	28,002	26,623	-1,379	-4.9%
99 - Administration	492,943	250,411	523,076	545,415	22,339	4.3%
Grand Total	532,833	258,716	551,078	572,038	20,960	3.8%
Funds:						
20 - Water General	\$532,833	\$258,716	\$551,078	\$572,038	\$20,960	3.8%
Grand Total	532,833	258,716	551,078	572,038	20,960	3.8%
Headcount:						
Full-Time	5	5	5	5	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	5	5	5	5	0	0.0%

PWD's new vacuum excavator in use on Center Street in Portland



Water Services: Water Transmission/Distribution (A2)**Financial Summary:**

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$1,242,340	\$645,966	\$1,377,786	\$1,435,799	\$58,013	4.2%
Employee Benefits	522,617	274,966	580,155	616,430	36,275	6.3%
Contracted Services	1,013,168	471,599	1,400,050	1,260,050	-140,000	-10.0%
Insurance	917	784	0	0	0	n/a
Materials & Supplies	377,048	186,168	369,097	409,922	40,825	11.1%
Other Expense	25,222	14,268	45,450	44,450	-1,000	-2.2%
Tele/Other Utilities	13,506	3,141	8,220	10,780	2,560	31.1%
Transportation	458,126	210,771	578,133	580,838	2,705	0.5%
Grand Total	3,652,945	1,807,664	4,358,891	4,358,269	-622	0.0%
Programs:						
1 - Seasonal Mains	\$127,904	\$64,601	\$130,270	\$133,821	\$3,551	2.7%
10 - General Distribution	246,999	80,173	267,305	299,560	32,255	12.1%
11 - Mains & Valves Maint	1,302,009	680,270	1,653,000	1,573,512	-79,488	-4.8%
12 - Services Maintenance	726,393	201,179	725,197	768,911	43,714	6.0%
15 - Digsafe Locates	2,653	0	575	0	-575	n/a
17 - Hydrant Maintenance	148,680	113,645	259,986	243,216	-16,770	-6.5%
2 - Meter Reading	2,001	151	8,799	6,187	-2,612	-29.7%
20 - Meter Service	710	15	0	0	0	n/a
34 - Distribution Maintenance	619	146	0	0	0	n/a
4 - Paving (Mains)	130,971	115,520	306,556	256,181	-50,375	-16.4%
44 - WW Pumping	4,267	0	7,398	6,822	-576	-7.8%
45 - WW Treatment	2,502	81	2,621	2,795	174	6.6%
90 - Vehicles	48,832	21,545	46,038	48,509	2,471	5.4%
91 - Snow Removal	35,629	7,906	36,357	44,900	8,543	23.5%
92 - Bulk Materials Adjustment	-2,687	0	2,500	2,500	0	0.0%
96 - Pandemic Costs	0	71,358	0	0	0	n/a
98 - Training	125,388	47,948	122,321	133,640	11,319	9.3%
99 - Administration	750,075	403,126	789,968	837,715	47,747	6.0%
Grand Total	3,652,945	1,807,664	4,358,891	4,358,269	-622	0.0%
Funds:						
10 - General	\$86,591	\$29,617	\$82,395	\$93,409	\$11,014	13.4%
20 - Water General	3,556,887	1,766,577	4,264,523	4,248,524	-15,999	-0.4%
30 - Water Standish	2,698	11,389	1,954	6,719	4,765	243.9%
53 - WW Cumberland	3,942	0	0	2,733	2,733	n/a
57 - WW Portland	2,827	81	9,445	6,286	-3,159	-33.4%
62 - WW Westbrook	0	0	287	299	12	4.2%
64 - WW Joint Westbrook	0	0	287	299	12	4.2%
Grand Total	3,652,945	1,807,664	4,358,891	4,358,269	-622	0.0%
Headcount:						
Full-Time	22	24	24	24	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	22	24	24	24	0	0.0%

Water Services: Water Treatment (A3)

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$746,040	\$353,926	\$768,116	\$784,843	\$16,727	2.2%
Employee Benefits	322,792	151,472	331,575	353,917	22,342	6.7%
Chemicals	429,782	210,669	451,897	496,347	44,450	9.8%
Contracted Services	160,687	76,676	262,164	238,583	-23,581	-9.0%
Heat/Fuel Oil	86,771	58,495	103,044	84,863	-18,181	-17.6%
Insurance	23,427	11,886	24,944	26,150	1,206	4.8%
Materials & Supplies	124,141	42,152	150,182	119,641	-30,541	-20.3%
Other Expense	-13,144	-9,878	6,745	-5,715	-12,460	-184.7%
Purchased Power	309,833	157,938	383,631	362,774	-20,857	-5.4%
Regulatory/Taxes	430	0	781	781	0	0.0%
Tele/Other Utilities	58,068	24,760	61,785	59,000	-2,785	-4.5%
Transportation	31,723	15,774	33,348	36,511	3,163	9.5%
Grand Total	2,280,549	1,093,870	2,578,212	2,557,695	-20,517	-0.8%
Programs:						
1 - Seasonal Mains	\$0	\$4	\$2,709	\$2,115	-\$594	-21.9%
11 - Mains & Valves Maint	2,120	294	2,765	2,406	-359	-13.0%
12 - Services Maintenance	529	0	861	746	-115	-13.4%
17 - Hydrant Maintenance	0	0	135	141	6	4.4%
18 - Water Treatment Maint	138,541	63,068	105,985	127,300	21,315	n/a
2 - Meter Reading	0	0	135	141	6	4.4%
24 - Distribution Operations	298,956	147,506	325,498	318,820	-6,678	-2.1%
25 - Water Storage Maintenance	59,588	10,418	32,779	43,222	10,443	31.9%
28 - Monitoring	212	20	0	252	252	n/a
34 - Distribution Maintenance	37,223	15,761	77,998	71,695	-6,303	-8.1%
45 - WW Treatment	39	0	0	96	96	n/a
6 - Water Treatment	1,476,182	720,592	1,767,510	1,734,284	-33,226	-1.9%
94 - Technology Teams	0	0	362	189	-173	-47.8%
96 - Pandemic Costs	0	12,224	0	0	0	n/a
98 - Training	47,053	28,591	46,606	47,535	929	2.0%
99 - Administration	220,106	95,393	214,869	208,753	-6,116	-2.8%
Grand Total	2,280,549	1,093,870	2,578,212	2,557,695	-20,517	-0.8%
Funds:						
20 - Water General	\$2,231,301	\$1,073,115	\$2,511,701	\$2,501,024	-\$10,677	-0.4%
30 - Water Standish	49,209	20,755	66,511	56,575	-9,936	-14.9%
57 - WW Portland	39	0	0	96	96	n/a
Grand Total	2,280,549	1,093,870	2,578,212	2,557,695	-20,517	-0.8%
Headcount:						
Full-Time	11	11	11	11	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	11	11	11	11	0	0.0%

Water Services: Water Utility Services (A6)

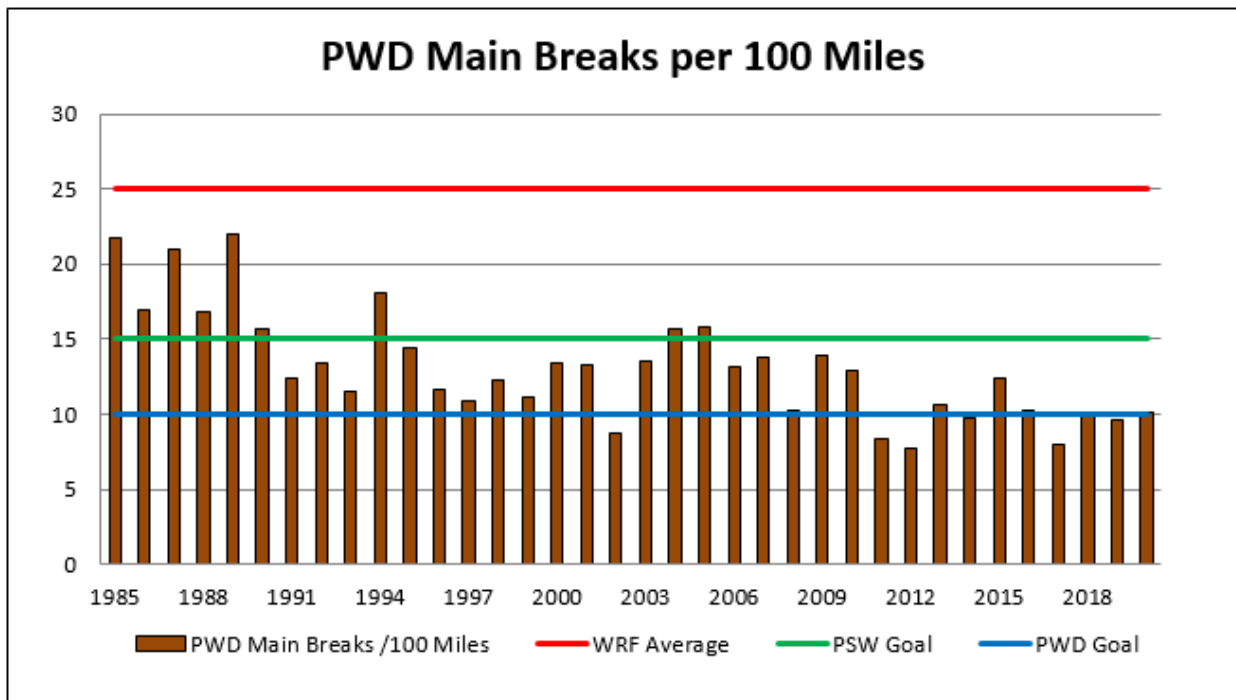
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$858,595	\$435,070	\$984,647	\$1,010,245	\$25,598	2.6%
Employee Benefits	368,671	195,895	413,526	440,323	26,797	6.5%
Contracted Services	20,056	12,029	17,020	23,500	6,480	38.1%
Materials & Supplies	69,505	25,369	113,725	107,100	-6,625	-5.8%
Other Expense	16,654	4,769	28,679	28,679	0	0.0%
Tele/Other Utilities	18,965	4,887	11,460	12,540	1,080	9.4%
Transportation	142,621	72,652	149,881	151,666	1,785	1.2%
Grand Total	1,495,068	750,672	1,718,938	1,774,053	55,115	3.2%
Programs:						
1 - Seasonal Mains	\$43,405	\$35,637	\$60,144	\$62,737	\$2,593	4.3%
10 - General Distribution	48,595	33,574	65,421	63,115	-2,306	-3.5%
11 - Mains & Valves Maint	6,386	5,010	11,284	11,075	-209	-1.9%
12 - Services Maintenance	1,970	2,148	3,801	3,932	131	3.4%
14 - Distribution Flushing	65,083	34,968	92,156	93,222	1,066	n/a
15 - Digsafe Locates	219,449	108,546	242,990	256,294	13,304	5.5%
16 - Cross Connection	22,439	16,179	26,008	25,948	-60	-0.2%
17 - Hydrant Maintenance	86,407	73,131	146,922	152,521	5,599	3.8%
19 - Winter Hydrant Pump	40,191	7,632	58,901	66,336	7,435	12.6%
2 - Meter Reading	87,860	32,004	109,239	118,168	8,929	8.2%
20 - Meter Service	106,319	30,971	120,008	127,722	7,714	6.4%
21 - Large Meter Testing	1,592	7,369	36,334	35,474	-860	-2.4%
22 - Meter Replacement Program	0	311	63	0	-63	-100.0%
26 - Submeters	805	32	1,300	1,470	170	13.1%
3 - Leak Surveys	3,774	3,007	6,233	8,135	1,902	30.5%
31 - Vehicle Cleaning	1,889	705	3,638	3,772	134	3.7%
4 - Paving (Mains)	341	147	0	0	0	n/a
7 - General Investigation	155,737	66,805	247,195	234,465	-12,730	-5.1%
76 - Collection	17,257	4,222	20,937	23,389	2,452	11.7%
90 - Vehicles	1,982	486	2,113	2,695	582	27.5%
94 - Technology Teams	738	1,659	0	0	0	n/a
96 - Pandemic Costs	0	38,455	0	0	0	n/a
98 - Training	110,662	45,619	87,174	92,306	5,132	5.9%
99 - Administration	472,185	202,054	377,077	391,277	14,200	3.8%
Grand Total	1,495,068	750,672	1,718,938	1,774,053	55,115	3.2%
Funds:						
10 - General	\$128,974	\$44,060	\$183,093	\$193,052	\$9,959	5.4%
20 - Water General	1,348,689	704,228	1,528,946	1,574,005	45,059	2.9%
30 - Water Standish	3,109	2,166	5,599	5,526	-73	-1.3%
51 - WW Cape Elizabeth	677	21	203	210	7	3.4%
53 - WW Cumberland	7,044	0	203	210	7	3.4%
55 - WW Windham LF	426	0	0	0	0	n/a
57 - WW Portland	481	0	244	420	176	72.1%
59 - WW South Portland	83	0	244	210	-34	-13.9%
61 - WW Gorham	5,512	135	203	210	7	3.4%
62 - WW Westbrook	33	11	203	210	7	3.4%
65 - WW Joint LF	41	50	0	0	0	n/a
Grand Total	1,495,068	750,672	1,718,938	1,774,053	55,115	3.2%
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%

Water Services

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

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

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



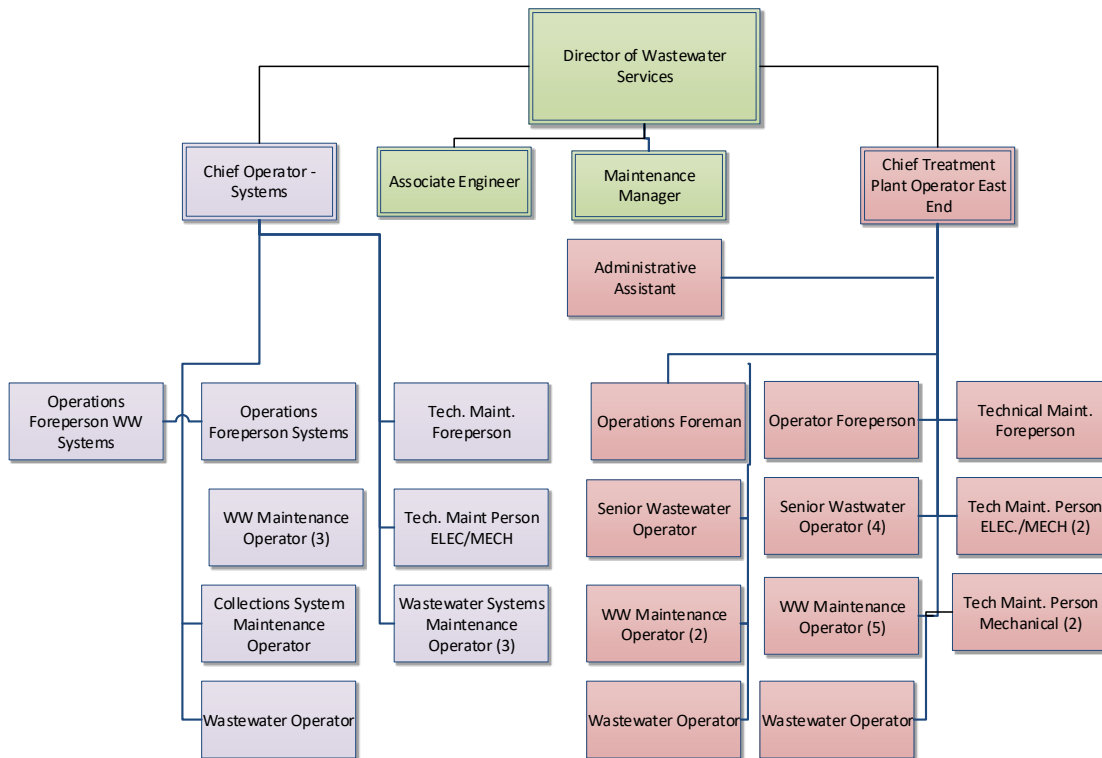
Wastewater Services – Purpose Statement

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 while protecting the surface and receiving waters of Casco Bay.

Core Services

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

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



Key Statistics

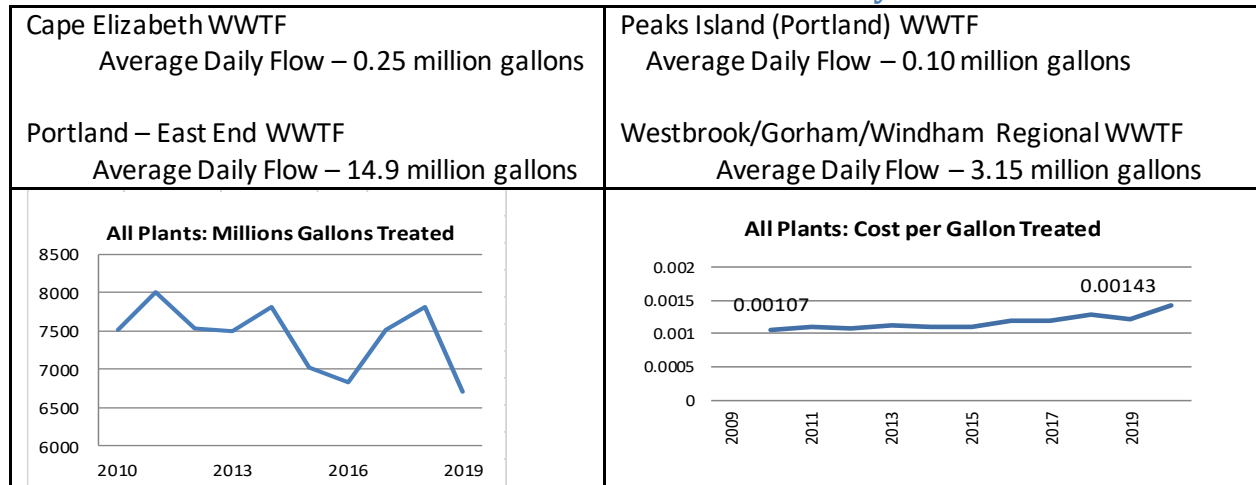
Wastewater Services Group Facts

- The Wastewater Services Group operates four wastewater treatment plants and provides sewer services to six communities. The East End treatment plant is the largest municipal treatment facility in Maine.
- Our Combined Sewer Overflow (CSO) monitoring efforts include a web-based system that allows for near real-time monitoring and alarming of over 90% of the total overflow sites for PWD and several member municipalities.
- The East End Treatment plant maximizes flow to the treatment facility during wet weather events as a critical component of the City of Portland's CSO management efforts, treating about half of the total wet weather flow generated in the collection system. This effort reduces the overall CSO discharge in Portland by nearly 50% and is a vital part of the CSO control program.
- The Wastewater Operator apprentice program has been in place for nearly a decade. This effort has helped address workforce management issues due to employee retirements. These positions work in each of our treatment plants and the wastewater systems and pumping group. This effort has been essential and very beneficial, as nearly the entire operations team has been replaced through retirements and changes in job assignments.
- 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 72% in past years. In 2020 initial results indicate a 75 percent seasonal mass loading reduction was realized through our adaptive management approach. Staff at the treatment plant have closely managed the disinfection system to improve operation of the disinfection system during nearly complete nitrification.
- The installation of ultra-violet disinfection systems at the Cape Elizabeth and Peaks Island treatment plants have improved disinfection system performance while decreasing the overall cost and chemical addition.
- 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.

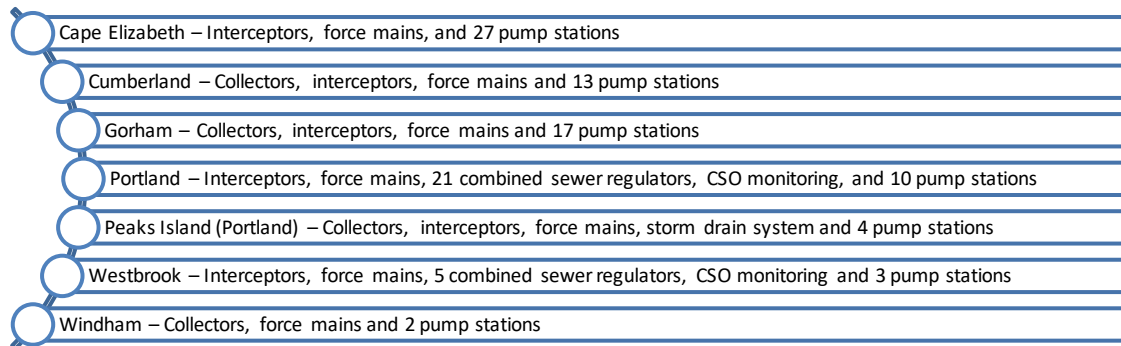


Aeration basin at East End Wastewater Treatment Facility

Wastewater Treatment Facilities – 2019 Flow Summary



Wastewater Systems Responsibility



Performance Benchmarks

	2019 Actual	2020 Projected	2021 Goal
Wastewater Systems			
Corporate Goal - Environment			
Wet wells cleaned	158	150	>125
Feet of pipe cleaned*	8,100	18,000	>20,000
Feet of pipe televised*	62,700	30,000	>30,000
Dry weather overflows	6	5	0
Corporate Goal -Reliability			
Corrective Maintenance tasks	134	110	<200
Corporate Goal -Affordability			
Preventive Maintenance tasks	1,754	1,500	1,500
Treatment Operations			
Corporate Goal - Environment			
Total license excursions	14	15	0
Corporate Goal -Reliability			
Biosolids removed (wet tons)	26,365	27,000	<25,500
% BOD removed	94	94	>85
% suspended solids removed	95	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 are evaluated.

Past Accomplishments

- Flow monitoring of combined sewer overflow events:
 - PWD continuously monitors over 90% of all combined sewer overflows in Portland, Westbrook, and Cape Elizabeth. This program has assisted in the development of Long Term CSO Control Plans in Portland, Westbrook, and Cape Elizabeth.
 - The Ottawa Rd CSO plan identified the need to address infiltration and inflow (mostly from private homes) by the communities. Both the Town of Cape Elizabeth and the City of South Portland completed an inventory of private sources of inflow & infiltration (I/I). Cape Elizabeth installed additional storm drainage to accommodate the redirection of private sources of I/I to the storm sewer system and has addressed 35 of 37 known sources of private I/I. South Portland completed work on Drew Rd. to separate known sources of I/I from homes. PWD installed larger pump impellers to increase flow from the pump station. Flow to the South Portland treatment plant is being monitored to determine the net reduction in extraneous flow to find if established flow reduction targets have been realized.
 - Using data from the flow monitoring system, sources of seawater inflow to the Portland collection system are monitored and any increases are investigated to minimize the inflow of seawater. The Long Wharf Tide Gate was replaced to eliminate excessive inflow from the outlet. The tide gate replacement for India St. and the Northeast Outfall will further support the effort to mitigate seawater inflow. Seawater inflow accounts for approximately 5 - 8% of the annual treatment plant flow in Portland.
- Effluent Permits and East End Nutrient Optimization Efforts
 - The Cape Elizabeth Wastewater Treatment Facility permit was renewed in late 2016. The permit included a significant reduction in routine monitoring requirements due to the plant's historical performance relative to regulatory standards. Monitoring of effluent nitrogen was required from May through October 2017. Monthly monitoring from May through October has continued. The facility is generally able to reduce the effluent total nitrogen.
 - The East End Wastewater Treatment Facility permit was renewed in 2017. This effort included a number of stakeholders and the Department of Environmental Protection. The negotiated "nutrient optimization approach" for managing nitrogen includes effluent monitoring from May to October, operational efforts to reduce nitrogen (leveraging improvements made during the aeration system upgrade), and participation in the City of Portland's Integrated Planning efforts. The permit included a significant reduction in routine monitoring requirements due to the plant's historical performance relative to regulatory standards. From May through September 2020, a reduction of 75 percent has been realized. This is comparable to past years.

Past Accomplishments (continued)

- The Peaks Island Wastewater Treatment Facility permit was renewed in 2017. The permit included a significant reduction in routine monitoring requirements due to the plant's historical performance relative to regulatory standards. Monitoring of effluent nitrogen was required from May through October. The facility is generally able to reduce the effluent total nitrogen. Increased demands for development on the island will strain the plant's ability to accept the increased future loadings without improvements to the facility.

- Westbrook/Gorham/Windham Regional Treatment Facility upgrades
 - The dewatering system was replaced in 2018 with a new screw press. During 2020 operations staff continued to focus on system performance. A focused and data driven approach to operating the system is being developed. This should improve performance and consistency.
 - We expect that phosphorus limits may be considered in future permit renewals, including the upcoming 2022 renewal. Seasonal monitoring is completed annually to develop baseline effluent levels.

- Improvements to Pump Station reliability
 - PWD monitors all systems through a SCADA computer system. Treatment plants can be remotely operated from the East End Treatment Facility, the Westbrook/Gorham Regional Treatment Facility, or the Douglass St. Office during emergencies using the SCADA system. In 2020, treatment plant staff took over daily alarm monitoring and dispatch responsibilities as part of our pandemic response plan.
 - To improve the reliability of systems during power interruption, PWD requires generators at new pump stations and has installed an average of 3 generators per year at its existing pump stations. The majority of pump stations that require emergency generators have been upgraded or have had generators installed during construction as part of our new infrastructure standards. Bypass connections are also installed to allow the stations to be serviced by a portable pumping unit if needed.
 - Staff completed an assessment of all pump stations in 2014. A summary report has been prepared for each community that PWD serves. These findings continue to guide the development and implementation of our long-range capital improvement program. The assessment is updated following station upgrades.
 - The Northeast Pump Station was upgraded with an odor control system to manage odors from the facility. Coupled with the aeration upgrade at the East End Plant, and staff housekeeping efforts, odors from the facility have decreased significantly.

Past Accomplishments (continued)

- Wastewater Services Department changes
 - The Wastewater Operator apprentice program continues to train operators to assist with workforce management. Operators from this program have moved into higher-level positions, most recently as Operations Foreperson at the East End facility. Nearly all but a handful of our wastewater operators have been through the program and have subsequently advanced.
 - With the acceptance of full responsibility for the Industrial Pretreatment Program in Portland, the WW Systems crew has taken the lead in industrial sampling efforts to monitor industrial discharges. While significant time is required, staff has met this challenge head-on with the assistance and support from the Environmental Services staff.
 - With the retirement of one of the Chief Operators in 2017, the position of a Maintenance Manager (Planning and Scheduling) was created. This position assists Chief Operators and staff in the further refinement of operational scheduling and preventive maintenance efforts. This position has taken a leading role in the asset management system replacement. This position has become the backbone of the operations and maintenance efforts within the department.
 - An Associate Engineer position was added to the Wastewater Services to assist with Capital Project Implementation and operational enhancement efforts. This position was vacant for much of 2020 following an internal promotion.

- East End Wastewater Treatment Plant
 - The construction of the diffused air system at the East End treatment plant was completed in the summer of 2017. Staff has noted a significant reduction in odors from the aeration system and improved process performance.
 - Emphasis on managing the disinfection system during nutrient optimization efforts has reduced effluent fecal coliform violations.
 - New local limits for BOD and TSS were implemented in 2017. The aeration system improvements have resulted in increased monthly allowable loadings and the program has been changed to regulate the mass discharge of high strength waste dischargers. This has eliminated the screening uniform local limit that challenged a number of dischargers. This change is still protective of the treatment plant.
 - An on-line ammonia analyzer was installed to enable staff to continuously monitor effluent nitrogen levels during our nutrient optimization efforts. While the system was not reliable initially, a coordinated effort between the vendor and our staff has resulted in a very reliable output from the analyzer. Staff relies on the system to provide key data for use in the operation of the plant and the disinfection system.
 - Maintenance of the dewatering system has helped to maintain system performance and reliability. The maintenance interval has been refined and future rebuilds will be completed every 4,500 hours. Increased attention by operations staff and the ability to manage more complex operational data has improved the performance of the system. Staff is actively working to maintain consistent performance while optimizing polymer use and improving our ability to coordinate hauling schedules with our biosolids management contractor.

2021 Projects and Initiatives

B1 – Administration

- We continue to monitor changing regulations related to phosphorus, nitrogen, and high flow management. With the renewal of permits at the treatment plants, we will monitor efforts that could affect the next permit in 2022.
- The City of Portland has completed their draft Integrated Planning effort to prioritize water quality commitments. This effort will assess combined sewer, stormwater, and wastewater treatment obligations and prioritize the use of resources to address the various efforts with a goal of improving receiving water quality. Staff is engaged in this effort and will be part of discussions with regulators.
- The Westbrook CSO Long Term Control Plan is scheduled to be updated in 2021. 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.
- The ever increasing reliance on our asset management system for ongoing preventive maintenance, capital projects, and even operations activities requires continuous support. The Maintenance Manager, Chief Operators, Associate Engineer, and increasingly, department staff, are all supporting ongoing and future efforts.
- Biosolids management has become more of a challenge as contaminants of emerging concern and other solid waste policy issues strain Maine's rather fragile waste management infrastructure. A 2020 review of current long-term options has resulted in a 2021 project to help shape future investment to manage this critical component of our treatment efforts. As market pressures increase costs while reducing outlets, a more capital intensive program may be required. These extra costs may be offset to some degree by increasing management costs.

B3, L9 – Operations

- Treatment Plant Operators continue to focus on effluent compliance including making process control adjustments to the operation of the treatment plant as needed, most recently in efforts to manage effluent nitrogen from the Cape Elizabeth, Peaks Island, and East End WWTFs.
- 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. The new Maintenance Manager (Planning and Scheduling) will help to move this effort forward.
- Staff continues to work to manage odors from our treatment facilities. The number of odor complaints has been reduced significantly from past years.
- Systems staff has taken a lead role in the sampling efforts required by the Industrial Pretreatment Program in Portland and Westbrook/Gorham.

2020 Projects and Initiatives (continued)

Corporate Goal – Reliability

B1 – Administration

- Support increased reliance on the asset management system to coordinate and document departmental efforts. The transition to Lucity will result in a more user-friendly system with increased scheduling and functionality.

B3, L9 – Operations

- The Maintenance Manager (Planning and Scheduling) is helping to further refine the preventive maintenance program as the new Maintenance Management Computer system is implemented.
- Continue developing preventive maintenance practices that lead to or exceed a 75%/25% mix of preventive to corrective work order history. It is anticipated that the new asset management system will further enhance these efforts.
- Monitor pump system's ability to minimize pump station downtime. The installation of generators at key pump stations along with bypass pumping connections helps to minimize service interruptions.
- The new portable pump (a larger unit to further complement our existing portable pump) will serve larger stations and can be used to empty large process tanks in a matter of hours instead of days. This will make operational and maintenance efforts easier to schedule and complete.
- As part of the Maintenance Manager (Planning and Scheduling)'s responsibilities, our preventive maintenance program continues to be enhanced. This will include a review of the workload and assignment of work. Part of this review includes the review of current staff utilization and the need for additional staffing or resources. Staffing optimization plans are being developed for possible implementation in early 2021.
- Continue the condition assessment program of combining line cleaning and CCTV inspection of 10% of each community's buried infrastructure. We completed assessment of our entire buried sewer infrastructure by the end of 2018. The results are being evaluated and staff will develop a monitoring plan over the next 2 years. The Associate Engineer will assist with this effort in 2021.
- The Peaks Island Facility Controls were upgraded in 2013 to further enhance the operation of the plant and to allow for improved remote operation of the facility. In the spring of 2015, a new ultraviolet (UV) treatment system was installed at the Peak's Island facility. This has improved the disinfection system significantly.
- In 2016, an evaluation of the electrical distribution systems at each treatment plant was completed. This resulted in a prioritized plan to address these aging and critical systems. The first projects from this assessment are currently under design. A recent agreement with Central Maine Power to site a substation at the plant has revised the scope of the project. Enhancement of the in-plant electrical distribution will be completed in 2021.
- A comprehensive evaluation of the HVAC systems at each treatment plant began in 2016. This evaluation identified aging systems in need of refurbishment and replacement. The project included a review of energy management in the recommendation of future projects. The first projects from this assessment are currently under construction.

2021 Projects and Initiatives (continued)

Corporate Goal – Affordability

B1 – Administration

- The EEWWTF continues to participate in electricity Demand Response through ISO New England and receives between \$500 and \$5,000 annually for its participation.
- Work with operations staff to manage overtime and off-shift coverage through possible enhancements to the staffing plan in treatment.

B3, L9 – Operations

- Manage departmental budgets with area supervisors that lead to cost savings measures, i.e. improved dewatered solids at the Westbrook/Gorham and East End WWTFs, station visits, chemical use, etc. Major budget items, including chemicals, power, biosolids, and others are monitored using the WIMS data management system to monitor and control operations and budgets. Staff will continue to develop clear operational goals for key process areas (dewatering, odor control, disinfection, aeration, etc.) and rely on process data to manage the processes.
- Continue to implement process control measures in the operation of wastewater treatment facilities. Operations Plans have been developed for each facility and an on-line computer based Operations Manuals continue to be updated to serve as guidance for the Operations Team.
- Continue to support the use of the District's asset management systems to efficiently manage equipment and systems. Operations staff and maintenance staff are working with the AMaP Department to complete our asset inventory and to develop preventive maintenance tasks for each facility. This is a significant effort and staff participation continues to increase.

Corporate Goal – Environment

B1 – Administration

- Continue to monitor existing performance and developing regulations.

B3, L9 – Operations

- Treatment and Systems teams work to ensure facilities operate in accordance with permit requirements. Effluent permit violations have decreased in recent years, with a goal of no violations from our treatment plants and systems.
- Through process control enhancements at the Peaks Island and Cape Elizabeth WWTF's, these plants are managing effluent nitrogen levels. With the upgraded aeration system and the requirement for a "nutrient optimization approach" at the East End, efforts to manage and monitor effluent nitrogen began 2018. The configuration of these plants has made this possible with minor control upgrades and the process control enhancements. This will not be possible at the Westbrook/Gorham/Windham Regional WWTF without significant capital investment. The Cape Elizabeth aeration system will be reviewed in 2021 to identify process changes to further manage effluent nitrogen.
- Beginning in 2016, our goal is zero exceedances each year from all treatment plants. This goal continues to direct our operational and compliance efforts into the future.

2021 Projects and Initiatives (continued)

Corporate Goal – Environment (continued)

- The developing concern over a class of chemicals referred to as PFAS will present challenges to 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. A study of biosolids management efforts will be completed in 2021. It is anticipated that the future program will require more capital intensive systems that reduce the volume of material to be managed, while possible – reducing the concentration of PFAS and other contaminants of emerging concern.

Corporate Goal – Employees and Work Environment

B1 – Administration

- Promote the District’s professional development program of a minimum 80 hours of training each year. Emphasis on increasing training opportunities for all staff in 2021 is expected.
- In 2016, the Wastewater Study Group was created. This monthly session involves operators in hands-on learning designed to prepare operators for certification exams and their daily activities in our treatment plants and systems. Challenges with group work in 2020 have limited this group, however, increased staff involvement through weekly coordination meetings and daily reporting have increased the knowledge and performance of our team.
- 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. In 2021, all performance reviews will be completed in a timely manner.
- Following a near miss incident in the summer of 2020, there is an increased focus on project planning, safety management, and work coordination. This effort will continue into 2021 with a goal of increased and sustained performance within the department.
- Develop and maintain a safe working environment in each area of responsibility. Develop wastewater operators through the apprentice program; operators rotate through systems, treatment plants, the wastewater laboratory, and the Water Services Department.
- To ensure safety of our employees near chemical storage facilities and other identified areas, an investment in forced air personal respirator systems was made in 2019. This has enhanced our ability to safely handle chemicals, implement a painting and maintenance program in our facilities, and to work more safely around wastewater during the pandemic.



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 2021 budget total includes an increase of \$740,415 to \$10,889,691. This is a 7.3% increase from the 2020 budget.

Salaries/Wages: Overall budgeted staffing have remained consistent. Maintenance support for all treatment plants continues to come from the central treatment maintenance group at the East End treatment plant with these efforts coordinated through our Maintenance Manager. Overall, this category has increased by \$79,851 or 3.2%.

Biosolids Disposal: The total budget for the hauling and management of biosolids generated from the treatment of wastewater has increased by \$459,254 in 2021 or 26.7%. The agreement with the District's disposal vendor expires at the end of 2020. It is anticipated that the new contract, which has yet to be negotiated, will have a significantly higher rate. The budget assumes a disposal rate of \$90/wet ton, that is a 26.7% increase over the 2020 Budget assumption of \$71.05. The higher unit costs relates to increased regulator and public concern with per- and poly-fluoroalkyl substances (PFAS) with the impact of limiting the available outlets to dispose of biosolids. The budget for Percent Total Solids at both Portland's East End Wastewater Treatment Facility and Westbrook Regional Treatment Facility is targeted at 21.0% again in 2021

Chemicals: Generally, chemicals are used at each of our facilities to treat and disinfect the treated wastewater before being discharged to the environment, to aid in dewatering biosolids, and for odor control. Overall, the total budget for chemicals has increased by \$96,372 or 12.6% from the 2020 budget. A large projected increase in the per unit cost of sodium hypochlorite (25.7%) is the primary reason for the increase.

Contracted Services: Contracted services include the costs of the Falmouth and South Portland treatment plants to treat flows conveyed by PWD from Cumberland and Northern Cape Elizabeth. Contracted Services also includes a maintenance agreement related to the CSO monitoring services. The budget amount increased by \$61,942 or 4.7% mostly due to planned repairs to the EEWWTF's clarifier.

Heat/Fuel Oil: The East End treatment plant converted from fuel oil to natural gas in 2012. Natural gas use is continually monitored and recorded by the SCADA control system. For 2021, the budget has decreased 22.2% (\$45,259) as the per unit cost of energy is expected to decline.

Purchased Power: The power budget has been decreased by \$18,519 or 1.3% in the 2021 budget. The decrease was due in large part to a reduction in the fixed rate cost of energy at both the EEWWTF and the India Street WWPS.

Transportation: The transportation budget has increased by \$7,303 from the 2020 budget. This 3.0% increase results in a budget amount of \$252,618.

Wastewater Services: Total

Financial Summary:

Column	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
B1 - Wastewater Administration	\$366,250	\$174,619	\$378,779	\$406,491	\$27,712	7.3%
B3 - Wastewater Treatment	6,681,465	3,267,311	6,974,559	7,615,423	640,864	9.2%
L9 - Wastewater Systems	2,559,286	1,248,160	2,795,938	2,867,777	71,839	2.6%
Grand Total	9,607,001	4,690,090	10,149,276	10,889,691	740,415	7.3%
Expense Type:						
Salaries & Wages	\$2,273,528	\$1,136,375	\$2,504,320	\$2,584,171	\$79,851	3.2%
Employee Benefits	1,044,098	531,156	1,140,749	1,223,989	83,240	7.3%
Biosolids Disposal	1,809,983	880,621	1,722,166	2,181,420	459,254	26.7%
Chemicals	736,559	375,879	764,812	861,184	96,372	12.6%
Contracted Services	1,215,194	487,261	1,326,458	1,388,400	61,942	4.7%
Heat/Fuel Oil	183,515	91,358	203,947	158,688	-45,259	-22.2%
Insurance	42,027	22,445	44,729	46,912	2,183	4.9%
Materials & Supplies	345,510	174,308	448,610	458,262	9,652	2.2%
Other Expense	85,192	33,033	64,110	52,010	-12,100	-18.9%
Purchased Power	1,409,424	758,806	1,464,129	1,445,610	-18,519	-1.3%
Regulatory/Taxes	19,893	6,662	40,500	42,150	1,650	4.1%
Tele/Other Utilities	202,000	89,511	179,431	194,277	14,846	8.3%
Transportation	240,079	102,676	245,315	252,618	7,303	3.0%
Grand Total	9,607,001	4,690,090	10,149,276	10,889,691	740,415	7.3%
Headcount:						
Full Time	39	39	39	39	0	0.0%
Part Time	0	0	0	0	0	n/a
Total	39	39	39	39	0	0.0%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$381,886	\$191,250	\$405,830	\$426,630	\$20,800	5.1%
660121 - WAGES/REGULAR UNION	1,707,735	861,498	1,884,342	1,934,197	49,855	2.6%
660122 - WAGES/OVERTIME UNION	134,920	61,245	144,441	147,575	3,134	2.2%
660123 - WAGES/DOUBLETIME UNION	14,176	4,422	19,217	20,062	845	4.4%
660124 - WAGES/STANDBY TIME UNION	37,658	17,959	40,410	45,627	5,217	12.9%
660131 - WAGES - REGULAR - TEMPS	7,014	-	10,080	10,080	-	0.0%
66014 - VACATION ACCRUAL	11,730	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	(21,591)	-	-	-	-	n/a
Salaries & Wages Total	2,273,528	1,136,375	2,504,320	2,584,171	79,851	3.2%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	173,567	89,792	191,583	197,691	6,108	3.2%
660405 - SAFETY/WHY PROGRAM ITEMS	7,999	2,155	7,800	6,300	(1,500)	-19.2%
660411 - MEALS ALLOWANCE	240	50	450	450	-	0.0%
6604151 - FIELD UNIFORMS	409	-	90	90	-	0.0%
660418 - STIPENDS	2,800	3,200	4,600	3,900	(700)	-15.2%
660419 - EMPLOYEE BENEFITS-MISC OTH	3,301	233	3,200	2,100	(1,100)	-34.4%
660491 - FRINGE BENEFITS-REG/SAL	855,782	435,725	933,026	1,013,458	80,432	8.6%
Employee Benefits Total	1,044,098	531,156	1,140,749	1,223,989	83,240	7.3%
Biosolids Disposal						
663571 - BIOSOLIDS DISPOSAL	1,809,983	880,621	1,722,166	2,181,420	459,254	26.7%
Biosolids Disposal Total	1,809,983	880,621	1,722,166	2,181,420	459,254	26.7%
Chemicals						
661811 - SODIUM BICARBONATE	12,407	11,211	13,800	17,365	3,565	25.8%
661812 - SODIUM BISULFITE	123,867	57,812	217,846	228,669	10,823	5.0%
66182 - CAUSTIC SODA	7,347	11,280	7,250	15,110	7,860	108.4%
66185 - SODIUM HYPOCHLORITE	222,103	118,021	255,013	320,660	65,647	25.7%
66189 - POLYMER	361,162	177,555	256,765	265,242	8,477	3.3%
661899 - OTHER CHEMICALS	9,674	-	14,138	14,138	-	0.0%
Chemicals Total	736,559	375,879	764,812	861,184	96,372	12.6%
Contracted Services						
6631 - ENGINEERING SERVICES	69,820	20,141	100,000	60,000	(40,000)	-40.0%
663521 - TRAFFIC CONTROL	2,218	-	800	800	-	0.0%
6635221 - PAVING - MINOR REPAIR	319	-	-	-	-	n/a
663525 - CONTRACTOR CONSTRUCTION	21,989	2,500	45,500	42,000	(3,500)	-7.7%
66353 - REPAIR SERVICES	98,494	7,770	13,000	88,500	75,500	580.8%
66354 - MAINTENANCE SERVICES	258,645	84,354	291,796	299,106	7,310	2.5%
663543 - CSO FLOW MONITORING	90,923	21,799	156,375	154,000	(2,375)	-1.5%
663544 - MAINT SERVICES - CCTV	51,600	24,525	61,250	61,250	-	0.0%
663546 - MAINTENANCE - SNOW REMOVL	43,836	32,082	55,700	46,993	(8,707)	-15.6%
663547 - WASTE SLUDGE TRANSPORT	34,451	11,664	33,800	49,800	16,000	47.3%
663551 - LAB ANALYSIS	1,965	40	1,600	1,600	-	0.0%
663561 - COMPUTER LICENSES	39,413	35,677	38,397	35,939	(2,458)	-6.4%
663562 - COMPUTER MAINTENANCE	356	-	-	-	-	n/a
663572 - GRIT & SCREENS DISPOSAL	45,119	19,463	74,450	65,650	(8,800)	-11.8%
663573 - GREASE DISPOSAL	22,220	14,452	30,700	30,700	-	0.0%
663574 - DISPOSAL SERVICES	10,528	5,655	7,800	7,800	-	0.0%
663585 - TREATMENT CONTRACT SERVIC	412,990	205,235	410,470	435,600	25,130	6.1%
6635851 - WW DEWATERING SERVICES	3,237	2,478	5,020	9,062	4,042	80.5%
6635852 - WW DEWATERING SRVS CRED	(3,237)	(2,478)	(5,000)	(5,000)	-	0.0%
663587 - COURIER SERVICES	4,562	1,904	4,800	4,600	(200)	-4.2%
663599 - MISC OTHER SERVICES	5,497	-	-	-	-	n/a
6640 - RENTAL-PROPERTY/EQUIPMENT	248	-	-	-	-	n/a
Contracted Services Total	1,215,194	487,261	1,326,458	1,388,400	61,942	4.7%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Heat/Fuel Oil						
66161 - HEATING OIL	\$32,599	\$22,122	\$27,635	\$26,215	(\$1,420)	-5.1%
661621 - PIPELINE DELIVERED PROPAN	87,716	41,835	109,022	78,709	(30,313)	-27.8%
661622 - CONTAINER DELIVERED	62,718	27,283	66,740	53,214	(13,526)	-20.3%
66166 - UNLEADED GAS	482	118	550	550	-	0.0%
Heat/Fuel Oil Total	183,515	91,358	203,947	158,688	(45,259)	-22.2%
Insurance						
66599 - PROPERTY & BOILER INSUR	42,027	22,445	44,729	46,912	2,183	4.9%
Insurance Total	42,027	22,445	44,729	46,912	2,183	4.9%
Materials & Supplies						
6619 - ASSET PURCHASES	116,770	51,506	153,000	151,000	(2,000)	-1.3%
66202 - TOOLS	13,910	1,805	7,300	7,700	400	5.5%
66203 - VENDOR PURCHASED SUPPLIES	90,894	61,375	184,150	186,550	2,400	1.3%
662041 - MATERIALS INVENTORY	64,480	31,639	47,925	52,800	4,875	10.2%
662042 - SUPPLIES INVENTORY	37,407	19,574	29,035	31,725	2,690	9.3%
66204201 - INVENTORY - QPR	145	-	-	-	-	n/a
66204202 - INVENTORY - BNKRUN GRAVEL	70	-	-	-	-	n/a
66204204 - INVENTORY - CRUSHED STONE	61	-	-	-	-	n/a
66204206 - INVENTORY - TYPE A GRAVEL	196	-	-	-	-	n/a
662043 - TOOL INVENTORY	16,427	5,967	15,075	17,075	2,000	13.3%
66204301 - INVENTORY - TONER	-	121	-	-	-	n/a
66204302 - INVENTORY - PAPER	-	93	-	-	-	n/a
66204303 - INVENTORY-COMPUTER EQUIP	1,521	487	5,300	500	(4,800)	-90.6%
662047 - GARAGE INVENTORY	1,725	844	2,175	2,225	50	2.3%
66205 - CONSUMABLE SUPPLIES	196	-	650	650	-	0.0%
66206 - COMPUTER RELATED EQUIP	1,706	897	4,000	8,037	4,037	100.9%
Materials & Supplies Total	345,510	174,308	448,610	458,262	9,652	2.2%
Other Expense						
6642 - EQUIPMENT RENT	28,975	2,869	1,250	2,250	1,000	80.0%
66609 - OTHER ADVERTISING	-	-	350	350	-	0.0%
6675111 - INSTATE TRAINING/CONF	23,474	6,811	23,800	22,800	(1,000)	-4.2%
6675112 - OUT OF STATE TRAINING/CON	15,337	4,825	10,950	10,950	-	0.0%
667513 - DUES	6,898	12,904	12,800	12,800	-	0.0%
667514 - PROFESSIONAL LICENSES	2,066	1,075	2,480	2,480	-	0.0%
667515 - PERIODICAL SUBSCRIPTIONS	274	590	250	450	200	80.0%
667517 - PLANT OPER LICENSE FEES	-	-	75	75	-	0.0%
667521 - POSTAGE - THIRD PARTY	281	-	75	75	-	0.0%
667522 - POSTAGE - INTERNAL	27	55	100	100	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	422	148	500	500	-	0.0%
667531 - PRINTING COSTS	1,103	-	-	-	-	n/a
667533 - FORMS STOCK	-	-	400	400	-	0.0%
667552 - SAFETY TRAINING	382	72	1,500	600	(900)	-60.0%
667555 - SAFETY EXPENSES	27,186	11,641	33,650	22,050	(11,600)	-34.5%
667581 - ANNUAL LAND CONTRIB CAPE	2,500	4,000	-	-	-	n/a
667592 - FOOD SUPPLIES	370	328	500	700	200	40.0%
667599 - OTHER MISCELLANEOUS	467	-	-	-	-	n/a
6676 - EXPENSE OFFSET	(24,570)	(12,285)	(24,570)	(24,570)	-	0.0%
Other Expense Total	85,192	33,033	64,110	52,010	(12,100)	-18.9%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Purchased Power						
66151 - POWER - LARGE ENERGY	\$333,094	\$189,103	\$362,745	\$464,599	\$101,854	28.1%
66152 - POWER - LARGE T&D	371,577	187,815	413,518	433,310	19,792	4.8%
66153 - POWER - MEDIUM ENERGY	262,156	152,457	252,897	250,281	(2,616)	-1.0%
66154 - POWER - MEDIUM T&D	178,275	99,900	182,059	188,986	6,927	3.8%
66155 - POWER - SMALL ENERGY	41,368	23,440	45,246	48,559	3,313	7.3%
66156 - POWER - SMALL T&D	47,736	27,264	53,150	60,383	7,233	13.6%
66157 - POWER - OTHER CHARGES	63,560	36,246	66,874	-	(66,874)	-100.0%
66158 - LOAD RESPONSE	(346)	(344)	(1,300)	(508)	792	-60.9%
66159 - POWER - CAPACITY	112,002	42,926	88,940	-	(88,940)	-100.0%
Purchased Power Total	1,409,424	758,806	1,464,129	1,445,610	(18,519)	-1.3%
Regulatory/Taxes						
667516 - PERMITS	25,575	5,956	26,500	28,150	1,650	6.2%
667518 - REGULATORY REQUIRED FEES	10,818	706	14,000	14,000	-	0.0%
667519 - REGULATORY FINES	(16,500)	-	-	-	-	n/a
Regulatory/Taxes Total	19,893	6,662	40,500	42,150	1,650	4.1%
Tele/Other Utilities						
66101 - WATER	91,668	38,694	86,324	87,488	1,164	1.3%
66102 - WASTEWATER	60,967	26,059	52,938	53,348	410	0.8%
66103 - STORMWATER CHARGES	21,303	11,791	18,393	18,845	452	2.5%
66112 - DATA LINES	19,578	10,192	14,376	27,196	12,820	89.2%
66113 - CELLULAR PHONES	8,483	2,775	7,200	7,200	-	0.0%
66114 - PAGERS	-	-	200	200	-	0.0%
Tele/Other Utilities Total	202,000	89,511	179,431	194,277	14,846	8.3%
Transportation						
66501 - TRANSPORTATION - INTERNAL	135,446	52,359	161,955	172,323	10,368	6.4%
665019 - TRANS INTERNAL INACTIVE	80,348	45,012	66,185	63,120	(3,065)	-4.6%
66502 - TRANSPORTATION - EXTERNAL	20,782	4,909	15,300	15,300	-	0.0%
66503 - MILEAGE REIMBURSEMENT	3,503	397	1,875	1,875	-	0.0%
Transportation Total	240,079	102,676	245,315	252,618	7,303	3.0%
Grand Total	9,607,001	4,690,090	10,149,276	10,889,691	740,415	7.3%

Wastewater Services: Wastewater Administration (B1)

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$228,605	\$105,160	\$240,385	\$255,694	\$15,309	6.4%
Employee Benefits	111,755	51,871	117,423	130,626	13,203	11.2%
Contracted Services	605	0	500	500	0	0.0%
Materials & Supplies	636	3	150	150	0	0.0%
Other Expense	19,446	16,470	18,355	17,555	-800	-4.4%
Tele/Other Utilities	1,793	707	1,416	1,416	0	0.0%
Transportation	3,410	408	550	550	0	0.0%
Grand Total	366,250	174,619	378,779	406,491	27,712	7.3%
Programs:						
41 - Pretreatment	\$208	\$0	\$0	\$0	\$0	n/a
98 - Training	35,695	8,837	20,218	20,308	90	0.4%
99 - Administration	330,348	165,782	358,561	386,183	27,622	7.7%
Grand Total	366,250	174,619	378,779	406,491	27,712	7.3%
Funds:						
10 - General	\$545	\$0	\$0	\$0	\$0	n/a
50 - Wastewater General	365,498	174,619	378,779	406,491	27,712	7.3%
62 - WW Westbrook	208	0	0	0	0	n/a
Grand Total	366,250	174,619	378,779	406,491	27,712	7.3%
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 Treatment Plants (B3)

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$1,283,484	\$653,639	\$1,442,886	\$1,481,900	\$39,014	2.7%
Employee Benefits	581,516	299,932	645,702	689,532	43,830	6.8%
Biosolids Disposal	1,809,983	880,621	1,722,166	2,181,420	459,254	26.7%
Chemicals	726,885	375,879	752,674	849,046	96,372	12.8%
Contracted Services	684,677	249,097	688,392	752,909	64,517	9.4%
Heat/Fuel Oil	160,755	79,218	183,409	137,985	-45,424	-24.8%
Insurance	23,305	11,807	24,827	25,976	1,149	4.6%
Materials & Supplies	227,688	134,745	330,260	328,188	-2,072	-0.6%
Other Expense	44,559	7,462	23,955	13,355	-10,600	-44.2%
Purchased Power	916,452	476,791	934,010	914,059	-19,951	-2.1%
Regulatory/Taxes	19,487	6,662	40,050	40,050	0	0.0%
Tele/Other Utilities	126,804	59,340	116,576	129,405	12,829	11.0%
Transportation	75,869	32,118	69,652	71,598	1,946	2.8%
Grand Total	6,681,465	3,267,311	6,974,559	7,615,423	640,864	9.2%
Programs:						
44 - WW Pumping	\$22,656	\$16,646	\$16,827	\$15,520	-\$1,307	-7.8%
45 - WW Treatment	6,190,735	2,991,159	6,480,859	7,099,220	618,361	9.5%
47 - Septage Pumping	37	0	0	0	0	n/a
63 - Sample Analysis	0	0	6,708	6,988	280	4.2%
96 - Pandemic Costs	0	42,474	0	0	0	n/a
97 - Internal Admin	273	0	1,278	1,331	53	4.1%
98 - Training	89,877	25,973	105,688	109,366	3,678	3.5%
99 - Administration	377,888	191,059	363,199	382,998	19,799	5.5%
Grand Total	6,681,465	3,267,311	6,974,559	7,615,423	640,864	9.2%
Funds:						
10 - General	\$0	\$0	\$319	\$333	\$14	4.4%
50 - Wastewater General	468,037	259,420	476,554	500,350	23,796	5.0%
51 - WW Cape Elizabeth	392,899	216,761	460,778	501,661	40,883	8.9%
53 - WW Cumberland	0	0	2,051	2,137	86	4.2%
57 - WW Portland	4,688,887	2,197,469	4,831,664	5,315,508	483,844	10.0%
61 - WW Gorham	0	0	2,051	2,137	86	4.2%
62 - WW Westbrook	1,027	4,306	3,007	2,383	-624	-20.8%
64 - WW Joint Westbrook	963,409	514,445	997,462	1,092,479	95,017	9.5%
65 - WW Joint LF	83	603	0	0	0	n/a
66 - WW Peaks Island	167,121	74,307	200,673	198,435	-2,238	-1.1%
Grand Total	6,681,465	3,267,311	6,974,559	7,615,423	640,864	9.2%
Headcount:						
Full-Time	23	23	23	23	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	23	23	23	23	0	0.0%

Wastewater Services: Wastewater Systems (L9)

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$761,439	\$377,576	\$821,049	\$846,577	\$25,528	3.1%
Employee Benefits	350,827	179,353	377,624	403,831	26,207	6.9%
Chemicals	9,674	0	12,138	12,138	0	0.0%
Contracted Services	529,911	238,164	637,566	634,991	-2,575	-0.4%
Heat/Fuel Oil	22,760	12,140	20,538	20,703	165	0.8%
Insurance	18,722	10,638	19,902	20,936	1,034	5.2%
Materials & Supplies	117,186	39,559	118,200	129,924	11,724	9.9%
Other Expense	21,187	9,101	21,800	21,100	-700	-3.2%
Purchased Power	492,972	282,015	530,119	531,551	1,432	0.3%
Regulatory/Taxes	406	0	450	2,100	1,650	366.7%
Tele/Other Utilities	73,403	29,465	61,439	63,456	2,017	3.3%
Transportation	160,800	70,150	175,113	180,470	5,357	3.1%
Grand Total	2,559,286	1,248,160	2,795,938	2,867,777	71,839	2.6%
Programs:						
41 - Pretreatment	20,404	5,953	45,396	41,679	-3,717	-8.2%
44 - WW Pumping	1,773,326	830,334	2,029,089	2,066,075	36,986	1.8%
45 - WW Treatment	201,644	97,762	225,606	229,333	3,727	n/a
90 - Vehicles	28,859	11,156	23,171	33,688	10,517	45.4%
95 - Douglass Street	17,494	7,832	21,428	22,169	741	3.5%
96 - Pandemic Costs	0	29,194	0	0	0	n/a
98 - Training	70,028	18,217	64,229	69,221	4,992	7.8%
99 - Administration	447,532	247,712	387,019	405,612	18,593	4.8%
Grand Total	2,559,286	1,248,160	2,795,938	2,867,777	71,839	2.6%
Funds:						
10 - General	\$25,906	\$10,441	\$29,225	\$32,509	\$3,284	11.2%
20 - Water General	852	1,399	4,323	5,217	894	20.7%
50 - Wastewater General	584,878	331,247	505,972	537,823	31,851	6.3%
51 - WW Cape Elizabeth	309,177	173,029	331,264	348,158	16,894	5.1%
53 - WW Cumberland	390,047	177,891	389,139	399,474	10,335	2.7%
55 - WW Windham LF	38,620	10,755	40,238	43,413	3,175	7.9%
57 - WW Portland	647,739	310,435	836,724	825,601	-11,123	-1.3%
61 - WW Gorham	167,861	75,268	185,895	187,515	1,620	0.9%
62 - WW Westbrook	145,044	63,107	175,049	181,802	6,753	3.9%
64 - WW Joint Westbrook	118,149	63,721	143,711	148,465	4,754	3.3%
65 - WW Joint LF	77,970	20,709	75,856	79,597	3,741	4.9%
66 - WW Peaks Island	53,043	10,156	78,542	78,203	-339	-0.4%
Grand Total	2,559,286	1,248,160	2,795,938	2,867,777	71,839	2.6%
Headcount:						
Full-Time	13	13	13	13	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	13	13	13	13	0	0.0%

Environmental Services – Purpose Statement

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

Core Services

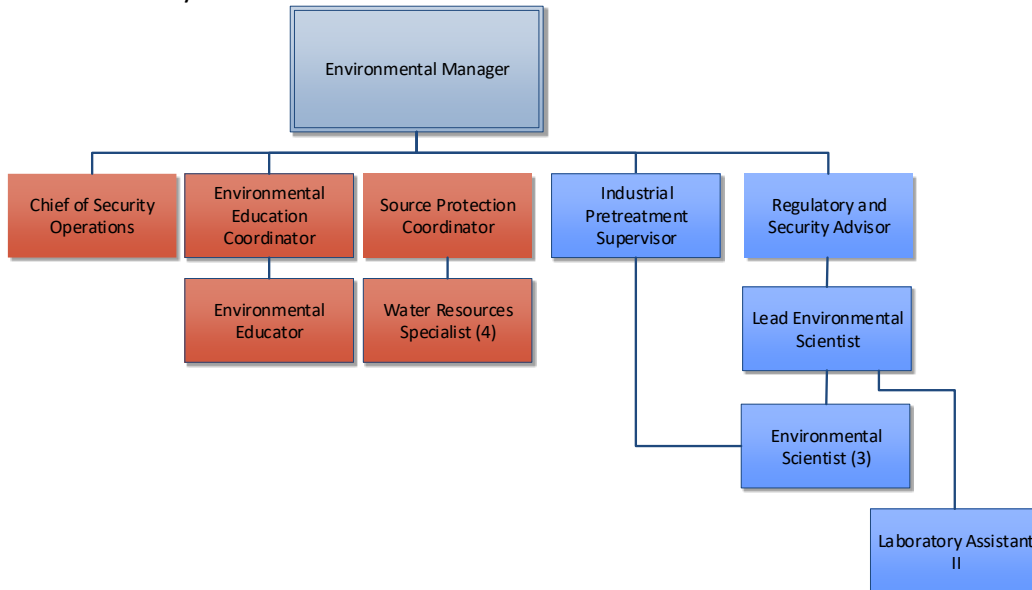
Environmental Services has five core areas of focus:

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

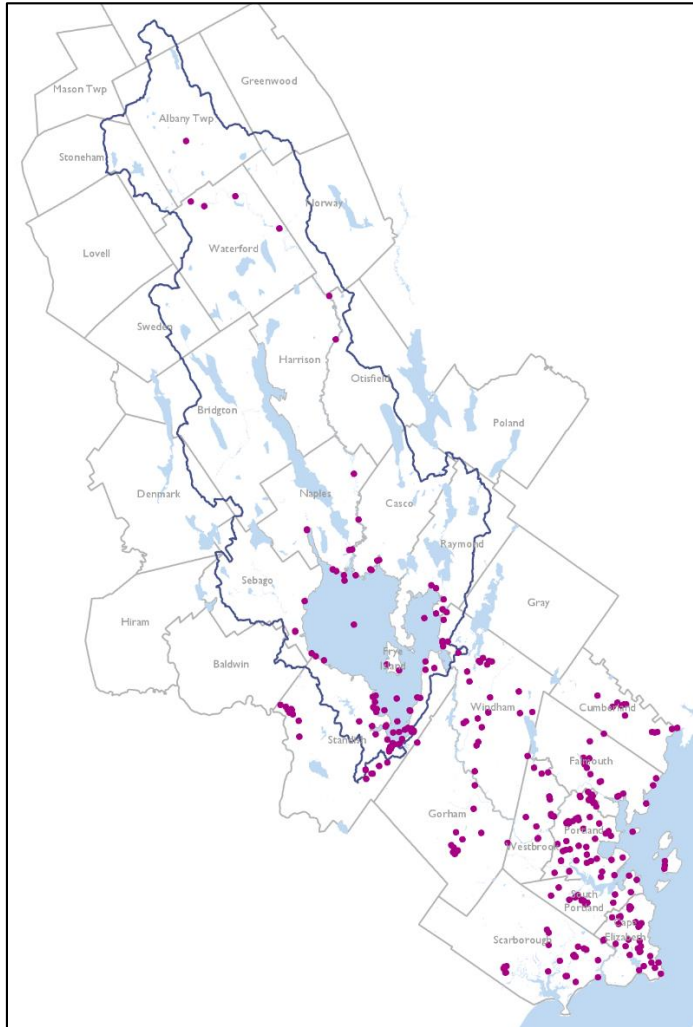
1. The Source Protection section monitors Sebago Lake and the watershed, inspects development projects in the watershed to minimize their impact, works with watershed partners to install pollution prevention and mitigation projects, and works with watershed land trusts to help landowners seeking to conserve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

Laboratory Services Group (L6; blue in organization chart)

4. The Environmental Laboratories ensure the proper collection, analysis and reporting of water, wastewater and biosolids samples both for compliance purposes and to support the proper functioning of water and wastewater operations.
5. The Industrial Pretreatment Program (IPT) staff are responsible for permitting, monitoring and initiating enforcement actions for sewer customers who discharge significant quantities of non-domestic wastewater to the sewer collection system. The IPT programs are designed to ensure discharges from industrial users do not impact District operations or pollute the Presumpscot River or Casco Bay.



Key Statistics



Watershed Monitoring Programs: **12**

Annual Watershed Inspections: **375**

Individuals reached through Education and Outreach programs:
More than **13,000** annually

Annual Land Reserve Day-use Visits:
23,000

Land Reserve Violations Issued: **300**

Annual Lower Bay Patrol Hours: **2100**

Annual Lower Bay Violators Cited: **75**

Accredited Laboratory Analytes: **68**

Average Annual Number of customer Water Quality Inquiries: **218**

IPT Industries Regulated: **43**

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

Performance Benchmarks

Annual Program Metrics – Environmental Services	2019 Actual	2020 Projected	2021 Projected
% Verified - Water Quality Inquiries	30	30	25
Shore Land Zone Inspections	419	375	375
Watershed Properties Improved or Recommendations Made	25	25	25
Lower Bay Water Violations	76	125	100
Land Reserve Visitors	28,424	>30,000 est.*	>30,000 est.*
Land Reserve Violations	282	Suspended*	250
Visitors per Land Reserve Violation	77	Suspended*	75
Accredited Laboratory Analytes	74	68	68
Students Served by WaterWays In-School Program*	889	351	700
Outreach Events and Presentations Organized by PWD*	15	5	30
Industrial Pretreatment Notices of Violation Issued	30	30	30

*Actual and projected numbers significantly impacted by the pandemic

Environmental Services By the Numbers:

Source Protection since 2000:

- Completed more than **10,100** watershed inspections.
- Provided Lakescaping Reports to **502** watershed property owners.
- Financially supported water quality-related improvements on **251** properties.
- Awarded more than **\$278,600** in Lakescaping Grants which, when combined with matching funds, resulted in more than **\$1,165,400** in improvements to the shoreland zone of Sebago Lake.
- Maintained **10** ongoing lake and watershed monitoring programs.
- Reviewed plans for more than **168** large developments and, when necessary, provided planning board feedback in an effort to minimize the impact of these projects.
- Responded to **496** complaints, **176** of which prevented or mitigated environmental violations and/or pollution.
- Contributed more than **\$900,000** to assist in the conservation by area land trusts of **5,800** acres of land in the watershed.

Education and Outreach since 2000:

- Produced **32** Watershed News newsletters and 5 State of the Lake reports.
- Distributed more than **65,300** Sebago Lake maps and **16,400** “Images of Sebago Lake” calendars to watershed residents and visitors.
- Distributed more than **58,000** other types of brochures and fact sheets to watershed residents and visitors.
- Posted over **440** lake protection related messages on Facebook to an audience that began at **490** followers in 2013 and has increased to over **2,500** followers today.
- Sent **51** mass emails about source protection events, publications, and information to a recipient list that started in 2015 with **1,100** email addresses and has increased to over **3,300** today.
- Taught source protection principles to approximately **19,000** middle school-aged students through our HydroLogics and WaterWays in-school education programs.
- Provided environmental education to approximately **39,000** additional children, teachers, and adults through tours, events, workshops, field trips, lessons, loaned resources, and programs.

Water Resources Security since 2005:

- Patrolled Lower Bay by boat and attended the Standish Boat Launch for approximately **26,960** hours combined.
- Patrolled the Sebago Lake Land Reserve by using an all-terrain vehicle (Extended Security patrol) for approximately **1,790** hours combined.
- Issued more than **1,900** warnings for violation of water contact regulations
- Recorded more than **190,400** day-use visits to the Sebago Lake Land Reserve.
- Issued more than **3,350** warnings for violation of Land Reserve Rules.
- Suspended privileges to visit Land Reserve of **42** individuals for aggravated or multiple Land Reserve Rule violations.

Past Accomplishments (continued)

Environmental Laboratories since 2000:

- Combined the water and wastewater laboratories into one functioning unit with shared resources, staff, and expertise.
- Consolidated to East End laboratory the daily wastewater analyses for the four wastewater treatment facilities in order to improve consistency and reduce duplication of quality control requirements.
- Modified laboratory procedures as needed to meet evolving EPA and state standards to maintain accreditation for water and wastewater analyses.
- Consistently analyzed performance testing samples properly to maintain accreditation. Presently accredited for **68** analytes.
- Managed the customer water quality inquiry process to ensure prompt and consistent response by appropriate staff; responded to approximately **250** calls per year.
- Contributed to the protection of public health by participating in the Maine Healthy Beaches program.
- Supported water and wastewater operations by providing accurate and timely water and wastewater quality data.
- Provided training in water quality and environmental regulation to District staff in all departments.

Industrial Pretreatment since 2010:

- Accomplished the adoption of local limits on Portland and Westbrook industrial dischargers each time facility permits were renewed.
- Created and implemented Industrial Waste Surveys of the Westbrook-Gorham-Windham, Cape Elizabeth and Peaks Island systems to identify IPT industries.
- Manage all aspects of the Portland and Westbrook-Gorham IPT programs since 2018.
- Received 2015 Regional EPA Industrial Pretreatment Program Excellence Award.
- Implemented the new Dental Amalgam Rule by collecting one-time certification forms from more than **60** area dentists.
- Held two outreach events to connect to industrial pretreatment customers (one in Westbrook, one in Portland).
- Coordinated with **4** industrial users to solve chronic discharge issues by modifying and upgrading pretreatment or sampling.

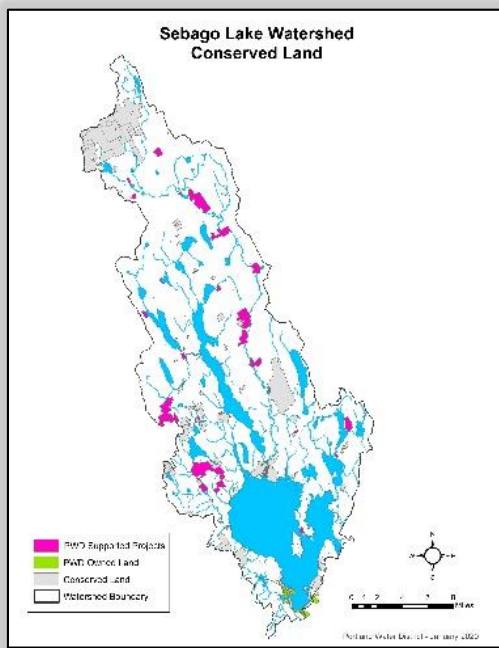
Budget Year 2020 Highlights:

- Collaborated with Sebago Clean Waters Partners to acquire an \$8 million dollar Regional Conservation Partnership Program grant from the Natural Resources Conservation Service to fund conservation work in the watershed for the next five years.
- Successfully utilized a Source Water Protection Grant from the Maine Drinking Water Program to implement innovative erosion mitigation strategies in partnership with Sebago Lake State Park.
- Temporarily assumed management of the Total Coliform Rule distribution system monitoring program to support Water Operations.
- Completed a AWIA Risk and Resilience Assessment on the Greater Portland water system.
- Completed a revision of the Water Emergency Response Plan and submitted to EPA in September.
- Completed updates to the Sebago Lake Water Treatment Facility's Integrated Contingency Plan (ICP).
- Completed haloacetic acid (HAA9), metals, pesticides, alcohols and SVOC monitoring for the Greater Portland system per the EPA UCMR4 regulation.
- Provided laboratory support to the Maine Healthy Beach Program by testing East End beach for bacteria.
- Maintained good standing with DHHS lab accreditation program following on-site assessments.
- Revised the Source Protection section of the District's website to improve navigation and readability.
- Created a newly designed newsletter, *Sebago In Depth*, which replaces the *Watershed News*.
- Created a variety of remote sources for use by educators and families in response to the pandemic; one resource was featured on Maine PBS in the spring.
- Convened an environmental educators' group with local staff at Lakes Environmental Association and Cumberland County Soil & Water Conservation District to coordinate work and provide professional development.
- Continued outreach in the Sebago Lake Watershed, coordinating efforts with partners, meeting with officials from four towns, and partnering on four events.
- Completed the annual update to the PWD Incident Management Plan
- Made improvements to the personnel shelter for District and Town of Standish Boat Launch staff to use as an information center, milfoil inspection check point, and Lower Bay observation platform.
- Restored the Pond Road grave site of Revolutionary War hero and Standish resident, Jedediah Lumbard.
- Hosted Portland industrial pretreatment customers at the EEWWTF for a tour and educational event.
- Created an Industrial pretreatment website which is now hosted on www.pwd.org.
- Created and posted a short video about IPT to highlight benefits of the program.
- Established sampling protocol and procedures for WW Systems Operators and Environmental Service lab staff for both Westbrook-Gorham and Portland IPT programs.
- Supported promulgation into municipal ordinances of updated IPT local industrial discharge limits in Westbrook and Portland.
- Renewed all expiring Industrial Pretreatment permits on time. In 2020, 42% of all IPT permits expired and were renewed.
- Issued new permits to two industrial users in 2020 – Helical Solutions and Mast Landing Brewing.
- Implemented the new Dental Amalgam Rule by collecting one-time certification forms from area dentists connected to the sewer systems in Portland, Westbrook, Gorham and Windham.

2020 Highlights



Successfully utilized a Source Water Protection Grant from the Maine Drinking Water Program to implement innovative erosion mitigation strategies in partnership with Sebago Lake State Park.



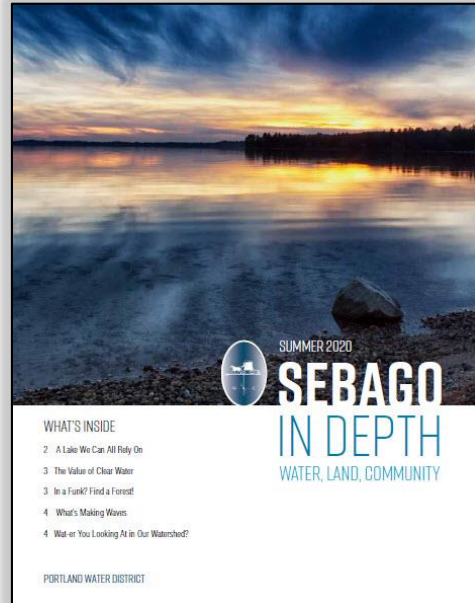
Collaborated with Sebago Clean Waters Partners to apply for a \$8,000,000 dollar RCPP grant from the Natural Resources Conservation Service to fund conservation work in the watershed for the next five years.



Followed socially distanced protocol to conduct on-site inspections at IPT facilities.



Worked with Schlotterbeck and Foss to upgrade their pretreatment system by installing a Dissolved Air Flotation(DAF) unit.



Created an updated newsletter, Sebago In Depth, which replaces the Watershed News.



Created remote learning resources for schools and families in response to the pandemic.



Completed monitoring for HAA9, metals, alcohols, pesticide and SVOC's per the EPA Unregulated Contaminant Monitoring Rule.



Certified completion of the AWIA required Risk and Resilience Assessment and Emergency Response Plan to EPA in March and September, respectively.



Completed Lead and Copper Rule triennial monitoring at 50 customer homes.



Suspended the requirement for filling out permits at kiosks due to the pandemic but maintained land patrols in a socially distant manner.



The shelter at the Standish boat launch was set up in such a way to allow for social distancing for both District security staff and Town attendants.



Secured the boat dock at the 52 Intake with additional mooring blocks.

2021 Projects and Initiatives

Source Protection

- Support Sebago Clean Waters partners in their efforts to purchase and conserve the 3,000-acre Chadbourne Tree Farms property, a pristine working forest with nearly 14 miles of frontage on the Crooked River.
- Implement Sebago Lake Phase IV: Utilize federal 319 grant funds to improve eroding sites around Sebago Lake, reducing the input of phosphorus and protecting water quality.
- Continue supporting the land conservation efforts of Sebago Clean Waters.
- Work with the District's forester on an inventory and update of the District's Forest Management Plan for the Sebago Lake Land Reserve.
- Re-deploy real-time water quality monitoring buoy in Lower Bay and continue refinement of data interface and data transmission.
- Continue collaboration with the Town of Standish to influence management of the Rich Memorial Beach, the Route 35 overlook facility, and operations and lake friendly facility improvements at the Standish Boat Launch.
- 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.
- Resume all 12 lake and watershed water quality monitoring programs, analyze the data, and produce and post useful water reports (beach monitoring and the real-time monitoring buoy were suspended in 2020).
- Monitor planning board agendas, provide technical assistance, and track large-scale projects such as subdivision and commercial development within the Sebago Lake watershed.
- Maintain communication with Portland Pipeline Corporation and continue monitoring the status of their operations and potential plans.

Environmental Laboratories

- Re-accredit testing methods at East End and Sebago Lake laboratories for all reportable analytes.
- Maintain DHHS "quality system" requirements in each District laboratory for accreditation and data integrity.
- Report on customer Water Quality Inquiries including those at dead end locations.
- Continue safety awareness and improvements through hazard analysis, Global Harmonized System secondary container labeling, chemical inventory procedures and coordinating District hazardous waste removal.
- Provide training to District staff to improve data quality and understanding.
- Provide support to nitrogen and phosphorus monitoring at wastewater facilities to contribute to nutrient testing programs.
- Represent the District at Cumberland County EMA and Cumberland District Public Health Council meetings.
- Complete intensive "surveillance year" monitoring at Westbrook and Peaks Island WWTF's ahead of permit renewals.
- Meet the District's need for in-house metals analyses on water, wastewater, IPT and biosolids samples using the ICP.
- Continue managing all aspects of the Westbrook-Gorham and Portland pretreatment programs.
- Renew all expiring Industrial Pretreatment permits (in 2021, 44% of all IPT permits will expire).
- Collaborate with the City of Portland on a general permit program for breweries and other alcoholic beverage producers.

2021 Projects and Initiatives (cont'd)

Industrial Pretreatment

- Redo Industrial Waste Survey to identify industrial users that are not currently permitted in the Portland program.
- Continue active membership in the MEWEA Industrial Pretreatment Committee.
- Provide periodic reports of IPT activity to the Cities of Portland and Westbrook and the Town of Gorham.

District Security & Preparedness

- Exercise District's emergency preparedness with either a full-scale or tabletop exercise.
- 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.
- Maintain enhanced patrol of the Otter Pond Parcel of the Sebago Lake Land Reserve to address the growing number of visitors.
- Provide field oversight of District logging operations and track documentation.
- Conduct training for Operations staff in security patrol procedures of District's water storage facilities.
- 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.
- Support Water and Wastewater operations in their effort to update Integrated Contingency Plans.
- Strengthen relationship and communication between PWD and local public health agencies.

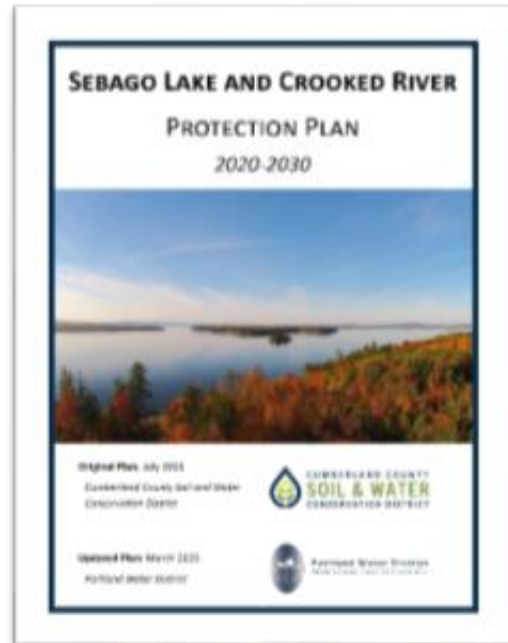
Environmental Education and Outreach

- Stay abreast of educational trends in response to the pandemic, working with teachers to develop engaging resources that relate to source protection principles, drinking water, and wastewater.
- If schools reopen, implement the fifth year of our WaterWays in-school programs in service area and watershed schools. If schools don't reopen fully, provide virtual resources to our participating schools.
- Continue to increase educational capacity through teacher consultations, grants, and the creation and loaning of educational resources.
- Continue to coordinate a local educators' group to provide updates, share resources, and provide professional development to strengthen classroom management skills, student engagement, and programming.
- Conduct outreach to towns and groups in the upper Sebago Lake watershed towns to increase forest conservation and awareness of Sebago Clean Waters.
- Collaborate with partners, coordinate events, and serve as a resource for watershed and service area schools and groups to teach source protection and water stewardship principles.
- Utilize technology and a variety of media to connect the public with PWD events and environmental stewardship messages.
- Recognize Drinking Water Week with District-sponsored initiatives for the public.
- Provide outreach materials to the public including maps, calendars, and brochures.
- Provide support to the Southern Maine Children's Water Festival.

2021 Projects and Initiatives



Continue our outreach efforts in the upper watershed to promote understanding about the connection between forests and drinking water quality.



Utilize federal 319 grant funds to improve eroding sites around Sebago Lake, reducing the input of phosphorus and protecting water quality of Sebago Lake.



Support Sebago Clean Waters partners in their efforts to purchase and conserve the 3,000 acre Chadbourne Tree Farms property, a pristine working forest with nearly 14 miles of frontage on the Crooked River.



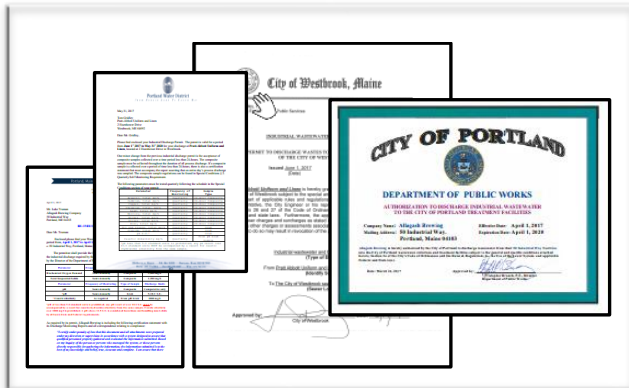
Re-deploy real-time water quality monitoring buoy in Lower Bay and continue refinement of data interface and data transmission.



Support schools during the pandemic through development of engaging and requested resources.



(Anticipate) reopening kiosks at the SLLR in 2021. They will be refurbished and outfitted with new informational materials.



Renew all expiring IPT permits (44% of total).



Continue to monitor chlorine booster stations in the distribution system to maintain WQ.



Issue General Permits to breweries that discharge to the Portland or Westbrook-Gorham sewer systems.



Complete fencing and replanting of the former Webb property in Eel Cove inside the Two-mile Limit.

2021 Grants to Watershed Partners			
2021 Proposed	Type	Recipient	Purpose
\$2,500	Water Education Grants	Educators in the service area and watershed	Education
<i>Provides teaching resources to local teachers to support water education.</i>			
\$16,000	Lakescaping Grants	Watershed property owners, businesses	Source Protection
<i>Grants of up to \$1,000 are made to individual property owners and up to \$2,000 to businesses, associations, or municipalities for implementing erosion and sedimentation control BMPs based on our recommendations. A 50-50 match is required.</i>			
\$1,000	Lake Protection Support	Maine Lakes Society	Advocacy
<i>A contribution of \$1,000 to Maine Lakes Society to support their operations and \$250 to support their annual conference. Their advocacy benefits all surface supplies including PWD.</i>			
\$1,000	Lake Protection Support	Lake Stewards of Maine	Advocacy, Monitoring
<i>A contribution of \$1,000 to Lake Stewards of Maine to support their operations and \$250 to support their annual conference. Their outreach raises awareness statewide to issues of lake protection, particularly invasive aquatic plants. They conduct training at PWD and for PWD employees on request.</i>			
\$14,000	Watershed Organization Support	Lakes Environmental Association	Advocacy, Education, Source Protection
<i>LEA provides support for our upper watershed protection efforts. All lakes they work on ultimately lead to Sebago Lake. LEA monitors lake water quality and participates in the planning process in upper watershed towns to minimize development impact. Staff provides technical assistance to lakefront landowners on BMPs for lake protection and compliance with Shoreland zoning and the Natural Resources Protection Act. LEA also provides water-related education to area schools and operates the Lakes Science Center.</i>			
\$750	Watershed Organization Support	Raymond Waterways Protective Association	Outreach, Source Protection
<i>RWPA works on invasive plant control, BMP installation, and does outreach via a newsletter. They work on 319 (erosion control) projects in the indirect watershed of Sebago Lake. They also receive financial support from the town, grants, and individuals.</i>			
\$1,500	Land Trust Support	Loon Echo Land Trust	Source Protection
<i>Loon Echo's mission is to conserve land in the towns of Denmark, Bridgton, Harrison, Naples, Casco, Sebago, and Raymond. The trust's service area encompasses 126,000 acres – nearly half - of the Sebago Lake watershed. As they make progress in pursuit of their mission, our water supply is better protected.</i>			

2021 Grants to Watershed Partners (Continued)			
2021 Proposed	Type	Recipient	Purpose
\$1,500	Land Trust Support	Western Maine Foothills Land Trust	Source Protection
<i>The Western Foothills Land Trust is organized to conserve land in the towns of Otisfield, Norway, Bethel and Waterford, among others. The trust's service area encompasses 54,000 acres – about 20% - of the Sebago Lake watershed. As they make progress in pursuit of their mission, our water supply is better protected.</i>			
\$500	Land Trust Support	Presumpscot Regional Land Trust	Source Protection
<i>The Presumpscot Regional Land Trust is organized to conserve land in the towns of Gorham, Gray, Standish, Westbrook, and Windham. As they work to conserve land in parts of the watershed towns of Windham and Standish, our water supply is better protected. They are also the stewards of the Sebago to the Sea Trail that passes through District property.</i>			
\$500	Maine Water Conference Support	U Maine Mitchell Center	Public Relations
<i>Our support mostly serves a public relations function, ensuring the District's name on promotional materials. The conference also provides an opportunity to attract Maine colleges and Universities to research Sebago Lake.</i>			
\$800	Children's Water Festival	Southern Maine CWF Committee	Education, Public Relations
<i>Our support serves a PR purpose and contributes to the educational goal of the event, which is raising student awareness of water issues.</i>			
\$40,050	Total Grant Support to Watershed Partners		

Conservation Land Acquired by Land Trusts with District Support				
Year	Transactions	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	1005	\$68,990	\$718,500
2014	4	1301	\$346,443	\$2,410,000
2015	3	145	\$47,435	\$381,600
2016	0	0	\$0	\$0
2017	2	124	\$19,220	\$175,000
2018	3	1646	\$370,994	\$1,781,000
2019	0	0	\$0	\$0
2020	2	57	\$13,285	\$27,500
Totals	24	5507	\$901,922	\$8,309,600

Financial Overview

A5: Water Resources

The 2021 A5 budget has an increase of 0.9% over the 2020 budget.

- The costs associated with labor (wages and associated fringe benefits) increased by \$40,204 over 2020. This increase is based on scheduled wage increases and increases in the costs of some employee benefits. There were no increases in staffing.
- To help offset these increases in labor costs, reductions totaling \$31,750 were made to discretionary accounts. The largest of these cuts include:
 - The Education budget was reduced by about \$10,000 (Technical Services, Public Relations, and Vendor-purchased Supplies). We anticipate that our in-school programs will be substantially different in the coming year due to the pandemic and therefore we reduced the budget.
 - Out-of-State Training was decreased by \$1,500. Due to the pandemic, we anticipate training to be largely done remotely in 2021.
 - A total of \$6,000 in reduction was made to the budget for landscaping the grounds around the Lake Office (Maintenance Services). We anticipate fewer visitors in 2021 and there are no acute issues to address.
 - A total of \$3,000 in kiosk improvement costs was cut from the Security budget (Maintenance Services). We generally plan to improve the parking and access at one kiosk access point per year but none is in acute need so skipping one year will not significantly impact our long-term maintenance plan.

Financial Overview (continued)

L6: Laboratory Services & IPT

The 2021 L6 budget has an increase of 0.9% over the 2020 budget.

- The costs associated with labor (wages and associated fringe benefits) increased by \$28,393. This increase is based on scheduled wage increases and increases in the costs of some employee benefits. There were no increases in staffing.
- To help offset these increases in labor costs, reductions were made to operating costs totaling \$22,433, including:
 - Most of this decrease in operating costs was made to the Lab Analysis budget (\$18,255). This is a fortunate consequence of the variable costs each year in required compliance testing. Our lab analysis costs rise and fall each year due to legal requirements and we, fortunately, will have fewer required tests to send out to contract labs in 2021.
 - Out of State Training was reduced by more than \$5,000. Due to the pandemic, we anticipate training to be largely done remotely in 2021.

Environmental Services: Total

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
A5 - Water Resources	\$1,129,315	\$516,554	\$1,208,810	\$1,219,951	\$11,141	0.9%
L6 - Water/WW Laboratory	935,551	440,787	916,027	924,224	8,197	0.9%
Grand Total	2,064,866	957,342	2,124,837	2,144,175	19,338	0.9%
Expense Type:						
Salaries & Wages	\$1,079,778	\$516,678	\$1,079,531	\$1,109,755	\$30,224	2.8%
Employee Benefits	495,858	244,093	499,074	537,447	38,373	7.7%
Chemicals	6,815	2,251	5,200	5,700	500	9.6%
Contracted Services	122,892	53,991	162,931	123,456	-39,475	-24.2%
Heat/Fuel Oil	10,294	2,392	12,000	10,000	-2,000	-16.7%
Insurance	2,358	1,203	2,505	2,717	212	8.5%
Materials & Supplies	114,872	35,728	117,901	115,388	-2,513	-2.1%
Other Expense	176,016	75,802	189,043	180,776	-8,267	-4.4%
Purchased Power	5,148	2,758	5,253	5,441	188	3.6%
Tele/Other Utilities	5,237	2,657	5,555	5,495	-60	-1.1%
Transportation	45,598	19,788	45,844	48,000	2,156	4.7%
Grand Total	2,064,866	957,342	2,124,837	2,144,175	19,338	0.9%
Headcount:						
Full Time	15	15	15	15	0	0.0%
Part Time	1	1	1	1	0	0.0%
Total	16	16	16	16	0	0.0%

Environmental Services: Total

	2019 Actual	Jan-Jun 2020	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$429,467	\$219,081	\$443,917	\$457,523	\$13,606	3.1%
660121 - WAGES/REGULAR UNION	547,464	273,185	552,898	570,611	17,713	3.2%
660122 - WAGES/OVERTIME UNION	26,149	3,919	27,480	24,167	(3,313)	-12.1%
660123 - WAGES/DOUBLETIME UNION	1,703	230	2,386	2,014	(372)	-15.6%
660131 - WAGES - REGULAR - TEMPS	49,146	20,263	52,850	55,440	2,590	4.9%
66014 - VACATION ACCRUAL	5,493	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	20,356	-	-	-	-	n/a
Salaries & Wages Total	1,079,778	516,678	1,079,531	1,109,755	30,224	2.8%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	78,588	38,434	82,583	84,892	2,309	2.8%
660405 - SAFETY/WHY PROGRAM ITEMS	3,221	220	4,040	4,290	250	6.2%
6604151 - FIELD UNIFORMS	1,457	-	1,200	1,200	-	0.0%
660418 - STIPENDS	1,800	1,600	1,800	1,700	(100)	-5.6%
660419 - EMPLOYEE BENEFITS-MISC OTH	4,229	150	3,340	4,000	660	19.8%
660491 - FRINGE BENEFITS-REG/SAL	406,563	203,690	406,111	441,365	35,254	8.7%
Employee Benefits Total	495,858	244,093	499,074	537,447	38,373	7.7%
Chemicals						
661899 - OTHER CHEMICALS	6,815	2,251	5,200	5,700	500	9.6%
Chemicals Total	6,815	2,251	5,200	5,700	500	9.6%
Contracted Services						
66353 - REPAIR SERVICES	506	377	2,000	1,900	(100)	-5.0%
66354 - MAINTENANCE SERVICES	43,553	27,768	52,336	41,366	(10,970)	-21.0%
663546 - MAINTENANCE - SNOW REMOVL	6,461	4,010	8,100	10,500	2,400	29.6%
663551 - LAB ANALYSIS	31,340	14,827	49,845	30,590	(19,255)	-38.6%
663553 - PHOTOGRAPHY SERVICES	400	-	850	600	(250)	-29.4%
663561 - COMPUTER LICENSES	71	-	-	-	-	n/a
663574 - DISPOSAL SERVICES	10,537	247	6,150	5,900	(250)	-4.1%
663587 - COURIER SERVICES	2,281	952	2,400	2,300	(100)	-4.2%
663599 - MISC OTHER SERVICES	12,600	5,600	-	-	-	n/a
6636 - TECHNICAL SERVICES	15,144	209	41,250	30,300	(10,950)	-26.5%
Contracted Services Total	122,892	53,991	162,931	123,456	(39,475)	-24.2%
Heat/Fuel Oil						
661622 - CONTAINER DELIVERED	2,337	2,315	5,000	3,000	(2,000)	-40.0%
66166 - UNLEADED GAS	7,958	77	7,000	7,000	-	0.0%
Heat/Fuel Oil Total	10,294	2,392	12,000	10,000	(2,000)	-16.7%
Insurance						
66599 - PROPERTY & BOILER INSUR	2,358	1,203	2,505	2,717	212	8.5%
Insurance Total	2,358	1,203	2,505	2,717	212	8.5%

	2019 Actual	Jan-Jun 2020	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Materials & Supplies						
6619 - ASSET PURCHASES	\$17,430	\$1,529	\$14,000	\$12,200	(\$1,800)	-12.9%
66202 - TOOLS	1,692	188	1,800	1,750	(50)	-2.8%
66203 - VENDOR PURCHASED SUPPLIES	10,817	4,205	14,700	11,250	(3,450)	-23.5%
662042 - SUPPLIES INVENTORY	676	361	1,700	1,700	-	0.0%
662043 - TOOL INVENTORY	1,289	536	1,950	1,950	-	0.0%
66204303 - INVENTORY-COMPUTER EQUIP	1,963	16	1,313	1,600	287	21.9%
662047 - GARAGE INVENTORY	-	53	100	100	-	0.0%
66205 - CONSUMABLE SUPPLIES	79,763	28,629	75,850	78,850	3,000	4.0%
66206 - COMPUTER RELATED EQUIP	1,242	211	6,488	5,988	(500)	-7.7%
Materials & Supplies Total	114,872	35,728	117,901	115,388	(2,513)	-2.1%
Other Expense						
66411 - INTERNAL RENTAL CHARGES	51,030	25,515	51,330	51,330	-	0.0%
66601 - PUBLIC RELATIONS	6,631	420	13,800	9,900	(3,900)	-28.3%
66609 - OTHER ADVERTISING	1,968	1,072	3,300	3,400	100	3.0%
6675111 - INSTATE TRAINING/CONF	4,077	2,090	5,400	5,900	500	9.3%
6675112 - OUT OF STATE TRAINING/CON	7,806	1,033	6,600	-	(6,600)	-100.0%
667513 - DUES	19,815	16,999	22,263	23,371	1,108	5.0%
667514 - PROFESSIONAL LICENSES	4,990	125	845	4,795	3,950	467.5%
667515 - PERIODICAL SUBSCRIPTIONS	337	268	680	580	(100)	-14.7%
667521 - POSTAGE - THIRD PARTY	1,067	-	3,800	3,300	(500)	-13.2%
667522 - POSTAGE - INTERNAL	711	202	825	825	-	0.0%
667523 - POSTAGE - EXPRESS DELIVER	369	-	150	75	(75)	-50.0%
667531 - PRINTING COSTS	23,560	-	30,000	29,500	(500)	-1.7%
667555 - SAFETY EXPENSES	47	31	100	100	-	0.0%
667561 - WATERSHED GRANTS/SUPPORT	47,681	27,000	43,300	41,450	(1,850)	-4.3%
667591 - UNIFORMS	2,914	968	2,300	2,300	-	0.0%
667592 - FOOD SUPPLIES	2,896	30	4,350	3,950	(400)	-9.2%
667599 - OTHER MISCELLANEOUS	116	50	-	-	-	n/a
Other Expense Total	176,016	75,802	189,043	180,776	(8,267)	-4.4%
Purchased Power						
66155 - POWER - SMALL ENERGY	2,649	1,407	2,676	2,676	-	0.0%
66156 - POWER - SMALL T&D	2,499	1,350	2,577	2,765	188	7.3%
Purchased Power Total	5,148	2,758	5,253	5,441	188	3.6%
Tele/Other Utilities						
66101 - WATER	208	62	335	335	-	0.0%
66111 - TELEPHONE LINES	-	174	-	-	-	n/a
66112 - DATA LINES	87	41	540	540	-	0.0%
66113 - CELLULAR PHONES	4,942	2,381	4,680	4,620	(60)	-1.3%
Tele/Other Utilities Total	5,237	2,657	5,555	5,495	(60)	-1.1%
Transportation						
66501 - TRANSPORTATION - INTERNAL	16,594	6,204	15,821	17,143	1,322	8.4%
665019 - TRANS INTERNAL INACTIVE	19,448	11,653	18,673	18,597	(76)	-0.4%
66503 - MILEAGE REIMBURSEMENT	9,555	1,931	11,350	12,260	910	8.0%
Transportation Total	45,598	19,788	45,844	48,000	2,156	4.7%
Grand Total	2,064,866	957,342	2,124,837	2,144,175	19,338	0.9%

Environmental Services: Water Resources (A5)

Financial Summary:

	2019 Actual	Jan-Jun 2020	2020 Budget	2021 Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$621,315	\$300,759	\$626,415	\$644,775	\$18,360	2.9%
Employee Benefits	283,105	139,186	286,673	308,517	21,844	7.6%
Contracted Services	55,005	13,912	91,986	73,586	-18,400	-20.0%
Heat/Fuel Oil	10,294	2,392	12,000	10,000	-2,000	-16.7%
Insurance	2,358	1,203	2,505	2,717	212	8.5%
Materials & Supplies	18,008	5,299	36,088	31,838	-4,250	-11.8%
Other Expense	92,741	31,130	104,975	97,875	-7,100	-6.8%
Purchased Power	5,148	2,758	5,253	5,441	188	3.6%
Tele/Other Utilities	4,652	2,267	4,775	4,715	-60	-1.3%
Transportation	36,690	17,648	38,140	40,487	2,347	6.2%
Grand Total	1,129,315	516,554	1,208,810	1,219,951	11,141	0.9%
Programs:						
28 - Monitoring	\$209,289	\$91,098	\$148,424	\$211,718	\$63,294	42.6%
41 - Pretreatment	4,299	2,997	17,014	8,338	-8,676	-51.0%
56 - Tech Ops Support	53,373	36,575	67,018	57,203	-9,815	-14.6%
78 - Education	118,584	37,490	155,422	130,837	-24,585	-15.8%
82 - Lake Security - Land	152,642	65,078	143,553	143,742	189	0.1%
83 - Customer Outreach	175,406	94,583	212,995	225,329	12,334	5.8%
84 - Lake Security - Water	29,695	13,549	50,682	43,372	-7,310	-14.4%
96 - Pandemic Costs	0	3,741	0	0	0	n/a
98 - Training	33,311	8,794	38,398	38,220	-178	-0.5%
99 - Administration	352,717	162,649	375,304	361,192	-14,112	-3.8%
Grand Total	1,129,315	516,554	1,208,810	1,219,951	11,141	0.9%
Funds:						
10 - General	\$293,904	\$129,018	\$238,445	\$275,146	\$36,701	15.4%
20 - Water General	831,113	384,331	953,351	936,467	-16,884	-1.8%
50 - Wastewater General	2,244	2,509	64	2,900	2,836	4431.3%
57 - WW Portland	1,504	487	10,377	3,626	-6,751	-65.1%
61 - WW Gorham	136	70	1,383	362	-1,021	-73.8%
62 - WW Westbrook	415	140	5,190	1,450	-3,740	-72.1%
Grand Total	1,129,315	516,554	1,208,810	1,219,951	11,141	0.9%
Headcount:						
Full-Time	8	8	8	8	0	0.0%
Part-Time	1	1	1	1	0	0.0%
Total	9	9	9	9	0	0.0%

Environmental Services: Laboratory Service (L6)

Financial Summary:

	2019 Actual	Jan-Jun 2020	2020 Budget	2021 Budget	Diff \$	Diff %
Expense Type:						
Salaries & Wages	\$458,463	\$215,919	\$453,116	\$464,980	\$11,864	2.6%
Employee Benefits	212,754	104,907	212,401	228,930	16,529	7.8%
Chemicals	6,815	2,251	5,200	5,700	500	9.6%
Contracted Services	67,887	40,079	70,945	49,870	-21,075	-29.7%
Materials & Supplies	96,864	30,429	81,813	83,550	1,737	2.1%
Other Expense	83,275	44,673	84,068	82,901	-1,167	-1.4%
Tele/Other Utilities	585	390	780	780	0	0.0%
Transportation	8,907	2,141	7,704	7,513	-191	-2.5%
Grand Total	935,551	440,787	916,027	924,224	8,197	0.9%
Programs:						
41 - Pretreatment	\$122,952	\$63,212	\$154,811	\$131,367	-\$23,444	-15.1%
56 - Tech Ops Support	64,925	25,910	76,414	66,656	-9,758	-12.8%
63 - Sample Analysis	369,107	157,673	370,403	370,954	551	0.1%
78 - Education	0	0	1,561	1,402	-159	-10.2%
96 - Pandemic Costs	0	9,275	0	0	0	n/a
98 - Training	34,079	16,397	31,543	28,524	-3,019	n/a
99 - Administration	344,486	168,320	281,295	325,321	44,026	n/a
Grand Total	935,551	440,787	916,027	924,224	8,197	0.9%
Funds:						
10 - General	\$299,363	\$152,330	\$226,689	\$293,042	\$66,353	29.3%
20 - Water General	240,288	116,209	249,139	231,511	-17,628	-7.1%
50 - Wastewater General	277,378	117,061	293,599	285,619	-7,980	-2.7%
51 - WW Cape Elizabeth	3,752	1,773	6,770	2,511	-4,259	-62.9%
55 - WW Windham LF	1,083	72	175	415	240	137.1%
57 - WW Portland	72,615	35,862	83,933	69,277	-14,656	-17.5%
61 - WW Gorham	6,458	4,938	8,835	5,460	-3,375	-38.2%
62 - WW Westbrook	19,739	7,555	33,124	19,646	-13,478	-40.7%
64 - WW Joint Westbrook	13,107	4,322	12,064	12,249	185	1.5%
66 - WW Peaks Island	1,767	666	1,699	4,494	2,795	164.5%
Grand Total	935,551	440,787	916,027	924,224	8,197	0.9%
Headcount:						
Full-Time	7	7	7	7	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	7	7	7	7	0	0.0%

Industrial Pretreatment Program


The Clean Water Act requires that communities that receive wastewater from industrial sources must have a pretreatment program to protect collection systems and treatment plants from industrial wastewater. Specifically, industrial pretreatment programs have a threefold purpose:

- To shield the treatment works from the potentially harmful impacts of industrial wastewater.
- To prevent industrial wastewater from polluting receiving waters.
- To protect treatment plant and collect system workers from toxic or harmful discharges.

The Portland Water District has two Industrial Pretreatment (IPT) Programs, one in Portland and one in the communities of Westbrook-Gorham-Windham. In both programs we:

- Identify industries that may cause issues with the sewer
- Issue permits to these facilities that limit the quality and quantity of wastewater discharged
- Inspect and sample industrial users on a regular basis
- Enforce the rules

The Portland IPT Program is funded through a high-strength wastewater surcharge while the Westbrook IPT Program is funded by a monthly fee assessed to industrial users. Any shortfall is paid from general ratepayer fees.

	<p>B&G Foods (Burnham & Morrill) has been a fixture in Portland since 1867. The plant bakes B&M Baked Beans in a traditional brick oven. They also produce refried beans, brown bread, canned meat spreads and seasoning packets. B&M has been operating in its iconic spot on Casco Bay since 1913.</p> <p>This customer is one of the District's top 10 water users - \$90,000 annual revenue and uses 76,000 HCF.</p> <p>The plant is in the Industrial Pretreatment Program and pretreats its wastewater with a Dissolved Air Flootation (DAF) System to remove solids and grease prior to discharge to the District's East End Wastewater Treatment Plant</p>
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IPT PROGRAM
Revenue and Expense Summary
For the year Ending December 31, 2019

	<u>Gorham</u>	<u>Portland</u>	<u>Westbook</u>	<u>Windham</u>
Revenue	\$ 1,888	\$ 374,319	\$ 19,905	\$ -
Expenses:				
Salaries	\$ 5,051	\$ 37,358	\$ 15,528	\$ 547
Benefits	\$ 2,506	\$ 18,475	\$ 7,678	\$ 272
Transportation	\$ 309	\$ 1,912	\$ 696	\$ 15
Lab Analysis	\$ 800	\$ 3,740	\$ 1,680	\$ 250
Administration	\$ 5,022	\$ 33,145	\$ 11,048	\$ 1,004
Other	\$ 78	\$ 669	\$ 270	\$ -
Total	\$ 13,766	\$ 95,299	\$ 36,900	\$ 2,088
Net Income	\$ (11,878)	\$ 279,020	\$ (16,995)	\$ (2,088)

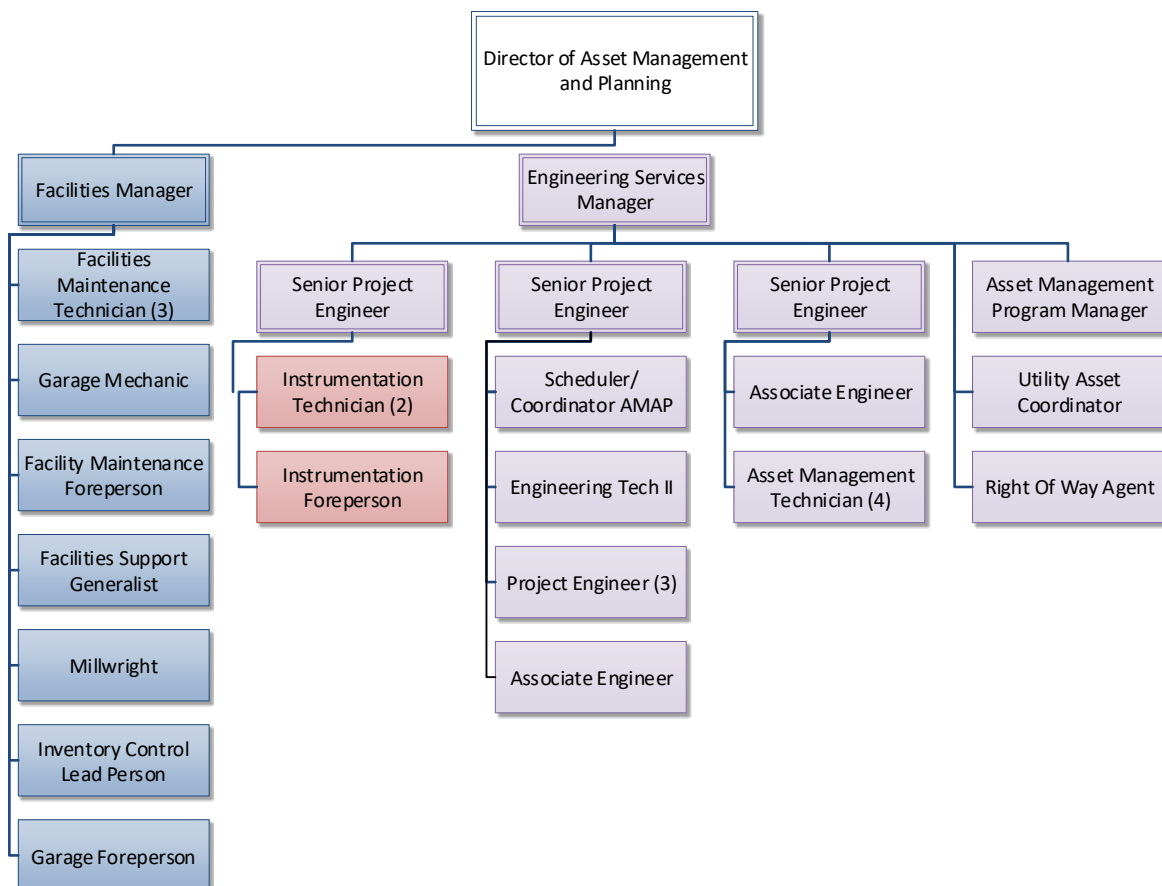
Engineering Services - Purpose Statement

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

Core Services

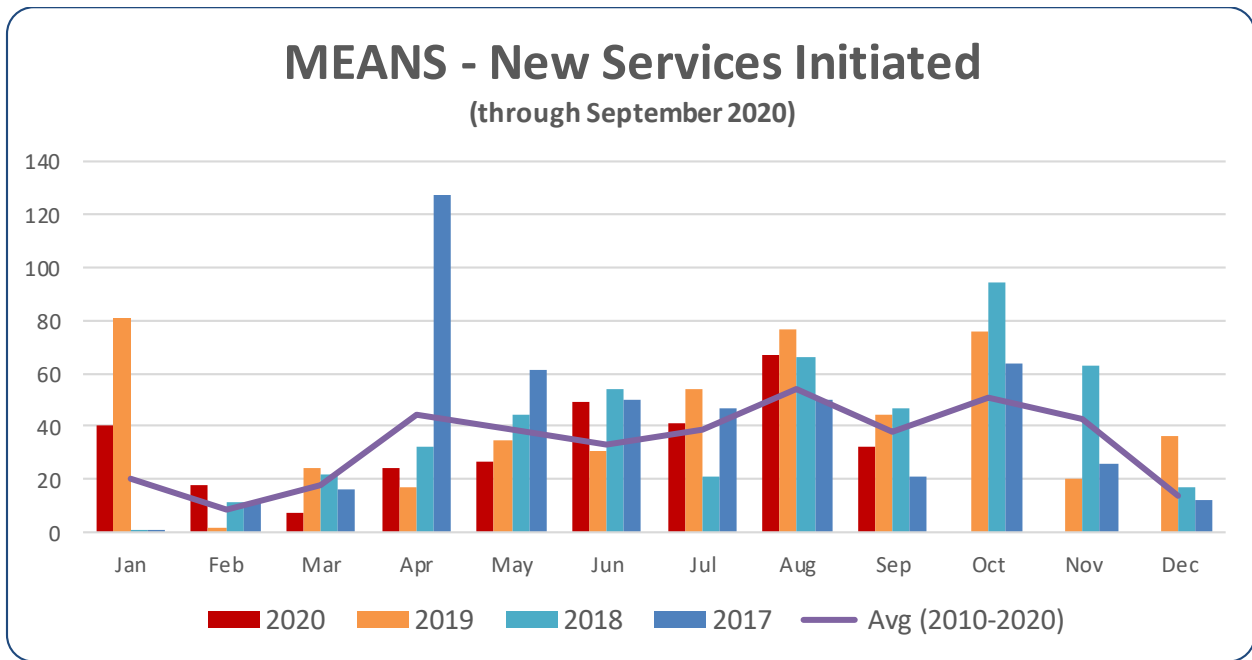
Engineering Services is responsible for providing engineering and maintenance services to internal and external customers. They are responsible for the following services:

- Manages planning and design of developer installed water and sewer infrastructure and coordination of existing District field and facilities assets. Supports long range planning, alternatives evaluation, and detailed design development of water main renewal programs as well as treatment and pumping facility projects. Provides construction oversight/recordkeeping for all infrastructure projects. (Asset Engineering Services Group, E2; purple in organization chart).
- Responsible for operation and maintenance of administrative facilities. Provides facility support services including garage, structural maintenance and stock room services (Facility Services Group-C1; blue in organization chart).
- Provides design, installation, maintenance and technical support of the Supervisory Control and Data Acquisition (SCADA) systems (SCADA Services Group-E7; red in organization chart).



Key Statistics

New Water Services



Assets in the Asset Information Management System (AIM)

Facilities	141
Facility Processes & Systems	1,325
Equipment/Components	11,212
Vehicles/Heavy Equipment	112
Water Service Association Assets (meters, backflows, etc.)	223,882
Water Field Assets	48,069
Sewer Field Assets	7,074
Total Assets	291,815

Performance Benchmarks

	2019 Actual	2020 Budget	2021 Budget
Corporate Goal – Reliability			
Leaks per 100 miles of main	9.6	<10	<10
Main Renewals, feet	20,800	24,000	24,000
Main Extensions, feet	20,900	24,000	24,000
Corporate Goal - Affordability			
New Water Services	421	450	450
Corporate Goal – Employees and Work Environment			
Employee Training Hours	87	80	80

Past Accomplishments

- Managed design/installation of 4 miles of water main renewals and 4 miles of extensions.
- Oversaw design and construction of projects at East End WWTF (Primary Gallery electrical assessment, Primary Clarifier Sludge Collector mechanism) Cape Elizabeth WWTF (UV Disinfection), Fore River Pump Station upgrade, Dana Court Pump Station upgrade, and Little John Pump Station upgrade.
- Managed design effort of Depot St wastewater pump station in South Windham
- Developed Request for Proposal for Engineering Services related to design of wastewater collection and treatment infrastructure in North Windham.
- Completed final design of EEWWTF medium voltage power distribution system to address resiliency and reliability issues.
- Completed detailed design of HVAC upgrades for EEWWTF 3rd Floor and managed HVAC upgrades at EEWWTF and CEWWTF.
- Developed design/build documents for procurement of Tide Gate replacements at India St and Northeast Pump Stations.
- Completed design for Westbrook Gorham Windham Regional WWTF aeration, clarifier and power upgrades.
- Managed design and construction of water main replacement program including major transmission main crossing projects with the Turnpike Authority and various municipalities.
- Began configuration of computerized maintenance management system (CMMS) software as part of Central Square Asset Management Project.
- Worked with water and wastewater operations and environmental services staff to improve asset data and AIM understanding and prepare for CMMS transition.
- Managed facilities projects across District including Douglass St Phase III roof replacement.
- Reconfigured Douglass St to support utilization during pandemic

2021 Projects and Initiatives

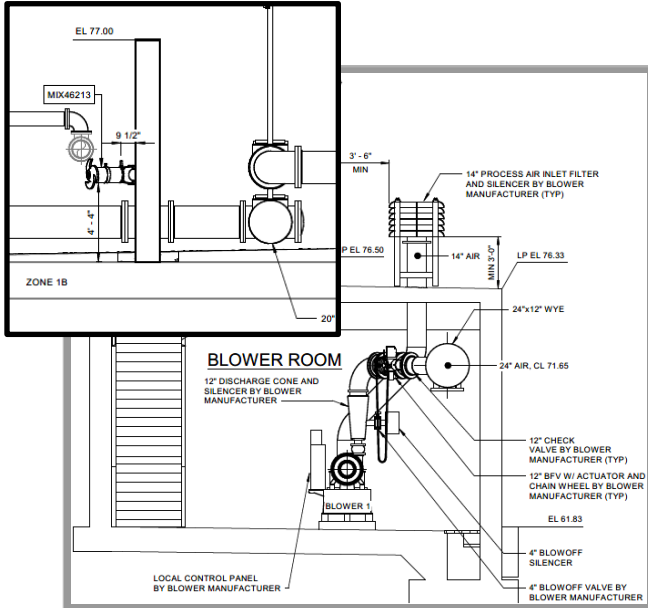
Corporate Goals – Reliability and Affordability

- Manage and support vertical asset upgrade projects (WGWRWWTF aeration, clarifier and power upgrades, Windham Water Storage Tank, EEWWTF (Flow Split/Flow Metering, Backup Power), Little John PS upgrade, etc.).
- Improve water main replacement programs and manage design and delivery of projects.
- Manage and support design and construction associated with 10 Maine Turnpike infrastructure crossing upgrades.
- Lead and support implementation of Central Square EAM CMMS software.
- Work with Operations, and Environmental Services to improve AIM data and configure CMMS.
- Manage facilities projects around District including HVAC upgrades
- Provide core support of asset management and CMMS implementation of ABC project

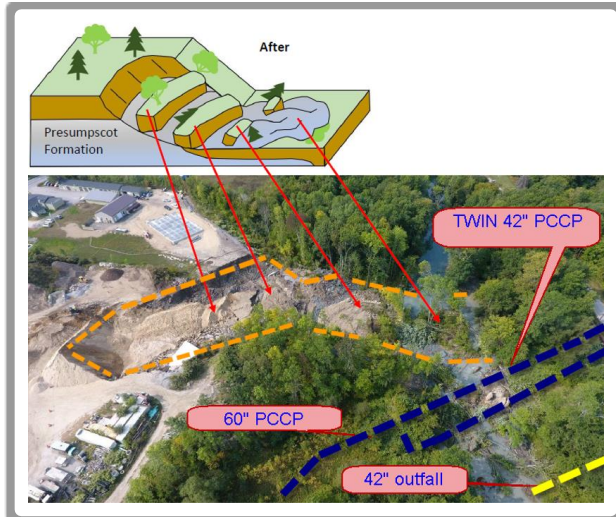
Corporate Goal – Employees and Work Environment

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

2020 Highlights



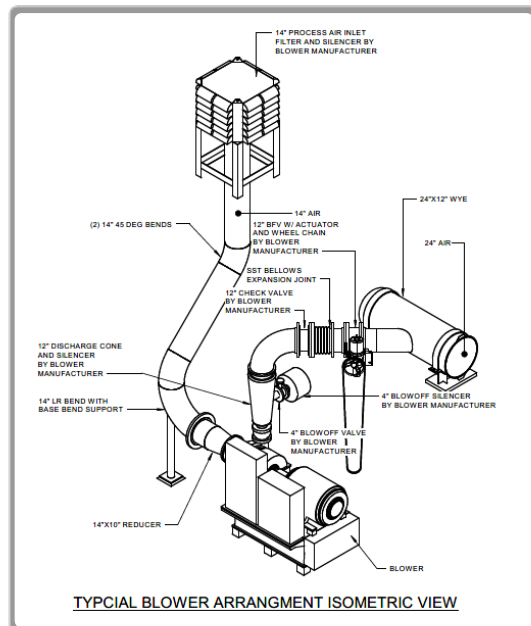
Managed WWGRWWTF aeration and secondary clarifier upgrade project.



Supported and managed District response to Presumpscot River landslide.



Design and construction support of Maine Turnpike infrastructure crossings



Completed detailed design for EEWTF 3rd Floor HVAC upgrades.

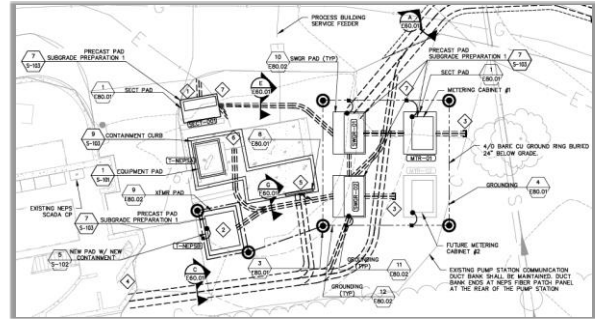


Managed CEWWTF UV Disinfection construction

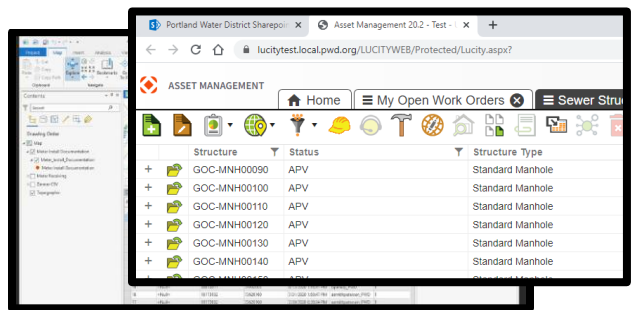
2021 Projects and Initiatives



Manage construction phase of EEWTF Dewatering Area and CEWWTF Headworks HVAC upgrades.



Manage bidding and construction of EEWTF Medium Voltage Power Distribution Upgrade



Lead and support CMMS upgrade project



Manage design and construction of Maiden Cove Pump Station upgrade project.



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

Financial Overview

The Engineering Services 2021 budget request is \$4,327,806, which is \$68,036 or 1.6% 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 decreases by \$43,590 or 2.2% primarily reflecting two things, the move to having the Douglass Street facility unattended after business hours and a reduction in diesel and gasoline contract prices. The removal of security has saved \$30k and in the same Contracted Services group, and equipment maintenance costs were lowered by \$5.5k due to historical actual expenses being much lower than budget. The District's stocked gasoline and diesel price per unit came down 25% or in total \$11.8k and down 15% or in total \$18.2k, respectively. Also Facilities reduced their vendor purchased supplies used on District owned vehicles, saving \$20k.

E2 - Asset Engineering's budget increased by \$98,614 or 5.3%, reflecting the new CMMS software maintenance fees that have increased by \$33k due to a full year of expense. In addition, E2 has increased Salaries and Wages by 1.8% for a total of \$23k which in turn affects employee benefits by \$38k. The District has proposed a company-wide average increase of 2.9% therefore E2 had some decreases to offset this. The head count and positions did not change from 2020, but overtime hours were reduced by 90 hours (90%) and certain line items were reallocated.

E7 - SCADA Services' budget increase is \$13,012 or 3.6% attributed to an increase in wage costs by \$5k (2.7%) and benefits (7.2%) due to position reclassification and the 2.9% average increase in rates by the whole company. SCADA has also increased their computer licensing to include a new monitoring software that costs \$2.5k. These are partially offset by a \$4.5k reduction in training expenses due to the COVID pandemic response shifting to remote training.

Engineering Services - Total

Financial Summary

Column 1	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
C1 - Facilities Services	\$1,791,159	\$851,239	\$2,026,101	\$1,982,511	-\$43,590	-2.2%
E2 - Asset Engineering	1,951,430	901,686	1,875,450	1,974,064	98,614	5.3%
E7 - SCADA Services	367,004	187,346	358,219	371,231	13,012	3.6%
Grand Total	4,109,593	1,940,272	4,259,770	4,327,806	68,036	1.6%
Expense Type:						
Salaries & Wages	\$1,944,419	\$968,198	\$2,052,805	\$2,088,725	\$35,920	1.7%
Employee Benefits	955,428	458,041	987,158	1,046,470	59,312	6.0%
Contracted Services	565,592	211,924	463,511	463,461	-50	0.0%
Deferred Cost W/O	10,098	0	0	0	0	0.0%
Heat/Fuel Oil	35,870	55,495	67,494	75,350	7,856	11.6%
Insurance	41,256	23,499	43,273	51,697	8,424	19.5%
Materials & Supplies	406,881	162,621	503,716	449,507	-54,209	-10.8%
Other Expense	-100,147	-68,261	-114,870	-126,680	-11,810	10.3%
Purchased Power	75,723	37,621	77,276	82,492	5,216	6.7%
Regulatory/Taxes	280	1,379	2,500	2,500	0	0.0%
Tele/Other Utilities	76,681	43,231	81,548	87,362	5,814	7.1%
Transportation	97,513	46,525	95,359	106,922	11,563	12.1%
Grand Total	4,109,593	1,940,272	4,259,770	4,327,806	68,036	1.6%
Headcount:						
Full Time	31	31	31	31	0	0.0%
Part Time	0	0	0	0	0	n/a
Total	31	31	31	31	0	0.0%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$1,052,102	\$513,913	\$1,102,797	\$1,113,262	\$10,465	0.9%
660121 - WAGES/REGULAR UNION	842,826	427,257	894,954	919,207	24,253	2.7%
660122 - WAGES/OVERTIME UNION	7,608	3,561	11,958	12,942	984	8.2%
660123 - WAGES/DOUBLETIME UNION	71	-	517	588	71	13.7%
660124 - WAGES/STANDBY TIME UNION	206	-	1,139	1,286	147	12.9%
660131 - WAGES - REGULAR - TEMPS	35,784	3,297	41,440	41,440	-	0.0%
660136 - CONTRACTED - TEMP	-	20,171	-	-	-	n/a
66014 - VACATION ACCRUAL	3,244	-	-	-	-	n/a
66015 - SICKTIME ACCRUAL	2,577	-	-	-	-	n/a
Salaries & Wages Total	1,944,419	968,198	2,052,805	2,088,725	35,920	1.7%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	146,621	72,102	157,039	159,783	2,744	1.7%
660405 - SAFETY/WHY PROGRAM ITEMS	6,516	1,343	7,825	7,675	(150)	-1.9%
660411 - MEALS ALLOWANCE	70	10	100	100	-	0.0%
660418 - STIPENDS	1,800	1,800	2,500	2,200	(300)	-12.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	11,567	1,870	5,800	4,200	(1,600)	-27.6%
660491 - FRINGE BENEFITS-REG/SAL	788,855	380,917	813,894	872,512	58,618	7.2%
Employee Benefits Total	955,428	458,041	987,158	1,046,470	59,312	6.0%
Contracted Services						
6631 - ENGINEERING SERVICES	121,145	3,556	5,000	5,000	-	0.0%
663525 - CONTRACTOR CONSTRUCTION	300	435	-	-	-	n/a
663526 - INSPECTION SERVICES	610	96	-	-	-	n/a
66353 - REPAIR SERVICES	11,458	-	17,500	17,500	-	0.0%
66354 - MAINTENANCE SERVICES	247,623	100,256	270,200	268,700	(1,500)	-0.6%
663546 - MAINTENANCE - SNOW REMOVL	20,018	21,348	25,000	25,000	-	0.0%
663561 - COMPUTER LICENSES	32,651	35,229	32,323	35,461	3,138	9.7%
663562 - COMPUTER MAINTENANCE	2,516	844	11,588	45,000	33,412	288.3%
663563 - COMPUTER CONSULTING/OTHER	-	-	600	600	-	0.0%
663574 - DISPOSAL SERVICES	11,457	10,803	23,500	23,900	400	1.7%
663587 - COURIER SERVICES	9,142	3,816	9,800	9,800	-	0.0%
663588 - EQUIPMENT MAINTENANCE	1,730	-	5,500	-	(5,500)	-100.0%
663589 - SECURITY SERVICES	84,793	18,540	30,000	-	(30,000)	-100.0%
6635985 - VEHICLE FLEET GPS SERVICE	21,560	10,780	25,000	25,000	-	0.0%
663599 - MISC OTHER SERVICES	591	-	2,500	2,500	-	0.0%
6636 - TECHNICAL SERVICES	-	6,220	5,000	5,000	-	0.0%
Contracted Services Total	565,592	211,924	463,511	463,461	(50)	0.0%
Deferred Cost W/O						
66754 - DEFERRED COSTS WRITE OFF	10,098	-	-	-	-	n/a
Deferred Cost W/O Total	10,098	-	-	-	-	n/a
Heat/Fuel Oil						
661621 - PIPELINE DELIVERED PROPAN	22,490	50,718	50,994	58,850	7,856	15.4%
66166 - UNLEADED GAS	13,381	4,777	16,500	16,500	-	0.0%
Heat/Fuel Oil Total	35,870	55,495	67,494	75,350	7,856	11.6%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Insurance						
6656 - VEHICAL INSURANCE	\$29,628	\$17,605	\$30,888	\$38,731	\$7,843	25.4%
66593 - UMBRELLA INSURANCE COVER	6,284	3,186	6,693	7,009	316	4.7%
66599 - PROPERTY & BOILER INSUR	5,344	2,708	5,692	5,957	265	4.7%
Insurance Total	41,256	23,499	43,273	51,697	8,424	19.5%
Materials & Supplies						
6619 - ASSET PURCHASES	16,935	9,391	45,250	45,250	-	0.0%
66202 - TOOLS	8,944	5,144	8,250	7,250	(1,000)	-12.1%
66203 - VENDOR PURCHASED SUPPLIES	180,393	77,808	206,450	185,700	(20,750)	-10.1%
662041 - MATERIALS INVENTORY	(21,302)	(6,505)	7,800	7,800	-	0.0%
662042 - SUPPLIES INVENTORY	15,436	9,680	18,800	15,200	(3,600)	-19.1%
66204201 - INVENTORY - QPR	391	-	-	-	-	n/a
66204202 - INVENTORY - BNKRUN GRAVEL	319	-	-	-	-	n/a
66204203 - INVENTORY - CRUSHD GRAVEL	3,017	-	-	-	-	n/a
66204204 - INVENTORY - CRUSHED STONE	1,581	-	-	-	-	n/a
66204205 - INVENTORY - LOAM	(6)	-	-	-	-	n/a
66204206 - INVENTORY - TYPE A GRAVEL	(1,211)	-	-	-	-	n/a
662043 - TOOL INVENTORY	9,653	(122)	10,550	10,900	350	3.3%
66204301 - INVENTORY - TONER	875	82	-	-	-	n/a
66204302 - INVENTORY - PAPER	(489)	340	-	-	-	n/a
66204303 - INVENTORY-COMPUTER EQUIP	3,950	2,721	3,700	1,700	(2,000)	-54.1%
662044 - METER INVENTORY	(560)	(28,991)	-	-	-	n/a
662046 - HYDRANT INVENTORY	(1,469)	(323)	-	-	-	n/a
662047 - GARAGE INVENTORY	11,201	4,231	10,325	10,825	500	4.8%
66204701 - INVENTORY - UNLEADED GAS	107,757	59,024	102,850	84,620	(18,230)	-17.7%
66204702 - INVENTORY - DIESEL	45,869	19,874	48,741	36,895	(11,846)	-24.3%
66204703 - INVENTORY - TIRES	15,876	7,355	15,000	15,000	-	0.0%
66205 - CONSUMABLE SUPPLIES	-	66	3,400	3,050	(350)	-10.3%
66206 - COMPUTER RELATED EQUIP	9,720	2,847	22,600	25,317	2,717	12.0%
Materials & Supplies Total	406,881	162,621	503,716	449,507	(54,209)	-10.8%
Other Expense						
6642 - EQUIPMENT RENT	631	-	3,500	3,500	-	0.0%
66609 - OTHER ADVERTISING	332	1,867	-	-	-	n/a
6675111 - INSTATE TRAINING/CONF	14,180	6,562	20,000	15,000	(5,000)	-25.0%
6675112 - OUT OF STATE TRAINING/CON	17,003	3,901	9,600	8,100	(1,500)	-15.6%
667513 - DUES	802	339	3,000	3,000	-	0.0%
667514 - PROFESSIONAL LICENSES	2,436	727	4,180	3,880	(300)	-7.2%
667515 - PERIODICAL SUBSCRIPTIONS	500	-	800	800	-	0.0%
667522 - POSTAGE - INTERNAL	188	83	400	350	(50)	-12.5%
667523 - POSTAGE - EXPRESS DELIVER	1,388	761	1,300	1,300	-	0.0%
667531 - PRINTING COSTS	53	55	-	-	-	n/a
667552 - SAFETY TRAINING	-	-	750	750	-	0.0%
667555 - SAFETY EXPENSES	5,546	-	3,500	3,000	(500)	-14.3%
667556 - FREIGHT CHARGES (STOCK)	-	-	5,000	3,000	(2,000)	-40.0%
667592 - FOOD SUPPLIES	209	-	50	50	-	0.0%
667599 - OTHER MISCELLANEOUS	4,717	917	550	550	-	0.0%
6676 - EXPENSE OFFSET	(148,131)	(83,473)	(167,500)	(169,960)	(2,460)	1.5%
Other Expense Total	(100,147)	(68,261)	(114,870)	(126,680)	(11,810)	10.3%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Purchased Power						
66153 - POWER - MEDIUM ENERGY	\$47,637	\$23,955	\$46,562	\$48,503	\$1,941	4.2%
66154 - POWER - MEDIUM T&D	25,094	11,635	27,945	30,777	2,832	10.1%
66155 - POWER - SMALL ENERGY	1,498	1,023	1,365	1,539	174	12.7%
66156 - POWER - SMALL T&D	1,494	1,008	1,404	1,673	269	19.2%
Purchased Power Total	75,723	37,621	77,276	82,492	5,216	6.7%
Regulatory/Taxes						
667516 - PERMITS	280	1,379	2,500	2,500	-	0.0%
Regulatory/Taxes Total	280	1,379	2,500	2,500	-	0.0%
Tele/Other Utilities						
66101 - WATER	4,186	1,636	5,000	5,000	-	0.0%
66102 - WASTEWATER	6,952	2,402	7,500	7,500	-	0.0%
66103 - STORMWATER CHARGES	13,684	6,842	13,890	14,094	204	1.5%
66111 - TELEPHONE LINES	19,302	12,589	20,792	20,792	-	0.0%
66112 - DATA LINES	23,854	17,059	27,476	32,246	4,770	17.4%
66113 - CELLULAR PHONES	8,704	2,703	6,840	7,680	840	12.3%
66114 - PAGERS	-	-	50	50	-	0.0%
Tele/Other Utilities Total	76,681	43,231	81,548	87,362	5,814	7.1%
Transportation						
66501 - TRANSPORTATION - INTERNAL	32,501	10,424	32,605	32,842	237	0.7%
665019 - TRANS INTERNAL INACTIVE	60,988	35,500	56,004	67,430	11,426	20.4%
66502 - TRANSPORTATION - EXTERNAL	1,983	248	3,800	3,800	-	0.0%
66503 - MILEAGE REIMBURSEMENT	2,042	354	2,950	2,850	(100)	-3.4%
Transportation Total	97,513	46,525	95,359	106,922	11,563	12.1%
Grand Total	4,109,593	1,940,272	4,259,770	4,327,806	68,036	1.6%

Engineering Services - Facilities Services (C1)

Financial Summary

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$519,836	\$240,110	\$563,972	\$571,324	\$7,352	1.3%
Employee Benefits	250,757	116,413	269,486	284,326	14,840	5.5%
Contracted Services	405,467	171,764	411,500	374,900	-36,600	-8.9%
Heat/Fuel Oil	35,870	55,495	67,494	75,350	7,856	11.6%
Insurance	41,256	23,499	43,273	51,697	8,424	19.5%
Materials & Supplies	357,487	149,774	468,216	410,482	-57,734	-12.3%
Other Expense	-17,798	-10,950	-850	-7,160	-6,310	742.4%
Purchased Power	75,723	37,621	77,276	82,492	5,216	6.7%
Regulatory/Taxes	280	1,329	2,500	2,500	0	0.0%
Tele/Other Utilities	66,513	39,158	67,198	71,026	3,828	5.7%
Transportation	55,767	27,027	56,036	65,574	9,538	17.0%
Grand Total	1,791,159	851,239	2,026,101	1,982,511	-43,590	-2.2%
Programs:						
23 - Stockroom Operations	\$80,251	\$19,801	\$126,122	\$129,950	\$3,828	3.0%
24 - Distribution Operations	11,105	2,936	29,957	20,859	-9,098	-30.4%
30 - Maintenance	214,525	57,154	222,970	241,280	18,310	8.2%
55 - Prof Ops Support	72,434	15,140	91,700	84,007	-7,693	-8.4%
90 - Vehicles	551,298	259,107	653,499	612,759	-40,740	-6.2%
93 - Stockroom Scrap	1,360	0	0	0	0	n/a
95 - Douglass Street	668,120	343,165	704,845	683,146	-21,699	-3.1%
96 - Pandemic Costs	0	32,891	0	0	0	n/a
98 - Training	43,210	21,535	47,139	46,950	-189	-0.4%
99 - Administration	148,856	99,511	149,869	163,560	13,691	9.1%
Grand Total	1,791,159	851,239	2,026,101	1,982,511	-43,590	-2.2%
Funds:						
10 - General	\$1,411,484	\$755,499	\$1,555,352	\$1,506,415	-\$48,937	-3.1%
20 - Water General	275,728	70,961	349,655	349,753	98	0.0%
30 - Water Standish	930	368	3,588	3,176	-412	-11.5%
51 - WW Cape Elizabeth	20,114	5,231	26,207	24,385	-1,822	-7.0%
53 - WW Cumberland	6,195	1,466	9,235	8,486	-749	-8.1%
55 - WW Windham LF	504	250	838	676	-162	-19.3%
57 - WW Portland	46,413	7,560	48,379	55,108	6,729	13.9%
61 - WW Gorham	6,044	2,863	7,591	7,660	69	0.9%
62 - WW Westbrook	6,223	1,104	4,237	4,696	459	10.8%
64 - WW Joint Westbrook	14,495	2,531	13,944	15,875	1,931	13.8%
65 - WW Joint LF	1,331	533	1,535	1,500	-35	-2.3%
66 - WW Peaks Island	1,699	2,873	5,540	4,781	-759	-13.7%
Grand Total	1,791,159	851,239	2,026,101	1,982,511	-43,590	-2.2%
Headcount:						
Full-Time	10	10	10	10	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	10	10	10	10	0	0.0%

Engineering Services - Asset Engineering Services (E2)

Financial Summary

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$1,243,859	\$634,690	\$1,303,344	\$1,326,823	\$23,479	1.8%
Employee Benefits	617,441	298,837	628,871	666,950	38,079	6.1%
Contracted Services	126,246	11,141	23,438	57,450	34,012	145.1%
Deferred Cost W/O	10,098	0	0	0	0	n/a
Materials & Supplies	21,674	6,481	14,425	17,200	2,775	19.2%
Other Expense	-94,691	-61,603	-124,570	-125,570	-1,000	0.8%
Regulatory/Taxes	0	50	0	0	0	n/a
Tele/Other Utilities	6,877	3,022	11,972	11,986	14	0.1%
Transportation	19,926	9,068	17,970	19,225	1,255	7.0%
Grand Total	1,951,430	901,686	1,875,450	1,974,064	98,614	5.3%
Programs:						
57 - Means Coordination	\$567,609	\$239,297	\$396,833	\$422,905	\$26,072	6.6%
79 - Amap Services	432,580	210,045	518,268	475,715	-42,553	-8.2%
81 - Instrumentation & Control	0	0	0	43,102	43,102	n/a
94 - Technology Teams	202,513	97,475	327,020	326,609	-411	-0.1%
96 - Pandemic Costs	0	1,046	0	0	0	n/a
98 - Training	95,480	43,134	90,076	88,108	-1,968	-2.2%
99 - Administration	653,248	310,690	543,253	617,625	74,372	13.7%
Grand Total	1,951,430	901,686	1,875,450	1,974,064	98,614	5.3%
Funds:						
10 - General	\$851,739	\$392,932	\$874,032	\$903,710	\$29,678	3.4%
20 - Water General	834,561	387,071	750,583	795,834	45,251	6.0%
50- Wastewater General	27,730	7,994	25,835	274,520	23,685	9.4%
51 - WW Cape Elizabeth	39,589	20,113	0	0	0	n/a
55 - WW Windham LF	9,703	18,174	0	0	0	n/a
57 - WW Portland	125,993	55,669	0	0	0	n/a
61 - WW Gorham	331	0	0	0	0	n/a
62 - WW Westbrook	37,164	2,163	0	0	0	n/a
64 - WW Joint Westbrook	14,373	14,317	0	0	0	n/a
66 - WW Peaks Island	10,247	3,253	0	0	0	n/a
Grand Total	1,951,430	901,686	1,650,450	1,974,064	98,614	5.3%
Headcount:						
Full-Time	18	18	18	18	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	18	18	18	18	0	0.0%

Engineering Services - SCADA Services (E7)

Financial Summary

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$180,724	\$93,398	\$185,489	\$190,578	\$5,089	2.7%
Employee Benefits	87,230	42,791	88,801	95,194	6,393	7.2%
Contracted Services	33,879	29,019	28,573	31,111	2,538	8.9%
Materials & Supplies	27,719	6,366	21,075	21,825	750	3.6%
Other Expense	12,341	4,291	10,550	6,050	-4,500	-42.7%
Tele/Other Utilities	3,290	1,051	2,378	4,350	1,972	82.9%
Transportation	21,819	10,430	21,353	22,123	770	3.6%
Grand Total	367,004	187,346	358,219	371,231	13,012	3.6%
Programs:						
81 - Instrumentation & Control	\$200,033	\$83,903	\$218,065	\$226,406	\$8,341	3.8%
94 - Technology Teams	2	5,453	3,847	3,006	-841	-21.9%
96 - Pandemic Costs	0	18,398	0	0	0	n/a
98 - Training	16,529	7,273	19,948	15,877	-4,071	-20.4%
99 - Administration	150,440	72,319	116,359	125,942	9,583	n/a
Grand Total	367,004	187,346	358,219	371,231	13,012	3.6%
Funds:						
10 - General	\$166,971	\$103,353	\$140,154	\$144,825	\$4,671	3.3%
20 - Water General	62,104	15,377	88,840	86,440	-2,400	-2.7%
50 - Wastewater General	11,819	7,204	77,035	82,905	5,870	7.6%
51 - WW Cape Elizabeth	21,435	4,842	450	450	0	0.0%
53 - WW Cumberland	6,166	777	900	900	0	0.0%
57 - WW Portland	64,203	35,380	48,940	53,811	4,871	10.0%
61 - WW Gorham	5,198	2,682	450	450	0	0.0%
62 - WW Westbrook	10,750	888	450	450	0	0.0%
64 - WW Joint Westbrook	6,470	13,162	500	500	0	0.0%
65 - WW Joint LF	4,800	840	0	0	0	n/a
66 - WW Peaks Island	7,090	2,840	500	500	0	0.0%
Grand Total	367,004	187,346	358,219	371,231	13,012	3.6%
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%

Administrative Services - Purpose Statement

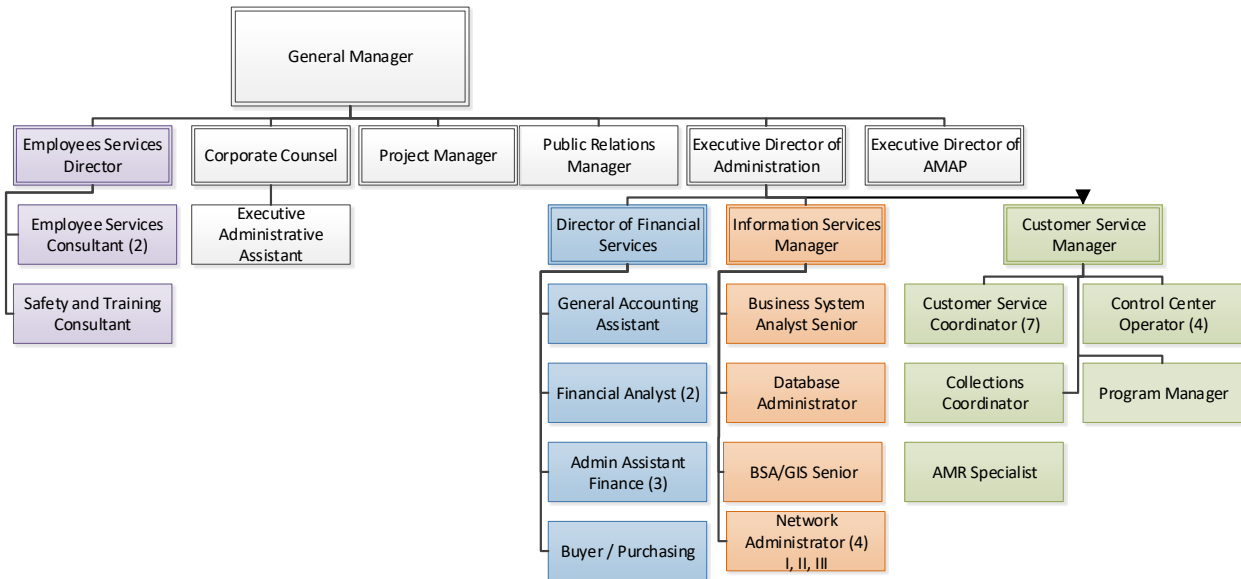
To provide support services to internal and external customers.

Core Services

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

- External customer call center response and billing services (Customer Service Group- F1; green in the organization chart).
- Computer system and related technology support and maintenance services (Information Services Group – G1; orange in the organization chart).
- Financial transaction processing and information services (Financial Services Group – H1; blue in the organization chart).
- Employee development, benefits and management services (Employee Services Group – I1; purple in the organization chart). In 2020, an additional Employee Consultant position is budgeted starting April 2020. The 2021 Budget has the position for the full year.

The District has an eight-person group (Executive Group – J1; white in the organization chart) that directs, oversees and provides administrative support for the District.



Past Accomplishments and 2021 Projects and Initiatives

Customer Service

2020 Accomplishments:

- **New Billing System:** Customer Service personnel have been involved with implementing the system from the start. Time and effort in supporting the project has been significant.
- **Rates:** Changed and tested Portland Water District's water rates and sewer rates for Cape Elizabeth, Portland, South Portland, Falmouth and Cumberland.
- **Large meter review:** Continued collaboration and focus with Water Ops in reviewing and addressing any large meters with issues with monthly meetings. This has proven successful, as the number of outstanding large meters issues has significantly decreased since the start of this program.

2021 Projects and Initiatives:

- **Service Levels and rate changes:** Continue focus on meeting both objectives while supporting new billing system in 2021.
- **Contribute and support the efforts and progress of the new Asset Management system.**
- **Develop an appropriate plan to transition customers to the billing system/bill while educating them on new functions that will be available with the online Customer portal.**
- **Update documentation and procedures for the new billing system (Cayenta) process, including updating the Terms & Conditions as needed.**
- **Work with the Public Relations Manager to promote our low-income programs.**
- **Support the efforts and progress of the new billing system project.**
- **Develop a transition plan for Meter Reader retirement.**
- **Review current collection processes to improve efficiencies with the new Cayenta system.**
- **Participate in New England Water Works' Customer Service Committee efforts to develop customer service related training.**

Past Accomplishments and 2021 Projects and Initiatives (continued)

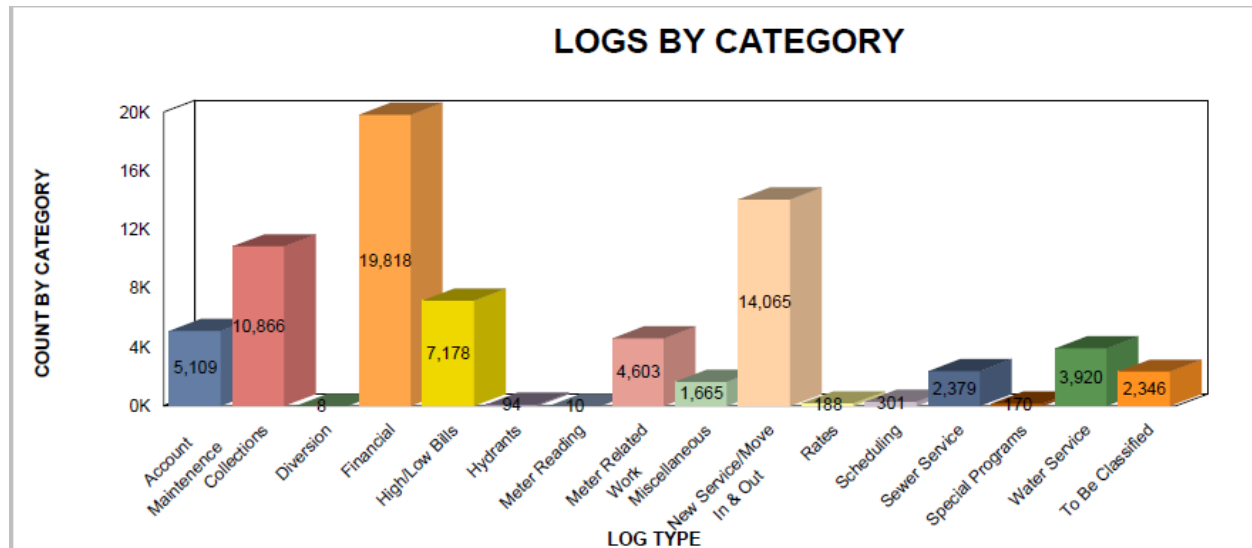
Customer Service (continued)

CS Department Key Statistics:

<u>Key Statistic</u>	<u>2016 Actual</u>	<u>2017 Actual</u>	<u>2018 Actual</u>	<u>2019 Actual</u>	<u>2020 Actual</u>	<u>2021 Goal</u>
Customers	54,700	55,100	55,500	55,900	56,300	56,700
Phone Calls answered within 1 min	88%	86%	93%	90%	85%	82%
Customer Satisfaction	97%	98%	97%	98%	95%	95%
Actual vs Estimated reads	99.63%	99.67%	99.58%	100%	99%	99%
Accurate bill Index	99.96%	99.97%	99.96%	100%	99%	99%
Customer Contacts	54,753	48,971	56,565	59,383	60,000	63,000
Bills produced	647,429	652,974	659,174	660,000	664,000	668,000

Customer Service – Customer Contacts

Customer Services handles over 56,000 customer contacts a year via phone, email and in person. With the billing system implementation scheduled for 2021, and collections resuming January 1, 2021 we anticipate higher contact levels.



Past Accomplishments and 2021 Projects and Initiatives (continued)

Information Services

2020 Accomplishments

System upgrades:

- Continued expansion of Wi-Fi networks to support new Asset, Work Management system.
- Continued migration to virtual servers has resulted in increased in network speed and reliability.
- Support of the eFinance Plus upgrade.
- Hach WIMS upgrade.
- Support of CRM / Billing replacement project.
- Support of Asset, Work Management replacement project.
- Call recording software update.
- Roll out of Citrix 7.6
- Upgrade of Microsoft Exchange email server.
- Continued upgrades of Wide Area Network data links; i.e., East End Fiber via GWI MPLS
- Replacement of several data servers as part of annual server refresh program.

Process Improvements:

- Develop additional digital workflows to replace paper-based processes.
- Implement additional system monitoring.
- Conference room upgrades.

System Security

- Security Awareness Training – End-user Cyber Security training conducted throughout the year to raise awareness related to the topic.
- New security software installed to increase our security posture.
- Continued build out of cold site - As a backup to our data center at Douglass Street, we continued to build out our cold site at our Sebago Lake Treatment Plant. Tested twice in 2019.
- Additional firewalls added to increase security posture.
- Continued Information Services inter-departmental cross training.

2021 Projects and Initiatives

System upgrades:

- Continued support of CRM / Billing replacement project.
- Continued support of Asset, Work Management replacement project.
- Continued expansion of Wi-Fi networks to support new Asset, Work Management system.
- Continued migration of physical servers to virtual servers.
- Replacement of several data servers as part of annual server refresh program.

Past Accomplishments and 2021 Projects and Initiatives (continued)

Information Services

2021 Projects and Initiatives (continued)

System Security

- Security Awareness Training – Continue End-user Cyber Security training throughout the year to raise awareness related to the topic.
- Network Security Audit – Admin Network
- Continued build out of cold site - As a backup to our data center at Douglass Street, we will continue to build out our cold site at our Sebago Lake Treatment Plant.

Training

- PWD IS Department Overview sessions – We will be conducting several sessions for employees to understand what the Information Services does on a daily basis
- Continued Information Services inter-departmental cross training.
- Technical training for Information Services staff.

IS Department Key Statistics:

Devices Maintained

Device Type	2019	2020	2021
Servers	15	20	28
Virtual Servers	60	75	95
Laptops	58	59	106
CPU	25	27	27
Thin Clients	140	145	145
Firewall	8	13	13
Switches	25	30	30
Routers	7	10	10
Phone Switches	11	12	12
Desk Phones	170	180	180
Smart Phones	20	21	22
Printers/Scanner	26	26	26
Copiers	9	9	9
iPads	21	21	21
Total	595	648	724

Major Applications

- AutoCAD
- Callrex Call Recording
- Cayenta CRM
- Citrix Presentation Server
- eFinance Plus
- ESRI GIS
- Hach WIMS
- Hansen Assent Management /Customer Billing
- IBM Cognos Reports
- Lucity CMMS
- Microsoft Exchange
- Microsoft Office 2016
- Microsoft Power BI
- Microsoft Remote Desktop Services
- Microsoft Sharepoint 2016
- Microsoft Windows Server
- Mitel IP Phone System
- Oracle Database (3)
- SAP Crystal Reports
- Scale Computing
- SQL Databases (4)
- VMware

Past Accomplishments and 2021 Projects and Initiatives (continued)

Financial Services

2020 Accomplishments

- Received Government Finance Officers Association’s “Certificate of Achievement for Excellence in Financial Reporting” for the 2018 Comprehensive Annual Financial Report (CAFR) and the “Distinguished Budget Presentation Award” for the 2020 Comprehensive Budget Report for the tenth year in a row.
- Shift most department work from the office to employees working at home during the month of March due to the COVID-19 emergency. Some office hours were still necessary to processing incoming mail but overall in office hours were reduced from 320 hours/week to under 40 hours/week. Also, the annual audit field visit, that was to start the week after the declaration of emergency, was done remotely with no face to face contact with the auditors.
- Finance received training on the new Cayenta customer billing system and began posting customer payments into that system to familiarize the Finance staff with the system and to support the project with real customer data.

2021 Projects and Initiatives

- Support the Asset (Lucity) and Billing (Cayenta) projects so that we can continue to pull billing, payroll, transportation and inventory data into the financial system.
- Continue to upgrade financial information provided to the Board of Trustees and management through more visual/graphical presentations of financial data.
- Review and update department procedures for the newly updated financial system and in concert with the Asset and Billing projects.
- Continue efforts on employee training with a particular focus learning about other areas within the District.

Past Accomplishments and 2021 Projects and Initiatives (continued)

Employee Services

2020 Accomplishments

Pandemic Related Changes have moved to the forefront in 2020. Employee Services has been implementing and communicating such changes from the expansion of FMLA to include childcare, Emergency Paid Sick Leave, tracking absenteeism and assisting employees with testing and travel requirements. Our vigilant monitoring has assisted in keeping us all safe at this difficult time.

Employee Services, while maintaining all essential services, has worked to provide policy revisions, applications and communications related to the expansion of FMLA to include childcare, the new Emergency Paid Sick Leave, including Families First FAQ's for employees for guidance. We have worked hard to track all employee absences, with exposure mapping and tracking based on CDC guidelines, working on travel guidelines that have had to be edited as often as written. We have kept on top of the changes that could benefit our employees at this time, such as incorporating more flexibility in allowing changes to dependent care accounts, while transitioning our life, long term disability and short term disability plans to the Hartford Life Insurance Company, maintaining recruitment for essential positions and providing ongoing services for the District.

Compensation: Career Management Associates was selected to provide a compensation survey for non-union positions, and has been in the various stages of this process throughout 2020. This is expected to be completed by the end of the year. The process has included selecting and soliciting participation from peer institutions, benchmarking positions, updating all job descriptions, providing job summaries and creating the survey document. The non-union evaluation process has been changed with a focus on goal setting based on the employee's updated job descriptions. All non-union job descriptions were updated within the District in preparation for the non-union salary survey to provide the best possible match to similar positions at other companies.

Retirement Planning:

While the pandemic restricted in-person retirement planning presentations, we have been actively exploring an annuity option and a stable value fund that allows a greater return on the guaranteed fund offered through the 457 plan.

Student Outreach Program:

With the recent Pandemic, all plans for student outreach in 2020 were put on hold, while work with the NEWWA Waterworks Committee continues, with the completion of their survey in 2020.

Health Plan:

Effective 1/1/21, our health insurance premiums will increase by 2.75% with no changes to the benefit design. All employees will continue to pay 9% towards single health insurance coverage in 2021.

Union:

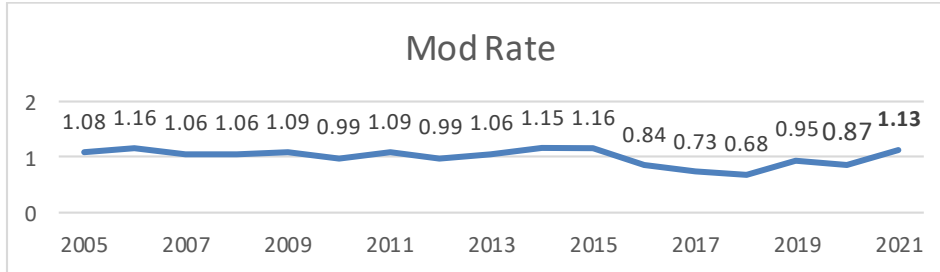
The Union stewards continue to meet virtually on a monthly basis with the General Manager and the Director of Employee Services. These meetings have proved to be an excellent way to keep the lines of communication open at this critical time.

Past Accomplishments and 2021 Projects and Initiatives (continued)

Employee Services (continued)

2020 Accomplishments

Worker’s Compensation: The District’s mod rate dropped to very low levels for five years in a row to the lowest level in over a decade in 2018. Effective January 1, 2016 it dropped to 0.84, saving approximately \$60,000 annually in premiums. Effective January 1, 2017 it dropped to 0.73, resulting in approximately another \$10,000 in annual premium reductions. Effective January 1, 2018, the mod rate again dropped to 0.68, saving approximately \$4,000 more in annual premiums. However, due to a few high cost workplace injuries, our mod rate increased to 0.95 effective January 1, 2019. This resulted in an increase of \$45,000 in annual premiums. The 2020 mod rate declined to 0.87 in 2020, but we had a serious injury that resulted in significant lost time. This claim has been in the process of mediation, but has affected our mod rate, which will rise to 1.13 in 2021. We continue to vigilantly monitor workplace injuries, investigate all accidents and examine the situations associated with these claims, and will do all we can to reverse this recent trend. The following is a recent history of the worker’s compensation experience mod rates for PWD:



Safety:

- Due to the Pandemic, some training scheduled for 2020 has been canceled, with the exception of the schedule listed below:

2020 SAFETY REQUIRED TRAINING - PWD		
Topic	# Employees	Completed
Confined Space	15	September 2020
Verbal Judo (Zoom)	15	
VDT On-Line		Training sent electronically to employees
N95 Mask Training Water		April 2020
Red Cross certification	80	
Fire Extinguishers		October 2020
Bloodborne Pathogens		Self-directed training

The safety consultant has worked on initiatives related to the Pandemic such as creating SOPs for worker protection, updating the Safety Commitment Policy and PPE program, concentrating on proper PPE, including face coverings, and ensuring these items are available and in stock, organizing sanitation and disinfection(including vehicles), assisting in setting up training rooms in a safe manner, and working on evacuation plans for facilities.

In addition, an outside annual inspection of the monorail systems, hoists and cranes was completed, and Electrical Controls of Maine met with chief operators for the 2020 NFPA70E requirements, and a safety inspection of SLTWF has taken place. In addition, a flu clinic and food drive was successfully organized with 54 participating.

Past Accomplishments and 2021 Projects and Initiatives (continued)

Employee Services (continued)

2021 Projects and Initiatives

Pandemic Response:

If required, Pandemic related measures will remain a priority, from tracking and tracing contacts to providing assistance to employees who request and need information about expanded FMLA childcare, travel, and testing information. In 2020, Employee Services has been responsible for contacting all employees who call in sick for either themselves or family members. This will continue until the Pandemic ends. Federal and State responses to COVID-19 have required writing new procedures related to travel guidelines, FAQ's for FMLA Childcare, applications for FMLA Childcare and Emergency Paid Sick Leave, a Remote Work Policy and then updating them as required. We have worked hard to communicate these important changes to our employees. By January 1, we will be required to implement the new Paid Leave in Maine. COVID-19 has effectively added a new layer of what human resources professionals are required to manage during this unprecedented event.

Employee Services and Benefits:

We will explore retirement planning and education by seeking to provide additional educational opportunities to assist employees with understanding their investment options, including a new annuity option that will be added to the 457 plan, and the replacement of the stable interest fund with one that will provide an incrementally better rate of return while still offering the same guaranty. We transitioned our life and disability insurances to a new carrier in 2020, and we will explore ways to better integrate short term disability benefits and review differences in how benefits will be administered with the new carrier. We hope to review and enhance our new hire employee orientation, continue to work on policies, and continue to focus on the management of leaves of absence and disability claims (including worker's compensation) and the recruitment process. We will be concluding the non-union salary survey, implement recommendations and adjust the broad band pay bands to reflect the current labor market. We will continue to monitor the health plan to obtain the best possible renewals for the District.

Student Outreach:

We hope to resume student outreach efforts. Prior to the Pandemic, we successfully connected with local technical/vocational schools and received invitations to attend events. These types of events are temporarily on hold. Going forward, we hope to pick up where we left off, and successfully cultivate these relationships.

Union Relations:

In 2020, the number of grievances filed by the union was greatly reduced, and to date there are no arbitrations in progress or pending. The monthly meetings with the union stewards and the proactive approach that the District has taken in relation to the Pandemic has encouraged a good working relationship with the Union. We will work to continue to this trend. By the fall of 2021, the union negotiations are scheduled to begin again for a new three year contract.

Past Accomplishments and 2021 Projects and Initiatives (continued)

Executive Group

2020 Accomplishments

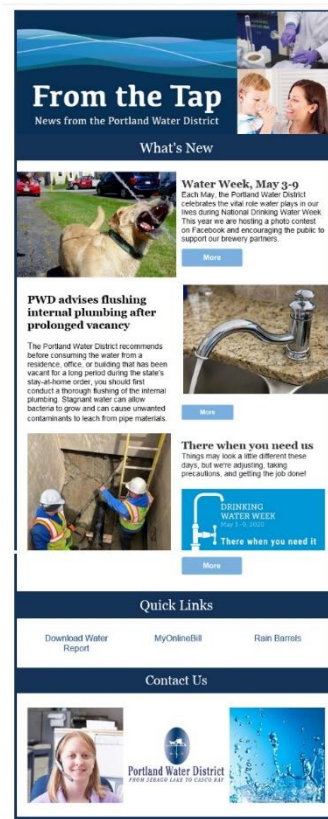
Corporate Counsel

- Monitored legislation at the state and the federal level, and prepared testimony for presentation to state legislators on bills of interest to PWD. This became especially challenging during the time of COVID legislation passed at the federal level to insure PWD's compliance with legislative directives, and with numerous executive orders issued by the Governor.
- Worked with the MEANS group to arrive at and draft major development agreements, including those affecting 58 Fore Street, 100 Fore Street and a major development in the area of Clark's Pond in South Portland.
- Worked on several matters at the Public Utilities Commission, including notices of inquiry and a matter being appealed to the Supreme Court for the State of Maine
- Managed the liability claims process, which consists of reviewing every claim filed against PWD, reviewing the facts of each claim, sometimes in conjunction with the District's insurer, and determining whether the District is liable for the claim.

Public Relations

Early in 2020, Portland Water District's communications efforts shifted into crisis mode in response to the global pandemic. As stay-at-home mandates were ordered and much of the PWD staff moved remote, reaching the internal audience became prime focus to calm fears and keep employees informed of shifting guidelines and protocols. Messages, delivery channels, and tone were adapted to reach and connect with both internal and external audiences.

In addition to administering typical communications programs (Annual Water Quality Report, Comprehensive Financial Report, Water Bottle Filling Station Grants, Clean Water Week, Scholarship, etc.), video productions, social media engagement, live-streaming events, and email marketing were developed or expanded. The Portland Water District developed several videos and fast tracked a planned project to add email marketing to its outreach efforts. The email newsletter was created and distributed to a list of 27,000 customers through the Constant Contact platform. We have sent out 5 email newsletters in 2020, and Initial analytics are favorable, ranging from 33% to 46% open rate (18% industry average), and a 3% to 8% click rate (8% industry average).



Past Accomplishments and 2021 Projects and Initiatives (continued)

Executive Group (continued)

2021 Projects and Initiatives

Corporate Counsel

Continue to respond to initiatives of the departments, communities served and developments in the Legislature and Congress including working with the Town of Windham on providing sewer service to the North Windham Area, reviewing the results of the 2020 Census to determine whether any change in apportionment of the Trustees need to be done and addressing the impact of federal and state regulation changes related to PFAS and Lead.

Public Relations

ABC marketing outreach: Communications remains on standby to help shepherd in the new billing system before, during, and after the Go Live date.

AWWA Advisory Board: Due to the pandemic, new nominations to the board were delayed. I will apply again next year to secure a PWD voice on the prominent committee.

Customer Outreach – Bill stuffers are regularly included in the monthly bill. Each year the District sends an Annual Water Quality Report to all customers.

Do your part to keep polluted stormwater out of our rivers, lakes, and Casco Bay!

Stormwater runoff is a major problem in Maine. As rainwater runs across pavement and rooftops, it picks up pollutants and carries them to our waterways. Rain barrels capture and collect stormwater before it becomes polluted so the water can be used for lawns, gardens, and indoor plants. They also help you conserve water, too.

Order your rain barrel TODAY!

We are pleased to provide rain barrels at a discounted price of \$63.30 (includes tax & handling). This is over 50% off the retail price!


Features:

- Repurposed 55-gallon, food-grade barrels (May have minor scratches and vary slightly in color)
- Barrel color is reddish brown
- Screening at the top keeps mosquitoes, insects, and debris out
- Removable lid for easy cleaning
- Solid brass threaded spigot for connecting to a hose
- Overflow hose directs water away from the foundation
- Multiple barrels can be joined for additional storage capacity



2020 Annual Water Quality Report

NOW AVAILABLE AT:
www.pwd.org/publications/2020-annual-water-quality-report




In the report, you will find more about:

- The Water Source
- Ensuring Water Quality: Water Purification and Disinfection
- The Forest is the Filter - A Shared Responsibility
- Water Quality Analysis
- Monitoring Emerging Concerns: PFAS
- Health Notices
- Steep Falls Supplemental Information



Portland Water District
 207.761.8310 | pwd.org
customerservice@pwd.org

I am pleased to announce the availability of the 2020 Annual Water Quality Report. The report once again indicates that PWD consistently produces high quality water that continues to surpass federal and state standards.

We are so fortunate to have a pristine water source, but what is more impressive to me as the General Manager is the passion and commitment of our staff. From operations, customer service, to watershed protection; dedicated staff work day and night to ensure service is reliable, quality is excellent, and investments are prudent. Even during the unprecedented response to the COVID-19 pandemic, staff adapted and focused on the same goal of maintaining quality water and essential services to our community.



To learn more about your water, where it comes from and water quality analysis results, please read the complete annual water quality report at:
www.pwd.org/publications/2020-annual-water-quality-report

DID YOU KNOW... THE FOREST IS THE FILTER



Keeping the land surrounding a lake forested is key to protecting the water quality of the lake since forests naturally clean water. To conserve forest land, the Portland Water District purchases properties from willing sellers in select areas in Lower Bay and also works with local land trusts and other partners like Sebago Clean Waters (www.sebagocleanwaters.org). PWD contributes up to 25% of the cost of conserving these forests. This effort has helped protect more than 6,000 acres of watershed forest in the last 20 years.

Financial Overview

The Administrative Services budget request is \$6,368,680, which is \$304,533 or 5.0% higher than last year. The number of employees in the area is 44, no change from the prior year.

Customer Service (F1) Group (\$1,803,215 request; \$178,843 or 11.0% higher)

- Salaries/Wages and Benefits: Increased by \$55,800, or 4.8%. No changes in the number of employees. Meter reading position merged with the Control Center Operation positions, providing more depth and flexibility. Assumed 3% wage increase and reflects the higher pension & health insurance costs.
- Contracted Services: Increased by \$98,046, or 49.8%. The new computer system maintenance contract impacts the 2021 for the first time.
- Other Expenses increased by \$21,042 or 8.6% . Assumed an increase of 2 cents in postage rates.

Information Service (G1) Group (\$1,201,334 request; \$45,710 or 4.0% higher)

- Salaries/Wages and Benefits: Increased by \$44,324, or 5.1 %. The Business System Analysts (BSA) positions were upgraded to a senior level. An open BSA position was converted to a Network Admin II position (no financial impact). Assumed 3% wage increase and reflects the higher pension & health insurance costs.
- All Other Expenses: Increased by \$1,386, or 0.5%. Small reductions in several lines are offset by the cost of sending two staff members to attend the mid-year GMIS conference (\$3,500).

Financial Services (H1) Group (\$949,089 request; \$24,171 or 2.6% higher)

- Salaries/Wages and Benefits: Increased by \$46,076, or 10.6%. No changes in the number of employees. Assumed 3% wage increase and reflects the higher pension & health insurance costs.
- Other Expenses: Decreased by \$4,449, or 34.2%, reflects the annual credit card rebate the received by the District.

Employee Service (I1) Group (\$594,045 request; \$5,380 or 0.9% higher)

- Salaries/Wages and Benefits: Increased by \$83,031, or 23.6%. An additional ES Consultant was included in the budget. Assumed 3% wage increase and reflects the higher pension & health insurance costs.
- Contracted Services: Decreased by \$38,500, or 30.1%, due to hiring a new HR Consultant to conduct a study in 2020 that will not reoccur in 2021.

Executive (J1) Group (\$1,820,997 request; \$50,429 or 2.8% higher)

- Salaries/Wages and Benefits: Increased by \$59,145, or 4.4%. No staffing changes planned. Assumed 3% wage increase and reflects the higher pension & health insurance costs.
- Contracted Services: increased by \$4,550, or 5.7%. Small increases on several lines are offset by the increase related to conducting the periodic customer satisfaction survey (\$10,000)
- Other Expenses: decrease by \$13,625, or 5.7%). Lower public relation costs included in the operating budget. PR related to the new billing system is included in the project budget.

Administrative Services - Total

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Sub-Group:						
F1 - Customer Service	\$1,410,252	\$717,322	\$1,624,372	\$1,803,215	\$178,843	11.0%
G1 - Information Services	1,125,658	546,722	1,155,624	1,201,334	45,710	4.0%
H1 - Financial Services	920,499	488,026	924,918	949,089	24,171	2.6%
I1 - Employee Services	452,622	248,761	588,665	594,045	5,380	0.9%
J1 - BOT & Senior Management	1,556,961	694,145	1,770,568	1,820,997	50,429	2.8%
Grand Total	5,465,991	2,694,977	6,064,147	6,368,680	304,533	5.0%
Expense Type:						
Salaries & Wages	\$2,795,748	\$1,396,548	\$3,018,140	\$3,129,647	\$111,507	3.7%
Employee Benefits	1,324,266	676,828	1,450,862	1,573,738	122,876	8.5%
Contracted Services	780,024	358,051	889,436	951,842	62,406	7.0%
Insurance	96,321	43,428	95,724	95,231	-493	-0.5%
Materials & Supplies	45,723	48,104	55,191	58,190	2,999	5.4%
Other Expense	368,504	156,277	520,568	524,636	4,068	0.8%
Tele/Other Utilities	36,111	7,550	15,348	15,140	-208	-1.4%
Transportation	19,294	8,191	18,878	20,256	1,378	7.3%
Grand Total	5,465,991	2,694,977	6,064,147	6,368,680	304,533	5.0%
Headcount:						
Full Time	41	44	44	44	0	0.0%
Part Time	1	0	0	0	0	n/a
Total	42	44	44	44	0	4.8%

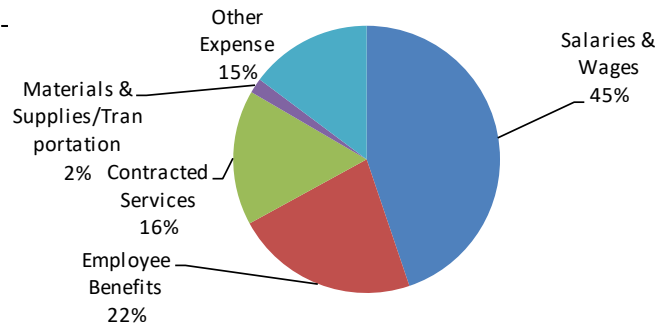
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages						
660111 - SALARIES/WAGES NON-UNION	\$1,964,016	\$1,019,823	\$2,230,807	\$2,318,163	\$87,356	3.9%
660112 - WAGES/OVERTIME NON-UNION	317	118	-	-	-	n/a
660121 - WAGES/REGULAR UNION	673,712	356,736	730,497	755,144	24,647	3.4%
660122 - WAGES/OVERTIME UNION	7,841	1,796	23,116	22,620	(496)	-2.1%
660124 - WAGES/STANDBY TIME UNION	16	-	-	-	-	n/a
660131 - WAGES - REGULAR - TEMPS	7,007	-	6,720	6,720	-	0.0%
660136 - CONTRACTED - TEMP	14,095	4,450	-	-	-	n/a
66014 - VACATION ACCRUAL	31,014	-	-	-	-	n/a
660141 - TRUSTEES COMPENSATION	23,275	13,625	27,000	27,000	-	0.0%
66015 - SICKTIME ACCRUAL	74,454	-	-	-	-	n/a
Salaries & Wages Total	2,795,748	1,396,548	3,018,140	3,129,647	111,507	3.7%
Employee Benefits						
660401 - FICA - EMPLOYERS' SHARE	202,068	105,009	230,891	239,417	8,526	3.7%
660405 - SAFETY/WHY PROGRAM ITEMS	5,801	1,249	6,140	6,310	170	2.8%
660411 - MEALS ALLOWANCE	20	-	100	100	-	0.0%
660413 - PWD TRAINING PROGRAM	160	20	-	-	-	n/a
660418 - STIPENDS	300	400	200	200	-	0.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	9,401	750	7,080	8,380	1,300	18.4%
660491 - FRINGE BENEFITS-REG/SAL	1,106,516	569,400	1,206,451	1,319,331	112,880	9.4%
Employee Benefits Total	1,324,266	676,828	1,450,862	1,573,738	122,876	8.5%
Contracted Services						
662063 - COPIER MAINTENANCE/TONER	15,314	9,661	15,000	15,000	-	0.0%
6632 - ACCOUNTING SERVICES	35,500	35,000	37,500	38,500	1,000	2.7%
66331 - LEGAL - LABOR RELATIONS	48,160	15,885	65,000	65,000	-	0.0%
66333 - BOND COUNSEL	7,500	-	7,500	7,500	-	0.0%
66339 - LEGAL - OTHER	14,347	-	19,500	20,000	500	2.6%
663545 - RADIO SERVICING AND EQUIP	3,241	597	4,000	3,000	(1,000)	-25.0%
663561 - COMPUTER LICENSES	307	190	2,500	2,000	(500)	-20.0%
663562 - COMPUTER MAINTENANCE	287,577	148,317	276,418	373,377	96,959	35.1%
663563 - COMPUTER CONSULTING/OTHER	34,149	815	25,000	23,000	(2,000)	-8.0%
6635801 - EMPLOYEE HEALTH SERVICES	7,333	2,741	10,000	10,000	-	0.0%
663581 - UTILITY BILLING PRINTING	66,708	31,356	83,933	88,370	4,437	5.3%
663582 - PAYMENT PROCESSING	159,746	71,736	154,630	152,300	(2,330)	-1.5%
663583 - RECEIVABLE COLLECTIONS	8,428	2,074	10,000	10,000	-	0.0%
663584 - BANK SERVICE CHARGES	24,615	5,709	26,400	25,200	(1,200)	-4.5%
663587 - COURIER SERVICES	4,545	1,896	4,900	4,600	(300)	-6.1%
663588 - EQUIPMENT MAINTENANCE	-	-	1,500	1,500	-	0.0%
663592 - RECRUITING SERVICES	3,760	2,228	7,000	6,000	(1,000)	-14.3%
663594 - DIGSAFE	33,507	17,213	63,000	63,000	-	0.0%
663595 - OUTPLACEMENT SERVICES	-	-	1,000	500	(500)	-50.0%
663598 - HR CONSULTANT SERVICES	7,583	1,444	45,000	8,000	(37,000)	-82.2%
6635984 - LANGUAGE INTERPRETATION	178	-	355	355	-	0.0%
663599 - MISC OTHER SERVICES	17,527	11,189	29,300	34,640	5,340	18.2%
Contracted Services Total	780,024	358,051	889,436	951,842	62,406	7.0%
Insurance						
6657 - GEN LIABILITY INSURANCE	54,739	25,529	59,884	56,163	(3,721)	-6.2%
66592 - DAMAGES & CLAIMS-GOODWILL	11,986	2,642	4,500	5,500	1,000	22.2%
66593 - UMBRELLA INSURANCE COVER	3,384	1,716	3,604	3,774	170	4.7%
66594 - PROFESSION/CRIME BONDING	26,213	13,543	27,736	29,794	2,058	7.4%
Insurance Total	96,321	43,428	95,724	95,231	(493)	-0.5%

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Materials & Supplies						
6619 - ASSET PURCHASES	\$2,398	\$23,727	\$4,500	\$5,500	\$1,000	22.2%
66202 - TOOLS	297	216	300	300	-	0.0%
66203 - VENDOR PURCHASED SUPPLIE	4,392	5,479	3,300	3,400	100	3.0%
662041 - MATERIALS INVENTORY	411	24	-	-	-	n/a
662042 - SUPPLIES INVENTORY	2,047	1,752	2,550	2,650	100	3.9%
662043 - TOOL INVENTORY	1,635	1,073	1,700	1,200	(500)	-29.4%
66204301 - INVENTORY - TONER	2,722	995	500	1,000	500	100.0%
66204302 - INVENTORY - PAPER	3,850	1,072	4,000	4,000	-	0.0%
66204303 - INVENTORY - COMPUTER EQ	2,589	4,078	9,026	10,825	1,799	19.9%
662047 - GARAGE INVENTORY	43	7	-	-	-	n/a
66205 - CONSUMABLE SUPPLIES	757	163	2,750	2,750	-	0.0%
66206 - COMPUTER RELATED EQUIP	24,582	9,518	26,565	26,565	-	0.0%
Materials & Supplies Total	45,723	48,104	55,191	58,190	2,999	5.4%
Other Expense						
6642 - EQUIPMENT RENT	2,263	1,634	3,000	2,900	(100)	-3.3%
66601 - PUBLIC RELATIONS	2,555	342	5,250	3,250	(2,000)	-38.1%
66609 - OTHER ADVERTISING	4,564	3,181	7,100	5,350	(1,750)	-24.6%
6675111 - INSTATE TRAINING/CONF	11,751	2,340	21,500	19,000	(2,500)	-11.6%
6675112 - OUT OF STATE TRAINING/CC	24,653	(7)	20,500	23,500	3,000	14.6%
667513 - DUES	52,631	2,378	54,165	54,665	500	0.9%
667514 - PROFESSIONAL LICENSES	610	-	900	900	-	0.0%
667515 - PERIODICAL SUBSCRIPTIONS	4,868	1,819	7,735	6,375	(1,360)	-17.6%
667521 - POSTAGE - THIRD PARTY	180,277	109,862	242,438	261,480	19,042	7.9%
667522 - POSTAGE - INTERNAL	14,831	4,511	15,391	15,641	250	1.6%
667523 - POSTAGE - EXPRESS DELIVER	-	-	400	400	-	0.0%
667531 - PRINTING COSTS	25,499	8,317	34,600	27,600	(7,000)	-20.2%
667532 - PHOTOCOPYING COSTS	(250)	-	-	-	-	n/a
667533 - FORMS STOCK	746	789	925	925	-	0.0%
667552 - SAFETY TRAINING	340	-	4,200	3,000	(1,200)	-28.6%
667553 - DOT SUBSTANCE ABUSE	2,994	1,249	2,000	2,000	-	0.0%
667555 - SAFETY EXPENSES	4,460	3,783	5,200	5,000	(200)	-3.8%
667592 - FOOD SUPPLIES	2,991	447	3,700	3,900	200	5.4%
667593 - VENDOR INTEREST CHARGES	(4,372)	-	-	(4,500)	(4,500)	n/a
667598 - GEN MANAGER CONTINGENC'	-	-	50,000	44,500	(5,500)	-11.0%
6675981 - GEN MNG - TRUSTEES	14,338	5,735	12,750	14,350	1,600	12.5%
6675982 - GEN MNG - COMMUNITY	18,580	7,736	27,215	32,900	5,685	20.9%
667599 - OTHER MISCELLANEOUS	4,175	2,160	1,599	1,500	(99)	-6.2%
Other Expense Total	368,504	156,277	520,568	524,636	4,068	0.8%
Tele/Other Utilities						
66111 - TELEPHONE LINES	18	-	-	-	-	n/a
66112 - DATA LINES	19,903	3,937	7,392	6,696	(696)	-9.4%
66113 - CELLULAR PHONES	16,190	3,613	7,860	8,444	584	7.4%
66114 - PAGERS	-	-	96	-	(96)	-100.0%
Tele/Other Utilities Total	36,111	7,550	15,348	15,140	(208)	-1.4%
Transportation						
66501 - TRANSPORTATION - INTERNAL	10,066	4,430	9,094	9,424	330	3.6%
665019 - TRANS INTERNAL INACTIVE	4,840	2,857	5,309	5,497	188	3.5%
66502 - TRANSPORTATION - EXTERNAL	1,002	160	850	850	-	0.0%
66503 - MILEAGE REIMBURSEMENT	3,377	745	3,625	4,385	760	21.0%
66504 - MTA TRANS-PASS TOLL FEES	10	-	-	100	100	n/a
Transportation Total	19,294	8,191	18,878	20,256	1,378	7.3%
Grand Total	5,465,991	2,694,977	6,064,147	6,368,680	304,533	5.0%

Administrative Services: Customer Services (F1)

Financial Summary:

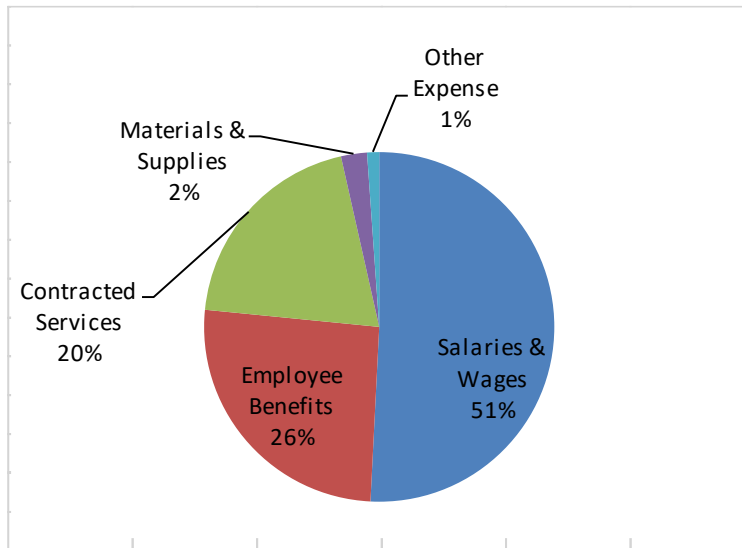
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$740,056	\$374,581	\$781,913	\$807,893	\$25,980	3.3%
Employee Benefits	345,065	181,209	371,133	400,953	29,820	8.0%
Contracted Services	122,535	50,695	196,865	294,911	98,046	49.8%
Materials & Supplies	5,716	1,923	13,203	16,640	3,437	26.0%
Other Expense	178,726	100,662	244,379	265,421	21,042	8.6%
Tele/Other Utilities	2,778	911	1,476	1,476	0	0.0%
Transportation	15,374	7,341	15,403	15,921	518	3.4%
Grand Total	1,410,252	717,322	1,624,372	1,803,215	178,843	11.0%
Programs:						
17 - Hydrant Maintenance	\$0	\$10,032	\$0	\$0	\$0	n/a
74 - Control Center	168,110	94,185	180,534	220,075	39,541	21.9%
76 - Collection	57,148	12,600	58,197	60,174	1,977	3.4%
77 - Billing	242,521	132,248	344,019	462,626	118,607	34.5%
80 - Meter Reading	71,736	33,640	79,850	77,119	-2,731	-3.4%
96 - Pandemic Costs	0	6,376	0	0	0	n/a
98 - Training	26,688	36,226	163,971	171,904	7,933	4.8%
99 - Administration	844,047	392,014	797,801	811,317	13,516	1.7%
Grand Total	1,410,252	717,322	1,624,372	1,803,215	178,843	11.0%
Funds:						
10 - General	\$1,353,099	\$694,495	\$1,566,175	\$1,743,041	\$176,866	11.3%
20 - Water General	36,898	18,567	19,343	19,728	385	2.0%
30 - Water Standish	1,154	107	1,958	2,039	81	4.1%
51 - WW Cape Elizabeth	1,319	307	2,534	2,637	103	4.1%
53 - WW Cumberland	461	152	1,056	1,099	43	4.1%
54 - WW Falmouth	741	176	1,488	1,549	61	4.1%
57 - WW Portland	8,641	1,750	15,634	16,275	641	4.1%
59 - WW South Portland	3,788	1,074	7,117	7,409	292	4.1%
61 - WW Gorham	1,030	196	2,727	2,838	111	4.1%
62 - WW Westbrook	3,122	499	6,340	6,600	260	4.1%
Grand Total	1,410,252	717,322	1,624,372	1,803,215	178,843	11.0%
Headcount:						
Full-Time	14	14	14	14	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	14	14	14	14	0	0.0%



Administrative Services: Information Services (G1)

Financial Summary:

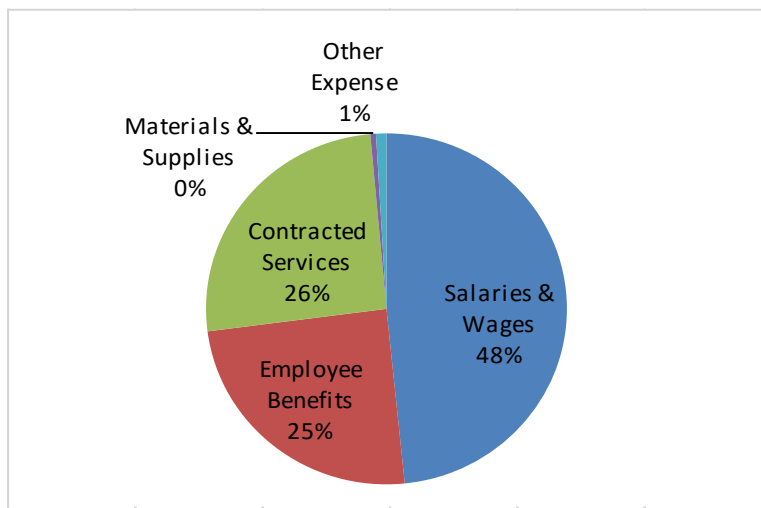
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$531,803	\$262,216	\$589,494	\$610,231	\$20,737	3.5%
Employee Benefits	256,979	129,020	286,000	309,587	23,587	8.2%
Contracted Services	282,428	115,809	240,841	239,341	-1,500	-0.6%
Materials & Supplies	27,770	35,341	29,300	28,800	-500	-1.7%
Other Expense	9,008	1,776	5,225	8,725	3,500	67.0%
Tele/Other Utilities	16,140	2,223	3,264	3,150	-114	-3.5%
Transportation	1,529	337	1,500	1,500	0	0.0%
Grand Total	1,125,658	546,722	1,155,624	1,201,334	45,710	4.0%
Programs:						
96 - Pandemic Costs	\$0	\$40,024	\$0	\$0	\$0	n/a
98 - Training	45,621	10,690	37,147	42,343	5,196	14.0%
99 - Administration	1,080,036	496,008	1,118,477	1,158,991	40,514	3.6%
Grand Total	1,125,658	546,722	1,155,624	1,201,334	45,710	4.0%
Funds:						
10 - General	\$1,125,658	\$546,722	\$1,155,624	\$1,201,334	\$45,710	4.0%
Grand Total	1,125,658	546,722	1,155,624	1,201,334	45,710	4.0%
Headcount:						
Full-Time	7	7	7	7	0	0.0%
Part-Time	0	0	0	0	0	n/a
Total	7	7	7	7	0	0.0%



Administrative Services: Financial Services (H1)

Financial Summary:

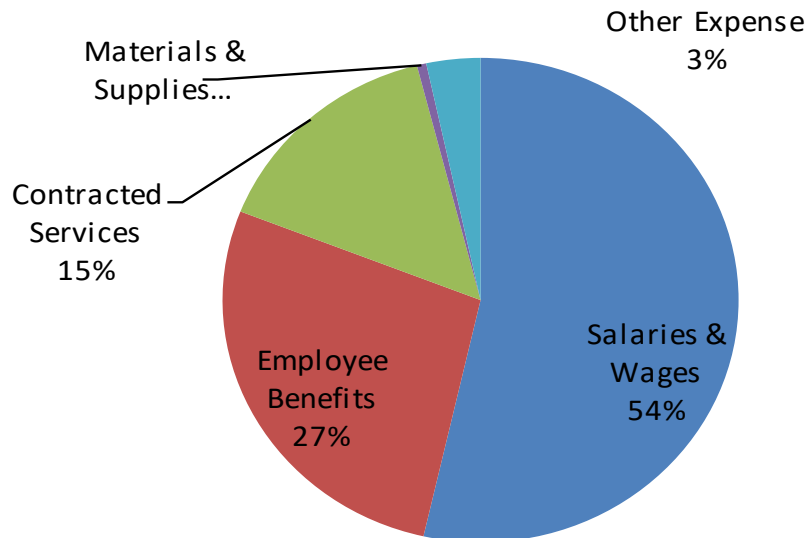
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$448,777	\$219,335	\$446,232	\$459,172	\$12,940	2.9%
Employee Benefits	216,740	107,478	217,099	233,197	16,098	7.4%
Contracted Services	246,347	152,565	243,330	243,140	-190	-0.1%
Materials & Supplies	3,619	3,531	4,988	4,750	-238	-4.8%
Other Expense	4,899	5,053	12,994	8,545	-4,449	-34.2%
Transportation	117	63	275	285	10	3.6%
Grand Total	920,499	488,026	924,918	949,089	24,171	2.6%
Programs:						
77 - Billing	\$159,870	\$74,211	\$181,928	\$180,350	-\$1,578	-0.9%
96 - Pandemic Costs	0	1,750	0	0	0	n/a
98 - Training	11,786	1,235	27,904	29,043	1,139	4.1%
99 - Administration	748,843	410,830	715,086	739,696	24,610	3.4%
Grand Total	920,499	488,026	924,918	949,089	24,171	2.6%
Funds:						
10 - General	\$840,824	\$447,987	\$843,827	\$864,456	\$20,629	2.4%
20 - Water General	79,675	40,039	81,091	84,633	3,542	4.4%
Grand Total	920,499	488,026	924,918	949,089	24,171	2.6%
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: Employee Services (I1)

Financial Summary:

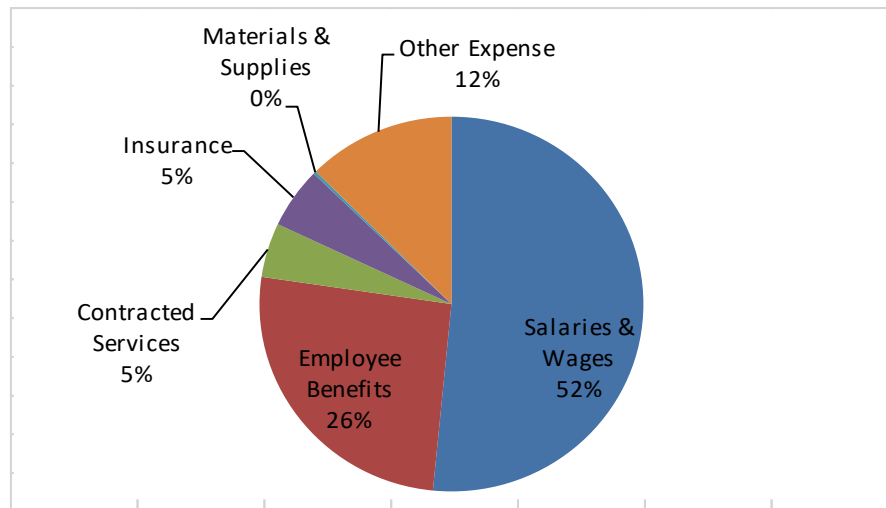
	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$249,807	\$142,817	\$291,642	\$318,136	\$26,494	9.1%
Employee Benefits	119,623	70,323	143,227	162,809	19,582	13.7%
Contracted Services	65,714	22,315	128,000	89,500	-38,500	-30.1%
Materials & Supplies	1,515	4,783	3,200	3,500	300	9.4%
Other Expense	13,639	7,554	19,900	17,500	-2,400	-12.1%
Tele/Other Utilities	2,064	854	2,196	2,000	-196	-8.9%
Transportation	261	115	500	600	100	20.0%
Grand Total	452,622	248,761	588,665	594,045	5,380	0.9%
Programs:						
96 - Pandemic Costs	\$0	\$114	\$0	\$0	\$0	n/a
98 - Training	15,590	8,297	21,481	20,825	-656	-3.1%
99 - Administration	437,032	240,351	567,184	573,220	6,036	1.1%
Grand Total	452,622	248,761	588,665	594,045	5,380	0.9%
Funds:						
10 - General	\$452,622	\$248,761	\$588,665	\$594,045	\$5,380	0.9%
Grand Total	452,622	248,761	588,665	594,045	5,380	0.9%
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: Executive (J1)

Financial Summary:

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Expense Type:						
Salaries & Wages	\$825,304	\$397,600	\$908,859	\$934,215	\$25,356	2.8%
Employee Benefits	385,859	188,798	433,403	467,192	33,789	7.8%
Contracted Services	63,000	16,667	80,400	84,950	4,550	5.7%
Insurance	96,321	43,428	95,724	95,231	-493	-0.5%
Materials & Supplies	7,103	2,526	4,500	4,500	0	0.0%
Other Expense	162,232	41,231	238,070	224,445	-13,625	-5.7%
Tele/Other Utilities	15,130	3,562	8,412	8,514	102	1.2%
Transportation	2,013	334	1,200	1,950	750	62.5%
Grand Total	1,556,961	694,145	1,770,568	1,820,997	50,429	2.8%
Programs:						
5 - Public Relations	145,757	73,721	190,217	183,644	-6,573	-3.5%
96 - Pandemic Costs	0	2,484	0	0	0	n/a
98 - Training	49,965	12,154	76,131	78,593	2,462	3.2%
99 - Administration	1,361,239	605,785	1,504,220	1,558,760	54,540	3.6%
Grand Total	1,556,961	694,145	1,770,568	1,820,997	50,429	2.8%
Funds:						
10 - General	\$1,514,021	\$677,560	\$1,708,768	\$1,766,697	\$57,929	3.4%
20 - Water General	42,036	16,183	61,800	54,300	-7,500	-12.1%
50 - Wastewater General	621	403	0	0	0	n/a
62 - WW Westbrook	283	0	0	0	0	n/a
Grand Total	1,556,961	694,145	1,770,568	1,820,997	50,429	2.8%
Headcount:						
Full-Time	9	10	10	10	0	0.0%
Part-Time	1	0	0	0	0	n/a
Total	10	10	10	10	0	0.0%



Non-Departmental

Non-Department 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 increased due to expected increases in past due accounts because of the economic slowdown associated with the COVID-19 pandemic.

	2019 Actual	2020 Jan-Jun	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Contracted Services						
663599 - MISC OTHER SERVICES	15,724	12,343	0	0	0	n/a
Contracted Services Total	15,724	12,343	0	0	0	n/a
Other Expense						
6670 - BAD DEBT EXPENSE	-7,506	63,750	27,500	50,000	22,500	81.8%
6706 - AMORT OF U P ACQ ADJUSTS	17,000	8,500	17,000	17,000	0	0.0%
Other Expense Total	9,494	72,250	44,500	67,000	22,500	50.6%
Regulatory/Taxes						
670821 - STANDISH REAL ESTATE TAX	50,358	26,655	50,500	55,930	5,430	10.8%
670822 - OTHER R/E TAX(NON-STANDI)	8,411	5,373	8,874	9,060	186	2.1%
670823 - PUC ASSESSMENT	94,327	112,996	90,000	95,000	5,000	5.6%
670824 - ME DRINKING WTR PROGRAM	82,438	82,438	80,275	80,275	0	0.0%
670825 - PUC PUBLIC ADVOCATE	19,551	0	15,000	15,000	0	0.0%
Regulatory/Taxes Total	255,085	227,462	244,649	255,265	10,616	4.3%
Grand Total	280,303	312,055	289,149	322,265	33,116	11.5%

The District pays (670821 – Standish Real Estate Tax) real estate taxes. Real estate charges in other municipalities are paid using account 670822 – Other R/E Tax (Non-Standish).

The District also pays annual assessments to the Maine Public Utility Commission (PUC) and the Maine Drinking Water Program. The PUC assessment has two components – general assessment (670823 – PUC Assessment) and public advocacy (670825 – PUC Public Advocate). The PUC bases the general assessment on the utility’s size and the amount of time the Commission spends in each industry sector. The assessment from the Drinking Water Program (670824 – ME Drinking WTR Program) is based on population served.

Introduction

Total salaries, wages and benefits budget for 2021 is \$18,959,606. This is 4.4% higher than the 2020 budget.

Total Labor & Benefits (O&M and Capital):

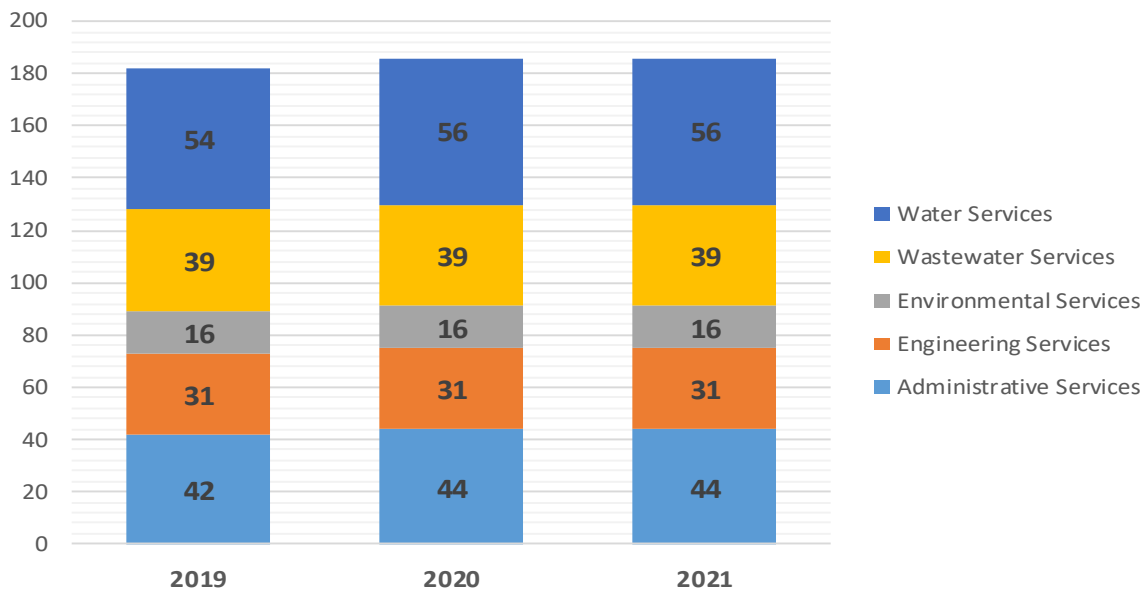
	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Salaries & Wages	\$11,485,951	\$12,536,522	\$12,906,794	\$370,272	3.0%
Employee Benefits	<u>5,242,325</u>	<u>5,631,504</u>	<u>6,052,812</u>	<u>\$421,308</u>	<u>7.5%</u>
Actual	16,728,276	18,168,026	18,959,606	791,580	4.4%

Employees record their labor hours by specific water and wastewater operating funds and capital projects. Benefits are allocated based on the labor dollars to the funds. It is estimated staff will allocate \$556,670 in labor/benefits to capital projects in 2021; which is \$12,951 (2.4%) higher than the 2020 budget.

	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Operations & Maintenance	\$16,390,237	\$17,624,307	\$18,402,906	\$778,599	4.4%
Capital	<u>338,039</u>	<u>543,719</u>	<u>556,670</u>	<u>12,951</u>	<u>2.4%</u>
	16,728,276	18,168,026	18,959,576	791,550	4.4%

Total Employee Positions:

Authorized positions were 182 in 2019. They increased by four (4) to 186 in the 2020 Budget as Water Services and Administrative Services both added two (2) positions. The 2021 Budget was also 186.



Salary Costs

The Budget for total labor costs will increase by 3.0% (\$370,242).

Labor rates for Non-Union employees were assumed to be 2.8% higher than the rates paid on July 1, 2020. The rates for Union employees were based on the current labor agreement which has a 3.0% rate increase scheduled in November 2020. The contract expires at the end of October 2021, so the actual increase impacting the last two months of the 2021 Budget has not been determined.

Overall hours budgeted increased only 0.2% as the headcount remained flat.

Operating labor will increase 3.0% while capital labor will increase 0.9% as the percent of labor dedicated to operations increases slightly from 96.9% to 97.0%.

Total Labor (O&M and Capital) by Type:

	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	\$10,600,242	\$11,468,832	\$11,797,666	\$328,834	2.9%
Overtime	527,833	629,379	641,326	11,947	1.9%
Doubletime	52,229	69,749	73,135	3,386	4.9%
Standby	<u>145,992</u>	<u>163,272</u>	<u>186,757</u>	<u>23,485</u>	<u>14.4%</u>
Premium Time/Standby	726,054	862,400	901,218	38,818	4.5%
Trustee Compensation	23,275	27,000	27,000	0	0.0%
District Employed Temps	123,949	178,290	180,880	2,590	1.5%
Agency Temps	<u>12,431</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>n/a</u>
Temporary Employees	136,380	178,290	180,880	2,590	1.5%
Total Labor Cost	11,485,951	12,536,522	12,906,764	370,242	3.0%

Total Labor Broken Out by O&M and Capital:

	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Operating Expense	\$11,287,519	\$12,149,805	\$12,516,650	\$366,845	3.0%
Capital Expenditures	<u>198,432</u>	<u>386,717</u>	<u>390,114</u>	<u>3,397</u>	<u>0.9%</u>
	11,485,951	12,536,522	12,906,764	370,242	3.0%
Operating Expense	98.3%	96.9%	97.0%		
Capital Expenditures	<u>1.7%</u>	<u>3.1%</u>	<u>3.0%</u>		
	100.0%	100.0%	100.0%		

Labor Hours/Average Pay Rates

Budgeted hours were up 709 hours or 0.2%. Regular hours were up 520 (0.1%) due to a position added in last year's budget that was planned to be filled in Q2 of 2020. In the 2021 Budget, that position is funded for the entire year.

Total Labor (O&M and Capital) Hours by Type:

	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	364,388	385,580	386,100	520	0.1%
Overtime	14,331	16,151	16,026	(125)	-0.8%
Doubletime	1,045	1,307	1,343	36	2.8%
<u>Standby</u>	<u>5,476</u>	<u>6,279</u>	<u>6,372</u>	<u>93</u>	<u>1.5%</u>
Premium Time/Standby	20,852	23,737	23,741	4	0.0%
District Employed Temps	8,826	12,735	12,920	185	1.5%
<u>Agency Temps</u>	<u>622</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>n/a</u>
Temporary Employees	9,448	12,735	12,920	185	1.5%
	394,688	422,052	422,761	709	0.2%

Labor Rates by Type:

On average pay rates were increased 2.8%. Changes to overtime and double-time and varied due to shifts in personnel budgeted to cover those hours. The Standby rate increased by 12.7%, most of that was due to recognition in the budget to the additional dollars paid to employees on stand due to the requirements of the Fair Labor Standards Act. Temporary Employee rates are flat.

	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Regular (Hourly & Salaried)	\$29.09	\$29.74	\$30.56	\$0.81	2.7%
Overtime	36.83	38.97	40.02	1.05	2.7%
Doubletime	49.98	53.37	54.46	1.09	2.0%
<u>Standby</u>	<u>26.66</u>	<u>26.00</u>	<u>29.31</u>	<u>3.31</u>	<u>12.7%</u>
Premium Time/Standby	34.82	36.33	37.96	1.63	4.5%
District Employed Temps	14.04	14.00	14.00	0.00	0.0%
<u>Agency Temps</u>	<u>20.00</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Temporary Employees	13.12	14.00	14.00	0.00	0.0%
	29.10	29.70	30.53	0.83	2.8%

Employee Benefits

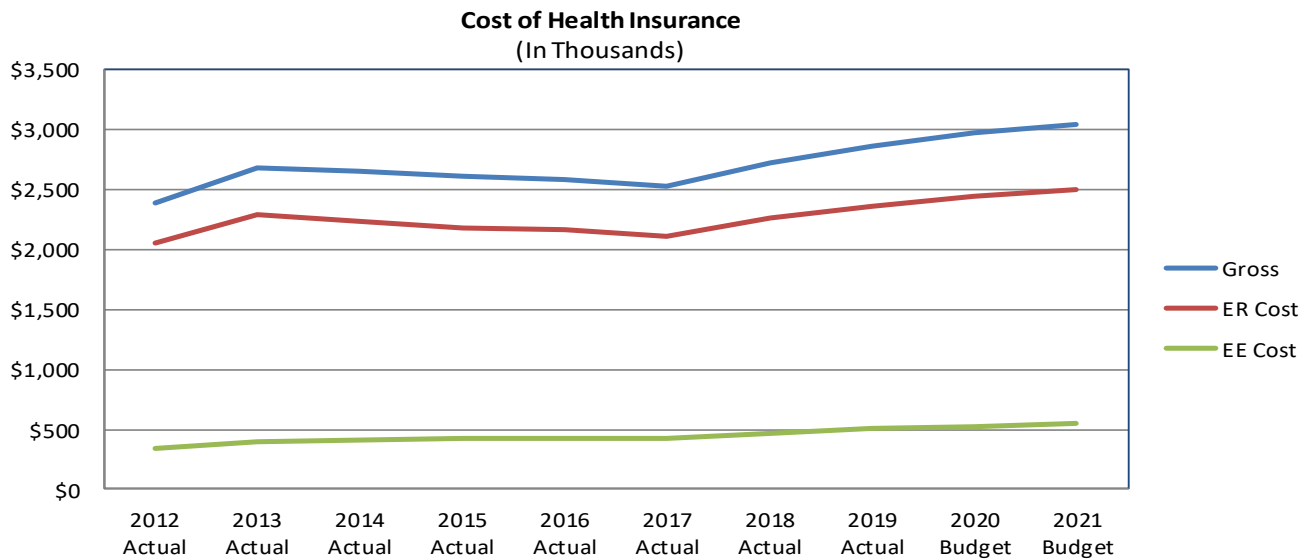
In order to qualify for benefits, employees must work more than 20/24 hours/week (non-union/union). Seasonal or temporary employees are monitored for eligibility as required under Affordable Care Act (ACA), but in general do not qualify for benefits. Benefits are charged to departments as a percentage of the regular non-premium pay. In 2021, the benefits percentage increased from 40.74% to 42.94% as overall benefit costs rose 8.4% and regular wages grew 2.9%.

Health Insurance

Based on recent claims experience for the health plan, the District was able to lower the renewal rate to 2.75% for calendar year 2021. The overall cost increased by \$80,220 (2.7%).

The 2021 Budget assumed the District would pay 91% of an employee’s health insurance premiums and 70% of the premiums for dependents. Total employee contributions to health insurance in 2021 are budgeted to be \$550,380.

The number of employees opting out of health insurance increased in the 2021 Budget and weekly amount of this opt out increased from \$30/week to just over \$59/week per the last Union contract. Overall, the cost of the opt-out (payout) increased \$18,850 (125.7%) in the 2021 Budget.



The District makes health insurance coverage available to regular employees who work over 20 hours per week (24 hours per week for Union employees). The medical cost for part-time employees is prorated based on hours worked. Employees who are insured outside the District receive an amount equal to 30% of the premium cost for single employee coverage under the HMO plan. For the 2021 Budget that amount was \$59.18/week.

Year	Insured	Non-Insured	Total
2020	173	7	180
<u>2021</u>	<u>169</u>	<u>11</u>	<u>180</u>
Change	-4	+4	0

Employee Benefits (continued)

Pension

Pension related expenses are \$1,975,538 in the 2021 Budget. The District offers employees a defined benefit plan and a deferred compensation plan.

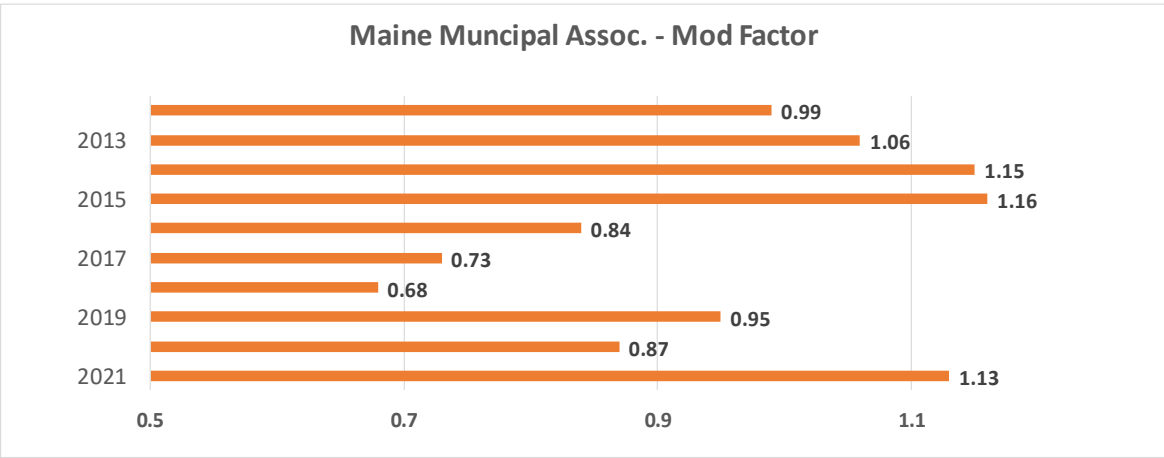
The defined benefit plan’s contributions in the 2021 Budget increased 27.1% (\$303,651) to \$1,424,313. This contribution is consistent with the Board adopted long-term funding policy and represents the amount calculated by the District’s actuary in 2020. The contribution increase is primarily due to a reduction in the value of plan assets due to changes in the market. The plan is solely funded by the District without any employee contributions.

In addition, the deferred compensation plan for Union employees hired prior to 2011, and Non-Union employees hired prior to 2012, fully matches employee contributions up to \$1,225 annually. The 2021 Budget is \$94,325, this is a \$17,675 (15.8%) reduction due to employee turnover.

New Union employees hired during or after 2011, and Non-Union employees hired during or after 2012, are enrolled in the deferred compensation plan only. The plan requires employees to contribute 3.0% of their pay, which the District matches at a rate of 150%. Since Q2 2016, the District matches up to 4.5% of their pay, with employee contributions above 3% remaining voluntary. The expense for the match is budgeted at \$400,000 for 2021, an increase of \$50,000 (14.3%).

Workers Compensation

The District participates in the Maine Municipal Association’s workers’ compensation program. The premium assessed is based on amount of wages and a claim experience factor. The 2020 mod rate declined to 0.87 in 2020, but we had a serious injury that resulted in significant lost time. This claim has been in the process of mediation, but has affected our mod rate, which will rise to 1.13 in 2021. The 2021 Budget is \$237,000 with a deductible cost of \$9,000 resulting in a total budget of \$246,000.



Other Benefits

Other benefits, which include dental, uniforms, unemployment, long-term disability, life insurance and a contingency for higher benefit costs total \$313,231.

Employee Benefits (continued)

	2019 Actual	2020 Budget	2021 Budget	Budget Diff \$	Budget Diff %
Health Insurance:					
6604041 - HEALTH INSURANCE-EMPLOYEE	\$2,858,309	\$2,966,990	\$3,047,210	80,220	2.7%
66040419 - HEALTH INSUR - EE CONTRIB	(504,822)	(527,802)	(550,380)	(22,578)	4.3%
6604043 - MEDICAL INSURANCE PAYOUT	13,961	15,000	33,850	18,850	125.7%
	2,367,448	2,454,188	2,530,680	76,492	3.1%
Pension:					
66040611 - PEN EXP - DEFINED BENEFIT	17,995	44,500	21,900	(22,600)	-50.8%
66040612 - PEN EXP - DEFER COMP 457	24,828	25,000	25,000	-	0.0%
6604062 - PENSION CONTRIBUTION	1,112,774	1,120,662	1,424,313	303,651	27.1%
6604063 - DEF COMP 457 MATCH - NEW	320,178	350,000	400,000	50,000	14.3%
6604064 - DEF COMP 457 MATCH - OLD	105,248	112,000	94,325	(17,675)	-15.8%
6604065 - PENSION LEGAL EXPENSE	-	10,000	10,000	-	0.0%
	1,581,023	1,662,162	1,975,538	313,376	18.9%
Workers Compensation:					
660409 - WORKERS' COMPENSATION	208,139	230,000	237,000	7,000	3.0%
6604091 - WORKES COMP DEDUCTABLE	16,524	9,000	9,000	-	0.0%
	224,663	239,000	246,000	7,000	2.9%
Other Benefits:					
66025 - BENEFITS CONTINGENCY	-	50,000	50,000	-	0.0%
660402 - LONG-TERM DISABILITY	28,066	30,000	28,000	(2,000)	-6.7%
660403 - LIFE INSURANCE	19,983	25,000	23,000	(2,000)	-8.0%
660407 - EDUCATION SUBSIDY	4,219	11,000	11,000	-	0.0%
660408 - PROGRAMS ADMINISTRATION	7,039	15,000	17,000	2,000	13.3%
660410 - UNEMPLOYMENT COMPENSATION	959	20,000	20,000	-	0.0%
660413 - PWD TRAINING PROGRAM	-	5,000	5,000	-	0.0%
6604151 - FIELD UNIFORMS	38,601	36,000	38,000	2,000	5.6%
6604152 - OFFICE CLOTHING	8,168	7,200	7,200	-	0.0%
660416 - DENTAL COVERAGE	56,276	65,000	65,000	-	0.0%
660417 - WELLNESS PROGRAM	1,125	2,500	2,500	-	0.0%
660419 - EMPLOYEE BENEFITS-MISC OTH	36,509	35,770	35,775	5	0.0%
660420 - WORKFORCE PLANNING	-	1,000	-	(1,000)	n/a
660422 - ACTUARY NON-PENSION	-	2,500	2,500	-	0.0%
663592 - RECRUITING SERVICES	-	10,000	7,000	(3,000)	-30.0%
663598 - HR CONSULTANT SERVICES	1,350	-	-	-	n/a
66595 - INDENTTTY FRAUD INSURANCE	1,086	1,142	1,256	114	10.0%
	203,381	317,112	313,231	(3,881)	-1.2%
Total Employee Benefits	4,376,515	4,672,462	5,065,449	392,987	8.4%
660401 - FICA - EMPLOYERS' SHARE	865,810	959,042	987,363	28,321	3.0%
Total Costs	5,242,325	5,631,504	6,052,812	421,308	7.5%
Total Regular Labor (Benefits Basis)	10,600,242	11,468,832	11,797,666	328,834	2.9%
Benefit Rate	41.29%	40.74%	42.94%	2.2%	5.4%
Total Rate (with FICA of 7.65%)	48.94%	48.39%	50.59%	2.2%	4.5%

Note: The total employee benefits expense above (\$6,052,812) does not include \$92,895 in employee benefits charged directly to departments. With these costs, the District's benefits cost is \$6,145,07.

Authorized Headcount

The overall headcount was unchanged at 186.

Customer Service (CS) reclassified their AMR Special position to a CS Coordinator Control Center. That change was an upgrade from Union Pay Range D to E.

Information Services (IS) made two (2) reclassifications:

- Business Systems Analyst – GIS to Business Systems Analyst – GIS Senior
- Business Intelligence & Reporting Analyst to a Business Systems Analyst Senior
- Business Systems Analyst to Network Administrator II

All position remained in Non-Union Pay Range 2.

	2019 Budget	2020 Budget	2021 Budget	Change
Water Services				
A1 - Water Administration	5	5	5	0
A2 - Wtr Transmission/Distrib	22	24	24	0
A3 - Water Treatment	11	11	11	0
A6 - Water Utility Services	<u>16</u>	<u>16</u>	<u>16</u>	<u>0</u>
	54	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	9	9	0
L6 - Water/WW Laboratory	<u>7</u>	<u>7</u>	<u>7</u>	<u>0</u>
	16	16	16	0
Engineering Services				
C1 - Facilities Services	10	10	10	0
E2 - Asset Engineering	18	18	18	0
E7 - Instrumentation	<u>3</u>	<u>3</u>	<u>3</u>	<u>0</u>
	31	31	31	0
Administration				
F1 - Customer Service	14	14	14	0
G1 - Information Services	7	8	8	0
H1 - Financial Services	8	8	8	0
I1 - Employee Services	3	4	4	0
J1 - BOT & Senior Management	<u>10</u>	<u>10</u>	<u>10</u>	<u>0</u>
	42	44	44	0
	182	186	186	0

Non-Union Positions

The overall Non-Union headcount remained at 62. The table below shows the requested Non-Union positions by pay range. The pay ranges are effective 01/01/19. The Job Class Code (JCC) is in parentheses:

<u>Range 1 (\$40,000 to \$60,000)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>Range 4 (\$71,400 to \$107,000)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Executive Admin Asst (5010)	1	1	0	Customer Service Manager (9006)	1	1	0
General Accounting Asst (5028)	<u>1</u>	<u>1</u>	<u>0</u>	Director of Financial Serv (9008)	1	1	0
	2	2	0	Dist Sys Manager - Water (9014)	1	1	0
				Eng/Asset Mgmt Srv Mngr (9031)	1	1	0
<u>Range 2 (\$51,000 to \$76,400)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	Environmental Srv Manager (9020)	1	1	0
Asset Analyst (9043)	0	0	0	Information Svcs Manager (9010)	1	1	0
BSA - GIS (5022)	1	0	-1	Senior Project Engineer (9045)	3	3	0
Business Intelligence & Reporting Analylst	1	0	-1	Project Manager - Admin (9047)	<u>1</u>	<u>1</u>	<u>0</u>
Business Systems Analyst (9501)	1	0	-1		10	10	0
Chief of Security Oper (1069)	1	1	0				
Associate Engineer (5023)	3	3	0	<u>Range 5 (\$80,000 to \$120,000)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Environmental Educ Coord (5017)	1	1	0	Director of Opr Svcs (9011)	2	2	0
ES Const Safety/Training (5004)	1	1	0	Exec Director of EE Svcs (9007)	<u>1</u>	<u>1</u>	<u>0</u>
ES Consult Employment/Comp/Benefits (5003)	1	1	0		3	3	0
Employee Service Consultant (5036)	1	1	0				
Financial Analyst (5020)	2	2	0	<u>Range 6 (\$90,000 to \$134,800)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Industrial Pretreatment Program Supv (5035)	1	1	0	Corporate Counsel (9035)	1	1	0
Network Admin I (9503)	1	1	0	Exec Director of Admin (9004)	1	1	0
Network Admin II (9044)	1	2	1	Exec Director of AMAP (9005)	<u>1</u>	<u>1</u>	<u>0</u>
Purchasing Agent/Buyer (5005)	1	1	0		3	3	0
Right of Way Agent (5014)	1	1	0				
Scheduler/Coord AMAP (5032)	1	1	0	<u>Range 7 (\$108,400 to \$162,400)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Scheduler/Coordinator Ops (5033)	1	1	0	General Manager (9018)	1	1	0
Source Protection Coord (5018)	<u>1</u>	<u>1</u>	<u>0</u>				
	21	19	-2	<u>Workforce Management</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
				Position (9600)	3	3	0
<u>Range 3 (\$59,500 to \$89,300)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>				
Facility Manager (5019)	1	1	0	Full Time Positions	61	61	0
Asset MGMT Program Manager (9049)	1	1	0	Part Time Positions	<u>1</u>	<u>1</u>	<u>0</u>
BSA - GIS Senior (9505)	0	1	1	Total Non-Union Positions:	62	62	0
Business Systems Analyst Senior (9504)	0	1	1				
Cust Srv Program Manager (9502)	1	1	0				
Database Administrator (9027)	1	1	0				
Network Admin III (9026)	1	1	0				
WW Maintenance Manager Planner Scheduler (9048)	1	1	0				
Project Engineer (9030)	3	3	0				
Public Relations Manager (PT) (9025)	1	1	0				
Regulatory & Security Advisor (9028)	1	1	0				
Transm Dist Supervisor (5011)	2	2	0				
Utility Asset Coord AMAP (9038)	1	1	0				
Utility Asset Coord Water (9039)	1	1	0				
Utility Specialist Suprv (9023)	1	1	0				
Wtr Svcs Plnt/Sys Chief Op (9002)	1	1	0				
WW Chief Operator - Systems (9050)	1	1	0				
WW Chief Operator - Plant (9042)	<u>1</u>	<u>1</u>	<u>0</u>				
	19	21	2				

Union Positions

For the 2021 Budget, the Union headcount was unchanged at 124. One SCADA Technician 1 position was upgraded to a SCADA Technician III. The table below shows the requested Union positions by pay grade. The rates shown are effective starting 11/02/20 and will be in effect until 11/01/21. The Job Class Code (JCC) is in parentheses:

<u>Paygrade - D (\$19.80/\$20.84)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>Paygrade - I (\$26.45/\$27.84)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
AMR Specialist (1577)	1	0	-1	SCADA Technician 1 (1038)	2	1	-1
Laboratory Assistant II (1092)	<u>0</u>	<u>0</u>	<u>0</u>	Senior WW Operator (1055)	5	5	0
	1	0	-1	Utility Specialist (1085)	13	13	0
				Wtr Treat Plant Sys Oper (1051)	7	7	0
				WW System Maint/Operator (1082)	<u>3</u>	<u>3</u>	<u>0</u>
					30	29	-1
<u>Paygrade - E (\$20.96/\$22.06)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>Paygrade - J (\$28.09/\$29.57)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Admin Asst Finance II (1094)	3	3	0	Environmental Scientist (1022)	3	3	0
Administrative Asst WW (1083)	1	1	0	Facility Maint Foreperson (1565)	0	0	0
Environmental Educator (5029)	1	1	0	Tech Maint Pers Mech/Elec (1073)	5	5	0
Laboratory Assistant II (1092)	<u>1</u>	<u>1</u>	<u>0</u>	Tech Maint Person SLWTF (1070)	1	1	0
	6	6	0	Water Resource Specialist (1021)	<u>4</u>	<u>4</u>	<u>0</u>
				(1 of 4 is part-time)	13	13	0
<u>Paygrade - F (\$22.20/\$23.37)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>Paygrade - K (\$29.71/\$31.27)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Cust Serv Coord Ctrl Ctr (1008)	3	4	1	Dist System Foreperson (1557)	5	5	0
Facility Maint Technician (1086)	3	3	0	Environ Scien Lead Fore (1573)	1	1	0
Facility Supp Generalist (1091)	1	1	0	Facility Maint Foreperson (1565)	1	1	0
Technical Admin Asst (1522)	2	2	0	Garage Foreperson (1528)	1	1	0
Wastewater Operator (1006)	3	3	0	Operations Foreman, Sys (1090)	1	1	0
Water System Operator (1005)	<u>13</u>	<u>13</u>	<u>0</u>	Operations Foreperson (1053)	3	3	0
	25	26	1	Ops Foreman, WW System (1093)	1	1	0
				SCADA Technician III (1098)	0	1	1
				Utility Foreperson (1095)	<u>1</u>	<u>1</u>	<u>0</u>
					14	15	1
<u>Paygrade - G (\$23.54/\$24.78)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>Paygrade - L (\$31.55/\$33.21)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
Collections Coordinator (1028)	1	1	0	SCADA Tech Foreperson (1537)	1	1	0
Cust Serv Coordinator (1017)	4	4	0	Tech Maint Foreperson (1569)	<u>2</u>	<u>2</u>	<u>0</u>
Engineering Tech (1020)	1	1	0		3	3	0
Equip Operator (1023)	5	5	0				
Fleet Maintenance Tech (1029)	1	1	0	Full Time Positions	123	123	0
Millwright I (1049)	1	1	0	Part Time Positions	<u>1</u>	<u>1</u>	<u>0</u>
WW Maintenance Operator (1059)	<u>10</u>	<u>10</u>	<u>0</u>	Total Union Positions	124	124	0
	23	23	0				
<u>Paygrade - H (\$24.98/\$26.29)</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>				
Asset Mgmt Technician (1575)	4	4	0				
Cust Serv Coordinator (1017)	3	3	0				
Collection Sys Maint Oper (1576)	1	1	0				
Inv Control Leadperson (1564)	<u>1</u>	<u>1</u>	<u>0</u>				
	9	9	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 Affordable Care Act. All other positions are classified as “seasonal” employees who also are not offered benefits, but do have their hours tracked to monitor for benefits eligibility. The position totals are listed as full time equivalents (FTE’s). Temporary employees hired via outside agencies are also included below.

Water Operations	2019	2020	2021	Change '20 to 21
A1 - Water Administration	0.00	0.35	0.35	0.00
A2 - Transmission/Distribution	0.40	0.00	0.00	0.00
A3 - Water Treatment	0.00	0.00	0.00	0.00
A6 - Utility Services	<u>1.97</u>	<u>1.96</u>	<u>1.96</u>	<u>0.00</u>
	2.37	2.31	2.31	0.00
<u>Wastewater Operations</u>				
B1 - Wastewater Administration	0.00	0.00	0.00	0.00
B3 - Portland/Cape/Peaks WWTP's	0.19	0.18	0.18	0.00
L9 - Water / WW Systems	<u>0.10</u>	<u>0.17</u>	<u>0.17</u>	<u>0.00</u>
	0.29	0.35	0.35	0.00
<u>Environmental Services</u>				
A5 - Environmental Services	1.82	1.81	1.90	0.09
L6 - Water / WW Laboratory	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	1.82	1.81	1.90	0.09
<u>Engineering Services</u>				
C1 - Facility Services Administration	0.50	0.50	0.50	0.00
E2 - Planning & Design	1.00	0.92	0.92	0.00
E3 - New Mains & Construction	0.00	0.00	0.00	0.00
E7 - Instrumentation	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	1.50	1.42	1.42	0.00
<u>Administration Department</u>				
F1 - Customer Service	0.00	0.23	0.23	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	0.02	0.00	0.00	0.00
J1 - Executive Office	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	0.02	0.23	0.23	0.00
	6.00	6.12	6.21	0.09

Temporary & Non-Benefit Employees (continued)

Temporary Positions Detail:

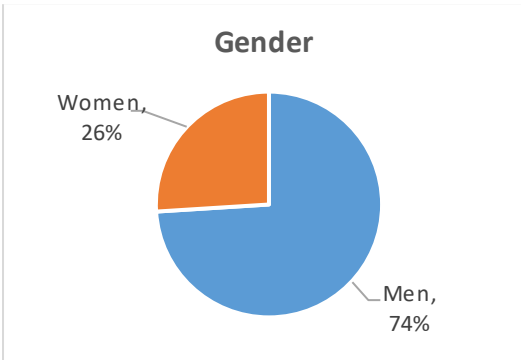
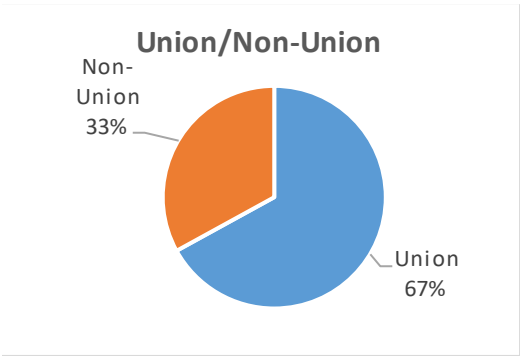
District Paid (Account 660131):

Org	Job Class	ACA Type	#EE	Hrs/Wk	# Wks	Hours
A1	Water Operations Intern	U	1.5	40	12	720
A5	Lake Security	V	6	12	20	1,440
	Lake Security	V	2	18	25	900
	Lake Security	V	1	10	46	460
	Environmental Educator	T	1	20	26	520
	Watershed Protection Specialist	S	1	40	16	640
A6	Water Operation Temp	S	4	40	25.5	4,080
B3/L9	Wastewater Operations Intern	U	1.5	40	12	720
C1	Facility Maintenance Technician	T	1	20	52	1,040
E2	Engineering Intern	U	4	40	12	1,920
F1	Customer Service Temp	U	1	40	12	480
			24			

Affordable Care Act (ACA) Types:

- S – Seasonal (cannot work more than 26 weeks)
- T – Temp EE (cannot exceed 30 hours in a single week)
- U – Under 90 Days (maximum of 12 weeks)
- V – Variable (average hours cannot exceed 30 hours/week)

Headcount - All Regular Employees



Work Force Management

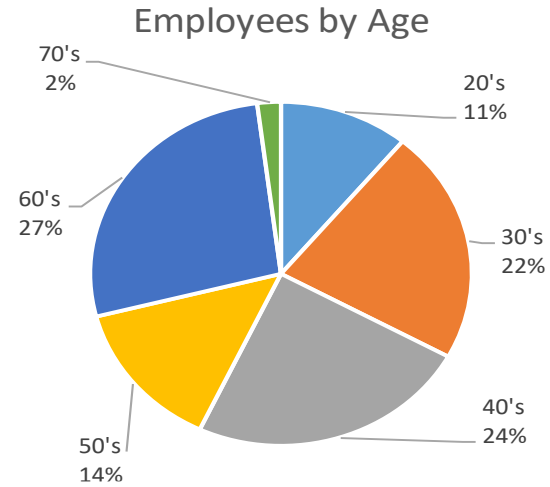
In 2021, five (5) employees will reach age 65, the normal retirement age. That would bring the total of current employees, at or above 65, to 16.

Management has been proactively managing the challenges of baby boomer retirements and the development of promoted personnel and unseasoned new hires.

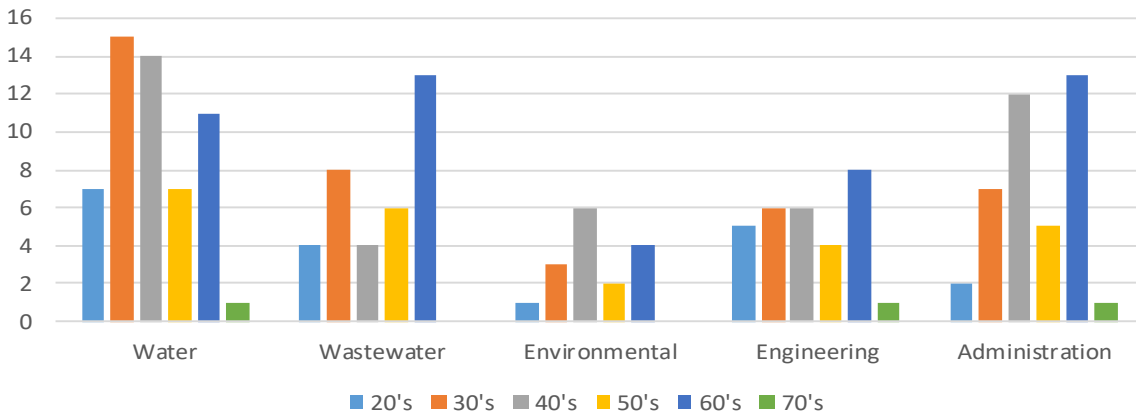
The Wastewater Department has implemented an Apprentice Program to help educate new hires to the breadth of knowledge needed to operate our facilities, as well as to get exposure to other areas of PWD operations. Documentation, such as procedures for operating the rotary press, has further supported knowledge transfer.

The Water Department's apprentice program has been satisfying its labor needs. It has served to launch capable Water System Operators into the more advanced Utility System and Water Treatment System Operator roles. The next challenge is preparing employees for the highest technical roles, and foreperson or supervisory role.

Generally speaking, the Administration Department is well positioned with existing personnel.



Age by Department



Average Length of Service (years)

Water	Wastewater	Environmental	Engineering	Administration	All Depts
12.9	15.4	15.6	16.0	11.7	13.9

Work Force Management (continued)

Employee Development

The District actively promotes skill development by encouraging participation in local, regional and national organizations, and on the job training. Also, a goal of an average of 80 hours of training per employee per year has been established.

Managing Today

To address work force management issues, the District requires all employees' performance be evaluated yearly with an action plan to assist with continuous development. Pay adjustments for non-union employees are based on performance. Non-Union Compensation policy requires that a market survey be conducted every two years to assure we are competitively compensating employees. The non-union market survey was conducted in 2020 with results implemented January 2021.

Travel Budget

The Board of Trustees approves an annual budget for out-of-state and overnight business travel. The General Manager specifically approves these travel requests. The total costs may not exceed the District's total budget without the Board's authorization.

Department	2020 Budget	2021 Budget	Change
Water Services	\$11,500	\$9,000	-\$2,500
Wastewater Services	10,950	10,950	0
Environmental Services	6,600	0	-6,600
Engineering Services	9,600	8,100	-1,500
Administration	<u>20,500</u>	<u>23,500</u>	<u>3,000</u>
	<u>\$59,150</u>	<u>\$51,550</u>	<u>-\$7,600</u>

Training Budget

Employee development is comprised of the annual budget for all in-state and out-of-state training events. Employee development costs include the travel budget listed above.

Department	2020 Budget	2021 Budget	Change
Water Services	\$284,103	\$300,104	\$16,001
Wastewater Services	190,135	198,895	8,760
Environmental Services	69,941	150,935	80,994
Engineering Services	157,163	66,744	-90,419
Administration	<u>326,634</u>	<u>342,708</u>	<u>16,074</u>
	<u>\$1,027,976</u>	<u>\$1,059,386</u>	<u>\$31,410</u>
Operating Expense Budget	\$31,253,832	\$32,511,482	
Percentage of O&M Budget	3.3%	3.3%	

Work Force Management (continued)

Environment and Tools

Organizational development and improvement is an on-going process. Management continues to evaluate areas that require additional focus as business needs and demands evolve, and as laws or rules governing our practices change. Many of these focus areas require cross-functional involvement including alignment to ensure understanding, practical and consistent application and communication of changes.

Management continues to utilize department monthly meetings to keep employees up to date on Board activities and decisions, significant capital improvement projects, business challenges and changes, and updates of organizational practices and policies.

SharePoint will continue to evolve in 2021 as our forum of daily information sharing, and document management across PWD. Developing and implementing a common methodology for cataloging documents to improve knowledge retrieval/sharing, and reducing document redundancy are significant areas of growth this year, ultimately involving every employee.

An organization's total compensation package is a key factor in establishing our competitive posture in the employment market, and employee satisfaction. A detail market review of the non-union salaries will be completed in 2020. As with most organizations, we continue to monitor our health care plan and explore ways to promote employees to live a healthy life style.

Employee Satisfaction Survey

A survey of employees on the work climate is conducted every other year and was done late 2019. The survey used the same redesigned format devised in 2017 by Market Decisions Research. The results were analyzed and shared with employees and the Board for further clarification. On the following page, the key findings of the survey are identified and appropriate actions steps have been taken or included in our 2021 work plans.

Employee Satisfaction Survey (continued)

2019 Suggestions for Change

Leadership

Team oriented
 Knowledgeable
 Accountable
 Consistent application of policies

Pay and Benefits

More competitive pay
 More and flexible time off
 Keep Health Plan the same
 Options for Union employees in the Retirement Plan:
 more contribution to the Defined Benefit Plan/move to another plan

Culture

Recognition
 Incentives
 Encourage training and advancement
 Improve skills
 GM to continue to engage employees and make changes

Summary of Highest and Lowest Scores

- 90- 96% Working Safely at PWD
- 89% Keep the same Health Plan
- 84% Know what is expected at work
- 79% The GM has a positive impact
- 78% PWD provides excellent customer service
- 77% Supervisors exhibit leadership
- 32% Policies are applied consistently
- 33% SMT is transparent in decision making
- 34% Those who go above and beyond are rewarded
- 39% Pay is competitive
- 45% The mission of PWD makes them feel that their job is important

Employee Satisfaction Survey (continued)

The results were shared with all employees at their departmental meetings where further comments were received to better understand the results (see prior page for some of the results shared with all employees). Additionally, the results were presented and discussed by the Board's Administration and Finance Committee. A summary was also included in the company Spigot newsletter – see below.

2019 Employee Satisfaction Survey

By Mary Demers

The results of the 2019 Employee Satisfaction Survey are available on Sharepoint, under the Employee Services page there is an icon on your right. You will find a wealth of information, and as I compare the results with the 2017 and the 2015 survey results, some things are new and others repeat themselves. Please review the details of the report, and if anything stands out that I may have missed, please let me know.

What we most like at PWD

Employees say year in and year out that what they most like at Portland Water District is their co-workers. This is high praise indeed! That is something that cannot be taken for granted, and should be celebrated.

While in 2015 and 2017 employees said that their work gives them a sense of accomplishment, in the most recent survey, this was replaced with employees saying that their benefit plans and the opportunities to learn and grow are what they like the best.

In 2015 employees said that supervisors treat them well. In 2017, the mission of PWD was next on the list and in 2019, the environment of PWD: being encouraged, knowing what is expected at work and being able to perform work safely.

Suggestions for Change

In this category, 1) pay remains at the top of the list for all three comparative years, 2) New in 2019 is Rewarding Employees, 3) Next is

policies and management communication

High and Low Scores

Some of our highest scores were given to co-workers for their commitment to doing quality work, the General Manager for having a positive impact, PWD providing opportunities to learn and grow, and for receiving recognition in the last week for doing good work. Safety is still ranked very high. Employees continue to say that we provide good customer service and employees are happy with their benefit plans, particularly the health plan.

From our low scores, it is clear that we need to find ways of rewarding employees who go above and beyond. While pay, performance evaluations, and policies (and consistently applying them) may need work, it is important to mention that we have and are making strides in these areas. Through our work with compensation consultants we periodically check to ensure that PWD pay is competitive with similar organizations. The annual union performance evaluations were reviewed and streamlined. For new employees, three and six month probationary evaluations have been introduced to assist with communication early in an employee's career at PWD, and non-union evaluations have been revised and the new forms will be used this year. Policies are being worked on, and in some cases

they are combined and collapsed so that it will be easier and lend to more consistency. When possible, we are moving procedures to separate documents for clarity. So, we may need work in these areas, but I am glad to report that it has begun and it will continue.

In Summary

In general, the number of employees who participated in 2019 is down approximately 10%, although the demographics closely resemble our current demographics for age, gender and years of service.

While overall rankings are similar to 2017, there is some downward shifting in positive rankings, particularly amongst union participants, older participants, and those with the most years of service.

The biggest promoters of PWD tend to be non-union, between the ages of 18-34 and those with less than five years of services. Even taking all of this information into consideration, it is interesting to note that using the Gallup Poll questions, PWD remains more engaged than the general U.S. population.

While this is a lot of information to analyze and understand, we should take this time to give a big thank you to everyone who took the time to respond to the 2019 Employee Satisfaction Survey. Your opinions do count. We are and will continue to listen to you! Thank you for your participation.

PORTLAND WATER DISTRICT PROFESSIONAL REPRESENTATION IN 2020

Employees participate in the following associations.

Association of Metropolitan Water Agencies

Board of Directors

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, Past President

Maine GIS User Group

Board of Directors

Maine Inland Fisheries and Wildlife

Sebago Lake Fisheries Focus Group

Maine Sustainability & Water Conference

Planning Committee

Maine Water Environment Association

Government Affairs Committee

Laboratory Committee

Personal Advancement Committee

Convention Committee

Pretreatment Committee

Maine Water Utilities Association

Board of Directors

Public Awareness Committee

Scholarship Fund

Utilities Finance Officer Group

National Association of Clean Water Agencies

Blending Workgroup

National Drinking Water Advisory Council

Chair

New England Chapter - North American Lake

Management Society

Board of Directors

New England Water Environment Association

CSO/Wet Weather Committee

Government Affairs Committee

Laboratory Committee

Laboratory Certification Subcommittee

Laboratory Practices Committee

Operations Challenge Committee

Workforce Development

New England Water Works Association

Board of Directors

Customer Service Committee

Finance Management Committee

Diversity Committee

Management Development Committee

Emergency Preparedness Committee

NEWWA Water WORKS Committee for

Student Outreach

Sebago Clean Waters

Communications Committee

Governance and Steering Committees

Southern Maine Children's Water Festival

Organizing Committee

Southern Maine Conservation Collaborative

Advisory Board

Southern Maine Regional Water Council

Board of Directors

University of Maine Cooperative Extension

Master Gardener

Utilities United Against Scams

Committee

Water Research Foundation

Board of Directors


Employee Recognition and Events



2019 General Manager's Award awarded to Terry Colpitts

Each year the General Manager recognizes an employee's outstanding efforts and inspiring contributions.

Terry Colpitts was recognized for his innovative and creative thinking, leading to quick implementation of solutions during emergency incidents. His efforts have contributed to swiftly restoring operations to protect public health and the environment.



2019
 Laboratory: Jim Galasyn, Pete Rush, Susan Jasper, Chris Kelley, Alana Dougherty
 Tech Maintenance : Terry Colpitts, Steven Mclellan
2020 : February
 Engineering: Brigitte Parady

Service Awards

Unfortunately, due to Covid-19, we were unable to hold our annual service award luncheon for employees achieving milestone anniversaries of between 5 and 40 years of service at the District in 2019. Carrie has reached out to each employee via onsite or a department virtual meeting to thank each and every one of the employees for their contribution and years of service to PWD. PWD recognized eighteen employees who have a combined total of 360 years of service at PWD!

5 Years of Service

George Grabler
Christopher Kelley
Laura King
Bud Philbrick
Tyler Semple

10 Years of Service

Erik Bergman
Steve Bodlovick

15 Years of Service

Tad Berube

20 Years of Service

Paul Hunt
Walter Meuse
Craig Reynolds

30 Years of Service

Eric Hyland
Michael Koza
Steve Lagasse

35 Years of Service

Bill Johnson
Bill McCloskey

40 Years of Service

Art Galli
Bill Flagg

Staying fit amidst a pandemic



The weekend of June 20 and 21 PWDers joined people from across the nation to support clean water education in Southern Maine by competing in the Virtual Urban Runoff 5k. Due to the spread of COVID-19 and the current mandates and restrictions, the annual race organized by Cumberland County Soil and Conservation District was converted to a virtual race at the course of the participant's choice. Participants were encouraged to share photos through social media and competed for prize entries for most scenic photo, storm water photo, etc.

"I ran the Virtual Urban Runoff as an "out-and-back" on the Eastern Trail in Scarborough on a hot Saturday morning. Starting from Black Point Rd., the trail courses through the woods before opening up into the Scarborough marsh where the sun reflects of the pools of brackish water and there is little relief from the hot sun. As I made it to the half-way point and turned around to head back, the forest was like a beacon in the distance- dark, shady and cool," said Laurel Jackson.



Road Rover 5K

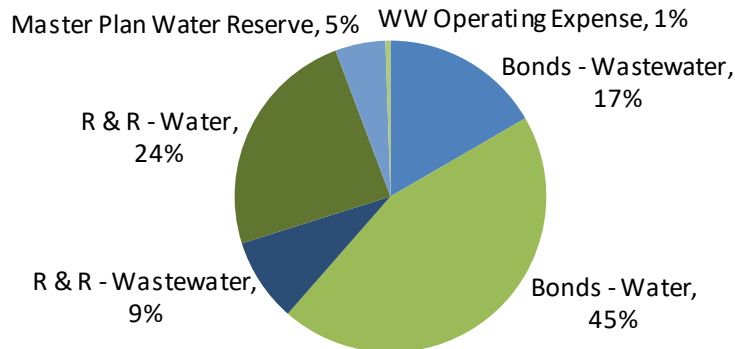
Melissa Parrott-Semple, Andy Smith-Petersen, Helen Newman and Deena Sawyer ran the Irish Road Rover 5k over last month in the Old Port on Team Portland Water District. Way to go team!



Introduction

Capital expenditures are financed either from withdrawals from the Renewal and Replacement fund (R&R fund) established for each enterprise fund or through the issuance of a bond. In some instances they may be funded through Operating Expense or other reserves. The financing option for each project is noted when the Board authorizes the project. A summary of the planned 2021 capital financing options (source of funds) are noted in the chart below. The funds will be used to fund \$10.67 million in water projects and \$3.82 million in wastewater projects.

Financing Summary



Annual Fund Operating Budget

The annual budget includes the impact of issuing \$9.39 million of debt and \$4.60 million in contributions to the renewal and replacement funds. All the funds are below the Board target maximum debt service. The projects financed have minimal impact to the operating expense budget, except the debt service impact. Most of the projects address aging assets so related maintenance costs of those assets will be lower.

Transportation renewal & replacement contributions are allocated to funds and departments through an hourly rate and are included in the transportation - internal line item.

	2020 Budget	2021 Budget	\$ Change
Debt Service Principal, Interest & Related Expense	10,195,431	10,689,438	\$494,007
Debt Service - Meters Allocated	469,140	484,585	15,445
Lease Expenses	13,981	16,019	2,038
Debt Service - Watershed Protection	39,791	33,763	(6,028)
Annual Debt Service	10,718,343	11,223,805	505,462
Renewal & Replacement - Water - General	2,800,000	1,964,000	(836,000)
Renewal & Replacement - Wastewater	1,677,349	1,280,849	(396,500)
Renewal & Replacement - Multi-Fund Assets	1,050,000	960,000	(90,000)
Renewal & Replacement - Funds	5,527,349	4,204,849	(1,322,500)
Renewal and Replacement - Transportation	400,000	400,000	-
Annual Renewal and Replacement Contributions	5,927,349	4,604,849	(1,322,500)
Total Capital / Finance	16,645,692	15,828,654	(817,038)

Bond Financing

Overview

The District typically finances larger capital projects by issuing revenue bonds for a term of the asset's useful life or 20 years, whichever is shorter. Since most of the District's assets have a useful life in excess of 20 years, the typical bond term is 20 years. A financial analysis is conducted before issuing the bond to determine the optimal bond term. The District's charter authorizes the District, through its trustees and without vote of its inhabitants, to issue bonds to pay for the costs of capital outlays incurred in connection with acquiring, renovating or constructing water and wastewater assets.

Water bonds are secured by the revenues of customers' water rates and charges. In the event of a bond payment default, the District has the power to assess its member municipalities to provide funds to cure the default. Such assessments would be allocated based upon the municipalities' respective state valuation.

Wastewater bonds are secured by the District's sewer assessment revenue. In the event of a bond payment default, the municipalities served would be responsible for the debt service related to assets serving that municipality. The annual sewer assessment once certified to the municipality by the District is an obligation of the municipality on *parity* with the municipality's general obligation debt and entitled to the full faith and credit of the municipality.

Water Capital Reserve Bond

The 2021 Budget includes issuing a \$2 million, **10-Year** bond to finance the replacement of aging water mains. In 2013, a law (35-A M.R.S. §§ 6107-A) was enacted allowing utilities to create a capital reserve to pay for infrastructure improvements, including debt service costs, and allows the reserve to be funded by designating a portion of the utility's revenue. The 2021 budget assumes that 1% of the proposed December 1, 2020 3.4% rate adjustment will be used to fund the reserve and will pay for the debt service of the proposed \$2 million bond. The tentative plan is to issue a \$2 million bond each of the 10 years starting in 2014, which will be funded by raising water rates an additional 1% each year.

Bond Options

The District issues bonds either directly to the market or through the Maine Municipal Bond Bank (MMBB). For larger projects, typically greater than \$10 million, the District considers issuing directly to the market. For smaller projects, the most cost effective option is to issue through MMBB.

MMBB has three different programs – General Bond, Drinking Water SRF (State Revolving Fund) and Clean Water SRF programs. General Bond issues are done twice a year at tax-exempt market rates. The SRF programs have a more flexible closing date and typically result in an interest rate 2% less than market. For qualifying projects, part of the principal may be forgiven. Projects financed through the SRF are competitively awarded by the State of Maine's Department of Human Services (water projects) or Department of Environmental Protection (wastewater projects). Those projects need to comply with certain procurement standards.

Bond Financing (continued)

The current water bond ratings by Moody's and Standard & Poor's ratings are Aa3 and AA, respectively. Moody's bond ratings range from AAA (highest quality) to C (lowest quality) and apply a number qualifier (1-high, 2-mid and 3-low) for each letter range. Standard & Poor's top four bond ratings (AAA, AA, A and BBB) generally are regarded as eligible for bank investment (AAA is highest rating). The latest rating for both was in July 2020. Moody's noted the District's deregulation from the Maine Public Utilities Commission. Additionally, the District's sizable and wealthy service area, as well as its strong liquidity and sound debt service coverage supported by annual rate increases were factors. In addition to the items Moody noted, S&P noted the District's sound system operations with virtually unlimited water supply and good financial flexibility due to the affordability of the water rates. Moody's noted the weak legal security as a challenge. The weak legal security references that the District has to be in default before evoking the municipalities' 'double barrel' general taxes cure.

Maine Municipal Bond Bank

The Maine Municipal Bond Bank was created in 1972 by the Maine State Legislature. The agency has an immense history of providing Maine's cities, towns, school systems, water and sewer districts, and other governmental entities access to low cost capital funds through the sale of its highly rated tax-exempt bonds. Established as an independent agency, the Bond Bank is administered by a board of commissioners appointed by the Governor. The Bond Bank works closely with its municipal clientele to provide unique, cost effective and competitive financing programs.

GENERAL RESOLUTION PROGRAM

For municipalities, schools districts, water districts, sewer districts and other local governments requesting loan financing through the General Resolution program. Under this tax-exempt bond financing program, the proposed debt will be paid from a General Resolution pledge of the municipality or municipalities. [Click here to learn more about the approval and financing process of this program.](#)

CLEAN WATER SRF PROGRAM

Created in 1987 by the Clean Water Act, the Maine Municipal Bond Bank serves as financial manager of the Clean Water State Revolving Loan Fund in cooperation with the Maine Department of Environmental Protection. [Click here to learn more about the approval and financing process of this program.](#)

DRINKING WATER SRF PROGRAM

Created by the Safe Drinking Water Act of 1996, the Maine Municipal Bond Bank serves as the financial manager of the Drinking Water State Revolving Loan Fund in cooperation with the Maine Department of Human Services. [Click here to learn more about the approval and financing of this program.](#)

Bond Financing (continued)

Bond Limits

The District has no legal limits of debt. A board-approved policy establishes a target maximum level of debt service to 35% of total fund budget and minimum debt service ratio of 1.25. The table indicates the status and projected status. The projected status is based on the projection included at the end of the Revenue section and includes bond financed capital projects as noted in the 5-year capital plan in the Capital Expenditures section. Preliminary work on a new system for Windham in the North Windham is underway. Once the decision is made to construct the facility adjustments will be made to bring their ratio to the level needed.

The Gorham & Windham funds exceed the debt service target due to a 2009 project requested by both municipalities. The project connected the Little Falls area to the Westbrook Regional Treatment Facility. Additionally the Windham's ratio is impacted by the proposed new North Windham treatment plant and a Depot Street pump station upgrade. Also, the \$12M upgrade at the Westbrook Regional Wastewater Treatment facility is planned. This resulted in Gorham's and Windham's debt service ratio to exceed 35% in 2022.

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

Funds	2018	2019	2020	2021	2022	2023	2024
Water	21%	22%	23%	24%	25%	26%	27%
Wastewater							
Cape Elizabeth	15%	15%	17%	17%	21%	22%	22%
Cumberland	33%	34%	31%	30%	31%	30%	30%
Gorham	31%	34%	32%	31%	36%	39%	41%
Portland	21%	20%	19%	20%	20%	21%	21%
Westbrook	17%	19%	21%	21%	24%	27%	30%
Windham	35%	38%	35%	34%	47%	49%	68%

Debt Service Ratio – Target: Greater or Equal to 1.25

Funds	2018	2019	2020	2021	2022	2023	2024
Water	1.82	1.51	1.57	1.41	1.42	1.44	1.45
Wastewater							
Cape Elizabeth	1.65	1.50	1.53	1.51	1.40	1.40	1.41
Cumberland	1.03	1.19	1.28	1.28	1.26	1.25	1.26
Gorham	1.12	1.25	1.30	1.32	1.26	1.23	1.20
Portland	1.50	1.36	1.53	1.33	1.44	1.41	1.40
Westbrook	1.81	1.67	1.56	1.52	1.41	1.35	1.30
Windham	0.96	1.19	1.29	1.28	1.16	1.15	1.06

Water & Wastewater Funds Debt Service

Long-Term Debt Principal & Interest

The District has \$8,649,227 and \$2,246,709 of principal and interest payments in 2021. Of the total, \$8,157,001 and \$2,184,205 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 (principal of \$450,063 and interest of \$56,493) based on relative benefit received by each fund. Lease expense, which is based on the present value of future lease payments, was budgeted for \$16,019 in 2021. Principal and interest related to Watershed Protection debt service totals are \$33,763.

Administrative Fees

Maine Municipal Bond Bank (MMBB) bonds issued under the Drinking Water State Revolving Fund (DWSRF) for Water and the State Revolving Fund (SRF) 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 2021 are budgeted at \$203,185.

Debt Issuance Expense

The Water and Wastewater funds incur costs for issuance of the permanent financing. Prior to 2014 governments were allowed to carry the cost of these issuances on their balance sheets and write off the expense over the life of the debt. A change in accounting rules now requires that all issuance costs be recognized in the year of debt issuance. That cost in 2021 is estimated to be \$177,400.

Premiums & Deferred Outflow

The District has received premiums on bonds issued directly to the market. These premiums are recognized over the life of the bonds as a reduction in interest expense. In addition, a bond refunding was done in 2016 that resulted in a deferred outflow being added to the District's balance sheet. That outflow is being amortized over the remaining life of those bonds as an addition to interest expense. The net impact of these items on the 2021 Budget is a reduction of debt service expense of \$343,825.

Contracted Debt Service, Intra-Fund Note & Lease Expense

The Cumberland Wastewater Fund contracts with the Town of Falmouth for the use of treatment and wastewater pump stations. Contracted Debt Service expense are payments made by Cumberland to reimburse Falmouth for debt issued to support the services provided, that cost in 2021 is \$286,890. The Windham Intra-fund note payable to Westbrook is for Windham's portion of a one-time buy-in of 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 2021 principal (\$13,240) and interest expense (\$4,219) totaling \$17,459 are budgeted for 2021.

Water & Wastewater Funds Debt Service (continued)

Summary of Debt Service

	Principal	Interest	MMBB & DEP Admin Fees	Debt Issuance Expense	Premiums, Deferred Outflow	Contracted & Notes	Debt Service Total
Direct Charges							
Water Fund:							
Water General Assets	3,247,340	1,158,993	51,364	80,500	(308,316)	-	4,229,881
Water Capital Reserve	<u>1,355,500</u>	<u>423,485</u>	<u>-</u>	<u>24,000</u>	<u>-</u>	<u>-</u>	<u>1,802,985</u>
Sub-Total Water	4,602,840	1,582,478	51,364	104,500	(308,316)	-	6,032,866
Wastewater:							
Cape Elizabeth	235,500	50,563	10,912	2,600	-	-	299,575
Cumberland	6,250	525	339	-	-	286,890	294,004
Falmouth	238,000	38,207	13,814	-	-	-	290,021
Gorham	303,655	44,137	14,604	4,312	-	-	366,708
Portland	2,199,908	346,874	86,956	53,300	(13,538)	-	2,673,500
Westbrook	468,689	107,049	18,596	9,324	-	(13,240)	590,418
Windham	<u>102,159</u>	<u>14,372</u>	<u>4,992</u>	<u>3,364</u>	<u>-</u>	<u>17,459</u>	<u>142,346</u>
Sub-Total Wastewater	3,554,161	601,727	150,213	72,900	(13,538)	291,109	4,656,572
Total Direct	8,157,001	2,184,205	201,577	177,400	(321,854)	291,109	10,689,438
Meters							
Water Fund	275,131	34,090	-	-	(12,992)	-	296,229
Wastewater:							
Cape Elizabeth	11,357	1,504	-	-	(631)	-	12,230
Cumberland	5,646	736	-	-	(300)	-	6,082
Falmouth	-	-	-	-	-	-	-
Gorham	8,850	1,149	-	-	(469)	-	9,530
Portland	84,989	10,849	-	-	(4,323)	-	91,515
Westbrook	21,579	2,763	-	-	(1,112)	-	23,230
Windham	<u>556</u>	<u>69</u>	<u>-</u>	<u>-</u>	<u>(26)</u>	<u>-</u>	<u>599</u>
Sub-Total Wastewater	132,977	17,070	-	-	(6,861)	-	143,186
Contracted Services:							
Scarborough	4,791	594	-	-	(227)	-	5,158
South Portland	<u>37,164</u>	<u>4,739</u>	<u>-</u>	<u>-</u>	<u>(1,891)</u>	<u>-</u>	<u>40,012</u>
Sub-Total Contracted	41,955	5,333	-	-	(2,118)	-	45,170
Total Meters Allocated	450,063	56,493	-	-	(21,971)	-	484,585
Leases							
Water Fund	8,906	277	-	-	-	-	9,183
Cape Elizabeth WW	<u>3,757</u>	<u>3,079</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>6,836</u>
Total Leases	12,663	3,356	-	-	-	-	16,019
Total Water/WW Funds	8,619,727	2,244,054	201,577	177,400	(343,825)	291,109	11,190,042
Watershed Protection	29,500	2,655	1,608	-	-	-	33,763
Total Debt Service	8,649,227	2,246,709	203,185	177,400	(343,825)	291,109	11,223,805

Debt Service Summary

The debt service expense for each fund consists of three parts:

Direct Debt Service – These charges are related to assets belonging to the specific fund such as treatment plants, pump stations, mains, etc.

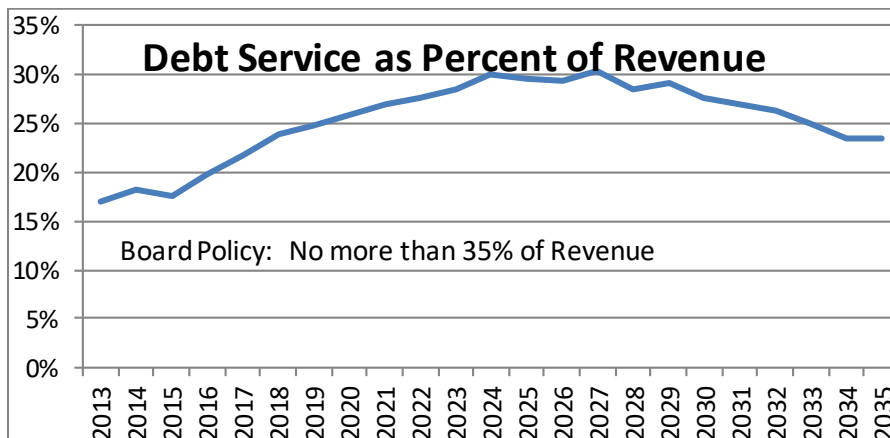
Meter (Allocated) Debt Service – Meters are an asset of the Water fund but are used to calculate both water and wastewater bills. The debt related to meters is allocated to each fund based on number and size of the meters in each municipality.

Lease Expense – This recognizes the costs of leased property/equipment under GASB 87. Under this rule, the District calculates present value of the future lease payments and recognizes each year's portion of the cost, including interest.

	Direct	Meters (Alloc)	Lease Expense	Total
Water Fund	6,032,866	296,229	9,183	6,338,278
Wastewater:				
Cape Elizabeth	299,575	12,229	6,836	318,640
Cumberland	294,004	6,117	-	300,121
Falmouth	290,021	-	-	290,021
Gorham	366,708	9,545	-	376,253
Portland	2,673,500	91,566	-	2,765,066
Westbrook	590,418	23,174	-	613,592
<u>Windham</u>	<u>142,346</u>	<u>596</u>	<u>-</u>	<u>142,942</u>
Sub-Total Wastewater	4,656,572	143,227	6,836	4,806,635
Contracted Services:				
Scarborough	-	5,158	-	5,158
<u>South Portland</u>	<u>-</u>	<u>39,971</u>	<u>-</u>	<u>39,971</u>
Sub-Total Contracted	-	45,129	-	45,129
Total Water/WW Funds	10,689,438	484,585	16,019	11,190,042
Watershed Protection	33,763	-	-	33,763
	<u>10,723,201</u>	<u>484,585</u>	<u>16,019</u>	<u>11,223,805</u>

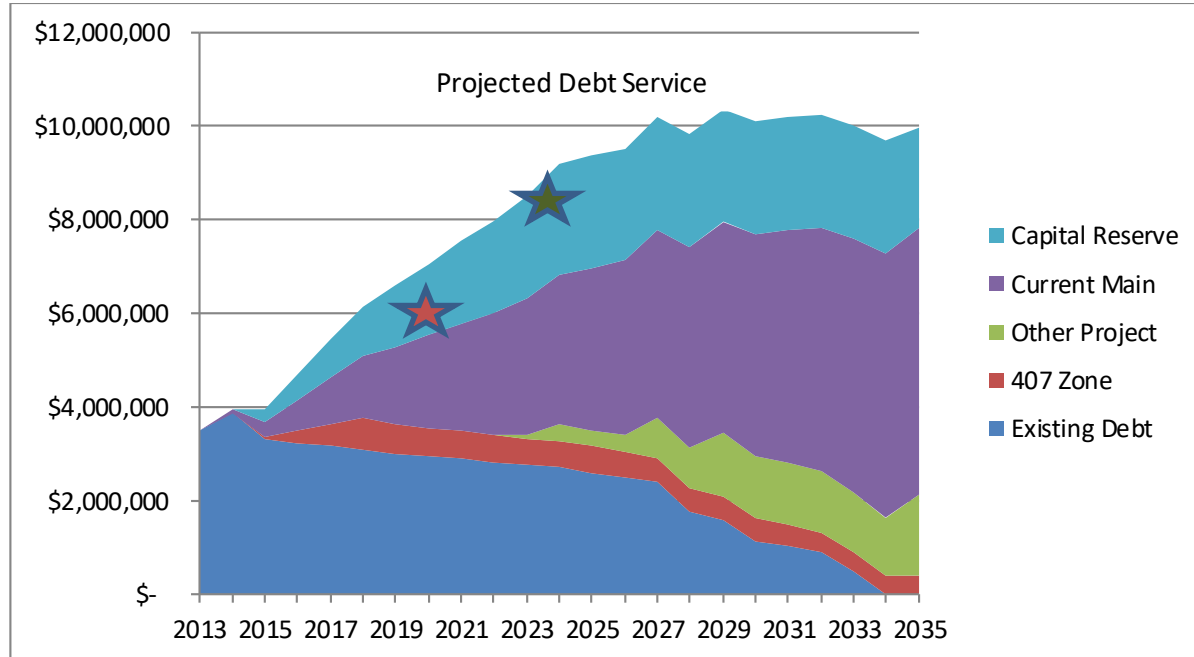
Long-Term Water Fund Target

The long-term water fund target was established in 2013. The projected 2022-2024 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 upgrade 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.

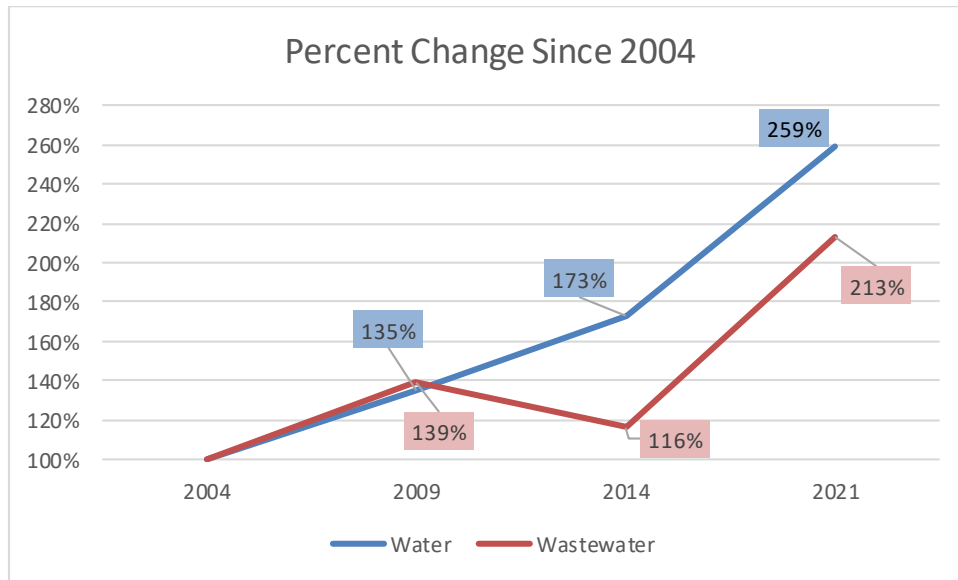


★ The 2021 Budget requests \$6.3 million of debt service, below the long-term plan

★ The updated multi-year projection indicates debt service payments will be \$8.0 million in 2024, \$1,200,000 below 2024 target.

Outstanding Debt by Fund Trends

The proposed 2021 budget results in outstanding debt increasing by 259% and 213% higher than 2004 for the water and wastewater funds, respectively. 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. Investments in water main renewal, water 407 zone and water and wastewater treatment plants & pump stations are driving the more recent increase.



Outstanding Debt By Fund

	2004	2009	2014	2021
Water	\$ 22,940,000	\$ 30,950,023	\$ 39,645,214	\$ 59,349,455
WW- Cape Elizabeth	\$ 839,000	\$ 159,250	\$ 2,276,000	\$ 4,421,700
WW- Cumberland	\$ 147,600	\$ 130,850	\$ 75,000	\$ 31,250
WW- Falmouth	\$ -	\$ -	\$ -	\$ 3,608,000
WW- Gorham	\$ 590,081	\$ 5,552,894	\$ 4,042,816	\$ 3,704,860
WW- Portland	\$ 19,914,857	\$ 19,263,106	\$ 15,517,561	\$ 27,363,762
WW- Westbrook	\$ 1,792,859	\$ 5,325,885	\$ 3,645,084	\$ 8,122,690
WW- Windham	\$ 37,736	\$ 1,925,071	\$ 1,414,740	\$ 2,464,184
Total	\$ 46,262,133	\$ 63,307,079	\$ 66,616,415	\$ 109,065,901

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.

2020 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2021 budget.

Issue Date	Bond ID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	2021 Interest Exp	MMBB/DEP Admin Fee	Issue Cost	PUC Docket#
Existing Debt Water General LTD												
10/27/2005	WTR05-02	General Assets	2025	3.9000% - 5.0000%	\$900,000	\$225,000	\$45,000	\$180,000	\$4,826			2005-488
10/26/2006	WTR06-01	General Assets	2026	3.0000% - 3.0000%	\$1,500,000	\$450,000	\$75,000	\$375,000	\$7,642			2006-510
10/30/2008	WTR08-01	General Assets	2028	5.5750% - 5.5750%	\$1,500,000	\$600,000	\$75,000	\$525,000	\$29,589			2008-360
04/01/2009	WTR09-01	General Assets (407 Zone)	2028	1.0500% - 1.0500%	\$1,598,500	\$639,400	\$79,925	\$559,475	\$6,574	\$4,332		2008-360 AMENDED
08/28/2009	WTR09-04	General Assets (ARRA)	2029	0.0000% - 0.0000%	\$2,991,066	\$1,345,980	\$149,553	\$1,196,426	\$0	\$7,478		2009-128
08/28/2009	WTR09-05	General Assets (ARRA)	2029	0.0000% - 0.0000%	\$163,953	\$73,779	\$8,198	\$65,581	\$0	\$410		2009-128
05/27/2010	WTR10-02	General Assets (RZEDB)	2030	5.1730% - 5.7460%	\$400,000	\$250,000	\$25,000	\$225,000	\$7,477			2010-62
11/01/2010	WTR10-03	General Assets (DWSRF)	2030	1.0000% - 1.0000%	\$902,500	\$451,250	\$45,125	\$406,125	\$4,437	\$2,482		2010-62
10/27/2011	WTR11-01	General Assets	2031	0.5000% - 5.5000%	\$2,300,000	\$1,265,000	\$115,000	\$1,150,000	\$27,570			2011-266
05/01/2012	WTR12-03	Ozone UV Design & Forest Ave (DWSRF)	2032	1.0000% - 1.0000%	\$1,130,000	\$678,000	\$56,500	\$621,500	\$6,403	\$3,150		2011-266
10/25/2012	WTR12-01	General Assets	2032	2.2100% - 3.7060%	\$2,000,000	\$1,200,000	\$100,000	\$1,100,000	\$36,430			2012-357
05/01/2013	WTR13-01	Ozone-UV Construction Phase 1 (DWSRF)	2032	1.0000% - 1.0000%	\$2,850,000	\$1,800,000	\$150,000	\$1,650,000	\$17,750	\$8,400		2011-266
05/23/2013	WTR13-04	General Assets	2033	2.0400% - 3.7000%	\$1,428,000	\$928,200	\$71,400	\$856,800	\$28,397			2013-00167
11/04/2013	WTR13-06	Ozone-UV Construction Phase 2	2034	3.0000% - 4.2500%	\$8,000,000	\$5,600,000	\$400,000	\$5,200,000	\$223,333			2011-266
11/15/2013	WTR13-05	General Assets (DWSRF)	2033	1.0700% - 1.0700%	\$1,072,000	\$696,800	\$53,600	\$643,200	\$7,360	\$3,053		2013-00167
06/30/2014	WTR14-01	General Assets	2034	3.0000% - 3.5000%	\$2,541,000	\$1,760,000	\$130,000	\$1,630,000	\$44,237			2014-00093
05/14/2015	WTR15-01	General Assets (DWSRF) Scott Dyer Rd	2034	0.1500% - 0.1500%	\$459,000	\$322,742	\$22,829	\$299,913	\$473	\$1,166		2014-38
06/25/2015	WTR15-04	General Assets - Water Main Renewal	2035	3.0000% - 3.2500%	\$3,230,000	\$2,405,000	\$165,000	\$2,240,000	\$73,325			2015-00051
06/25/2015	WTR15-05	General Assets - Ozone Destruct	2035	3.0000% - 3.2500%	\$500,000	\$375,000	\$25,000	\$350,000	\$11,438			2015-00051
12/04/2015	WTR15-06	Water Main Renewal - Gray Road	2035	1.0000% - 1.0000%	\$270,000	\$202,500	\$13,500	\$189,000	\$1,991	\$776		2015-00051
06/20/2016	WT16-04	General Assets - Water Main Renewal	2036	3.0000% - 4.0000%	\$385,000	\$305,000	\$20,000	\$285,000	\$10,300			
06/20/2016	WT16-06	407 Zone Design	2036	3.0000% - 4.0000%	\$1,830,000	\$1,450,000	\$95,000	\$1,355,000	\$49,325			
06/20/2016	WTR16-09	General Assets 2007 Refi	2027	3.0000% - 4.0000%	\$3,034,938	\$2,009,000	\$339,938	\$1,669,063	\$65,216			
09/28/2016	WTR16-10	General Assets - Thornton Heights Phase 3	2036	1.0000% - 1.0000%	\$1,128,979	\$945,258	\$54,772	\$890,486	\$9,224	\$3,211		
09/28/2016	WTR16-11	General Assets Westbrook St DWSRF	2036	1.0000% - 1.0000%	\$566,362	\$461,922	\$26,765	\$435,157	\$4,463	\$1,563		
07/18/2017	WTR17-05	General Assets - Water Main Renewal	2037	3.0000% - 5.0000%	\$3,725,000	\$3,162,500	\$187,500	\$2,975,000	\$106,875			
03/02/2018	WTR18-01	Ward's Hill PS (407 Zone Improvement) SRF	2037	1.0000% - 1.0000%	\$1,900,000	\$1,695,528	\$99,736	\$1,595,792	\$16,789	\$5,835		
08/01/2018	WTR18-04	Asset, Billing, Customer Relations System	2028	5.0000% - 5.0000%	\$1,000,000	\$800,000	\$100,000	\$700,000	\$39,167			
08/01/2018	WTR18-05	General Assets - Water Main Renewal	2038	3.0000% - 5.0000%	\$900,000	\$810,000	\$45,000	\$765,000	\$31,688			
11/30/2018	WTR18-08	Pleasantdale/Broadway Main Renewal SRF	2038	1.0000% - 1.0000%	\$3,000,000	\$2,700,000	\$150,000	\$2,550,000	\$26,750	\$8,850		
08/01/2019	WTR19-02	General Assets - Water Main Renewal	2039	2.0000% - 5.0000%	\$4,500,000	\$4,275,000	\$225,000	\$4,050,000	\$160,125			
07/30/2020	WTR20-03	General Assets - Water Main Renewals	2040	2.0000% - 5.0000%	\$1,745,000	\$1,745,000	\$87,000	\$1,658,000	\$70,555			
Total Existing Debt Water General LTD						\$41,627,858	\$3,236,340	\$38,391,518	\$1,129,728	\$50,704		
Proposed Water General LTD												
11/01/2020	WT_Preble_1	Preble Street Water Main	2040	1.0000% - 1.0000%	\$220,000	\$220,000	\$11,000	\$209,000	\$2,182	\$660		
11/01/2021	WT_MackMain_1	Mackworth Water Main	2041	1.5000% - 1.5000%	\$2,100,000	\$0	\$0	\$2,100,000	\$5,250		\$24,000	
11/01/2021	WT_WinTank_1	Windham Tank Design	2041	1.5000% - 1.5000%	\$400,000	\$0	\$0	\$400,000	\$1,000		\$5,000	
11/01/2021	WT_Wtr407_1	407 Zone Water Main	2041	1.5000% - 1.5000%	\$1,000,000	\$0	\$0	\$1,000,000	\$2,500		\$11,500	
11/01/2021	WT_WtrMains21_1	Various Water Mains	2041	2.7500% - 2.7500%	\$4,000,000	\$0	\$0	\$4,000,000	\$18,333		\$40,000	
Total Proposed Debt Water General LTD						\$220,000	\$11,000	\$7,709,000	\$29,265	\$660	\$80,500	
Total Existing and Proposed Debt Water General LTD						\$41,847,858	\$3,247,340	\$46,100,518	\$1,158,993	\$51,364	\$80,500	
Existing Debt Water Capital Reserv												
06/30/2014	WTR14-02	Water Assets - Capital Reserve	2024	3.0000% - 3.0000%	\$2,000,000	\$800,000	\$200,000	\$600,000	\$34,819			2014-00093

Water Funds Long-Term Debt (continued)

Long-Term Debt Detail (continued)

The table below is a list of all outstanding water fund bonds. Significant amounts of debt will be paid off in the current year and will mitigate the debt service of the new bonds scheduled to be issued.

2020 bond issues may appear in the proposed section if the target issue date is after the publication date of

2021 budget.

Issue Date	Bond ID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	2021 Interest Exp	MMBB/DEP Admin Fee	Issue Cost	PUC Docket#
06/25/2015	WTR15-03	Water Assets - Capital Reserve	2025	3.0000% - 3.0000%	\$2,000,000	\$1,000,000	\$200,000	\$800,000	\$29,000			2015-00051
06/20/2016	WT16-05	Water Assets - Capital Reserve	2026	3.0000% - 4.0000%	\$1,830,000	\$1,090,000	\$185,000	\$905,000	\$35,375			
07/18/2017	WTR17-06	Water Assets - Capital Reserve	2027	3.0000% - 5.0000%	\$1,875,000	\$1,312,500	\$187,500	\$1,125,000	\$49,063			
08/01/2018	WTR18-06	Water Assets - Capital Reserve	2028	5.0000% - 5.0000%	\$2,000,000	\$1,600,000	\$200,000	\$1,400,000	\$78,333			
08/01/2019	WTR19-03	Water Assets - Capital Reserve	2029	2.0000% - 5.0000%	\$2,000,000	\$1,800,000	\$200,000	\$1,600,000	\$82,333			
07/30/2020	WTR20-04	Water Assets - Capital Reserve	2030	5.0000% - 5.0000%	\$1,830,000	\$1,830,000	\$183,000	\$1,647,000	\$105,394			
Total Existing Debt Water Capital Reserve						\$9,432,500	\$1,355,500	\$8,077,000	\$414,318			
Proposed Water Capital Reserve												
11/01/2021	WT_WtrCap21_1	Water Mains Capital Reserve	2031	2.7500% - 2.7500%	\$2,000,000	\$0	\$0	\$2,000,000	\$9,167		\$24,000	
Total Proposed Debt Water Capital Reserve						\$0	\$0	\$2,000,000	\$9,167	\$0	\$24,000	
Total Existing and Proposed Debt Water Capital Reserve						\$9,432,500	\$1,355,500	\$10,077,000	\$423,484	\$0	\$24,000	
Existing Debt Meters Allocated												
05/28/2009	WTR09-02	Meters	2029	2.0800% - 5.5800%	\$4,519,800	\$2,033,910	\$225,990	\$1,807,920	\$14,804			2006-403
05/28/2009	WTR09-03	Sub-Meters	2029	2.0800% - 5.5800%	\$180,200	\$81,090	\$9,010	\$72,080	\$430			2006-403
06/20/2016	WTR16-07	Meters 2007 Refi	2027	3.0000% - 4.0000%	\$1,734,250	\$1,148,000	\$194,250	\$953,750	\$37,266			
06/20/2016	WTR16-08	Submeters 2007 Refi	2027	3.0000% - 4.0000%	\$185,813	\$123,000	\$20,813	\$102,188	\$3,993			
Total Existing Debt Meters Allocated						\$3,386,000	\$450,063	\$2,935,938	\$56,494			
Existing Debt Transportation Allocate												
01/31/2020	WTR20-01	Tiger Hill Conservation Easement SRF	2029	1.0000% - 1.0000%	\$295,000	\$265,500	\$29,500	\$236,000	\$2,630	\$1,608		
Total Existing Debt Transportation Allocate						\$265,500	\$29,500	\$236,000	\$2,630	\$1,608		
Total Existing and Proposed Water Debt						\$54,931,858	\$5,082,403	\$59,349,455	\$1,641,601	\$52,972	\$104,500	

Wastewater Funds Long-Term Debt

Long-Term Debt Detail

The tables below contain a list of all outstanding debt for Cape Elizabeth, Cumberland, Falmouth, Gorham and Portland wastewater funds. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2020 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2021 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	Accrued 2021 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Existing Debt Cape Elizabeth													
10/30/2008	WW08-03	Cape - Generators	2028	5.5750% - 5.5750%	\$95,000	\$38,000	\$4,750	\$33,250	\$1,874	\$0	\$1,874		
12/16/2011	WW11-01	CESO Treatment / Spurwink (SRF)	2031	1.0000% - 1.0000%	\$2,430,000	\$1,336,500	\$121,500	\$1,215,000	\$13,163	\$0	\$13,163	\$6,743	
10/25/2012	WW12-03	Cape Ottawa Rd CSO Studies / Treatment	2032	2.2100% - 3.7060%	\$160,000	\$96,000	\$8,000	\$88,000	\$2,914	\$0	\$2,914		
05/28/2015	WW15-02	Wastewater CE Garden Lane	2035	2.1900% - 3.8900%	\$240,000	\$180,000	\$12,000	\$168,000	\$5,792	\$0	\$5,792		
05/25/2017	WW17-03	Cape Elizabeth WW Projects	2037	1.7800% - 3.9180%	\$315,000	\$267,750	\$15,750	\$252,000	\$8,174	\$0	\$8,174		
11/02/2017	WW17-07	CE Wildwood PS Upgrade	2037	1.6700% - 4.0650%	\$72,000	\$61,200	\$3,600	\$57,600	\$1,815	\$0	\$1,815		
06/03/2019	WW19-01	Cape Elizabeth UV Treatment Upgrades SRF	2039	1.0000% - 1.0000%	\$875,000	\$831,250	\$43,750	\$787,500	\$8,240	\$0	\$8,240	\$2,603	
05/08/2020	WW20-02	Cape UV Treatment Upgrades SRF Loan #2	2039	1.0000% - 1.0000%	\$130,000	\$123,500	\$6,500	\$117,000	\$1,224	\$0	\$1,224	\$387	
Total Existing Debt Cape Elizabeth						\$2,934,200	\$215,850	\$2,718,350	\$43,195	\$0	\$43,195	\$9,733	
Proposed Cape Elizabeth													
11/01/2020	WW_Cape HVAC_1	Cape Treat Plant HVAC	2040	1.0000% - 1.0000%	\$393,000	\$393,000	\$19,650	\$373,350	\$3,897	\$0	\$3,897	\$1,179	
11/01/2021	WW_Little John_1	Little John Pump Station	2041	1.0000% - 1.0000%	\$900,000	\$0	\$0	\$900,000	\$1,500	\$0	\$1,500		\$1,500
11/01/2021	WW_MaidenCove_1	Maiden Cove Pump Station	2041	2.7500% - 2.7500%	\$430,000	\$0	\$0	\$430,000	\$1,971	\$0	\$1,971		\$1,100
Total Proposed Debt Cape Elizabeth						\$393,000	\$19,650	\$1,703,350	\$7,368	\$0	\$7,368	\$1,179	\$2,600
Total Existing and Proposed Debt Cape Elizabeth						\$3,327,200	\$235,500	\$4,421,700	\$50,563	\$0	\$50,563	\$10,912	\$2,600
Existing Debt Cumberland													
12/22/2006	WW06-01	Cumberland - Tuttle Pump Station (SRF)	2026	1.4200% - 1.4200%	\$125,000	\$37,500	\$6,250	\$31,250	\$525	\$0	\$525	\$339	
Total Existing Debt Cumberland						\$37,500	\$6,250	\$31,250	\$525	\$0	\$525	\$339	
Existing Debt Falmouth													
05/01/2016	WW16-03	Mill Creek PS SRF	2036	1.0000% - 1.0000%	\$4,000,000	\$3,200,000	\$200,000	\$3,000,000	\$32,000	\$0	\$32,000	\$11,600	
03/21/2017	WW17-02	Falmouth Mill Creek PS Phase 2 SRF	2037	1.0000% - 1.0000%	\$760,000	\$646,000	\$38,000	\$608,000	\$6,207	\$0	\$6,207	\$2,214	
Total Existing Debt Falmouth						\$3,846,000	\$238,000	\$3,608,000	\$38,207	\$0	\$38,207	\$13,814	
Existing Debt Gorham													
04/01/2003	WW03-03	Westbrook Treatment Dewatering (SRF)	2022	0.0000% - 4.2030%	\$78,120	\$7,389	\$3,714	\$3,676	\$46	\$0	\$46	\$60	
11/13/2003	WW03-14	Westbrook Treatment Headworks Upgrade (SRF)	2023	0.0000% - 4.4930%	\$73,185	\$10,826	\$3,637	\$7,189	\$77	\$0	\$77	\$134	
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$252,000	\$63,000	\$12,600	\$50,400	\$1,010	\$0	\$1,010	\$681	
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$50,400	\$20,160	\$2,520	\$17,640	\$756	\$0	\$756		

Wastewater Funds Long-Term Debt (continued)

Long-Term Debt Detail (continued)

The tables below contain a list of all outstanding debt for Cape Elizabeth, Cumberland, Falmouth, Gorham and Portland wastewater funds. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2020 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2021 budget.

Issue Date	Bond ID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	Accrued 2021 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$474,672	\$213,602	\$23,734	\$189,869	\$10,687	\$0	\$10,687		
01/15/2009	WW09-01	Little Falls Conveyance (SRF)	2028	1.4400% - 1.4400%	\$4,258,208	\$1,720,488	\$215,061	\$1,505,427	\$24,001	\$0	\$24,001	\$11,992	
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$253,475	\$101,390	\$12,674	\$88,716	\$982	\$0	\$982	\$684	
05/28/2009	WW09-04	Little Falls Conveyance	2029	2.0800% - 5.5800%	\$233,954	\$105,279	\$11,698	\$93,582	\$558	\$0	\$558		
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$52,360	\$26,180	\$2,618	\$23,562	\$257	\$0	\$257	\$144	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$308,000	\$277,200	\$15,400	\$261,800	\$2,746	\$0	\$2,746	\$909	
Total Existing Debt Gorham						\$2,545,515	\$303,655	\$2,241,860	\$41,121	\$0	\$41,121	\$14,604	
Proposed Gorham													
11/01/2021	WW_Sludge_1	Westbrook Sludge Odor	2041	2.5000% - 2.5000%	\$231,000	\$0	\$0	\$231,000	\$963	\$0	\$963		\$2,464
11/01/2021	WW_WesAer1_1	Westbrook Treatment Plant Aeration	2041	1.0000% - 1.0000%	\$1,232,000	\$0	\$0	\$1,232,000	\$2,053	\$0	\$2,053		\$1,848
Total Proposed Debt Gorham						\$0	\$0	\$1,463,000	\$3,016	\$0	\$3,016		\$4,312
Total Existing and Proposed Debt Gorham						\$2,545,515	\$303,655	\$3,704,860	\$44,137	\$0	\$44,137	\$14,604	\$4,312

Existing Debt Portland

10/26/2001	WW01-01	Peaks Ryefield / Seashore Upgrades (SRF)	2021	2.1000% - 2.1000%	\$2,785,000	\$139,250	\$139,250	\$0	\$2,437	\$0	\$2,437	\$2,133	
11/01/2001	WW01-02	EETreatment Clarifiers/Screens/Grit Upgrades (SRF)	2021	2.1000% - 2.1000%	\$1,250,000	\$62,500	\$62,500	\$0	\$1,094	\$0	\$1,094	\$957	
04/01/2003	WW03-02	Portland Treatment Odor Control (SRF)	2022	0.0000% - 4.2030%	\$5,200,000	\$491,856	\$247,193	\$244,663	\$3,085	\$0	\$3,085	\$4,011	
11/13/2003	WW03-12	EETF Dewatering/Clarifiers/Screens/Grit (SRF)	2023	0.0000% - 4.4930%	\$1,230,000	\$178,499	\$59,974	\$118,525	\$1,299	\$0	\$1,299	\$2,255	
11/13/2003	WW03-13	EE Treatment Primary Sedimentation & Odor (SRF)	2023	0.0000% - 4.4930%	\$2,000,000	\$298,721	\$100,000	\$198,721	\$2,646	\$0	\$2,646	\$3,666	
12/03/2004	WW04-01	EE Treatment Odor Control (SRF)	2024	1.3300% - 1.3300%	\$375,000	\$75,000	\$18,750	\$56,250	\$935	\$0	\$935	\$691	
12/03/2004	WW04-02	EE Treatment Dewatering (SRF)	2024	1.3300% - 1.3300%	\$1,740,000	\$348,000	\$87,000	\$261,000	\$4,339	\$0	\$4,339	\$3,207	
12/01/2005	WW05-01	EE Treatment Hypochlorite Upgrade (SRF)	2025	1.6300% - 1.6300%	\$1,900,000	\$475,000	\$95,000	\$380,000	\$7,613	\$0	\$7,613	\$5,137	
04/01/2009	WW09-03	Portland India Pump Station Upgrade (SRF)	2028	1.4700% - 1.4700%	\$5,700,000	\$2,247,952	\$280,994	\$1,966,958	\$32,357	\$0	\$32,357	\$15,702	
11/01/2010	WW10-03	Portland Northeast & Pump Station Upgrades (SRF)	2030	1.0000% - 1.0000%	\$752,200	\$376,100	\$37,610	\$338,490	\$3,698	\$0	\$3,698	\$2,069	
10/27/2011	WW11-02	Portland Pump Station Upgrades	2031	0.5000% - 5.5000%	\$400,000	\$220,000	\$20,000	\$200,000	\$4,795	\$0	\$4,795		
11/04/2013	WW13-02	Peaks Island Sewer Extension	2033	4.0000% - 4.0000%	\$3,000,000	\$1,950,000	\$150,000	\$1,800,000	\$77,000	\$0	\$77,000		
12/04/2015	WW15-07	EEWWTF Aeration Upgrade SRF	2035	1.0000% - 1.0000%	\$2,000,000	\$1,500,000	\$100,000	\$1,400,000	\$14,750	\$0	\$14,750	\$5,750	
07/08/2016	WW16-01	EEWWTF Aeration Phase 2 SRF	2036	1.0000% - 1.0000%	\$7,000,000	\$5,600,000	\$350,000	\$5,250,000	\$55,417	\$0	\$55,417	\$20,300	
07/08/2016	WW16-02	Fore River PS SRF	2036	1.0000% - 1.0000%	\$1,200,000	\$960,000	\$60,000	\$900,000	\$9,500	\$0	\$9,500	\$3,480	
05/01/2017	WW17-01	EEWWTF Aeration Phase 3 SRF	2036	1.0000% - 1.0000%	\$1,900,000	\$1,595,792	\$99,737	\$1,496,055	\$15,792	\$0	\$15,792	\$5,785	
05/24/2018	WW18-03	Northeast Pump Station Odor Control	2038	2.2800% - 4.0420%	\$500,000	\$450,000	\$25,000	\$425,000	\$14,491	\$0	\$14,491		
07/30/2020	WW20-05	East End WWTF Primary Clarifier Upgrade	2040	2.0000% - 2.0000%	\$940,000	\$940,000	\$49,000	\$891,000	\$21,805	\$0	\$21,805		
07/30/2020	WW20-06	India St PS Tide Gate	2040	2.0000% - 2.0000%	\$410,000	\$410,000	\$21,000	\$389,000	\$9,512	\$0	\$9,512		
Total Existing Debt Portland						\$18,318,670	\$2,003,008	\$16,315,662	\$282,564	\$0	\$282,564	\$75,142	

Wastewater Funds Long-Term Debt (continued)

Long-Term Debt Detail (continued)

The tables below contain a list of all outstanding debt for Cape Elizabeth, Cumberland, Falmouth, Gorham and Portland wastewater funds. Bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook, Windham and Gorham.

2020 bond issues may appear in the proposed section if the target issue date is after the publication date of the 2021 budget.

Issue Date	Bond ID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	Accrued 2021 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Proposed Portland													
11/01/2020	WW_HVAC-PORT_1	East End HVAC	2040	1.0000% - 1.0000%	\$438,000	\$438,000	\$21,900	\$416,100	\$4,344	\$0	\$4,344	\$1,314	
11/01/2020	WW_Po_Fore_P2_1	Fore River Pump Station Ph2 (SRF)	2040	1.0000% - 1.0000%	\$3,500,000	\$3,500,000	\$175,000	\$3,325,000	\$34,708	\$0	\$34,708	\$10,500	
11/01/2021	WW_ABC_1	Cayenta/Lucity Software	2031	1.0000% - 1.0000%	\$1,500,000	\$0	\$0	\$1,500,000	\$2,500	\$0	\$2,500		\$2,400
11/01/2021	WW_Elect_1	East End Electricity System	2041	2.5000% - 2.5000%	\$4,272,000	\$0	\$0	\$4,272,000	\$17,800	\$0	\$17,800		\$40,000
11/01/2021	WW_HVAC3_1	East End HVAC Third Floor	2041	1.0000% - 1.0000%	\$575,000	\$0	\$0	\$575,000	\$958	\$0	\$958		\$900
11/01/2021	WW_InflTank_1	East End Influent Screen and Tank Piping	2041	2.5000% - 2.5000%	\$960,000	\$0	\$0	\$960,000	\$4,000	\$0	\$4,000		\$10,000
Total Proposed Debt Portland						\$3,938,000	\$196,900	\$11,048,100	\$64,310	\$0	\$64,310	\$11,814	\$53,300
Total Existing and Proposed Debt Portland						\$22,256,670	\$2,199,908	\$27,363,762	\$346,874	\$0	\$346,874	\$86,956	\$53,300

Wastewater Funds LongTerm Debt (continued):

Long-Term Debt Detail (continued)

The tables below contain a list of all outstanding debt for the Westbrook wastewater funds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook Windham and Gorham.

2020 Bond issues may appear in the proposed section if the target issue date is after the publication date of the 2021 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	Accrued 2021 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Existing Debt Westbrook													
04/01/2003	WW03-03	Westbrook Treatment Dewatering (SRF)	2022	0.0000% - 4.2030%	\$284,208	\$26,883	\$13,510	\$13,372	\$169	\$0	\$169	\$219	
11/13/2003	WW03-14	Westbrook Treatment Headworks Upgrade (SRF)	2023	0.0000% - 4.4930%	\$266,254	\$39,384	\$13,231	\$26,153	\$280	\$0	\$280	\$488	
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$1,316,800	\$329,200	\$65,840	\$263,360	\$5,277	\$0	\$5,277	\$3,560	
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$183,360	\$73,344	\$9,168	\$64,176	\$2,751	\$0	\$2,751		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$2,384,641	\$1,073,088	\$119,232	\$953,856	\$53,687	\$0	\$53,687		
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$974,925	\$389,970	\$48,746	\$341,224	\$3,778	\$0	\$3,778	\$2,632	
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$113,220	\$56,610	\$5,661	\$50,949	\$557	\$0	\$557	\$311	
12/04/2015	WW15-08	Westbrook CSO Upgrade SRF	2035	1.0000% - 1.0000%	\$1,000,000	\$750,000	\$50,000	\$700,000	\$7,375	\$0	\$7,375	\$2,875	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$666,000	\$599,400	\$33,300	\$566,100	\$5,939	\$0	\$5,939	\$1,965	
09/01/2018	WW18-07	Dana Court PS Upgrades SRF	2039	1.0000% - 1.0000%	\$2,200,000	\$2,090,000	\$110,000	\$1,980,000	\$20,717	\$0	\$20,717	\$6,545	
Total Existing Debt Westbrook						\$5,427,879	\$468,689	\$4,959,190	\$100,528	\$0	\$100,528	\$18,596	
Proposed Westbrook													
11/01/2021	WW_Sludge_1	Westbrook Sludge Odor	2041	2.5000% - 2.5000%	\$499,500	\$0	\$0	\$499,500	\$2,081	\$0	\$2,081		\$5,328
11/01/2021	WW_WesAer1_1	Westbrook Treatment Plant Aeration	2041	1.0000% - 1.0000%	\$2,664,000	\$0	\$0	\$2,664,000	\$4,440	\$0	\$4,440		\$3,996
Total Proposed Debt Westbrook						\$0	\$0	\$3,163,500	\$6,521	\$0	\$6,521	\$0.00	\$9,324
Total Existing and Proposed Debt Westbrook						\$5,427,879	\$468,689	\$8,122,690	\$107,049	\$0	\$107,049	\$18,596	\$9,324

Wastewater Funds LongTerm Debt (continued):

Long-Term Debt Detail (continued)

The tables below contain a list of all outstanding debt for the Windham wastewater bonds for the Westbrook Regional Wastewater Treatment Plant and related interception assets are proportionately split between Westbrook Windham and Gorham.

2020 Bond issues may appear in the proposed section if the target issue date is after the publication date of the 2021 budget.

IssueDate	BondID	Purpose	Maturity	Range of Interest	Original Issue Principal	Yr End 2020 Balance	2021 Principal	Yr End 2021 Balance	Accrued 2021 Interest & Fees			MMBB/DEP Admin Fee	Issue Cost
									Interest Exp	DEP Mgt Fee	Interest Expense		
Existing Debt Windham													
04/01/2003	WW03-03	Westbrook Treatment Dewatering (SRF)	2022	0.0000% - 4.2030%	\$9,672	\$915	\$460	\$455	\$6	\$0	\$6	\$7	
11/13/2003	WW03-14	Westbrook Treatment Headworks Upgrade (SRF)	2023	0.0000% - 4.4930%	\$9,061	\$1,340	\$450	\$890	\$10	\$0	\$10	\$17	
12/01/2005	WW05-02	WB Cottage Place/ E. Bridge PS Upgrades (SRF)	2025	1.6300% - 1.6300%	\$31,200	\$7,800	\$1,560	\$6,240	\$125	\$0	\$125	\$84	
05/15/2008	WW08-01	WB Treatment Generator / Electrical Upgrades SRF	2028	2.2000% - 5.5000%	\$6,240	\$2,496	\$312	\$2,184	\$94	\$0	\$94		
10/30/2008	WW08-02	Westbrook Cottage Place/ E. Bridge PS Screens SRF	2029	5.5750% - 5.5750%	\$40,687	\$18,309	\$2,034	\$16,275	\$916	\$0	\$916		
01/15/2009	WW09-01	Little Falls Conveyance (SRF)	2028	1.4400% - 1.4400%	\$1,681,792	\$679,512	\$84,939	\$594,573	\$9,479	\$0	\$9,479	\$4,736	
02/27/2009	WW09-02	WB Headworks/Cottage Place/ E Bridge (SRF)	2028	1.0000% - 1.0000%	\$21,600	\$8,640	\$1,080	\$7,560	\$84	\$0	\$84	\$58	
05/28/2009	WW09-04	Little Falls Conveyance	2029	2.0800% - 5.5800%	\$196,046	\$88,221	\$9,802	\$78,418	\$468	\$0	\$468		
11/01/2010	WW10-04	Westbrook Treatment Misc Upgrades (SRF)	2030	1.0000% - 1.0000%	\$4,420	\$2,210	\$221	\$1,989	\$22	\$0	\$22	\$12	
03/02/2018	WW18-02	Westbrook Sludge Dewatering Upgrade SRF	2038	1.0000% - 1.0000%	\$26,000	\$23,400	\$1,300	\$22,100	\$232	\$0	\$232	\$77	
Total Existing Debt Windham						\$832,843	\$102,159	\$730,684	\$11,434	\$0	\$11,434	\$4,992	
Proposed Windham													
11/01/2021	WW_Depot_1	Depot Street	2041	1.0000% - 1.0000%	\$610,000	\$0	\$0	\$610,000	\$1,017	\$0	\$1,017		\$1,000
11/01/2021	WW_NoWin_1	North Windham System Design	2041	1.0000% - 1.0000%	\$1,000,000	\$0	\$0	\$1,000,000	\$1,667	\$0	\$1,667		\$2,000
11/01/2021	WW_Sludge_1	Westbrook Sludge Odor	2041	2.5000% - 2.5000%	\$19,500	\$0	\$0	\$19,500	\$81	\$0	\$81		\$208
11/01/2021	WW_WesAer1_1	Westbrook Treatment Plant Aeration	2041	1.0000% - 1.0000%	\$104,000	\$0	\$0	\$104,000	\$173	\$0	\$173		\$156
Total Proposed Debt Windham						\$0	\$0	\$1,733,500	\$2,938	\$0	\$2,938		\$3,364
Total Existing and Proposed Debt Windham						\$832,843	\$102,159	\$2,464,184	\$14,372	\$0	\$14,372	\$4,992	\$3,364

Capital Reserve – Water

In 2013, a new state law (35-A M.R.S. 6107-A, Funding for Infrastructure Improvements for Water Utilities) was enacted. The law allows a water utility to fund future infrastructure improvements through recovery in rates. As required by the law, the Maine Public Utilities Commission adopted a rule (Chapter 675 – Infrastructure Surcharge and Capital Reserve Accounts) that outlines the maximum amount of funds the may be recovered through rates, use of those funds, and reporting requirements.

The maximum dollar amount of funds that may be recovered through rates depends on the size of the utility. Portland Water District is considered a large utility (utilities with revenues greater than \$750,000 are considered large) and therefore the amount of revenue requirement attributed to funding a capital reserve should not exceed either of the following:

1% of Gross Plant (as of 12/31/19)	\$ 3,401,545
10% of Revenue Requirement (2020 Budget)	\$ 2,566,096

The capital reserve can only be used to pay for the costs of construction associated with the projects identified in the utility's System Infrastructure Assessment Report (SIA) and are related to transmission, distribution, and treatment of water. The District submitted a SIA that identified water mains that need to be replaced due to age or type of material.

SIA Program	Main to be replaced (ft)	Cost per foot	Miles of pipe	Program Cost
A (Cast Iron pipe >100 years old)	559,680	\$225	106 miles	\$126 million
B (Cast Iron pipe 75-100 years old)	443,520	\$225	84 miles	\$100 million
C (Galvanized Iron pipe)	59,136	\$200	11 miles	\$12 million
D (2 ¼" diameter Cast Iron pipe)	84,480	\$200	16 miles	\$17 million
Totals			217 miles	\$255 million

The District has chosen to increase each year an additional 1% for 10 years with the revenue reserved to pay the debt service costs of issuing a \$2 million bond each year. The bond proceeds will be used to replace water mains identified in the SIA.

The 2021 budget assumes 1% of the proposed water rate adjustment be dedicated to the capital reserve. Starting in 2014, 1% of the rate adjustments has been dedicated to the reserve.

	2020 Budget	2020 Projected	2021 Budget
Revenue	1,704,558	1,555,409	1,788,008
Expense	1,424,631	1,424,631	1,833,240
Annual Charge	279,927	130,778	(45,232)
Carry Forward	703,385	745,959	876,737
	983,312	876,737	831,505

Renewal & Replacement

Each fund contributes to a renewal and replacement (R&R) fund. These funds are used to pay for smaller capital projects as an alternative to issuing long-term debt. Each fund maintains a R&R fund for assets owned by that fund. In addition, R&R balances are maintained for other groups of assets that, while owned by the Water fund, serve the needs of all District funds. These other R&R balances are:

Douglass St – This fund is for the building and grounds that serve as the District’s main headquarters.

Meters – Water meters measure water flow but provide data used in both water and wastewater billing.

Technology – This category includes both computer hardware and software systems that serve all District funds.

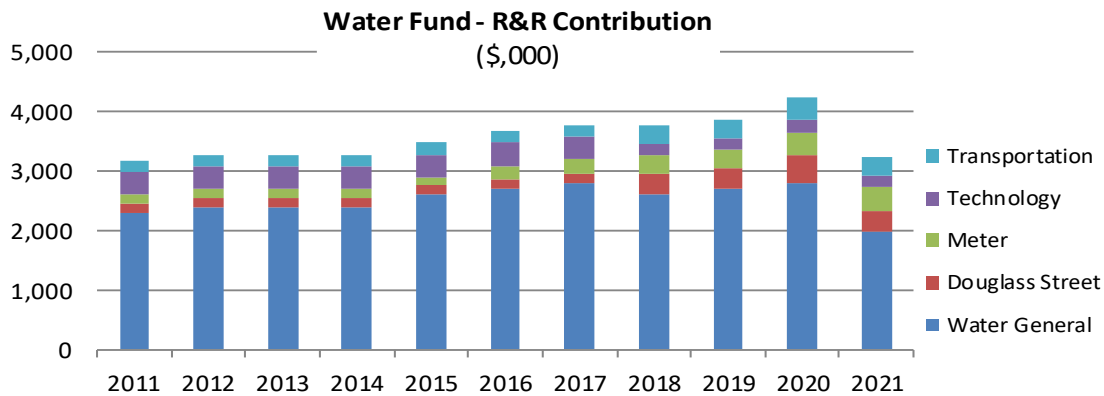
Transportation – These assets are used by all District funds. The charge for the R&R funding is part of the hourly rate of each vehicle (an internal line item).

2021 Contributions:

	Fund	Douglass St	Meters	Technology	Combined*	Total
Water	\$1,964,000	\$230,544	\$261,880	\$111,780	\$604,204	\$2,568,204
Wastewater:						
Cape Elizabeth	135,000	11,592	7,040	7,520	26,152	161,152
Cumberland	40,000	5,796	3,960	4,280	14,036	54,036
Gorham	100,000	8,676	6,360	5,120	20,156	120,156
Portland	700,000	80,388	68,480	57,280	206,148	906,148
Westbrook	270,000	17,460	17,040	12,280	46,780	316,780
Windham	35,849	2,340	520	1,740	4,600	40,449
Contracted Services:						
Falmouth	-	-	-	-	-	-
Scarborough	-	36	4,560	-	4,596	4,596
South Portland	-	3,168	30,160	-	33,328	33,328
R&R - Funds	\$3,244,849	360,000	400,000	200,000	960,000	\$4,204,849
R&R - Transportation						400,000
R&R - Total						4,604,849
*Combined = Douglass St + Meters + Technology						

Water Fund - Renewal & Replacement Fund

The District will contribute a total of \$3,324,000 to the renewal and replacement fund in 2020. 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 \$4,680,000, which is the estimated depreciation of all water assets, per Maine Public Utility Commission rules. Starting in 2011, the District began to track and reserve balances by different categories of renewal & replacement with part of the general surplus designated to the transportation, technology, meter and Douglass Street building reserves.



	Water General	Douglass Street	Water Meters	Technology	Transportation	Total
Balance 12/31/18	6,770,174	84,989	(287,893)	255,001	391,761	7,214,032
Contribution - 2019	2,750,000	360,000	290,000	200,000	320,000	3,920,000
Expenditure	(1,664,661)	(34,290)	(302,273)	(243,694)	(395,877)	(2,640,795)
Balance 12/31/19	7,855,513	410,699	(300,166)	211,307	315,884	8,493,237
Contribution - 2020	2,800,000	460,000	390,000	200,000	320,000	4,170,000
Expenditure (Est'd)	(7,173,788)	(745,420)	(180,272)	(320,236)	(400,142)	(8,819,858)
Balance 12/31/20 (Est'd)	3,481,725	125,279	(90,438)	91,071	235,742	3,843,379
Contribution - 2021	1,964,000	360,000	400,000	200,000	400,000	3,324,000
Expenditure (Est'd)	(2,365,000)	(110,000)	(400,000)	(200,000)	(400,000)	(3,475,000)
Balance 12/31/21 (Est'd)	3,080,725	375,279	(90,438)	91,071	235,742	3,692,379
Target R&R Balance (1% of Gross Fixed Asset Cost)						\$3,400,432

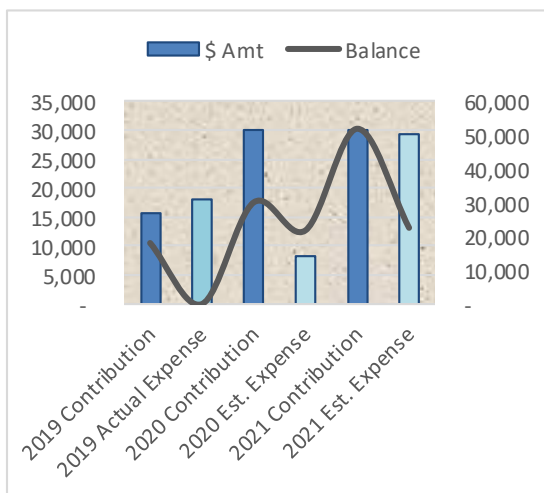
Wastewater Funds - Renewal & Replacement Funds

Each wastewater fund includes an annual contribution to the renewal and replacement (R&R) reserve to finance capital additions or replacements. At the end of 2019, Gorham's operating surplus of \$4,287 was transferred to Gorham's R&R reserve. Proceeds from an agreement with CMP, in the amount of \$125,000, was transferred to Portland's R&R reserve.

In 2021, R&R contributions decreased for Portland (\$1,090,000 to \$700,000) and Westbrook (\$300,000 to \$270,000). Contributions for Cape Elizabeth (\$120,700 to \$135,000) and Gorham (\$90,800 to \$100,000) increased. Cumberland and Windham remained the same at \$40,000 and \$35,849, respectively.

The estimated 2021 expenditures from the R&R funds are based on the 2021 Capital Improvements Budget as outlined in the Capital Expenditure section.

	CAPE					
	ELIZABETH	CUMBERLAND	GORHAM	PORTLAND	WESTBROOK	WINDHAM
Balance 12/31/18	311,324	294,813	1,014,948	4,594,734	3,516,993	384,451
Contribution - 2019	125,000	39,700	100,000	900,000	300,000	25,849
Operating Surplus Transfer	30,551	-	-	337,748	-	-
<u>Expenditure</u>	<u>(45,936)</u>	<u>-</u>	<u>(19,365)</u>	<u>(1,053,120)</u>	<u>(57,269)</u>	<u>(68,237)</u>
Balance 12/31/19	420,939	334,513	1,095,583	4,779,362	3,759,724	342,063
Contribution - 2020	120,700	40,000	90,800	1,090,000	300,000	35,849
Operating Surplus Transfer	-	-	4,287	125,000	-	-
<u>Expenditure (Est'd)</u>	<u>(209,000)</u>	<u>(152,650)</u>	<u>(478,070)</u>	<u>(1,512,945)</u>	<u>(335,940)</u>	<u>(148,890)</u>
Balance 12/31/20 Estimated	332,639	221,862	712,600	4,481,417	3,723,784	229,022
Contribution - 2021	135,000	40,000	100,000	700,000	270,000	35,849
Operating Surplus Transfer	-	-	-	-	-	-
<u>Expenditure (Est'd)</u>	<u>(50,000)</u>	<u>(120,000)</u>	<u>(103,160)</u>	<u>(660,000)</u>	<u>(374,820)</u>	<u>(42,020)</u>
Balance 12/31/21 Estimated	417,639	141,862	709,440	4,521,417	3,618,964	222,851
Target Renewal & Replacement (5% of Gross Capital Assets)	\$875,000	\$440,000	\$894,000	\$5,719,000	\$1,130,000	\$152,000



The Cumberland fund has a separate contracted R&R reserve that is used to pay its share of capital expenses to the Town of Falmouth. Falmouth operates the facilities and manages the capital projects. They then bill the Cumberland fund for a portion of those capital expenditures because those Falmouth facilities are also used to provide wastewater services to Cumberland. The contracted R&R reserve started in 2018 with a contribution of \$52,910. Contributions for both 2020 and 2021 are \$30,000. The projected 2021 end of year balance is \$22,500.

Water Fund - Rate Stabilization & Water Master Plan Funds

On January 27, 2020, the District's Board of Trustees authorized the creation of two new funds – Water Rate Stabilization and Water Master Plan funds. They also allocated \$1,244,548 of the 2019 annual surplus to the funds.

Water Rate Stabilization Fund

The purposes of the fund are to assist in smoothing rates as part of the District's multi-year and annual financial planning and to assure that the minimum debt coverage ratio established in the District's Debt Policy, as amended from time to time, is met. Funds deposited into this reserve are treated as operating costs in the year of deposit and such funds disbursed from this fund will be treated as revenues in the year of disbursed for the purposes of computing the District's debt service coverage ratio. Any withdrawal from the fund will be authorized by the Board.

Water Master Plan Fund

The purpose of the fund is to provide funding for the development and updating of the water master plan and related asset assessments. The District periodically creates and updates a long-term asset management plan and perform assessments of asset to determine the each asset conditions. Any withdrawal from this fund will be approved by the Board. At the Board's discretion, it may reallocate the fund for other District's purposes.

The 2021 Capital Improvement Plan includes authorizing starting a \$750,000 Comprehensive Asset Management Strategic Plan project (program 3, subprogram 3071). It is expected approximately \$100,000 will be spent in 2021 with the balance in the following year. Additional assessment on specific asset classes may be completed and funded from this fund.

	Balance 01/01/20	2020 Projected	2021 Budget	Balance 12/31/21
Rate Stabilization Fund	\$300,000	\$0	\$0	\$300,000
Water Master Plan	944,548	0	(100,000)	844,548
	1,244,548	0	(100,000)	1,144,548

Green Bonds Issued in 2020

The District issued its first green bond in 2019. In 2020, the District issued two green bonds - \$1,350,000 Portland Sewer Bond and \$3,575,000 Water Bond. In February, the Board authorized the green bonds be issued.



BOARD OF TRUSTEES / AGENDA ITEM SUMMARY

Agenda Item:	6D Order 20-005
Date of Meeting:	February 24, 2020
Subject:	<u>Designation of Bonds as "Green"</u>
Presented By:	David Kane, Treasurer

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, that the \$7.0 million water bond authorized on February 24, 2020 will be designated as "green bonds", with the proceeds used for "green" purposes.

BACKGROUND ANALYSIS

The Board is scheduled to authorize the issuance of up to \$7.0 million in water bonds at their February 24, 2020 meeting. The bonds will provide funds to finance the installation and renewal of water main improvements and other related infrastructure upgrades and improvements. These are environmentally beneficial projects designed to ensure safe drinking water for the public in the State in accordance with State, Federal and local standards. Therefore, the bonds can be designated as "Green Bonds".

Staff became aware that "green" bonds versus ordinary bonds are, on average, about 6 basis points below yields paid by otherwise equivalent bonds. The District's Financial Advisor recommended the Board pass a motion indicating the bond proceeds will be used for "green" purposes. Other than declaring the bonds as "green" in the bond's Official Statement the only other obligation on the District would be to provide certain post-issuance reporting showing the actual use of the bond proceeds for its declared purpose.

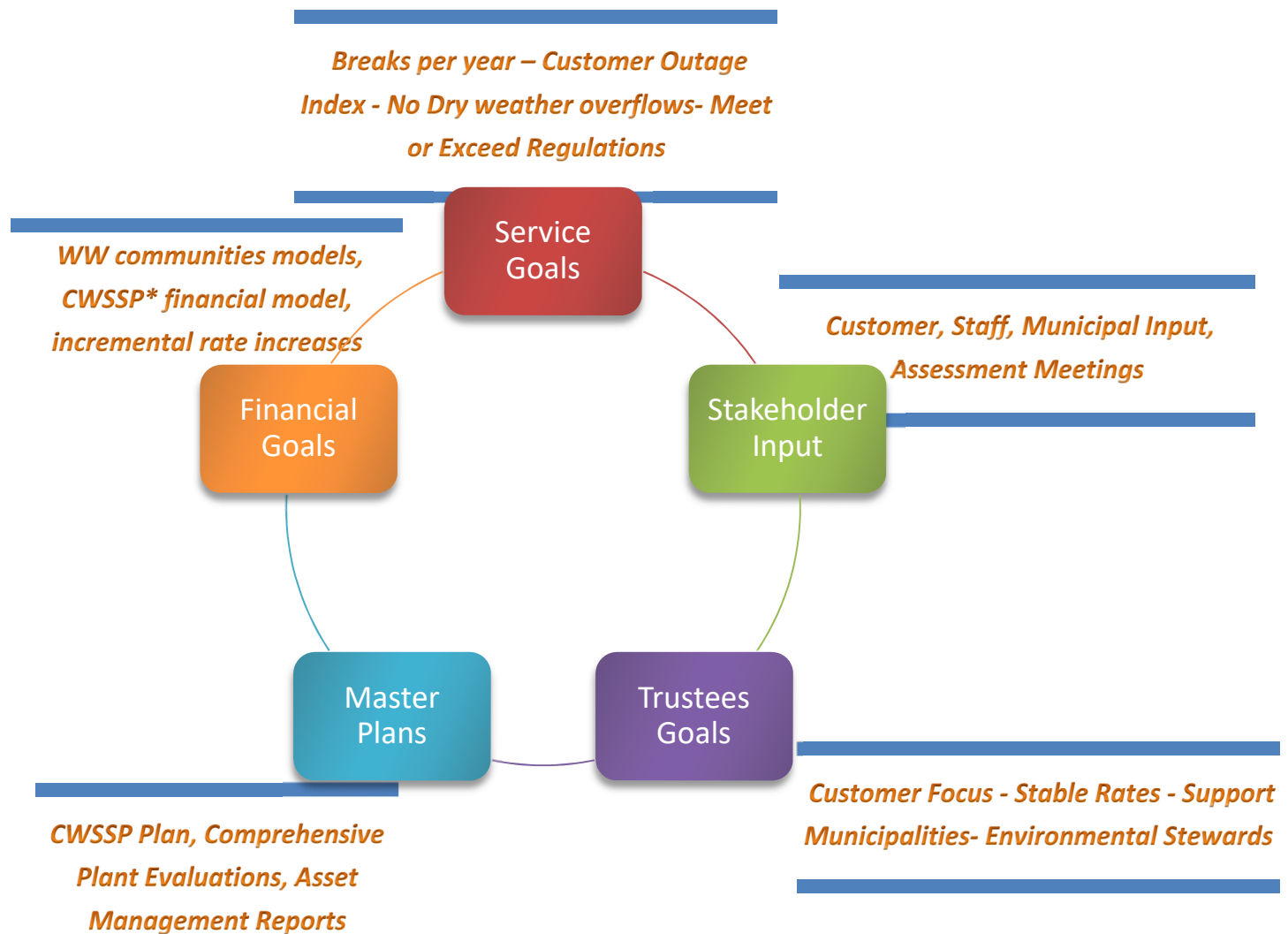
The Bond is scheduled to be sold in July 2020.

FINANCIAL REVIEW

The District intends to issue a \$7.0 million bond on August 1. The estimated annual interest savings in the first year of this "green" bond could be on the order of \$42,000.

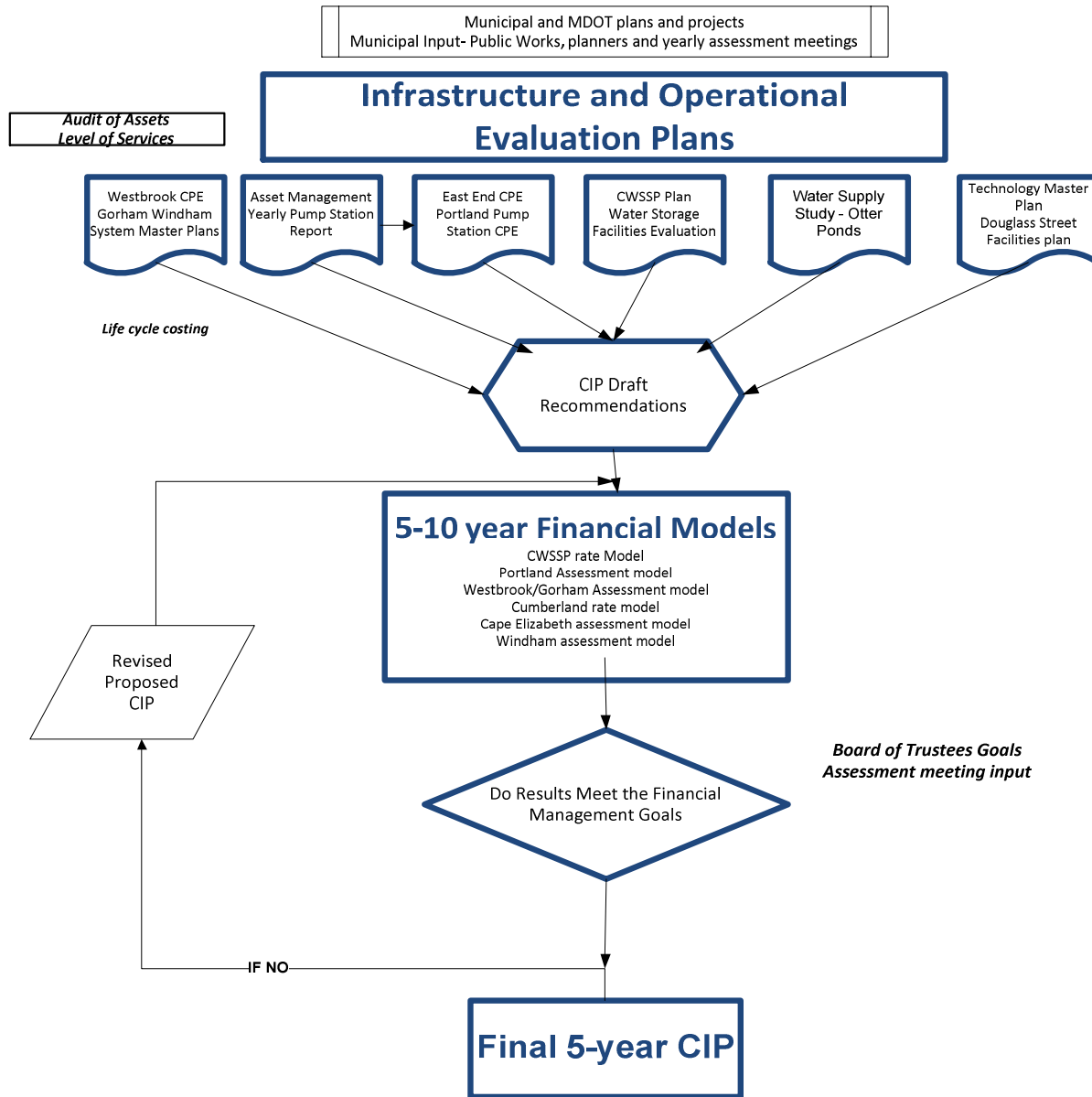
Introduction

A five-year capital improvement plan is developed each year taking into consideration various factors including Infrastructure and Operational Evaluation Plans, Strategic/Tactical Goals and Benchmarks, Multi-year Financial Projections and Board Established Budget Guidelines (described in the Introduction Section). The plan is developed with much of our stakeholder’s input, including input from customers, municipalities, regulators and staff. Staff recommends the Board of Trustees authorize the projects for the first year of the plan to be completed. Capital Expenditures are for a physical asset that exceeds \$10,000 and has a useful life of greater than 5 years or extends the useful life of an existing asset for more than 5 years.



*CWSSP – Comprehensive Water System Strategic Plan

Capital Improvement Program Process



Infrastructure and Operational Evaluation Plans

The water and wastewater industry is an infrastructure-oriented industry. Approximately 95% of the District’s total assets are infrastructure assets and capital-financing costs related to those assets are 30% of the annual budget. As the chart above indicates, a number of studies have been conducted to provide an assessment of those assets and is the basis for the capital improvement plan. Some of the studies are discussed in future pages by fund.

Program Summary and Board of Trustees Approval Order

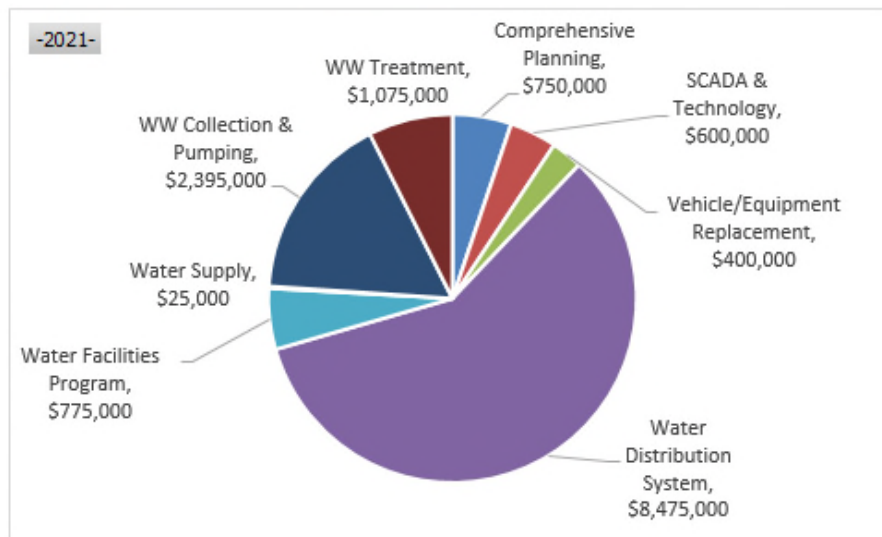
Program Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Comprehensive Planning	\$750,000				
SCADA & Technology	\$600,000	\$250,000	\$250,000	\$250,000	\$325,000
Vehicle/Equipment Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$8,475,000	\$10,075,000	\$10,475,000	\$10,075,000	\$16,475,000
Water Facilities Program	\$775,000	\$1,660,000	\$1,390,000	\$5,075,000	\$630,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
WW Collection & Pumping	\$2,395,000	\$775,000	\$1,650,000	\$1,455,000	\$3,330,000
WW Treatment	\$1,075,000	\$16,970,000	\$2,120,000	\$11,340,000	\$2,675,000
Grand Total	\$14,495,000	\$30,155,000	\$16,310,000	\$28,620,000	\$23,860,000

Proposed Board Action:

ORDERED: that the 2021-2025 Capital Improvement Plan is hereby adopted and the General Manager is authorized to solicit bids or proposals for the year 2021 projects, and to authorize the General Manager to award contracts for approved projects to the lowest bidder if the bid is within the project budget.

BE IT FURTHER ORDERED: that the General Manager shall solicit bids or proposals and to partner with Municipalities, MDOT and Developers for the year 2021 for the replacement and extension of water mains, services, valves and hydrants as outlined in the Water Distribution Systems Program and to authorize the General Manager to award and enter into contracts if the bid or partnering proposals are within the overall program budget.



Program Summary by Fund

Capital projects are recorded into the appropriate Water or Wastewater fund. The table summarizes the proposed 2021 Capital Improvement Plan by fund with a page reference where more details are provided on the projects. Gorham, Westbrook and Windham Wastewater system has a jointly used treatment plant located in Westbrook. Those costs are allocated between the municipalities – see the financial policies section for more information.

Program Summary

	-2021-	Page Reference Introduction	Page Reference Project Listing
Water	\$9,115,000	298	301
Comprehensive Planning	\$750,000		
SCADA & Technology	\$50,000		
Vehicle/Equipment Replacement			
Water Distribution System	\$8,075,000		
Water Facilities Program	\$215,000		
Water Supply	\$25,000		
Cape Elizabeth	\$645,000	319	320
SCADA & Technology	\$245,000		
WW Collection & Pumping	\$375,000		
WW Treatment	\$25,000		
Cumberland	\$120,000	324	325
WW Collection & Pumping	\$120,000		
Gorham	\$20,000	328	331
WW Collection & Pumping	\$20,000		
Westbrook	\$270,000	328	331
WW Collection & Pumping	\$145,000		
WW Treatment	\$125,000		
Windham	\$35,000	328	331
WW Collection & Pumping	\$35,000		
WW Treatment			
Westbrook Joint	\$270,000	328	331
SCADA & Technology			
WW Treatment	\$270,000		
Portland	\$2,460,000	341	343
SCADA & Technology	\$105,000		
WW Collection & Pumping	\$1,700,000		
WW Treatment	\$655,000		
Water & Wastewater	\$1,560,000	353	
SCADA & Technology	\$200,000		
Vehicle/Equipment Replacement	\$400,000		
Water Distribution System	\$400,000		
Water Facilities Program	\$560,000		
Grand Total	\$14,495,000		

Financing Summary of 2021 Capital Improvement Plan

Capital projects are financed through the issuance of bonds – general market bonds or low-interest rate state revolving loan program bonds – or drawdowns from the renewal and replacement funds. The Capital Financing section contains more information.

Financing Summary of 2021 Capital Improvement Plan

	Bond	Bond SRF	Operating	Renewal and Replacement	Reserves	Grand Total
Water	\$6,000,000			\$2,365,000	\$750,000	\$9,115,000
Comprehensive Planning					\$750,000	\$750,000
SCADA & Technology				\$50,000		\$50,000
Vehicle/Equipment Replacement						
Water Distribution System	\$6,000,000			\$2,075,000		\$8,075,000
Water Facilities Program				\$215,000		\$215,000
Water Supply				\$25,000		\$25,000
Cape Elizabeth	\$595,000			\$50,000		\$645,000
SCADA & Technology	\$245,000					\$245,000
WW Collection & Pumping	\$350,000			\$25,000		\$375,000
WW Treatment				\$25,000		\$25,000
Cumberland				\$120,000		\$120,000
WW Collection & Pumping				\$120,000		\$120,000
Gorham				\$20,000		\$20,000
WW Collection & Pumping				\$20,000		\$20,000
Portland	\$1,500,000	\$300,000		\$660,000		\$2,460,000
SCADA & Technology				\$105,000		\$105,000
WW Collection & Pumping	\$1,500,000			\$200,000		\$1,700,000
WW Treatment		\$300,000		\$355,000		\$655,000
Westbrook			\$75,000	\$195,000		\$270,000
WW Collection & Pumping			\$75,000	\$70,000		\$145,000
WW Treatment				\$125,000		\$125,000
Westbrook Joint				\$270,000		\$270,000
SCADA & Technology						
WW Treatment				\$270,000		\$270,000
Windham				\$35,000		\$35,000
WW Collection & Pumping				\$35,000		\$35,000
WW Treatment						
Water & Wastewater	\$450,000			\$1,110,000		\$1,560,000
SCADA & Technology				\$200,000		\$200,000
Vehicle/Equipment Replacement				\$400,000		\$400,000
Water Distribution System				\$400,000		\$400,000
Water Facilities Program	\$450,000			\$110,000		\$560,000
Grand Total	\$8,545,000	\$300,000	\$75,000	\$4,825,000	\$750,000	\$14,495,000

Five-Year Capital Improvement Plan

In addition to planning the capital projects for the upcoming year, a five-year plan has been developed to assist us in managing our staff, communicating to our external partners to improve coordination and developing financial projections to set expectations of future water rate and wastewater assessments adjustments.

The table below summarizes the planned capital projects in the upcoming year. Additional details on each program are provided on the following pages.

	-2021-	-2022-	-2023-	-2024-	-2025-
Water	\$9,115,000	\$10,700,000	\$10,990,000	\$13,400,000	\$16,505,000
Comprehensive Planning	\$750,000				
SCADA & Technology	\$50,000	\$50,000	\$50,000	\$50,000	\$75,000
Vehicle/Equipment Replacement		\$150,000			
Water Distribution System	\$8,075,000	\$9,675,000	\$10,075,000	\$9,675,000	\$16,075,000
Water Facilities Program	\$215,000	\$800,000	\$840,000	\$3,650,000	\$330,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Cape Elizabeth	\$645,000	\$125,000	\$515,000	\$50,000	\$125,000
SCADA & Technology	\$245,000				
WW Collection & Pumping	\$375,000	\$25,000	\$340,000	\$25,000	
WW Treatment	\$25,000	\$100,000	\$175,000	\$25,000	\$125,000
Cumberland	\$120,000	\$420,000	\$20,000	\$20,000	\$20,000
WW Collection & Pumping	\$120,000	\$420,000	\$20,000	\$20,000	\$20,000
Gorham	\$20,000	\$20,000	\$350,000	\$20,000	\$20,000
WW Collection & Pumping	\$20,000	\$20,000	\$350,000	\$20,000	\$20,000
Westbrook	\$270,000	\$20,000	\$20,000	\$20,000	\$3,220,000
WW Collection & Pumping	\$145,000	\$20,000	\$20,000	\$20,000	\$3,220,000
WW Treatment	\$125,000				
Windham	\$35,000	\$10,090,000	\$520,000	\$20,000	\$20,000
WW Collection & Pumping	\$35,000	\$90,000	\$520,000	\$20,000	\$20,000
WW Treatment		\$10,000,000			
Westbrook Joint	\$270,000	\$150,000	\$50,000	\$1,025,000	\$2,225,000
SCADA & Technology					\$25,000
WW Treatment	\$270,000	\$150,000	\$50,000	\$1,025,000	\$2,200,000
Portland	\$2,460,000	\$6,920,000	\$2,295,000	\$11,640,000	\$425,000
SCADA & Technology	\$105,000				\$25,000
WW Collection & Pumping	\$1,700,000	\$200,000	\$400,000	\$1,350,000	\$50,000
WW Treatment	\$655,000	\$6,720,000	\$1,895,000	\$10,290,000	\$350,000
Water & Wastewater	\$1,560,000	\$1,710,000	\$1,550,000	\$2,425,000	\$1,300,000
SCADA & Technology	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Vehicle/Equipment Replacement	\$400,000	\$250,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Facilities Program	\$560,000	\$860,000	\$550,000	\$1,425,000	\$300,000
Grand Total	\$14,495,000	\$30,155,000	\$16,310,000	\$28,620,000	\$23,860,000

Five-Year Capital Improvement Plan Impact on the Operating Budget

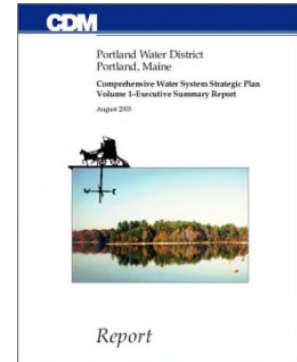
The proposed Capital Improvement Plan impacts the Operating results of the fund due to changes in on-going operating costs and debt service payments for those projects being bonded. The Operating results impact is included in the 5-year projections in the Budget by Fund section. The Capital Financing section includes more information on the debt service payment impact. The table below indicates the impact on operating fund expenses for the 2021 CIP only.

	-2021-	-2022-	-2023-	-2024-	-2025-
Water	\$91,500	\$563,166	\$552,166	\$541,166	\$530,166
Comprehensive Planning	\$0	\$0	\$0	\$0	\$0
SCADA & Technology	\$0	\$0	\$0	\$0	\$0
Vehicle/Equipment Replacement	\$0	\$0	\$0	\$0	\$0
Water Distribution System	\$91,500	\$563,166	\$552,166	\$541,166	\$530,166
Water Facilities Program	\$0	\$0	\$0	\$0	\$0
Water Supply	\$0	\$0	\$0	\$0	\$0
Cape Elizabeth	\$0	\$12,854	\$44,501	\$43,758	\$43,013
WW Collection & Pumping	\$0	\$9,333	\$26,177	\$25,740	\$25,302
SCADA & Technology	\$0	\$3,521	\$18,324	\$18,018	\$17,711
WW Collection & Pumping	\$0	\$0	\$0	\$0	\$0
WW Treatment	\$0	\$0	\$0	\$0	\$0
Cumberland	\$0	\$0	\$0	\$0	\$0
WW Collection & Pumping	\$0	\$0	\$0	\$0	\$0
Gorham	\$0	\$0	\$0	\$0	\$0
WW Collection & Pumping	\$0	\$0	\$0	\$0	\$0
Westbrook	\$0	\$25,000	\$25,000	\$25,000	\$0
WW Collection & Pumping	\$0	\$25,000	\$25,000	\$25,000	\$0
WW Treatment	\$0	\$0	\$0	\$0	\$0
Windham	\$0	\$0	\$0	\$0	\$0
WW Collection & Pumping	\$0	\$0	\$0	\$0	\$0
WW Treatment	\$0	\$0	\$0	\$0	\$0
Westbrook Joint	\$0	\$0	\$0	\$0	\$0
SCADA & Technology	\$0	\$0	\$0	\$0	\$0
WW Treatment	\$0	\$0	\$0	\$0	\$0
Portland	\$0	\$19,833	\$360,709	\$356,759	\$352,811
SCADA & Technology	\$0	\$0	\$0	\$0	\$0
WW Collection & Pumping	\$0	\$7,750	\$112,188	\$110,312	\$108,438
WW Treatment	\$0	\$12,083	\$248,521	\$246,447	\$244,373
Water & Wastewater	\$0	\$6,375	\$33,656	\$33,097	\$32,531
SCADA & Technology	\$0	\$0	\$0	\$0	\$0
Vehicle/Equipment Replacement	\$0	\$0	\$0	\$0	\$0
Water Distribution System	\$0	\$0	\$0	\$0	\$0
Water Facilities Program	\$0	\$6,375	\$33,656	\$33,097	\$32,531

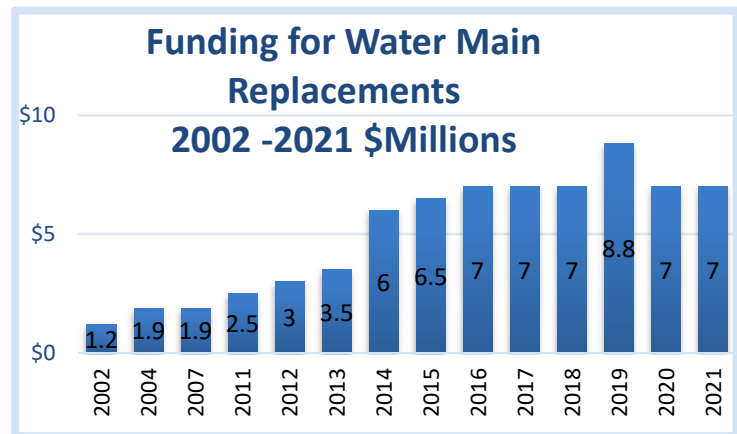
Water Fund

Comprehensive Water System Strategic Plan (CWSSP) - March 2003

Camp Dresser & McKee, engineering consultants, completed the master plan of the distribution system in March of 2003. The plan was prepared to guide the development, operations and financing of the water system through year 2020. The first 7- year planning cycle (priority - 1 projects 2003-2010) included an investment increase in the water main renewal program (see chart below). Along with the increase in water main renewals, the District also undertook the replacement of our existing water meters with new radio read meters. The project was completed in 2009 as recommended in the plan.



CWSSP also recommended removal or rehabilitation of existing water storage tanks. The District has removed three tanks from the system – Munjoy Hill reservoir, Shore Acres and Oak Hill. In 2008, the District rehabilitated 2-tanks, Steep Falls and Gowen. In 2009, the Standish Tank was rehabilitated and a bulk mixer added. In 2012, modifications were made to the concrete tanks to comply with OSHA fall protection standards.



In the plan, system deficiencies and recommended actions were identified. The most significant project identified from the priority - 1 projects was inadequacies associated with service from the Elevation 407 zone. CWSSP recommended the combining of the 407-north zone with the south zone. Many projects have been completed to that end. This included transmission main piping in the MDOT Rte. 202/Presumpscot River Bridge project, installation of 8,000 feet of trunk main on Fort Hill road along with several upgrades in the Little Falls area of Gorham and Windham as part of the Little Falls Conveyance Project. In 2008, 4,000 feet of transmission main was extended to the new pump station location on Ward's Hill road. In 2009, the transmission main was extended from the end of the Fort Hill main along Huston Road to the proposed pump station location. In 2016 the District completed the Transmission portion of the north 407 zone by extending 24" main from the pump station site 6,500 feet down Dyer Road and Huston Road to Rte. 202 connecting into the 2008 upgrades. This project provided an increase in pressure to approximately 150 customers that had substandard pressure and increased fire protection to the area.

A hydraulic analysis of the combined system and final design of the new 407 zone pump station (Wards Hill) was completed in 2017. The pump station construction started in 2017 (CIP #307) and was on-line in September 2018. Land acquisition and design for a new storage facility to replace the Windham Center Tank is underway and construction of the new tank was funded in the 2019 CIP (CIP #307) with an expected construction start of fall 2021. In the 2020 CIP, the Depot Street water transmission main connector (CIP 307/3066) to extend the 407 zone transmission system to connect the south zone to the north zone was put out to bid. Construction for the connector is scheduled for Spring of 2021.

Water Fund (continued)

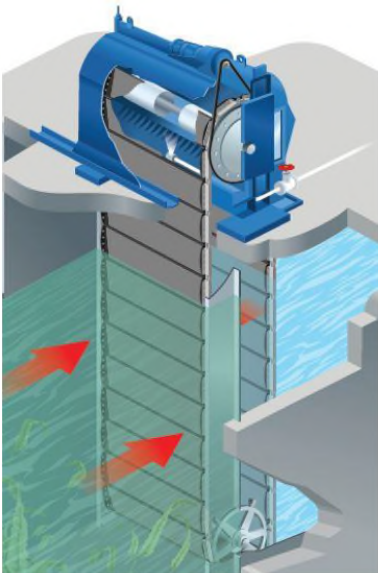
Greater Portland Water System – Water Treatment/Alternate Source – November 2008

Camp Dresser & McKee completed a study of the Sebago Lake Water Treatment Facility (SLWTF) in November of 2008. The primary focus of the study was to evaluate design alternatives for the ultraviolet disinfection process proposed to meet upcoming disinfection requirements and evaluate replacement of the existing 20-year old Ozone equipment. This study also reviewed raw water screening alternatives to replace the existing screening equipment. The third area looked at by this study was to evaluate the potential to connect the well supply that was being investigated in the Otter Ponds Aquifer area to the Sebago Lake Water Treatment Facility (SLWTF) as a backup or supplemental supply.

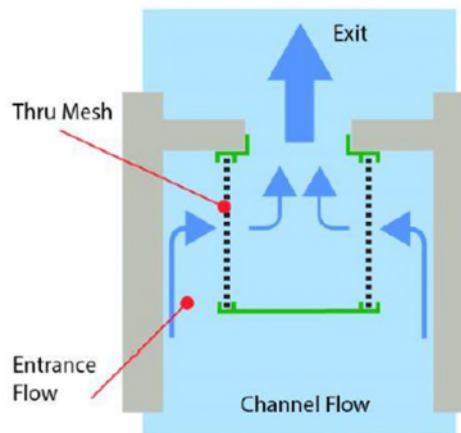
The report recommended conducting a pilot study of ultraviolet disinfection to evaluate the potential of fouling on the ultraviolet disinfection equipment and to help guide the choice of location and technology. The pilot work was completed in 2011. Final design of the UV facility and Ozone replacement equipment commenced in 2011 and was completed in May 2012. Construction of the \$12 million project was completed and the new system was on-line in April of 2014.

The final hydrogeological study of the Otter Ponds Aquifer well was completed. A production well was developed, tested and is licensed for an emergency supply that could supply Standish, Gorham and Windham if needed. Raw water screening for SLWTF was evaluated as part of this project. The current screens at the intake buildings are 70 years old and are in need of replacement. Preliminary design was completed in 2019 with final design planned for 2023 and construction in 2024.

Proposed 2023 -2024 CIP #18, Project 3007 – Replace Mechanical Screens



1: Image of a Typical Thru-Flow Traveling Water Screen



2: 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)

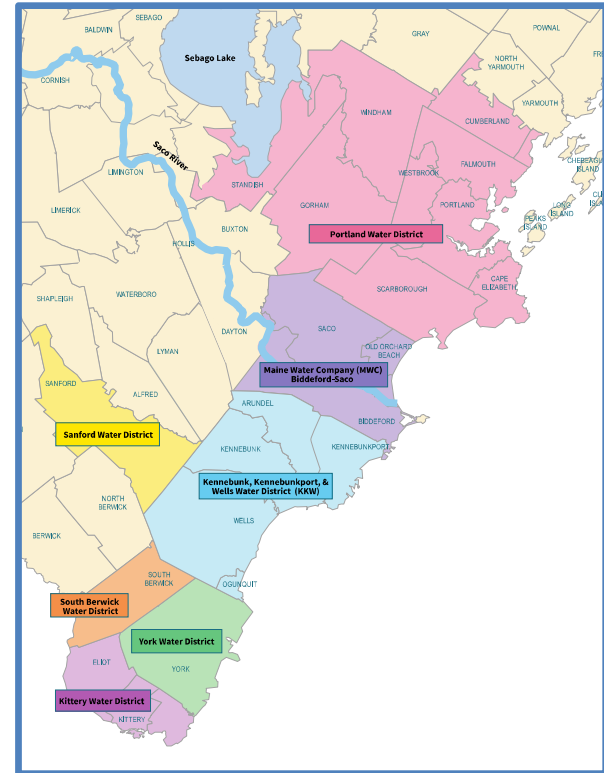


The Southern Maine Regional Water Council, made up of the 7 major water utilities of Cumberland and York County, completed a master plan in October of 2008. This document provides the southern Maine region with a planning tool for regional solutions to sustainable water resources and infrastructure for the foreseeable future. This study attained the following goals:

- Identified existing and potential sources of supply in the region and established the present and projected water needs in the region. Also, identified the limitations and risks of the existing and future supplies.
- Explored the logistics, benefits and impediments of creating an integrated, regional water supply system.
- Detailed the hydraulic considerations and infrastructure required to supply water over a large geographical area and evaluated potential water quality issues associated with blending various supplies and considered existing and future interconnections between systems.
- Developed short-term strategies for mutual-aid and sharing of resources between member utilities and developed an action plan to protect identified resources for future generations.
- Developed an integrated water supply plan for the entire region.
- Considered potential governance models for a regional supply organization.

The Council has continued to collaborate on regional utility planning and purchasing efforts. In 2016, the Council completed an update to the 2008 Regional Plan. The updated plan created a regional hydraulic model, explored in detail individual interconnections between all the utilities, identified and reviewed the following:

- existing capabilities for each system
- hydraulic limitations
- available water from neighboring systems
- water quality compatibility issues



Water Fund (continued)

Program Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Comprehensive Planning	\$750,000				
SCADA & Technology	\$50,000	\$50,000	\$50,000	\$50,000	\$75,000
Vehicle/Equipment Replacement		\$150,000			
Water Distribution System	\$8,075,000	\$9,675,000	\$10,075,000	\$9,675,000	\$16,075,000
Water Facilities Program	\$215,000	\$800,000	\$840,000	\$3,650,000	\$330,000
Water Supply	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Grand Total	\$9,115,000	\$10,700,000	\$10,990,000	\$13,400,000	\$16,505,000

Project by Program and Subprogram/Project Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Comprehensive Planning					
3\3071\Comprehensive Asset Management Strategic Plan	\$750,000				
SCADA & Technology					
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
Vehicle/Equipment Replacement					
326\3042\Replace Lake Patrol Boat		\$150,000			
Water Distribution System					
262\3069\SLWTF - Emergency Storage/Transmission- Design				\$600,000	
262\3070\SLWTF - Emergency Storage/Trans - Construction					\$6,000,000
307\3067\407 Zone Reliability Improvements		\$1,600,000			
307\3068\407 Zone Reliability Improvements			\$2,000,000		
408\3092\Water System Redundancy (looping), Upsizing	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
43\3121-a\WMR- Various Main Replacements	\$4,000,000	\$4,000,000	\$4,000,000	\$5,000,000	\$6,000,000
43\3121-b\WMR- Various Main Replacements	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
43\3121-c\WMR- Various Main Replacements R&R	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
53\3087\Water Valve Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
56\3077\Water Main Replacement - Seasonal Mains	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
61\3082\Water Services - Renew Domestic and Fire	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
65\3072\Water Hydrant Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Water Facilities Program					
122\3032\Water Facilities R&R	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
122\3210\Chemical Storage Facilities Upgrades		\$300,000			
122\3211\Windham Pump Upgrades		\$350,000			
122\3238\Parking Lot Improvements (Permeable Pavement)	\$65,000				
122\3240\SLWTF Raw Water Pump #4 Rebuild					\$180,000
18\3007\SLWTF Intake Screening Phase 1			\$240,000	\$3,500,000	
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			\$450,000		
Water Supply					
46\3097\Water System Security Improvements	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Grand Total	\$9,115,000	\$10,700,000	\$10,990,000	\$13,400,000	\$16,505,000

Water Fund (continued)

Financing Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond	\$6,000,000	\$7,600,000	\$8,240,000	\$11,100,000	\$14,000,000
R&R	\$2,365,000	\$3,100,000	\$2,750,000	\$2,300,000	\$2,505,000
Reserves	\$750,000				
Grand Total	\$9,115,000	\$10,700,000	\$10,990,000	\$13,400,000	\$16,505,000



Maine Turnpike widening project – District replaced two 1950 concrete water main crossings as part of that 2019 CIP#43 \$1.5M

Left photo - installing 36" HDPE pipe at Maine mall crossing
 Right photo – preparing to install 24"HDPE in 42" casing crossing the Turnpike

Subprogram # 3 Comprehensive Infrastructure Asset Management Plan

(Updated CWSSP Plan)

Division: Allocation

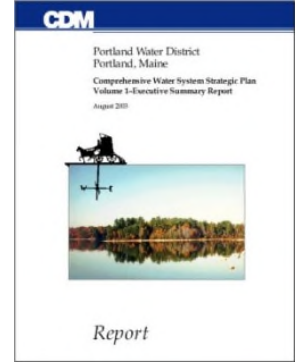
Manager: Crovo, Chris

Funding: Water Master Plan Reserve

Priority:

Description:

The District completed a Comprehensive Water System Strategic Plan (CWSSP) in 2003. This plan has served as the District’s water system master plan for the past 16 years and also served as a driver to develop an Asset Management approach to infrastructure maintenance and replacement of all the District’s assets. This project will provide an update to the existing CWSSP plan but will also build out Asset Management Plans for all the District’s water and wastewater critical assets.



Justification / Impact:

Since the completion of the CWSSP plan in 2003 the District has completed the following;

- Completed an Asset Inventory of our Infrastructure Systems
- Fully developed and integrated our CMMS and GIS system (Asset Information Management System – AIM)
- Updated portions of the Hydraulic Model for the Water system
- Completed many of the recommended capital projects
- Maintained a financial model for water system and wastewater communities
- Conducted many evaluations and condition assessments of many critical assets

The District is preparing to take the next step in Asset Management and would be seeking consulting assistance to completed the following;

- Determine assets that are critical to sustained performance and develop asset management plans for each asset class
- Development of condition-based monitoring plans and deployment
- Determine long-term optimized financial strategy

This effort would be used to update and create a single document outlining the status of our infrastructure and a multi-year plan on projects to be completed in the coming decade.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2021 – Reserve 3071	Comprehensive Infrastructure AMP	\$750,000
Total Cost, All Years:		\$ 750,000

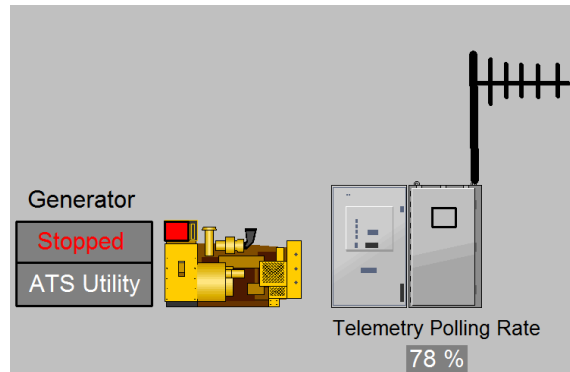
Previous Years on CIP: 2019

Related Projects:

Procurement Issues: Engineering Consulting procurement – purchasing policy

Subprogram # 110**SCADA/Process Control - Water****Division:** Water - General**Manager:** Pellerin, Greg**Funding:** R & R – Water-Div. 20**Priority:** Upgrade obsolete facility**Description:**

The program supports 30 water sites across the District in upgrading and replacing the existing Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to the District SCADA standards and provide for increased automation of the water systems and treatment. Programmable Logic Controllers (PLC) have been replaced across the District to meet the new standards and remove outdated, non-maintainable equipment.

**Justification / Impact:**

The benefit of this program is to increase the automation and reduce the staff hours needed to perform routine activities for the systems and treatment plants across the District.

History:

The District started changing out the system in 2003 by replacing the existing 20 year-old system 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:**

Budget year	Project	Budget Year Cost
2021 - R&R	3058 Miscellaneous Control Project Upgrades	\$50,000
2022 - R&R	3058 Miscellaneous Control Project Upgrade	\$50,000
2023 - R&R	3058 Micellaneous Control Projects Upgrades	\$50,000
2024 - R&R	3058 Micellaneous Control Projects Upgrades	\$50,000
2025 - R&R	3058 Miscellaneous Control Project Upgrades	\$50,000
2025 - R&R	3061 SLWTF SCADA PC Replacement Project	\$25,000
Total Cost, All Years:		\$275,000

Previous Years on CIP:

2003

Related Projects:

Subprogram #177

Subprogram # 262 SLWTF - Emergency Storage/60" Transmission Ph. 1

Division: Water - General

Manager: Johnson, Gordon

Funding: Bonds - Water - Div. 20

Priority: Customer driven

Description:

Construct a 7.0 Million Gallon Prestressed Concrete Reservoir near the Sebago Lake Water Treatment Facility (SLWTF).

Justification / Impact:

The purpose is to provide additional storage for partial redundancy of the SLWTF so that it can be shut down for longer periods of time and improve water quality by relying less on system storage.

History:

This project was conceived as part of the Comprehensive Water System Strategic Plan, as a future need and will be assessed further during the future "Comprehensive Asset Management Strategic Plan." – Subprogram # 3

Origin of the Subprogram:

This is a CWSSP recommendation to improve water quality and backup storage.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2024- Bond 3069	SLWTF- Emergency Storage/60" Transmission - Design	\$ 600,000
2025 - Bond 3070	Emergency Storage Tank - 7.0 MG / 60" transmission	\$6,000,000
Total Cost, All Years:		\$6,600,000

Previous Years on CIP:

2004

Related Projects:

CWSSP #267-1150, CAMSP #3-3071

Procurement Issues:

Standard consulting and/or contractor retention procedures.

Subprogram # 307**Gorham/Windham 407 Zone Improvements****Division:** Water - General**Manager:** Johnson, Gordon**Funding:** Bonds – Water - Div. 20**Priority:** Upgrade obsolete facility**Description:**

Phased design and construction of transmission mains, pumps & water tank for the integration of the 407 Zones (Gorham & Windham).

Justification / Impact:

The growth in these communities requires increased capacity. There are also specific service deficiencies and water quality issues that need to be addressed in the 407 Zones.

History:

The projects listed below were anticipated by the 1989 Master Plan. Further analysis and identification was undertaken as part of the 2003 CWSSP study.

Origin of the Subprogram:

Projects identified and proposed phasing outlined in Comprehensive Water System Strategic Plan.

Budget Summary:

Budget year		Project	Budget Year Cost
2022 - Bond	3067	407 Zone Reliability Improvements	\$1,600,000
2023 - Bond	3068	407 Zone Reliability Improvements II	\$2,000,000
Total Cost, All Years:			\$3,600,000



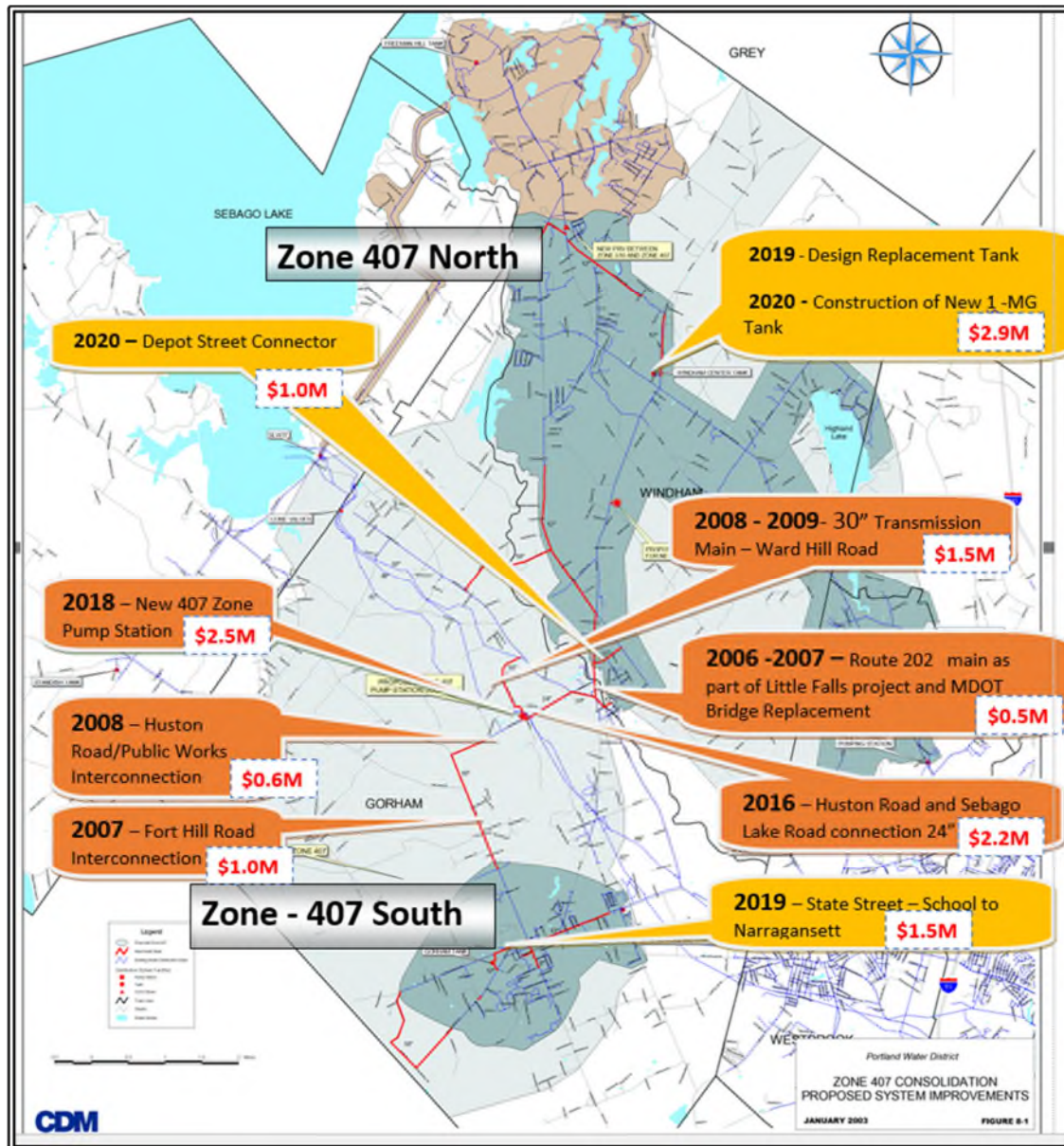
2019 – Subprogram 307
Elevated Storage for 407 zone north. This project will replace an old undersized 1950 Tank (left) with new tank (right) Currently under design – Construction 2021

Previous Years on CIP:

2000

Subprogram # 307

Gorham/Windham 407 Zone Improvements



Public Health, System Reliability and Public Safety Benefits

- Replacement of two obsolete Pumping Stations (Gorham- 1898, Prides Corner – 1950) with state of the art single new pump station (Wards Hill)
- Elimination of pressure limitations to approximately 150 customers
- Replacement of old 1950 undersized 0.2 MG Windham Center tank with new 1.0 MG elevated tank
- Improved water quality and water age in entire combined system
- Fire Flow improvements to Gorham Village and Windham

Subprogram # 43 Water Main Replacement

Division: Water - General

Manager: Johnson, Gordon

Funding: Bonds and R&R - Water- Div. 20

Priority: Routine replacement

Description:

Renew, replace, upgrade and loop cast iron water mains using materials and sizing for current and future conditions. Approximately 20,000 feet is scheduled for yearly replacement.

Level of Service – Reliability Performance

Water main break frequency - 10 breaks per 100 miles

Justification / Impact:

This is a cost saving and water quality improvement process. Mains selected for replacement use the same priority system as the Galvanized Main Renewal Program: water quality complaints, leak frequency data, and municipal/state reconstruction projects.

History:

Cast iron mains in sizes 2 inches and above had been a standard from the late 1800s until the introduction of Ductile Iron pipe in the late 1960s and early 1970s and PVC and HDPE pipe in the 1980s. The rigidity and lack of flexibility of cast iron has been attributed to failures such as frost movement, cross trenches, water hammers, contractor damages, as well as normal deterioration and corrosion through age. A percentage of these mains are unlined causing iron build up resulting in restricted flow and dirty water complaints. The District has a long term program to upgrade these mains.

Origin of the Subprogram:

The current list of projects is determined on the basis of water quality complaints, leak frequency data, age of main, and municipal/state reconstruction projects.

Budget Summary:

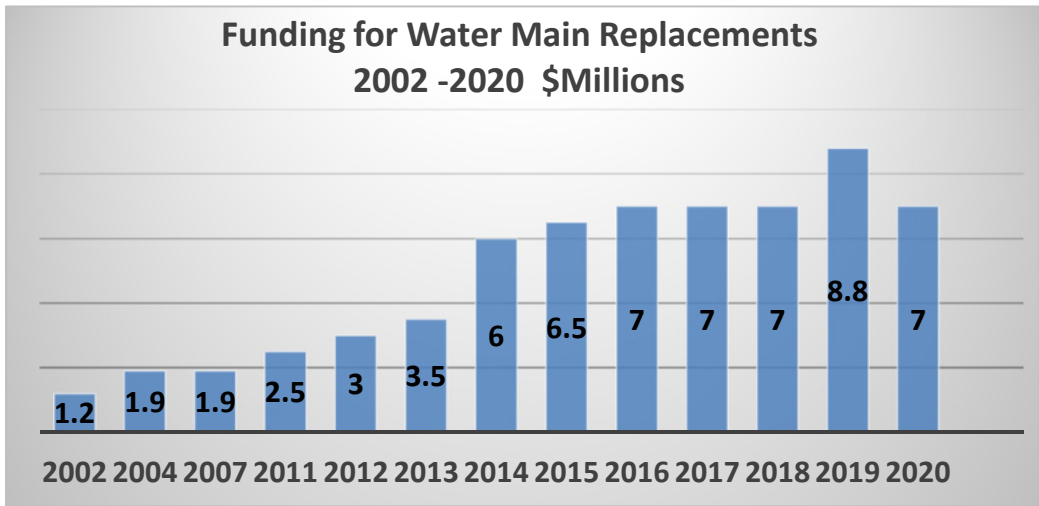
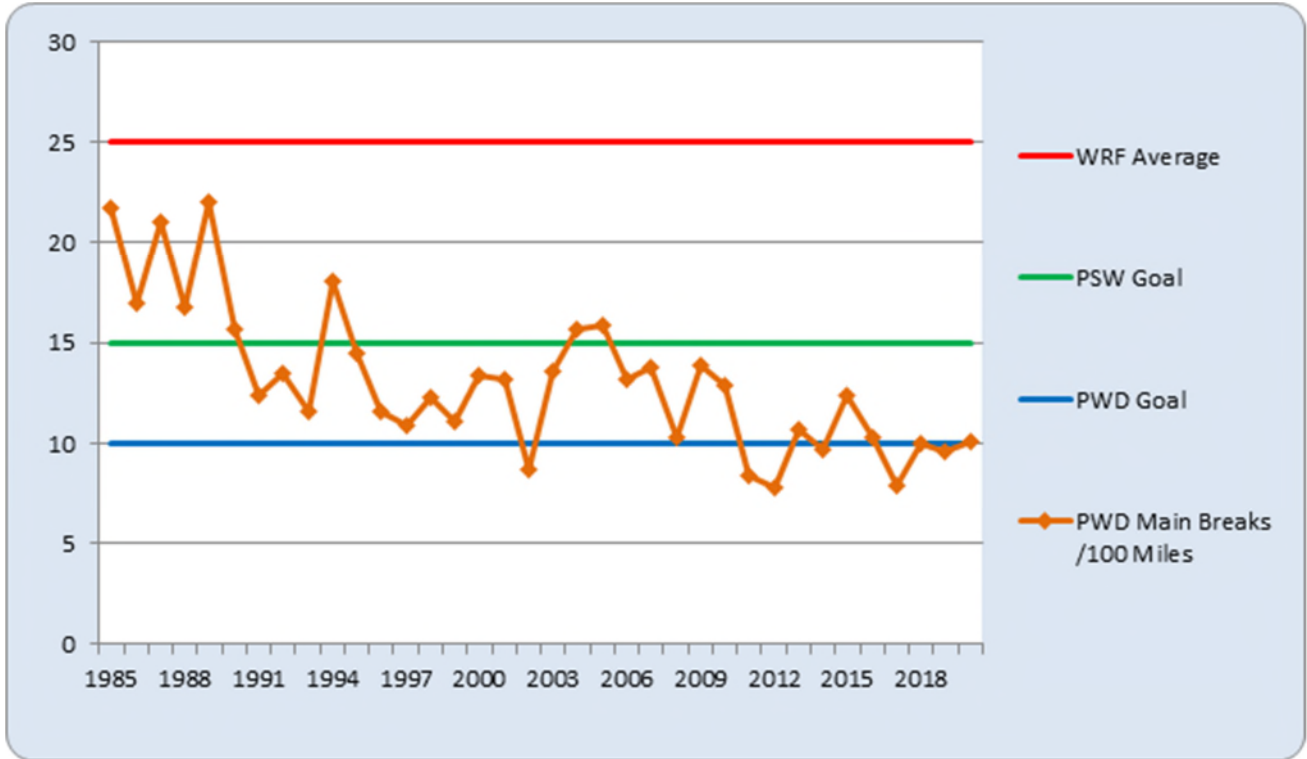
Budget Year		Project		Budget Year Cost
2021	Bond 3121	WMR- Various Main Replacements		\$7,000,000
2022	Bond 3121	WMR- Various Main Replacements		\$7,000,000
2023	Bond 3121	WMR- Various Main Replacements		\$7,000,000
2024	Bond 3121	WMR- Various Main Replacements		\$7,000,000
2025	Bond 3121	WMR- Various Main Replacements		\$7,000,000
Total Cost, All Years				\$28,000,000

Anticipated water main replacement projects for 2021

Water Main Replacement Projects - 2021	City	CIP Budget	Pipe Footage		Contracting Partnering Agency
		Estimated	Installed	Price/Ft	
Fore Street, Mountfort to Morning Ave	PO	\$ 1,300,000	3000	\$ 433	PO CSO
Cottage Road, Boadway to Pine	SP	\$ 900,000	2000	\$ 450	SP CSO
Pearl Street, Commercial to Congress	PO	\$ 800,000	2000	\$ 400	PO CSO
Maine Turnpike - Barron Center	PO	\$ 300,000	750	\$ 400	MTA
Narragansett Road - State Street to water tank	GO	\$ 900,000	2000	\$ 450	Gorham
Vaughn Street, Western Prom	PO	\$ 400,000	1000		PO CSO
Congress Street - St John to Weymouth	PO	\$ 600,000	1200	\$ 500	
Brighton, Wessex to Dorsett	PO	\$ 1,100,000	2400	\$ 458	PO CSO
Dartmouth Street - Baxter to Forest	PO	\$ 200,000	500	\$ 400	PO CSO
Water Main Replacement Projects		\$ 500,000	1200	\$ 417	
2021 total		\$ 7,000,000			

Level of Service – Reliability Performance

Water main break frequency - 10 breaks per 100 miles



Subprogram # 53 **Water Valve Replacement**

Division: Water - General

Manager: Wallace, Jim

Funding: R & R - Water - Div. 20

Priority: Routine replacement

Description:

Replacement of deteriorated valves in the distribution system.

Justification / Impact:

Replacement is determined and prioritized through data and workorders generated from our Distribution Valve Operation Program, Inspectors Valve Operation Reports, Leak Reports, Flushing Program Data, and the Distribution Maintenance Crews.

History:

Internal inspection of valves replaced has shown decay of the discs and spreaders which render the valves non-operational and ineffective in isolating a section of the distribution system. External inspection has shown corrosion of nuts and bolts, corroded operating nuts, and bent operating stems. Repacking and rebolting these valves has only provided a costly and temporary solution to the external portion of the valve. Replacement insures the valve will be up to standard and operational for many years to come with no required maintenance.



Origin of the Subprogram:

Our target is to replace 50 (+ or -) valves per year.

Budget Summary:

Budget year	Project	Budget Year Cost
2021 - R&R	3087 Replace Distribution Valves	\$200,000
2022 - R&R	3087 Replace Distribution Valves	\$200,000
2023 - R&R	3087 Replace Distribution Valves	\$200,000
2024 - R&R	3087 Replace Distribution Valves	\$200,000
2025 - R&R	3087 Replace Distribution Valves	\$200,000
Total Cost, All Years:		\$1,000,000

Previous Years on CIP:

All

Related Projects:

Procurement Issues:

Work is to be performed using District Staff, equipment, and materials.

Subprogram # 56 **Water Main Renewal - Seasonal Mains**

Division: Water - General
Funding: R & R – Water- Div. 20

Manager: Wallace, Jim
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:

Budget year	Project	Budget Year Cost
2021 - R&R	3077 Water Main Replacement - Seasonal Mains	\$25,000
2022 - R&R	3077 Water Main Replacement - Seasonal Mains	\$25,000
2023 - R&R	3077 Water Main Replacement - Seasonal Mains	\$25,000
2024 - R&R	3077 Water Main Replacement - Seasonal Mains	\$25,000
2025 - R&R	3077 Water Main Replacement - Seasonal Mains	\$25,000
Total Cost, All Years:		\$125,000

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 District Data. This Project is also coordinated with the various municipal paving projects in order to minimize future inflated municipal street opening costs and repairs.

History:

Galvanized and cast iron were common materials used in the installation of services from the early 1900s to the late 1940s. Copper was also used starting in the 1930s. The relatively inferior material of galvanized and cast iron are subject to rust related water quality and restricted flow problems from plugging as well as leak frequency from deterioration and corrosion. Older copper lines (50 years old + or -) are starting to show signs of leak failures from the old tube nut fittings used to couple fittings together. From a cost and end product comparison it is more efficient to replace than repair. The District has a long term program to replace and upgrade all sub standard services.

Origin of the Subprogram:

There are approximately 1,000 (1/2" to 2" size) galvanized, cement lined iron, and cast iron domestic services, and an additional 11,000 copper services installed prior to 1950. We also have 260 cast iron services installed prior to 1950. Our goal is to replace at least 300 services per year.

Budget Summary:

Budget year	Project	Budget Year Cost
2021 - R&R 3082	Water Services Replacement	\$600,000
2022 - R&R 3082	Water Services Replacement	\$600,000
2023 - R&R 3082	Water Services Replacement	\$600,000
2024 - R&R 3082	Water Services Replacement	\$600,000
2025 - R&R 3082	Water Services Replacement	\$600,000
Total Cost, All Years:		\$3,000,000

Previous Years on CIP:

All

Related Projects:

Procurement Issues:

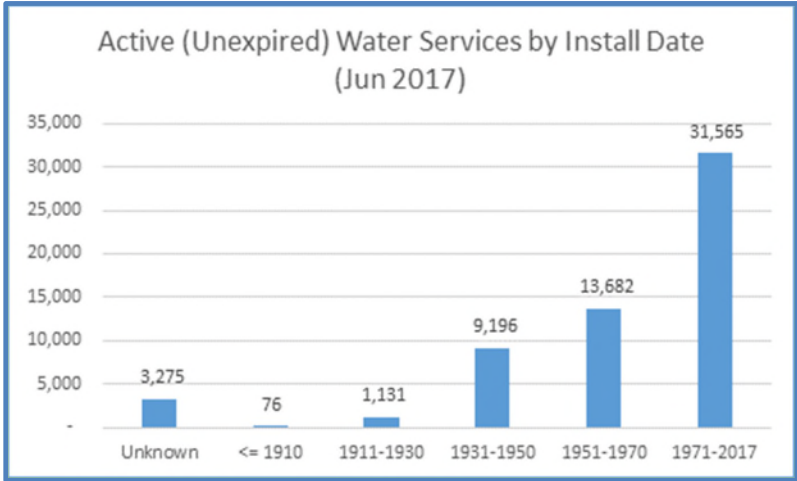
Project to be performed using District Staff, equipment, and materials and contracted through our main replacement projects.

Subprogram # 61 **Water Services - Renew Domestic & Fire**

Active (Unexpired) Water Services by Install Date

Install Date	# Services	%
Unknown	3,275	5.9%
<= 1910	76	0.1%
1911-1930	1,131	2.0%
1931-1950	9,196	16.5%
1951-1970	13,682	24.6%
1971-2017	31,565	56.7%

Total **55,650**



Subprogram # 65 **Water Hydrants Replacement**

Division: Water - General
Funding: R & R – Water –Div. 20

Manager: Wallace, Jim
Priority: Routine replacement

Description:

Replace and upgrade obsolete hydrants to meet current safety and operational standards, and to insure inventory parts availability for hydrant repairs.

Justification / Impact:

Replacement is determined and prioritized by: (1) hydrant failures (major damage and/or external leak,) (2) upgrade and replacement of obsolete sub standard hydrants based on (age - safety standards - repair parts availability - cost comparison to replace or repair,) (3) distribution main replacement program, (4) municipal and state reconstruction projects and (5) data gathered from the Hydrant Repair and Reconditioning Programs and the Winter Hydrant Inspection Program.



History:

The O&M Hydrant Repair/Reconditioning Programs and the Hydrant Winter Inspection Programs have been in place since the early 60s. These programs insure that our hydrants meet fire protection standards and provide direction for our C. I. P. Replacement Program. In recent times the ability to procure replacement parts for the 620 Matthews Post hydrants (Vintage late 1800s to the late 1940s) has become difficult or impossible. The 870 Darling B-50 hydrants (vintage early 1950s to early 1960s) require major internal rebuilding. Both hydrant makes are not traffic model hydrants and fail to have a sheer point to breakaway on impact. This failure results in costly repairs and replacements, and is unsafe in many highway standards (Deadly-Fixed-Objects Regulation).

Origin of the Subprogram:

Our project is focused on replacing and upgrading 75 hydrants per year over a twenty year replacement program of 1450 hydrants.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2021- R&R	3072 Hydrant Replacement	\$200,000
2022 - R&R	3072 Hydrant Replacement	\$200,000
2023 - R&R	3072 Hydrant Replacement	\$200,000
2024 - R&R	3072 Hydrant Replacement	\$200,000
2025 - R&R	3072 Hydrant Replacement	\$200,000
Total Cost, All Years:		\$1,000,000

Previous Years on CIP: All

Related Projects:

Procurement Issues: Project is performed using District staff, equipment, and materials.

Subprogram # 122 Water Facilities Renewal and Replacement

Division: Water - General
Funding: R & R – Water- Div. 20

Manager: Wallace, Jim
Priority: Routine replacement

Description:

This is an ongoing project designed to maintain and improve water pump stations, treatment facilities and related infrastructure. Modifications and upgrades will ensure adequate capacity, reliability and safety of these facilities.

Justification / Impact:

Components of the older pump stations that have reached their useful life and obsolete equipment should be replaced. Replacing this equipment before it fails completely reduces the amount spent on operating and maintaining the equipment.

History:

This planned renewal and replacement will assist operations in moving toward a goal of performing more predictive and preventive maintenance instead of emergency maintenance.

Origin of the Subprogram:

Budget Summary:

Budget Year			Project	Budget Year Cost
2021	R&R	3238	Parking Lot drainage improvements	\$65,000
2021	R&R	3032	Water Facilities R&R	\$100,000
2022	R&R	3032	Water Facilities R&R	\$100,000
2022	R&R	3210	Chemical Storage Facilities Upgrades	\$300,000
2022	Bond	3211	Windham Pump Upgrades	\$350,000
2024	R&R	3032	Water Facilities R&R	\$100,000
2025	R&R	3240	SLWTF Raw Water Pump #4 rebuild	\$180,000
2025	R&R	3032	Water Facilities R&R	\$100,000
Total Cost, All Years				\$1,295,000

Previous Years on CIP:

2007 to present



2019 CIP -Upgraded SLWTF Standby Generator to meet DEP standard for use in Real-Time Demand Response Program

Subprogram # 18 **SLWTF Intakes - Replace Mechanical Screens**

Division: Water - General
Funding: Bonds - Water- Div. 20

Manager: Johnson, Gordon
Priority: Routine replacement

Description:

This project involves selecting and installing a screen system to replace the existing screens in service at the intakes on Sebago Lake. The present systems use two travelling screens with backwash at each location with three sets of hand screens at the 1925 Intake and two sets of hand screens at the 1952 Intake.

Justification / Impact:

The existing equipment is approaching 50 years old and is basically worn out. The new equipment will be chosen to automate the screening process as much as possible to minimize operator time and reduce/prevent fish breakthrough.

History:

The intake screens were supposed to be retired after SLWTF start-up. Manual screens, designed for the inlet channel of the ozone contactor, were supposed to replace the need for the ones at the intakes. Unfortunately, a method for washing the screens was not designed into the facility. Many attempts were made to use the inlet screens before deciding to continue the use of the intake screens.

Origin of the Subprogram:

The hand and travelling screens at the intake buildings were installed in the early 1950's. They are past their expected lifespan. Present washing procedures are labor intensive, requiring nine to fifteen labor hours per week. We have experienced small fish getting by the screens and showing up in the clearwell. The ozone and chlorination process kills the fish, but we do not want to let them escape into the system.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2023- Bond 3007	Intake screening – final design/bidding	\$240,000
2024- Bond 3007	Intake Screening – Phase 1	\$3,500,000
Total Cost, All Years:		\$3,740,000

Previous Years on CIP: 1998 to present

Related Projects:

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:

Budget year	Project	Budget Year Cost
2021 - R&R	3102 Water Tank Maintenance	\$ 50,000
2022 - R&R	3102 Water Tank Maintenance	\$ 50,000
2023 - Bond	3104 Water Tank Maintenance: Gorham Tank	\$450,000
2023 - R&R	3102 Water Tank Maintenance	\$ 50,000
2024 - R&R	3102 Water Tank Maintenance	\$ 50,000
2025 - R&R	3102 Water Tank Maintenance	\$ 50,000
Total Cost, All Years:		\$700,000

Previous Years on CIP:

Since 2000

Procurement Issues:

RFP preparation and contract administration will be by District Staff. Maintenance and repair services will be competitively bid.

Subprogram # 46 **Water System Security**

Division: Water - General

Manager: Wallace, Jim

Funding: R & R – Water – Div.20

Priority: Security of facilities

Description:

This program is to improve the physical security of the District's water facilities. The program supports installing and upgrading security measures on District property and facilities. These measures include perimeter fencing, signage, access control, cyber keys and locks, video surveillance and monitoring, security lighting and improved SCADA monitoring.

Justification / Impact:

The District has performed two Vulnerability Assessments (2003, 2015) and has been following the recommendations from these reports.

History:

In the fall of 2004 and summer of 2005 fencing was installed on the East and West side of the lower bay inside the 2 mile limit. This was funded through the CIP. In 2005 hatch covers along with alarms were installed over tank hatches and a cyberlock system was installed on all SCADA panels. This was funded by a grant from MEMA - Homeland Security. In subsequent years video surveillance and access control were expanded to all major facilities across the District along with continued improvements to perimeter fencing and access control.



Origin of the Subprogram:

The vulnerability assessment completed in March of 2003 indicated that physical protection of existing facilities could be improved. Many of those recommendations were completed and a new Vulnerability Assessment was completed in 2015 and new recommendations are now determining the water system security improvements.

Budget Summary:

Budget year	Project	Budget Year Cost
2021 - R&R	3097 Water System Security Improvements	\$25,000
2022 - R&R	3097 Water System Security Improvements	\$25,000
2023 - R&R	3097 Water System Security Improvements	\$25,000
2024 - R&R	3097 Water System Security Improvements	\$25,000
2025 - R&R	3097 Water System Security Improvements	\$25,000
Total Cost, All Years:		\$125,000

Previous Years on CIP: 2004 to present

Related Projects:

Procurement Issues: Standard purchasing procedures will apply.

Cape Elizabeth Wastewater

Cape Elizabeth – Wastewater Treatment Facilities

In response to a regulatory requirement to eliminate bypassing of flows during periods of wet weather, upgrades were completed in 2012 to increase the peak flow capacity of the facility. These upgrades included new influent screening, high flow and low flow return sludge pumps, upsizing a portion of the secondary clarifier effluent piping, and new effluent pumps. Recent engineering evaluations include assessments of the aeration and secondary clarifier structures, disinfection systems, and HVAC equipment. Upgrades recently completed or ongoing include:

- Influent alkalinity metering system for enhanced buffering capacity and activated sludge stability
- Heating and ventilation system to serve the headworks and sludge thickening areas (ongoing)
- Replacement of the chlorine and sodium bisulfite chemical disinfection systems with Ultraviolet Disinfection (Completed Spring 2020)

UV Disinfection System Project – 2018 CIP 424, project 2701 - Construction of the upgrade completed by Spring 2020.



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 is underway with improvements to the Ottawa Road Pump Station including upgrades to standby power, flow measurement, and pumping.

CCTV assessment of the collection system is ongoing as part of the District's 10 year program to inspect its entire collection system.

Cape Elizabeth - Pump Stations

The District has continued with the installation of standby power generators at key pump stations. These generators enable systems to operate during the frequent power outages that occur in Cape Elizabeth while reducing manpower during these events. Additionally, automated emergency power goes a long way towards eliminating the occasional back-ups that have occurred within the collection system.

In 2018 CIP an upgrade project was approved for the Family Field (Little John) Pump Station. This project is currently under construction, anticipated completion is spring 2021.

Cape Elizabeth Wastewater (continued)

Program Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology	\$245,000				
WW Collection & Pumping	\$375,000	\$25,000	\$340,000	\$25,000	
WW Treatment	\$25,000	\$100,000	\$175,000	\$25,000	\$125,000
Grand Total	\$645,000	\$125,000	\$515,000	\$50,000	\$125,000

Fund

Cape Elizabeth

Project by Program and Subprogram/Project Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology					
177\3125-a\SCADA Radio Modem Replacement Project - PI	\$245,000				
WW Collection & Pumping					
52\3005\Ottawa Rd PS Upgrades	\$350,000				
52\3130\Cape Elizabeth Pump Station R&R	\$25,000	\$25,000	\$25,000	\$25,000	
52\3168\Stonegate South Upgrades			\$90,000		
52\3169\Algonquin PS Upgrades			\$135,000		
52\3170\Peabbles Cove PS Upgrades			\$90,000		
WW Treatment					
424\3129\Cape Elizabeth WWTF- R&R	\$25,000	\$50,000	\$25,000	\$25,000	\$25,000
424\3188\Clarifier Upgrade			\$150,000		
424\3189\Boiler Upgrade/Replacement					\$100,000
424\3207\Sludge Handling and Headworks Odor Control					
424\3213\WAS Piping and RDT Drive Upgrade \$50,000			\$50,000		
424\3223\Aerator and Tank Refurbishment					
424\3224\Odor Control (PEND)					
424\3225\Peabbles Dechlorination Bunker Repurposing					
424\3226\Building Envelope					
Grand Total	\$645,000	\$125,000	\$515,000	\$50,000	\$125,000

Financing Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond	\$595,000		\$225,000		
R&R	\$50,000	\$125,000	\$290,000	\$50,000	\$125,000
Grand Total	\$645,000	\$125,000	\$515,000	\$50,000	\$125,000

Subprogram # 52

Cape Elizabeth Pump Stations - R&R

Division: Wastewater - Cape Elizabeth

Manager: Poulin, Charlene

Funding: Bond and R&R – Wastewater – Div. 51

Priority: Routine replacement

Description:

This program provides a planned approach for the replacement of obsolete equipment in Cape Elizabeth wastewater pump stations.

Justification / Impact:

The pump stations have reached the end of their useful design life and obsolete equipment must be replaced. Upgrades, including the addition of VFD's in some cases, will provide more pumping capacity, mitigate CSO activity, and provide some power savings.

History:

This planned approach will assist maintenance and operations in moving toward a goal of performing more predictive/preventative maintenance instead of emergency maintenance.



Ottawa Road Pump Station – Installed in 1976 – scheduled for upgrade in 2021

Budget Summary:

Budget Year		Project		Cost	
2021	Bond	3005	Ottawa Rd PS Upgrades	\$	350,000
2021	R&R	3130	Cape Elizabeth Pump Station R&R	\$	25,000
2022	R&R	3130	Cape Elizabeth Pump Station R&R	\$	25,000
2023	R&R	3130	Cape Elizabeth Pump Station R&R	\$	25,000
2023	Bond	3168	Stonegate South Upgrades	\$	90,000
2023	Bond	3169	Algonquin PS Upgrades	\$	135,000
2023	Bond	3170	Peabbles Cove PS Upgrades	\$	90,000
2024	R&R	3130	Cape Elizabeth Pump Station	\$	25,000
2024	R&R	3130	Cape Elizabeth Pump Station R&R	\$	25,000
Total Cost, All Years				\$	765,000

Previous Years on CIP: 2005 to present

Related Projects: Subprogram #407

Condition Assessment – Cape Elizabeth Pump Stations

2014 Cape Elizabeth Pump Station Report			
Station	Rating	Station Type	Address
Algonquin Pump Station	3.30	Sub Dup	10 Waumbek Road
Birch Knolls	4.00	Sub Sing	19 Birch Knolls
Broad Cove No. Pump Station	3.79	Sub Tri	53 Broad Cove Road
Broad Cove So. Pump Station (2016)	3.15 4.5	Sub Dup	32A Broad Cove Road
Clifford	4.00	Sub Sing	886A Shore Road
Cragmoor North	3.65	Sub Dup	7A Cragmoor
Cragmoor South	3.30	Sub Sing	876A Shore Road
Cross Hill	3.65	Sub Dup	59 Wells Road
Family Field (2018 under design Construction 2020; formerly known as Little John))	2.76	Packaged Dry Pit	7 Little John Road
Garden Ln Pump Station (2014)	5	Sub Dup	5 Garden Lane
Gull Crest - Public Works Building	3.08	Sub Dup	9 Cooper Drive
Gull Crest - Public Works Transfer Station	3.04	Sub Sing	21 Dennison Drive
Hunts Point	3.90	Sub Dup	1A Hunt's Point Road
Maiden Cove Pump Station Under design 2020	1.98	Ejection	5 Kenyon Lane
Mitchell Rd Pump Station (2017)	3.16	Sub Dup	468 Mitchell Road
Oakhurst Pump Station	2.94	Sub Dup	123 Oakhurst Road
Ottawa Rd. Pump Station (2021)	2.09	Packaged Dry Pit	14 Ottawa Road
Pachios	3.97	Sub Dup	880A Shore Road
Peabbles Cove Pump Station	3.31	Sub Dup	15 Peabbles Cove Road
Peabbles Point Pump Station	2.87	Sub Dup	56 Shipwreck Cove Road
Running Tide Pump Station	3.59	Sub Dup	13A Running Tide Road
Spurwink Pump Station	4.16	Canned	445 Spurwink Ave
Stonegate North (2016)	3.47 4.5	Sub Dup	30 Stonegate Road
Stonegate South	3.04	Sub Dup	8 Stonegate Road
Tall Pines East Pump Station	4.67	Sub Dup	225 Ocean House Road
Tall Pines Pump Station	2.58	Sub Dup	30 Tall Pine Road
Wildwood Pump Station (2015)	2.95 4.5	Sub Dup	34A Wildwood Drive
Cape Elizabeth Average	3.53		
PWD Overall Average (74 Stations)	3.47		

Subprogram # 424**Cape Elizabeth WWTF****Division:** Wastewater - Cape Elizabeth**Manager:** Rodriguez, Paul**Funding:** R & R – Wastewater – Div. 51**Priority:** Routine replacement**Description:**

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The plant came online in 1988 along with the Spurwink Pump Station which 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: 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, and HVAC equipment. Upgrades recently completed or ongoing include:

- Heating and ventilation system to serve the headworks and sludge thickening areas (ongoing)
- Advanced treatment process configuration assessment (ongoing)
- Replacement of the chlorine and sodium bisulfite chemical disinfection systems with Ultraviolet Disinfection (Completed Spring 2020)

Budget Summary:

Budget Year			Project	Cost
2021	R&R	3129	Cape Elizabeth WWTF- R&R	\$ 25,000
2022	R&R	3129	Cape Elizabeth WWTF- R&R	\$ 50,000
2022	Bond	3213	WAS Piping and RDT Drive Upgrade	\$ 50,000
2023	R&R	3129	Cape Elizabeth WWTF- R&R	\$ 25,000
2023	Bond	3188	Clarifier Upgrade	\$ 150,000
2024	R&R	3129	Cape Elizabeth WWTF- R&R	\$ 25,000
2025	R&R	3129	Cape Elizabeth WWTF- R&R	\$ 25,000
2025	R&R	3189	Boiler Upgrade/Replacement	\$ 100,000
Total Cost, All Years				\$ 425,000

Previous Years on CIP:

2006

Cumberland Wastewater

Cumberland – Pump Stations

In 2007, the District completed upgrading the Tuttle Road pump station and the Foreside Road pump station. The Powell Road pump station was completed in 2008. In 2011, the 4th year of CCTV assessment of buried infrastructure was completed. An emergency generator was installed at the Smalls Brook Crossing pump station. This was part of a continued program to install emergency generators at pump stations. In 2014, an assessment of all of the pump stations in the system was completed to assist with prioritization and CIP development. In 2017, the Longmeadow pump station was upgraded including replacement pumps and telemetry panel.

The District and the Town of Cumberland have investigated infiltration and inflow (I/I) sources in the collection system. CCTV work, flow monitoring, and smoke testing are used to identify sources of I/I. The Town of Cumberland, with the District's assistance, also inspect 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 Wastewater (continued)**Program Summary**

	-2021-	-2022-	-2023-	-2024-	-2025-
WW Collection & Pumping	\$120,000	\$420,000	\$20,000	\$20,000	\$20,000
Grand Total	\$120,000	\$420,000	\$20,000	\$20,000	\$20,000

Project by Program and Subprogram/Project Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
WW Collection & Pumping					
41\3136\Cumberland WW Pump Stations - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
41\3171\Stony Ridge Pump Replacement		\$30,000			
41\3172\Ocean Terrace PS Pump Replacement, Bypass		\$50,000			
41\3173\Ferne Lane PS Pump Replacement		\$30,000			
41\3174\Ledge Rd PS Upgrades		\$75,000			
41\3175\Brookside PS Pump and Electrical Upgrades		\$35,000			
41\3176\Cumberland Meadows PS Upgrades		\$85,000			
41\3177\Smalls Brook PS Upgrades		\$95,000			
41\9999\Harris Road Culvert	\$100,000				
Grand Total	\$120,000	\$420,000	\$20,000	\$20,000	\$20,000

Fund Cumberland **Financing Summary**

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond		\$245,000			
R&R	\$120,000	\$175,000	\$20,000	\$20,000	\$20,000
Grand Total	\$120,000	\$420,000	\$20,000	\$20,000	\$20,000

Subprogram # 41 **Cumberland WW Pump Stations - R&R**

Division: Wastewater - Cumberland

Manager: Poulin, Charlene

Funding: R & R – Wastewater- Div. 53

Priority: Routine replacement

Description:

This project provides for continual upgrade of the pumping stations located within the Cumberland wastewater system. In most cases the work involves pump and rail replacements along with control modifications.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. This program will provide a planned approach to the maintenance management of Cumberland's wastewater pump stations.

History:

This planned approach will assist maintenance and operations in moving towards a goal of predictive and preventative maintenance.

Origin of the Subprogram:

Budget Summary:

Budget year		Project	Cost
2021 - R&R	3136	Cumberland WW Pump Stations - R&R	\$20,000
2021 - R&R	3242	Harris Road Culvert	\$100,000
2022 - R&R	3136	Cumberland WW Pump Stations - R&R	\$20,000
2022 - Bond	3171	Stony Ridge Pump Station Upgrades	\$30,000
2022 - Bond	3172	Ocean Terrace PS Pump Replacement, Bypass	\$50,000
2022 - Bond	3173	Ferne Lane PS Upgrade	\$30,000
2022 - Bond	3174	Ledge Rd PS Upgrades	\$75,000
2022 - Bond	3175	Brookside PS pump and Electrical Upgrades	\$35,000
2022 - Bond	3176	Cumberland Meadows PS Upgrades	\$85,000
2022 - Bond	3177	Smalls Brook PS Upgrades	\$95,000
2023 - R&R	3136	Cumberland WW Pump Stations - R&R	\$20,000
2024 - R&R	3136	Cumberland WW Pump Stations - R&R	\$20,000
2025 - R&R	3136	Cumberland WW Pump Stations - R&R	\$20,000
Total Cost, All Years:			\$500,000

Previous Years on CIP: 2001 to present

Procurement Issues: RFP for engineering services. Construction services will be low bid.

Condition Assessment – Cumberland Pump Stations

2014 Cumberland Pump Station Report			
Station	Rating	Station Type	Address
Brookside PS (2015) (2022)	3.18	Sub Dup	14 Brookside Drive
Cumberland Meadows (2022)	3.63	Sub Dup	12 Red Mill Way
Drowne Rd.	4.93	Sub Dup	2 Baxter Lane
Fern Ln. PS (2022)	3.81	Sub Dup	26 Ferne Lane
Foreside Rd. PS	3.75	Canned	82 Foreside Road
Ledge Rd. PS (2022)	3.82	Sub Dup	23 Ledge Road Unit A
Longmeadow Dr. PS (2016)	3.65 4.5	Sub Dup	17 Longmeadow Road
Ocean Terrace PS (2022)	3.26	Canned	12 Ocean Terrace
Powell Rd. PS	3.73	Canned	5 Powell Road
Small Brook Crossing(2022)	3.43	Sub Dup	18 Crossing Brook Road
Stony Ridge PS (2022)	3.60	Sub Dup	29 Stony Ridge Road
Tuttle Rd.	3.80	Canned	229 Tuttle Road
Twin Brook	3.83	Sub Dup	185 Tuttle Road
Cumberland Average	3.72		
PWD Overall Average	3.47		



2016 – Longmeadow P.S. installed in 1983 – condition rating was 3.26 - Upgrades included new SCADA and pump control panels, pumps, valves, and electrical work. New rating is 4.5

Gorham/Westbrook/Windham Wastewater

Westbrook Regional Treatment Plant

Wright-Pierce completed a comprehensive plant evaluation of the Westbrook Regional WWTF in 2001. The plan outlined recommended upgrades to the facility that had been constructed in the late '70s. To date, the District has made improvements to:

- Plant water system (2006)
- Clarifier scum removal (2006)
- Scum handling, and sludge conveyances control (2006)
- Plant electrical system – Standby Generator (2008)
- Polymer system (2010)
- RAS pumps (2011)
- Plant Control System (2013)
- RAS and flow split to the secondary clarifiers (2014)
- Sludge Dewatering (2018)

Proposed major modifications for a headworks upgrade were set aside in favor of installing screens at the two major pump stations feeding the treatment plant. Start-up of these systems at the Cottage Place and East Bridge St. Pump Stations in 2008 successfully eliminated pump plugging and has reduced the quantity of rags at the treatment plant. As part of the aeration and clarifier upgrade design effort, reducing the spacing of the screens at the pump stations is recommended to provide additional protection for the new equipment and reduce associated maintenance.

In 2013, design and replacement of the control system began. This was completed in 2014 along with chemical feed pumps, residual samplers, and enhanced automation of the disinfection system.

The aeration system was evaluated in 2015 to develop a roadmap for the eventual upgrade of the aeration system as it nears the end of its service life. The 2019 CIP included design phase services to upgrade the aeration system and secondary clarification process. These upgrades will facilitate process control to maintain dissolved oxygen to meet today's loadings, match current peak demand, and provide more energy efficient oxygen delivery. Similar to the East End plant in Portland, a selector is recommended to enhance process control and improve settleability.

In the summer of 2014, the Department of Environmental Protection requested that treatment plants across the State of Maine complete ambient and treatment plant effluent sampling for nitrogen and phosphorus. The designed upgrades to the aeration facilities would be incorporated into any additional treatment system upgrades for nutrient removal, should that become necessary in the future; however, the latest permit renewal includes continued sampling and monitoring only.

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. Design of the aeration and secondary clarification upgrade is complete and bids are due in November 2020. Construction must progress in a phased sequence to maintain plant operation and is scheduled to be complete by early summer 2023.



Gorham/Westbrook/Windham Wastewater (continued)

In 2015, the District completed an evaluation of sludge dewatering technologies for the Westbrook Regional WWTF, including rehabilitation of the existing belt filter press. Alternative technologies were piloted to quantify the improvement in dewatering performance as compared to the existing equipment. It was determined that alternative technologies would increase the dewatered sludge solids content from an average of approximately 16% to a minimum of 20%, which significantly reduces the volume of sludge to be disposed. This would reduce sludge disposal costs while enhancing flexibility with respect to future sludge disposal alternatives. As a result, in 2016 the proposed belt filter press rehabilitation project (CIP #416 project 2075) was replaced with a proposed upgrade to an alternative technology (CIP #167 project 2534). In 2016, alternative technologies were evaluated and competitively procured through an evaluated bid process that resulted in a recommendation to upgrade to a screw press technology in January of 2017. This project was completed in the spring of 2018 and has been performing well and achieving the target minimum cake solids. In the winter of 2019 the belt filter press equipment was removed and a platform was installed around the screw press to facilitate access for operation and maintenance. Design work to remove the belt filter press control panel, which includes a number of hard-wired interconnects with various system components, along with associated control system modifications is underway and expected to be complete by the end of 2021.



2018 CIP 416 project 3027 - Screw Press Access Stair and Platform

Gorham/Westbrook/Windham Wastewater (continued)

Westbrook – Sewer System

In late 2007, the District hired Woodard & Curran, Brown & Caldwell and Jordan Environmental to update the City of Westbrook's CSO Master Plan. This plan was completed and submitted to Maine DEP in 2008. Some of the work included in the plan involved the City, and some involved the District. Because the City operates the collection system, the bulk of the first five years would focus on the removal of infiltration and inflow (I/I) from the City collection system. Later portions of the plan would include storage and other work on District owned assets. Since the plan was updated, all flow from all the CSO outfalls are now continuously monitored.

The plan was updated in 2014 and submitted to the DEP per the State's requirements. The plan included a summary of the work completed in the first 5 years and a revised set of projects and schedule. The projects that involve District facilities are being completed in accordance with the Master Plan and have included several projects to increase the capacity of the interceptor system. The Master Plan included upgrades and capacity increase at the Dana Court Pump Station (CIP #29 project 2527). This project was completed in 2019. The plan also included the addition of floatables containment at the CSO diversion structure prior to the Cottage Place pump station (CIP #29 project 2524). This project was completed in 2020.

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 WWTF for treatment. This action led to the closure of two outfalls into the Presumpscot River. This project also led to an upgrade of the Tow Path pump station and the decommissioning of the treatment plant in Little Falls in 2010. Due to the relatively young age of most of Gorham's other pump stations, preventive maintenance, condition assessment through CCTV inspection of buried infrastructure, and minor repairs have been the focus in recent years.

To increase reliability and improve service during power outages, standby generators have been installed at most of the pump stations. In 2014, an assessment of all of the pump stations in the system was completed, and stations with identified needs were then flagged for more detailed investigation. As a result of those studies, upgrades at the Androscoggin PS (CIP #180 project 2317) and Canterbury Pines PS (CIP #60 project 1117) were completed by the end of 2017.

To ensure that accurate wastewater flow is measured and used for allocating operating costs to the Town of Gorham, a flow meter was installed to measure the flow from the Town of Gorham to the Westbrook Gorham Windham WWTF. This meter was installed and is maintained by a third party vendor as part of the District's extensive flow monitoring program.

Gorham/Westbrook/Windham Wastewater (continued)

Gorham, Westbrook and Windham are served by a centralized wastewater treatment plant in Westbrook. Capital costs are allocated by each municipality's relative design capacity of the specific infrastructure.

Program Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology					
Westbrook Joint					\$25,000
WW Collection & Pumping					
Gorham	\$20,000	\$20,000	\$350,000	\$20,000	\$20,000
Westbrook	\$145,000	\$20,000	\$20,000	\$20,000	\$3,220,000
Windham	\$35,000	\$90,000	\$520,000	\$20,000	\$20,000
WW Treatment					
Westbrook	\$125,000				
Westbrook Joint	\$270,000	\$150,000	\$50,000	\$1,025,000	\$2,200,000
Windham		\$10,000,000			
Grand Total	\$595,000	\$10,280,000	\$940,000	\$1,085,000	\$5,485,000

Financing Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond			\$500,000	\$750,000	\$5,100,000
Bond SRF		\$10,000,000			
Operating Expense	\$75,000				
R&R	\$520,000	\$280,000	\$440,000	\$335,000	\$385,000
Grand Total	\$595,000	\$10,280,000	\$940,000	\$1,085,000	\$5,485,000

Gorham/Westbrook/Windham Wastewater (continued)

Project by Program and Subprogram/Project Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Gorham	\$20,000	\$20,000	\$350,000	\$20,000	\$20,000
WW Collection & Pumping					
60\3137\Gorham WW Pump Station - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
60\3178\Gateway Commons PS Upgrades			\$85,000		
60\3179\Park South PS Upgrades			\$95,000		
60\3180\Briarwood PS Telemetry Upgrade			\$75,000		
60\3181\Meadowland PS Telemetry Upgrade			\$75,000		
Westbrook	\$270,000	\$20,000	\$20,000	\$20,000	\$3,220,000
WW Collection & Pumping					
29\3163\CSO Master Plan Update	\$75,000				
29\3230\Flow Metering	\$50,000				
29\3231\PEND - CSO Storage Facility					\$3,200,000
411\3134\Westbrook WW Systems R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
WW Treatment					
416\3160b\Influent Screening-East Bridge	\$125,000				
Westbrook Joint	\$270,000	\$150,000	\$50,000	\$1,025,000	\$2,225,000
SCADA & Technology					
177\3127\Westbrook SCADA Server Replacement Program					\$25,000
WW Treatment					
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				\$75,000	
416\3160a\Influent Screening Cottage Place	\$200,000				
416\3166\Process Area Ventilation Upgrades				\$750,000	
416\3190\Access Road and Parking Lot Resurfacing		\$100,000			
416\3191\TWAS Mixing System Replacement				\$150,000	
416\3198\WAS and GBT System Upgrade/Rehabilitation					\$250,000
416\3199\RAS Pumping Upgrade					
416\3200\Hypochlorite Storage Tank Replacement					
416\3232\Septage Screening Facilities					\$1,900,000
421\3233-b\Biosolids Processing and Disposal Assess	\$20,000				
Windham	\$35,000	\$10,090,000	\$520,000	\$20,000	\$20,000
WW Collection & Pumping					
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					
181\3139\Windham - Depot Street Pump Station			\$500,000		
181\3228\Rte 202 PS Easement and Stdbby Generator Dr	\$15,000				
181\3229\Rte 202 PS Generator Installation		\$70,000			
WW Treatment					
\3241\North Windham WWTF		\$10,000,000			
Grand Total	\$595,000	\$10,280,000	\$940,000	\$1,085,000	\$5,485,000

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 WWTP 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 25-years old. In 2019 CIP Depot street Pump Station design and construction was approved but due to delays the project is scheduled to go out to bid in October of 2020 for construction in 2021

Origin of the Subprogram:**Budget Summary:**

Budget year	Project	Budget Year Cost
2021- R&R	3138 Windham - Little Falls WW System R&R	\$ 20,000
2021 – R&R	3228 Rt. 202 PS Land Acquisition and Generator Design	\$ 15,000
2022 - R&R	3138 Windham - Little Falls WW System R&R	\$ 20,000
2022 – R&R	3229 Rt. 202 PS – Generator installation	\$ 70,000
2023 - Bond	3139 Depot Street Pump Station - Phase 2	\$ 500,000
2023 - R&R	3138 Windham - Little Falls WW System R&R	\$ 20,000
2024 - R&R	3138 Windham - Little Falls WW System R&R	\$ 20,000
2025 - R&R	3138 Windham - Little Falls WW System R&R	\$ 20,000
Total Cost, All Years:		\$ 740,000

Previous Years on CIP:

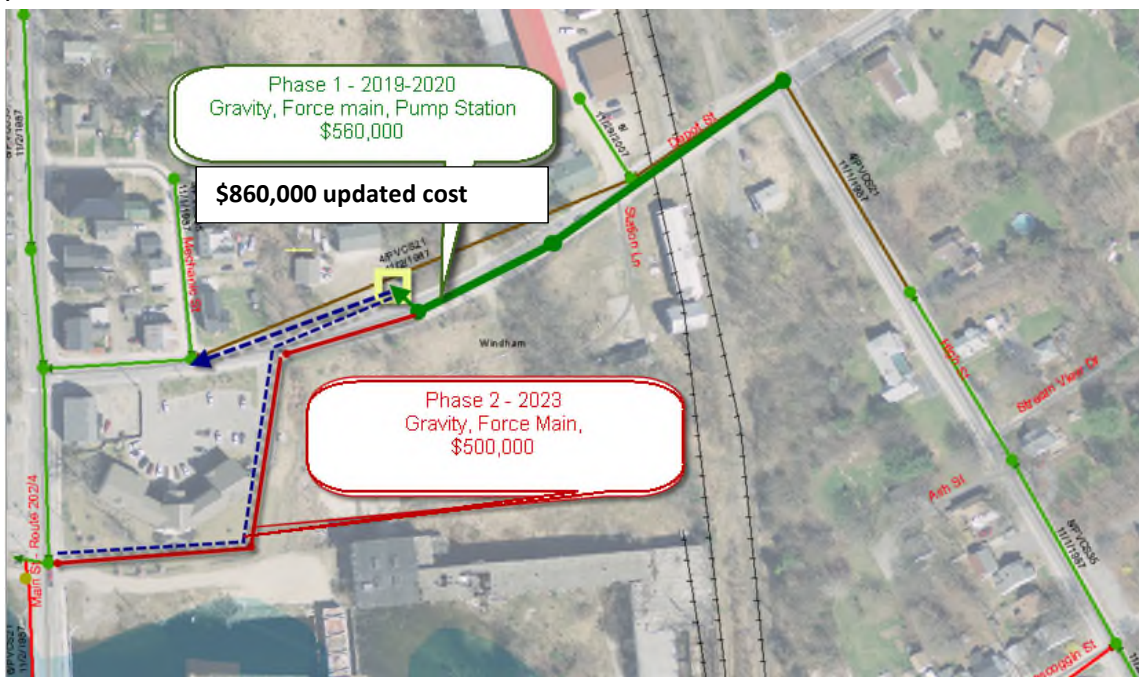
2000 to present

Procurement Issues:

Engineering and contracting will be via standard competitive retention procedures.

Subprogram # 180**Windham - Little Falls WW System**

The Depot Street Project will be in conjunction with the District replacing water mains on Depot Street and installing a 407- zone transmission main and the town reconstructing portion of Depot Street.



Subprogram # 29 Westbrook CSO Abatement

Division: Wastewater - Westbrook

Manager: Poulin, Charlene

Funding: Operating Expense,R&R,Bond – Wastewater Div 62

Priority: Regulatory mandate

Description:

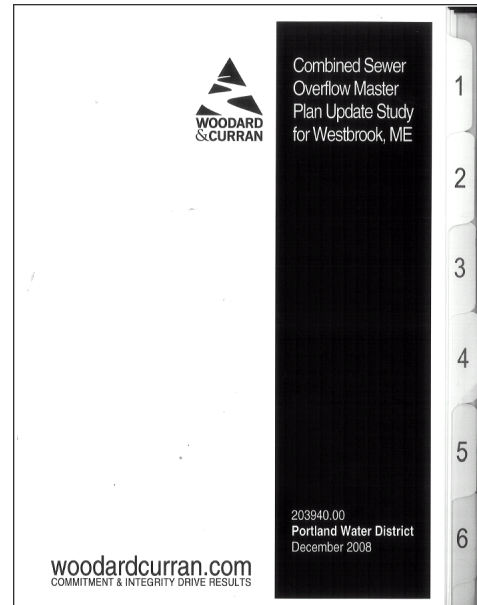
This project contemplates funding and programing the design and construction of projects recommended in a study that was completed by Woodard & Curran and Brown & Caldwell. The purpose of the study was to update the Westbrook CSO Master Plan.

Justification / Impact:

The District, City of Westbrook and the DEP agreed that an upgrade to the existing CSO Master Plan was favored over work previously scheduled for the sewer between Brown and King Streets. The Westbrook/Gorham WWTF license was renewed in 2006. Written into the new license was a requirement for the District to submit a CSO Master Plan update and abatement schedule on or before December 31, 2008. This was completed on time and submitted to DEP for their approval.

History:

King Street/Brown Street sewer work was put aside in lieu of updating the Westbrook CSO Master Plan. Project awarded to Woodard and Curran/Brown and Caldwell. Updated Master Plan due on or before 12/31/08 for Department review and approval.



Budget Summary:

Budget year		Project	Budget Year Cost
2021	Op Exp 3163	CSO Master Plan Update	\$ 75,000
2021	R&R 3230	Flow Metering	\$ 50,000
PEND	Bond 2522	Construction of New Storage Facility	\$3,200,000
Total Cost, All Years:			\$3,325,000

Previous Years on CIP: 2000 to present

Weir at Warren Ave CSO



Subprogram # 411 Westbrooke WW Systems R&R

Division: Wastewater - Westbrook
Funding: R&R - Wastewater – Div. 62

Manager: Poulin, Charlene
Priority: Routine replacement

Description:

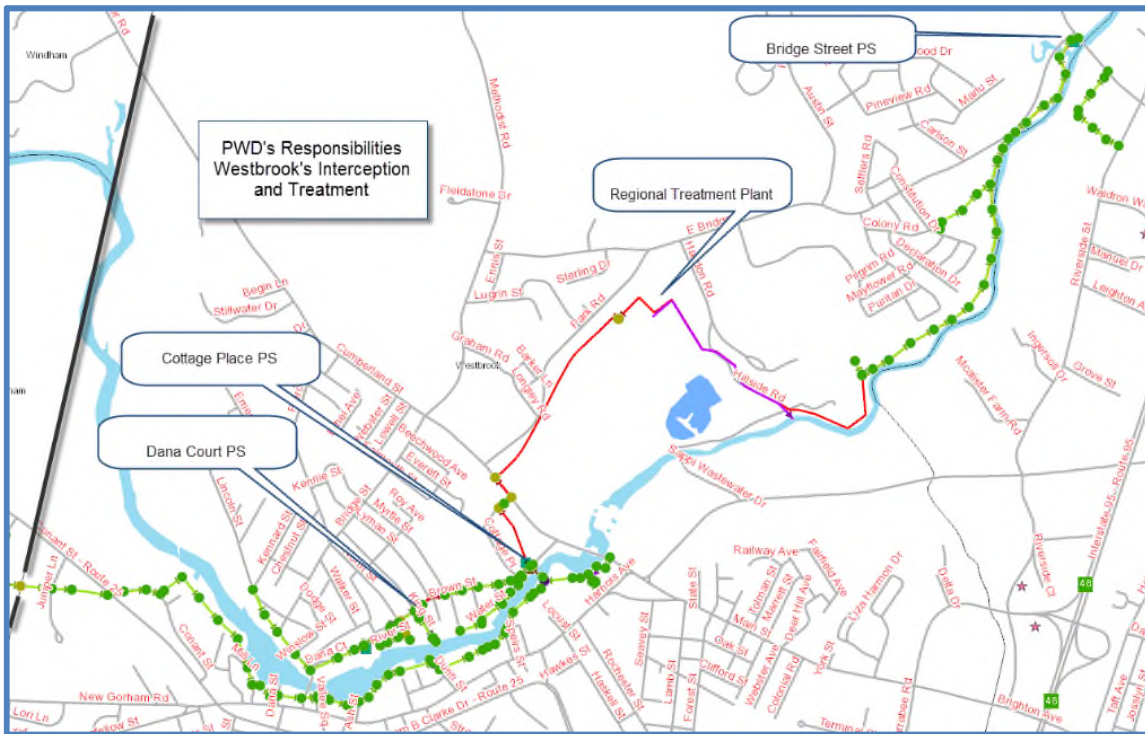
This project provides for the timely renewal of equipment associated with pump stations and the purchase of monitoring equipment for the interceptor system. Major pump stations have been recently upgraded but funds need to be available for replacement parts when necessary.

Justification / Impact:

An on-going study to upgrade the Westbrook CSO Master Plan will be complemented with the addition of a portable flow monitoring device. The Dana Court pump station has yet to be upgraded and funds are required to assure continued operation.

Budget Summary:

Budget year	Project	Budget Year Cost
2021 - R&R	3134 Westbrook WW Systems R&R	\$20,000
2022 - R&R	3134 Westbrook WW Systems R&R	\$20,000
2023 - R&R	3134 Westbrook WW Systems R&R	\$20,000
2024 - R&R	3134 Westbrook WW Systems R&R	\$20,000
2025 - R&R	3134 Westbrook WW Systems R&R	\$20,000
Total Cost, All Years:		\$100,000



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:

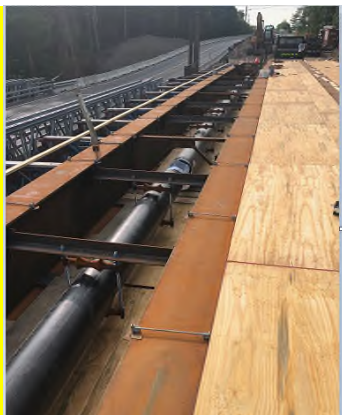
<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2021 - R&R	3137 Gorham WW Pump Stations - R&R	\$20,000
2022 - R&R	3137 Gorham WW Pump Stations - R&R	\$20,000
2023 - R&R	3137 Gorham WW Pump Stations - R&R	\$20,000
2023 - Bond	3178 Gateway Commons PS Upgrades	\$85,000
2023 - Bond	3179 Park South PS Upgrades	\$95,000
2023 - Bond	3180 Briarwood PS Upgrades	\$75,000
2023 - Bond	3181 Meadowland PS Upgrades	\$75,000
2024 – R&R	3137 Gorham WW Pump Stations - R&R	\$20,000
2025 - R&R	3137 Gorham WW Pump Stations - R&R	\$20,000
Total Cost, All Years:		\$730,000

Previous Years on CIP:

2000 - present

Procurement Issues:

Primarily staff labor for installation using standard parts procured competitively.



2020 CIP 60, 43 Project #3212 Little River Bridge Replacement – Force Main and Water Main replacement in conjunction with the MDOT replacement of the bridge

New 12” insulated bridge crossing water main (left)

Map showing existing 8” force main and 12” water (right)



Condition Assessment – Gorham Pump Stations

2014 Gorham Pump Station Report			
Station	Rating	Station Type	Address
Briarwood (2023)	3.78	Sub Dup	62 Briarwood Lane
Canterbury Pines	3.54	Sub Dup	14 Canterbury Pines Drive
Gateway Commons (2023)	3.83	Sub Dup	57 Clearview Drive
Glenwood Ave	3.59	Sub Dup	21 Glenwood Ave
Heartwood	3.81	Sub Dup	18 Caitlin Drive
Little River	4.08	Sub Dup	240B Mosher Road
Mallison	4.06	Sub Dup	35 Mallison Street
Meadowland Condo (2023)	3.72	Sub Dup	33A Joseph Drive
Old Dynamite	4.96	Sub Dup	14 Old Dynamite Way
Olde Canal	4.03	Sub Dup	338 Mosher Road
Park South Condo (2023)	3.98	Sub Dup	16 Kiara Lane
Running Spring/Southwoods	3.63	Sub Dup	50 Running Springs Road
Tink Drive	4.93	Sub Dup	46 Tink Drive(back)
University	3.95	Sub Dup	166 School Street
Woodlawn	3.76	Sub Dup	24 Tow Path Road
Gorham Average	3.98		
PWD Overall Average (74 Stations)	3.47		

Subprogram # 416 Westbrook Gorham Windham Regional WWTF

Division: Wastewater - Joint Westbrook
Funding: Bonds, R&R – Wastewater- Div. 64

Manager: Rodriguez, Paul
Priority: Upgrade obsolete facility

Description:

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The main focus of the proposed projects is to improve plant performance and efficiency.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. Planned upgrades also include instrumentation and control in accordance with current industry practice and provide enhanced automation, monitoring and control of the treatment processes. Regulatory requirements are continuously revised and updated by the EPA and administered by the Maine Department of Environmental Protection. This account provides for the equipment replacement and system upgrades necessary to continue to meet regulatory and operational requirements.

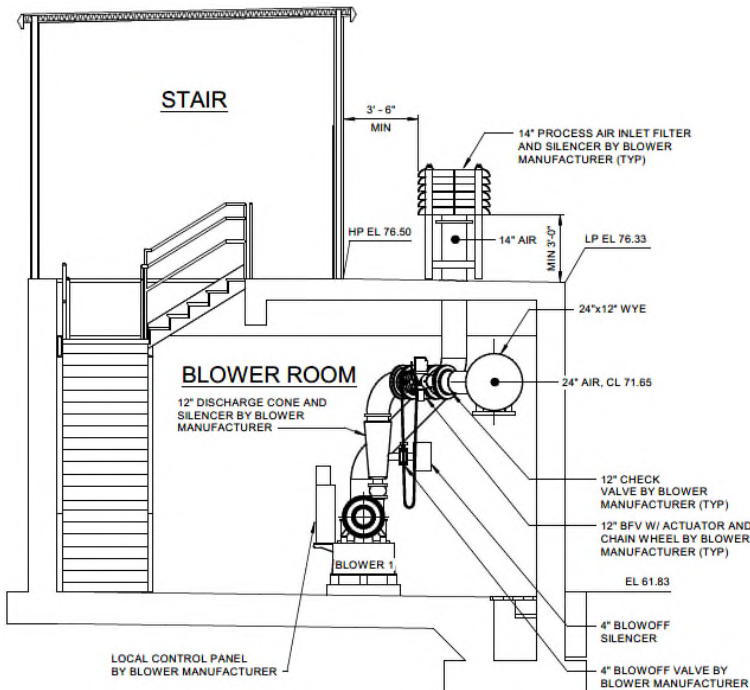
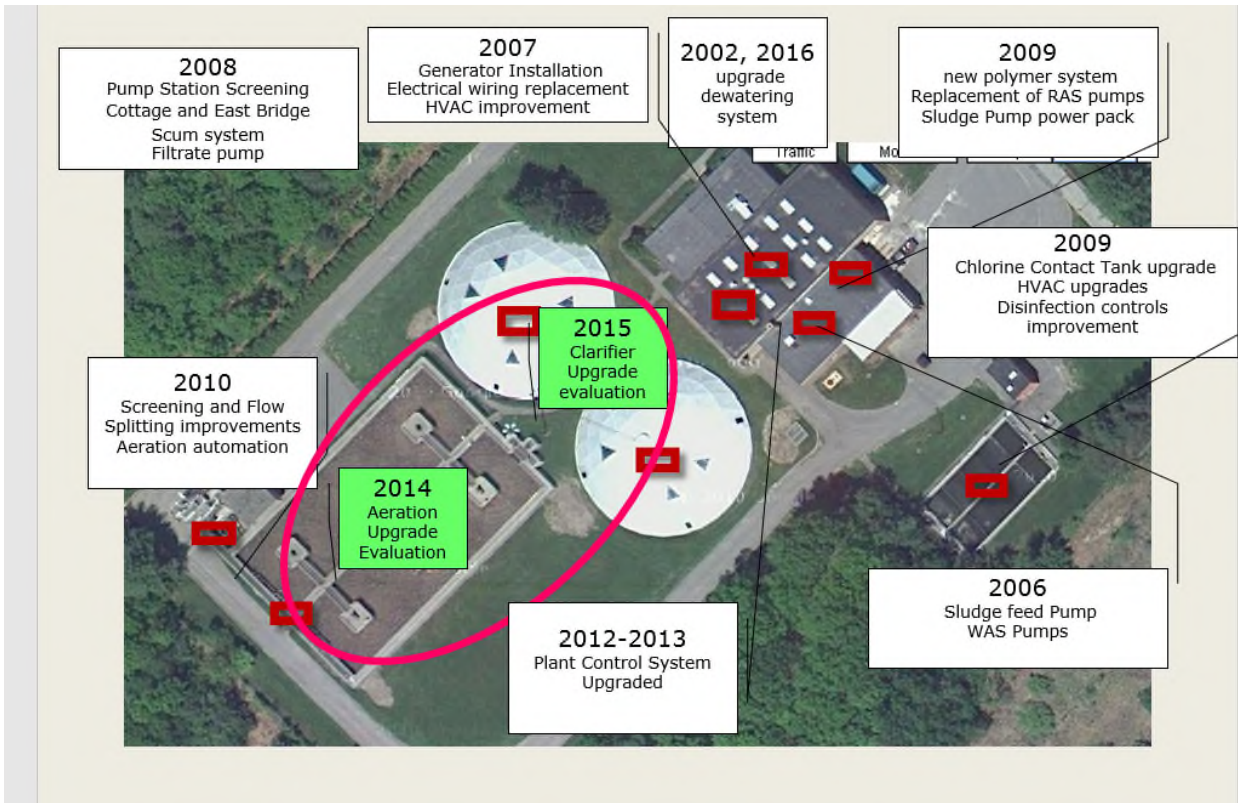
**History:**

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).

Budget Summary:

Budget Year			Project	Cost
2021	R&R	3132	Westbrook Gorham Windham WWTF R&R	\$ 50,000
2021	R&R	3160a	Influent Screening-Cottage Place	\$ 200,000
2021	R&R	3160b	Influent Screening-East Bridge	\$ 125,000
2022	R&R	3190	Access Road and Parking Lot Resurfacing	\$ 100,000
2022	R&R	3132	Westbrook Gorham Windham WWTF R&R	\$ 50,000
2023	R&R	3132	Westbrook Gorham Windham WWTF R&R	\$ 50,000
2024	R&R	3132	Westbrook Gorham Windham WWTF R&R	\$ 50,000
2024	R&R	3159	Plant Water System Rehab/Controls	\$ 75,000
2024	Bonds	3166	Process Area Ventilation Upgrades	\$ 750,000
2024	R&R	3191	TWAS Mixer Replacement	\$ 150,000
2025	R&R	3198	WAS and GBT System Upgrade/Rehabilitation	\$ 250,000
2025	Bonds	3232	Septage Screening Facilities	\$ 1,900,000
2025	R&R	3132	Westbrook Gorham Windham WWTF R&R	\$ 50,000
Total Cost, All Years				\$ 3,800,000

Subprogram # 416 Westbrook Gorham Windham Regional WWTF



CIP 2020, Subprogram #416, Project # 3023:
\$11,250,000 - Westbrook aeration and secondary clarifier upgrade. Construction is expected to start in 2021 with an anticipated two year construction duration. To the left is a diagram of the below grade blower room in design.

Portland Wastewater

East End Treatment Plant

PWD has completed a number of significant upgrade projects to key systems at the East End Wastewater Treatment Facility in recent years, including the following

- Aeration (2015)
- Sludge Dewatering (2011)
- Installation of a second CSO rated screen in the headworks (2010)
- Addition of a second waste activated sludge thickener, enclosed for odor control (2015)
- Building envelope improvements including roofing and windows (2016-2017)
- Addition of a screenings wash press (2014)
- Rehabilitation of the grit removal equipment and piping (2017-2019)
- Replacement of the sodium hypochlorite storage tanks and piping (2019)
- Overhaul of the main odor control fan OCF-1 (2019)

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 plant, this effort is recommended for combination with switchgear replacement which was also recommended as part of the electrical system evaluation. Design of power distribution upgrades at the plant including a new medium voltage loop and transformers and new main switchgear is scheduled for completion in October 2020 and bidding prior to the end of 2020. Construction is anticipated to be complete by the end of 2022.

The third floor HVAC upgrade design is complete and currently under review to consider advanced airstream treatment alternatives. Rehabilitation of primary clarifier sludge removal mechanism #3 was completed in 2018. Rehabilitation of mechanism #1 is nearly complete, including necessary structural remediation of the underwater concrete near the headshaft mechanism that was identified during construction. Primary mechanism #2 is also nearing completion and also received structural upgrade in the area of the headshaft. 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.

Peaks Island Treatment Plant

In 2014, the District conducted a feasibility study of ultraviolet disinfection at the Peaks facility as a potential replacement of the batch chlorination/dechlorination process. The study concluded that UV disinfection would provide a cost effective alternative to chlorination while enhancing the plant's ability to disinfect during wet weather flows. The system was installed in 2015 and has been performing well.

In 2018, the District installed a control panel and associated lifting systems to facilitate sequencing batch reactor tank dewatering in a timely fashion for maintenance, inspection and repairs. In the spring of 2019 the influent screen was replaced with a new combination screen/screenings washer-compactor.

Portland Wastewater (continued)

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 design was completed in 2018 with anticipated construction completion in 2020, and will primarily include upgrade of the station's screening, electrical, and ventilation systems. Detailed design of the Baxter Blvd. Pump Station upgrades (CIP #70 project 3144) is underway and is expected to be bid in the fall of 2020. Design of the Stroudwater Pump Station (CIP #70 project 3006) is nearing completion and construction is expected to be complete in 2021.

The City of Portland submitted a Tier III Long-Term Control Plan for the mitigation of CSO flows to Maine DEP in 2011. The plan includes a \$167 million plan over 15 years. This plan focuses on storage and dedicated wet weather systems at the East End WWTF in the later years of the plan. A 2-million gallon storage conduit along Baxter Blvd. and Payson Park was commissioned in 2013. Design and construction of the next two storage conduits is underway. These storage conduits are part of the City's collection system and are owned, operated, and maintained by the City. The treatment of flow from the storage conduits is coordinated with the City on an ongoing and regular basis.

The Portland City Council approved a \$3.1 million sewer expansion on Peaks Island. The project was managed, constructed, and financed by the District. The project was completed in 2014.

**New East End
Treatment Plant's
Influent Screen
Rotated out of the
Channel for Inspection**



Portland Wastewater (continued)

Program Summary

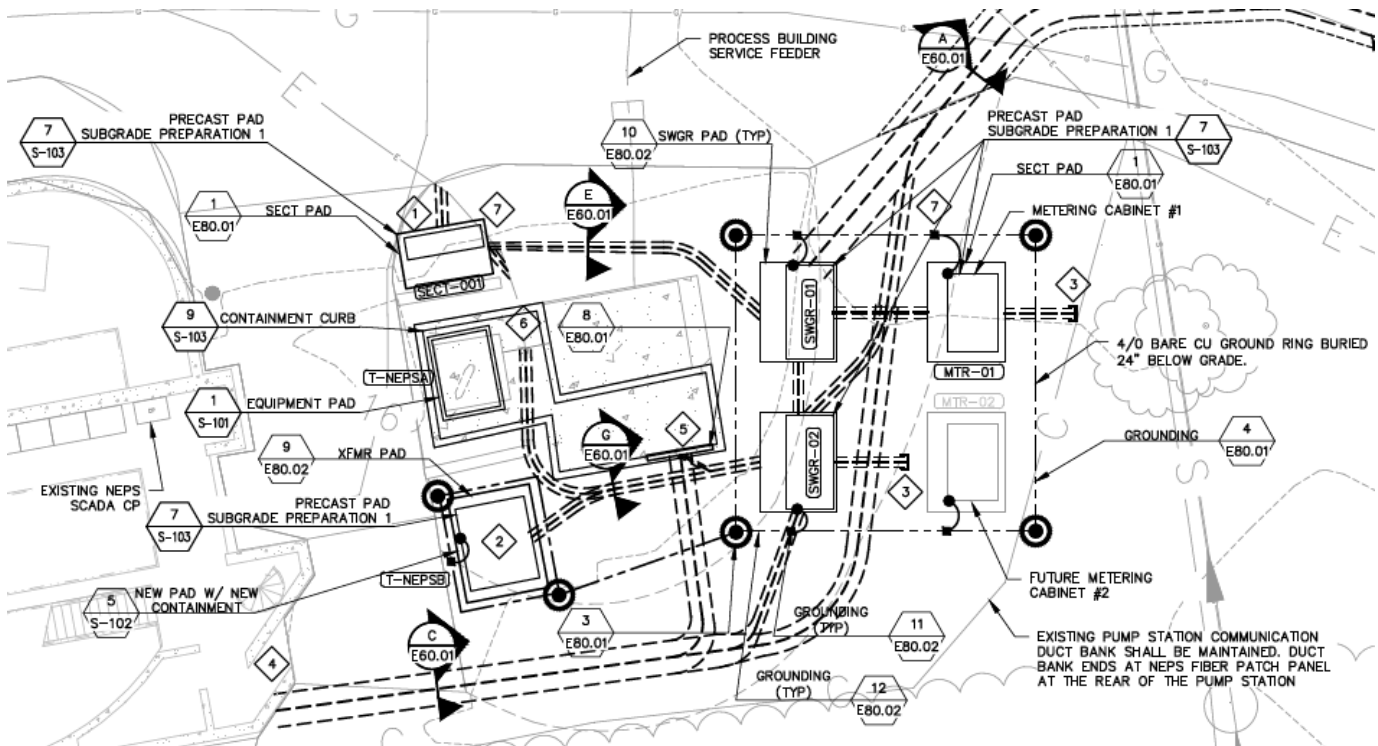
	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology	\$105,000				\$25,000
WW Collection & Pumping	\$1,700,000	\$200,000	\$400,000	\$1,350,000	\$50,000
WW Treatment	\$655,000	\$6,720,000	\$1,895,000	\$10,290,000	\$350,000
Grand Total	\$2,460,000	\$6,920,000	\$2,295,000	\$11,640,000	\$425,000

Fund Portland

Financing Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond	\$1,500,000				
Bond SRF	\$300,000	\$6,400,000	\$1,050,000	\$10,620,000	
R&R	\$660,000	\$520,000	\$1,245,000	\$1,020,000	\$425,000
Grand Total	\$2,460,000	\$6,920,000	\$2,295,000	\$11,640,000	\$425,000

2019 -2020 CIP 21 project 3014 East End Medium Voltage Power Distribution Upgrade – managed design effort, anticipated bidding fall 2020 followed by a two year construction duration starting in 2021.



Portland Wastewater (continued)

Project by Program and Subprogram/Project Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology					
177\3125-b\SCADA Radio Modem Replacement Project - Ph:	\$105,000				
177\3128\EE\W\WTF SCADA Server Replacement Program					\$25,000
WW Collection & Pumping					
131\3162\Modeling and Flow Assessment		\$50,000			
423\3161\Stormwater Piping Rehabilitation			\$50,000		
423\3182\Torrington Point PS Upgrades					
70\3135\Portland W\W Pump Stations - R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
70\3184\Garrison St PS Upgrade to Submersible	\$750,000				
70\3185\Congress St PS Upgrade to Submersible	\$750,000				
70\3186\Westbrook St PS Upgrades		\$100,000			
70\3187\India St PS Generator Upgrade			\$300,000		
70\3205\Northeast PS Generator and Switchgear Replacement				\$1,300,000	
70\3234\Forest Park Lane Pipe Rehabilitation	\$50,000				
70\3235\Northeast Pump Station VFD#1 Installation	\$100,000				
WW Treatment					
21\3003\Dewatering Odor Control Rehab and Expansion		\$950,000			
21\3019\Gravity Thickener #2 Rehabilitation					
21\3020\Process Gate Automation	\$50,000	\$50,000	\$50,000	\$50,000	
21\3133\East End W\WTF R&R	\$75,000	\$75,000	\$75,000	\$75,000	
21\3145\Lower Lot Paving		\$175,000			
21\3146\Gravity Belt Thickener Replacement			\$550,000		
21\3147\Secondary Clarifier Sludge Rake Replacement			\$500,000	\$7,320,000	
21\3148\Return Sludge Piping Replacement		\$1,800,000			
21\3149\HVAC Upgrades - Process Area				\$425,000	
21\3150\HVAC Upgrades - Tunnel and Pump Gallery					
21\3151\Influent Screen #2 and Headworks Conveyors			\$350,000		
21\3152\Primary Sludge Handling and Primary Gallery Upgrd	\$300,000	\$3,650,000			
21\3154\RAS Pump Rehabilitation					
21\3155\Heating System Expansion					
21\3156\Clarifier Ventilation					
21\3157\HVAC Upgrades - 2nd Floor Admin					
21\3202\Thickened Sludge Storage and Mixing Rehab				\$400,000	
21\3204\Dewatering System Upgrade				\$2,000,000	
21\3236\Replace Power Feed: Chlor/Dechlor	\$100,000				
21\3237\Existing Standby Generator Replacement					\$300,000
421\3233-a\Biosolids Processing and Disposal Assessment	\$80,000				
423\3131\Peaks Island R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
423\3167\Electrical Service and Power Distribution					
423\3192\Aeration System Upgrade					
423\3193\Decanter and Mixer Upgrade, Tanks A and B			\$350,000		
423\3194\SBR B Influent Valve Replacement	\$30,000				
423\3195\FDT Rehabilitation					
423\3196\Activated Sludge Process Control Upgrade					
423\3197\WAS Processing System Upgrade/Rehabilitation					
423\3239\Sludge Handling Upgrades - Design					\$30,000
Grand Total	\$2,460,000	\$6,920,000	\$2,295,000	\$11,640,000	\$425,000

Subprogram # 131 Portland CSO Mitigation

Division: Wastewater - Portland
Funding: R&R – Wastewater – Div 57

Manager: Rodriguez, Paul
Priority: Regulatory mandate

PWD owns and operates 21 of the 31 licensed CSO outfalls in the City of Portland. Upstream mitigation of CSO flows is primarily the responsibility of the City of Portland through their ongoing Long-Term Control Plan, currently in the third tier. Permanent monitors operated by PWD and located at critical sites allow for the continuous monitoring of nearly all outfalls. This provides accurate measurement of flow totals, alarming to prevent dry weather overflows, and for the measurement and verification of ongoing mitigation efforts by the City of Portland. It is critical that we have real time monitoring at CSO sites. This monitoring allows us to proactively address potential dry weather events as well as increasing our ability to implement operational measures based on system performance.

Justification / Impact:

In 2007 PWD started to install ADS Flowshark Meters at 7 key critical sites in Portland. By 2009 sixteen (16) were installed in Portland that monitor continuous flow and provide real time data and alarming at CSO sites. Due to technological changes and cellular capabilities, the current ADS Flowshark monitors have started to reach their expected life span. The benefit to the real time monitors has been valuable to both the City and to PWD. With real time monitoring, reduction of CSO events due to projects can be quantified. The reliability of the data is solid with a 98% uptime of the CSO meters during rain events allowing us to rely on actual data for CSO reporting. Over the past eight years, staff has been able to prevent Dry Weather Overflows and respond in a quick manner due to the alarming capabilities.

History:

All except for two CSO's are real time monitored by either ADS Environmental or Flow Assessment since 2010. Minor evaluation of India Street Tide gate was performed by Johnson and Jordan in 2013.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2022 – R&R 3162	Modeling and flow assessment	\$50,000
Total Cost, All Years:		\$50,000

Previous Years on CIP: 2007



2019 CIP 131 -Tide Gate Replacement, India St. and Northeast Pump Stations: Currently under construction, anticipated completion in 2021.

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:

Budget Year		Project	Cost
2021	R&R	3135 Portland WW Pump Stations - R&R	\$ 50,000
2021	R&R	3234 Forest Park Lane Pipe Rehab	\$ 50,000
2021	Bonds	3184 Garrison St PS Upgrade to Submersible	\$ 750,000
2021	Bonds	3185 Congress St PS Upgrade to Submersible	\$ 750,000
2021	R&R	3235 Northeast Pump Station VFD#1 Installation	\$ 100,000
2022	R&R	3135 Portland WW Pump Stations - R&R	\$ 50,000
2022	Bonds	3186 Westbrook St PS Upgrades	\$ 100,000
2023	R&R	3135 Portland WW Pump Stations - R&R	\$ 50,000
2023	Bonds	3187 India St PS Generator Upgrade	\$ 300,000
2024	R&R	3135 Portland WW Pump Stations - R&R	\$ 50,000
2024	SRF	3205 Northeast PS Generator and Switchgear Replacement	\$ 1,300,000
2025	R&R	3135 Portland WW Pump Stations - R&R	\$ 50,000
Total Cost, All Years			\$ 5,350,000

Subprogram # 21 **East End WWTF Upgrade****Division:** Wastewater – Portland**Manager:** Rodriguez, Paul**Funding:** Bonds & R&R– Wastewater – Div.57**Priority:** Upgrade obsolete facility**Description:**

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The main focus of the proposed projects to improve plant performance and efficiency.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. Planned upgrades also include instrumentation and control in accordance with current industry practice and provide enhanced automation, monitoring and control of the treatment processes. Regulatory requirements are continuously revised and updated by the EPA and administered by the Maine Department of Environmental Protection. This account provides for the equipment replacement and system upgrades necessary to continue to meet regulatory and operational requirements.

History:

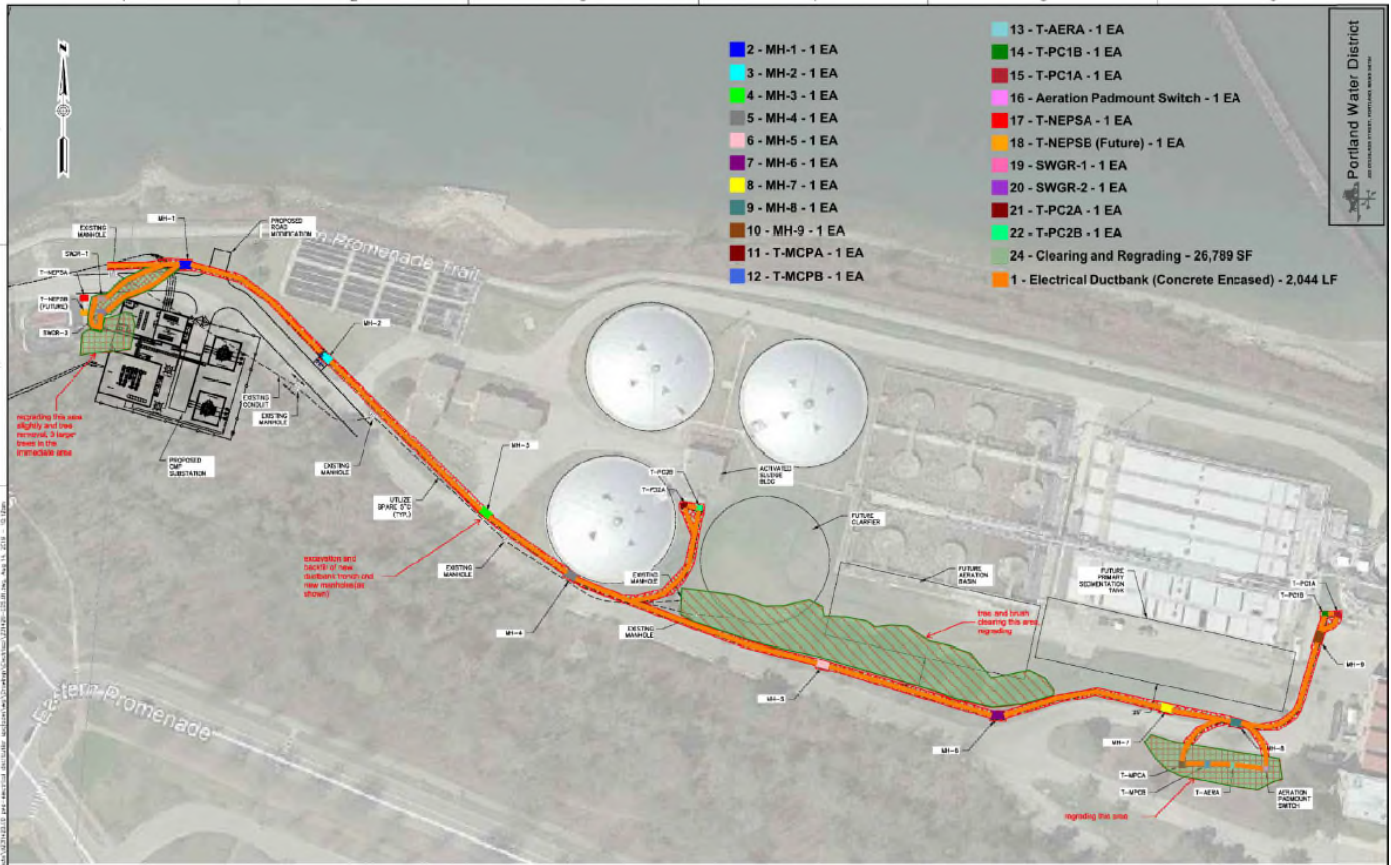
This implementation program began with the Woodard & Curran CPE completed in 1998. In recent years, several system assessments have been conducted to support continued efforts to meet the objectives of this subprogram, including influent channel flow diversion, secondary clarifier CCT isolation, secondary clarification and sludge withdrawal, return activated sludge piping replacement, and primary gallery electrical systems. The largest recent investment was an \$11M upgrade of the aeration system.

Budget Summary:

Budget Year		Project	Cost
2021	R&R	3020 Process Gate Automation	\$ 50,000
2021	R&R	3133 East End WWTF R&R	\$ 75,000
2021	Bond	3152 Primary Sludge and Primary Gallery Upgrd – Design	\$ 300,000
2021	R&R	3236 Replace Power Feed: Chlor/Dechlor	\$ 100,000
2022	Bond	3009 Dewatering Odor Control Rehab and Expansion	\$ 950,000
2022	R&R	3145 Lower Lot Paving	\$ 175,000
2022	Bond	3152 Primary Sludge and Primary Gallery Upgrd – Construction	\$ 3,650,000
2022	R&R	3020 Process Gate Automation	\$ 50,000
2022	R&R	3133 East End WWTF R&R	\$ 75,000
2022	SRF	3148 Return Sludge Piping Replacement	\$ 1,800,000
2023	R&R	3020 Process Gate Automation	\$ 50,000
2023	R&R	3133 East End WWTF R&R	\$ 75,000
2023	Bond	3146 Gravity Belt Thickener Replacement	\$ 550,000
2023	SRF	3147 Secondary Clarifier Sludge Rake Replacement –Design	\$ 500,000
2023	R&R	3151 Influent Screen #2 and Headworks Conveyors	\$ 350,000
2024	R&R	3020 Process Gate Automation	\$ 50,000
2024	R&R	3133 East End WWTF R&R	\$ 75,000
2024	SRF	3147 Secondary Clarifier Sludge Rake Replacement-Construction	\$ 7,320,000
2024	Bond	3149 HVAC Upgrades - Process Area	\$ 425,000
2024	R&R	3202 Thickened Sludge Storage and Mixing Rehab	\$ 400,000
2024	Bond	3204 Dewatering System Upgrade	\$ 2,000,000
2025	Bond	3237 Existing Generator Replacement	\$ 300,000
Total Cost, All Years			\$ 19,320,000

Previous Years on CIP:
 Related Projects:
 Procurement Issues:

1999 to present
 RFP for engineering services. Construction services will be low bid.



Site Plan for 2020 proposed East End WWTF Main 12.4kV Power Distribution Upgrades Project

Subprogram # 423 **Peaks Island WW Treatment and Systems**

Division: Wastewater - Peaks
Funding: R & R - Wastewater

Manager: Rodriguez, Paul
Priority: Routine replacement

Description:

This account will provide for timely routine replacement of equipment at the Peaks Island Treatment Plant and pump stations.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. This project provides funding for the efficient and timely replacement of equipment using routine and replacement funds.

History:

This program has been used at most PWD wastewater systems in the past.

Budget Summary:

Budget year	Project	Budget Year Cost
2021 - R&R	3131 Peaks Island R&R	\$ 20,000
2021 - R&R	3194 SBR Influent valve replacement	\$ 30,000
2022 - R&R	3131 Peaks Island R&R	\$ 20,000
2023 - R&R	3161 Stormwater Piping Rehabilitation	\$ 50,000
2023 - R&R	3131 Peaks Island R&R	\$ 20,000
2023 - R&R	3193 Decanter and Mixer Upgrade, tank A and B	\$350,000
2024 - R&R	3131 Peaks Island R&R	\$ 20,000
2025 - R&R	3131 Peaks Island R&R	\$ 20,000
2025 - R&R	3239 Sludge Handling Upgrades – Design	\$ 30,000
Total Cost, All Years:		\$630,000

Previous Years on CIP: 2007 - present

Peaks Island Treatment Plant – Built 1994



Wastewater – Multi-fund Program

SCADA and Process Control Plan

In the early part of this decade, the District began installing Supervisory Control and Data Acquisition (SCADA) equipment throughout its service area. The goal was to bring all critical alarming back into the District. Since then, standards have developed and SCADA is in place at most all of our installations. The next step is to meet our goal of bringing all wastewater related SCADA information into a single site located at the East End WWTF in Portland. This will allow us to monitor each wastewater facility at a single wastewater location. The construction of the Central Control Center at the East End WWTF began in 2010. During this time, the Westbrook/Gorham/Windham WWTF was connected to the Central Control Center directly, improving the ability to monitor and control this facility. Subsequently, Peaks Island WWTF and Cape Elizabeth WWTF automation and control system improvements occurred allowing for their connection to the Central Control Center.

Future programming routines will allow staff to interact with remote sites from a central location. In the end, our goal is to have operation staff in position to acknowledge alarms, trouble shoot mechanical problems and make process adjustments to four wastewater plants and better than 70 pump stations without having to call in additional staff.

CIP subprogram #177 outlines much of the work that is needed to complete the long-range SCADA plan. In 2020, Phase 2 of the SCADA Radio Modem Replacement Project is underway (CIP #177, project 3126) with completion expected 1st Quarter 2021. This project will replace 17-year old radios, Programmable Logic Controllers (PLC) and antennas and will therefore provide more reliable networks.



The SCADA panel for the newly installed Great Pond Pump Station for the Peaks Island Sewer Extension Project

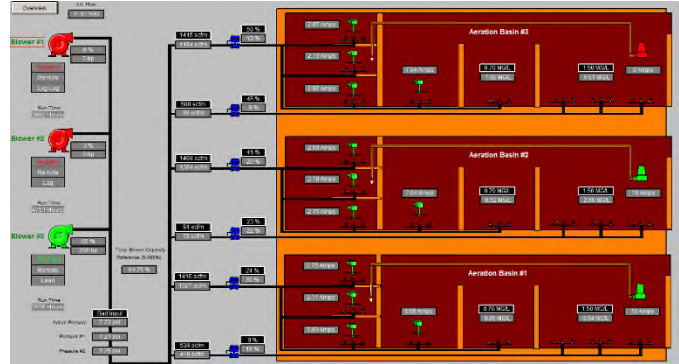
Subprogram # 177 **SCADA/Process Control - Wastewater**

Division: Wastewater - Portland
Funding: Bond/R & R - Wastewater

Manager: Pellerin, Greg
Priority: Upgrade obsolete facility

Description:

The program supports all 80 wastewater sites across the District in upgrading and replacing the existing Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to the District SCADA standards and provide for increased automation of wastewater systems and treatment. Programmable Logic Controllers (PLC) have been replaced across the District to meet the new standards and remove outdated, non-maintainable equipment.



Justification / Impact:

The benefit of this program is to increase the automation and reduce the staff hours needed to perform routine activities for the systems and treatment plants across the District.

In 2017, the new aeration system went on line. The system is fully automated and is represented in the District's SCADA system.

History:

The District started changing out the system in 2003 by replacing the existing 20 year-old system across the six wastewater communities and installing new SCADA equipment where it did not exist. All systems have been retrofitted or replaced but more automation of these systems will continue.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2021 - R&R 3125	SCADA Radio Modem Replacement Project – Phase3	\$350,000
2025 - R&R 3128	EEWWTP SCADA Server Replacement Project	\$ 25,000
Total Cost, All Years:		\$375,000

Previous Years on CIP: 2003 to present
Related Projects: Subprogram #110

Subprogram # 421 **Wastewater Asset Condition Evaluations**

Division: Wastewater - General

Manager: Firmin, Scott

Funding: R&R

Priority: Upgrade obsolete facility

Description:

This subprogram will provide needed engineering evaluation and programming of similar asset classes across all wastewater treatment plants and critical influent pump stations. 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 is the first step and 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. Many of these systems are original to the plants and pump stations (30- 35 years old). The goal is to upgrade these systems to meeting code and allow for additional capacity to meet the future needs. Engineering evaluations were completed in 2016 for Electrical and in 2017 for HVAC and many projects have been programmed in the Capital Improvement Program in their respective subprograms as a result of these evaluations. A biosolids processing and disposal assessment is needed for the Westbrook and Portland Plants as a result of a changing regulatory environment due to PFAS

History:

Budget Summary:

Budget year	Project	Budget Year Cost
2021	3233 Biosolids Processing and Disposal Assessment	100,000
Total Cost, All Years:		100,000

Previous Years on CIP: 2016

Procurement Issues: RFP for engineering procurement

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

	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Vehicle/Equipment Replace	\$400,000	\$250,000	\$400,000	\$400,000	\$400,000
Water Distribution System	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Facilities Program	\$560,000	\$860,000	\$550,000	\$1,425,000	\$300,000
Grand Total	\$1,560,000	\$1,710,000	\$1,550,000	\$2,425,000	\$1,300,000

Fund Water & Wastewater

Project by Program and Subprogram/Project Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
SCADA & Technology					
50\3038\Technology Upgrade and Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Vehicle/Equipment Replacement					
326\3041\Vehicle and Equipment Replacement	\$400,000	\$250,000	\$400,000	\$400,000	\$400,000
Water Distribution System					
63\3046\Meter Replacement and Leak Detection	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Water Facilities Program					
68\3050\Facility Upgrades	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000
68\3052\Douglass Street Fire System Upgrade	\$60,000				
68\3053\Douglass Street Roof replacement - Phase 3 of 3		\$280,000			
68\3054\HVAC Improvements -Phases 1, 2, 3, 4	\$450,000	\$500,000	\$425,000	\$1,300,000	
68\3216\Stockroom Platform Demo		\$30,000			
68\3217\SMT Renovation/Carpet/Lighting					\$75,000
68\3218\Renovation of Finance			\$75,000		
Grand Total	\$1,560,000	\$1,710,000	\$1,550,000	\$2,425,000	\$1,300,000

Fund Water & Wastewater

Financing Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond	\$450,000	\$500,000	\$425,000	\$1,300,000	
R&R	\$1,110,000	\$1,210,000	\$1,125,000	\$1,125,000	\$1,300,000
Grand Total	\$1,560,000	\$1,710,000	\$1,550,000	\$2,425,000	\$1,300,000

Subprogram # 50 Technology Upgrade and Replacement

Division: Allocation

Manager: Davis, Chad

Funding: R & R – Water- Div. 10

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 ability to be proactive and competitive. Better available information that is timely supports a customer-centric business perspective.

History:

Technology infusion into PWD began anew after an EMA study in 1996 recommended the use of technology to reduce a competitive gap, improve customer service and operating efficiency. Early on a technology master plan was developed as a guide for our investments. Key development work focused on building a stable reliable network infrastructure, acquiring best fit software solutions and populating the associated databases and documenting standard operating procedures. Most of the work was done in team environments to ensure the technology solution met the needs of the target PWD employee group. The PWD network consists of a 206 PC/Laptop/Thin Client wide area network supported by 39 servers housing various applications and data sources supporting asset management, customer billing, financials, GIS, voice mail, email, and VoIP phone. Our network also supports over fifty employees in the field via a wireless data network. Technology advances and cost savings continue to influence the design and delivery of information to our employees and customers.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2021 - R&R	3038 Technology Upgrades	\$200,000
2022 - R&R	3038 Technology Upgrades	\$200,000
2023 - R&R	3038 Technology Upgrades	\$200,000
2024 - R&R	3038 Technology Upgrades	\$200,000
2025 - R&R	3038 Technology Upgrades	\$200,000
Total Cost, All Years:		\$1,000,000

Previous Years on CIP:

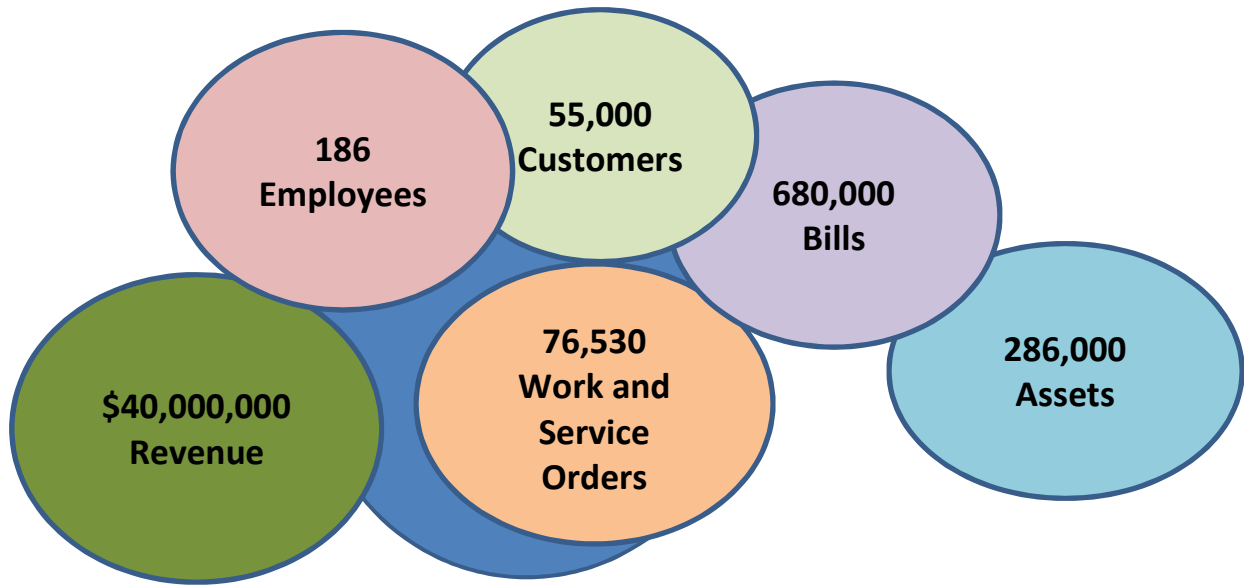
All since 1996

Related Projects:

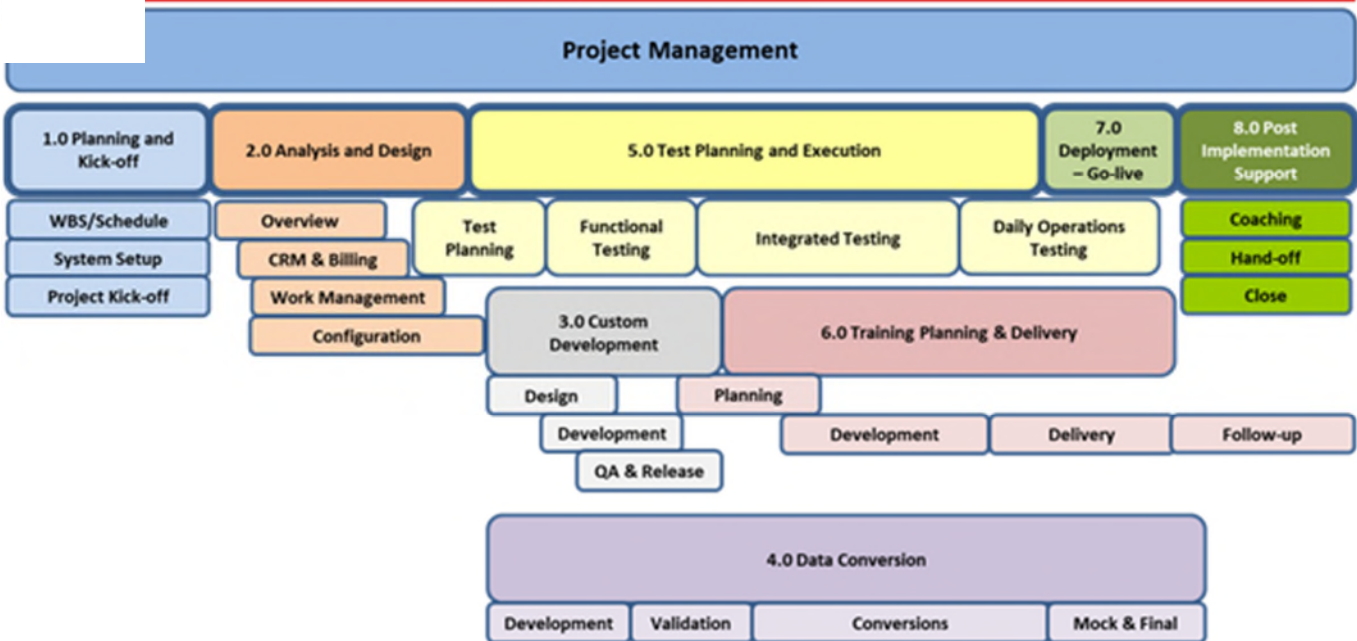
Procurement Issues:

Standard procurement procedures are used for major hardware, software and consulting purchases.

Cayenta Billing and Central Square Asset Management Systems (previously known as the ABC project)



Cayenta Implementation Methodology



This 2018 project, CIP #50 project 2542 – Hansen System Replacement (Billing and Customer Relations & Computerized Maintenance Management Systems) \$4,600,000 is expected to be on-line 4th quarter 2021

Subprogram # 326 Vehicle and Equipment Replacement

Division: Allocation

Manager: Hudak, Joshua

Funding: R & R – Water- Div. 10

Priority: Routine replacement

Description:

This project is to replace a portion of the District's Vehicle and Equipment fleet each year.

This year's review included the evaluation of all of the vehicles and equipment which have met or exceeded the trade criteria. In reviewing the fleet, the replacement cost is between \$4,500,000 and \$5,000,000.

Justification / Impact:

The rolling stock and construction equipment fleet are essential to the District's "mission to provide our customers with quality water, wastewater and related environmental services." Maintaining a reliable fleet of vehicles and equipment enables staff to fulfill the mission with safety, efficiency and timeliness. Worker safety, efficient operations and customer satisfaction are the basic benefits of maintaining a sound vehicle and equipment inventory.

History:

The Asset Management Department conducts an annual evaluation of major pieces of equipment and vehicles to determine our annual replacement needs. The various trade criteria are also reviewed to assure that they are appropriate. Based on the age and use of the fleet, projections of future annual costs are included in the five-year plan. These projections are re-reviewed each year to develop a minimum replacement program for the current year. Several major pieces of equipment will need to be replaced in the next two to four years.



Origin of the Subprogram:

Annual review and replacement of vehicles and equipment is a basic operating need of any geographically dispersed utility.

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
2021 - R&R 3041	Vehicle and Equipment Replacement	\$400,000
2022 - R&R 3041	Vehicle and Equipment Replacement	\$250,000
2022 - R&R 3042	Lake Boat Replacement	\$150,000
2023 - R&R 3041	Vehicle and Equipment Replacement	\$400,000
2024 - R&R 3041	Vehicle and Equipment Replacement	\$400,000
2025 - R&R 3041	Vehicle and Equipment Replacement	\$400,000
Total Cost, All Years:		\$2,000,000

Previous Years on CIP:

All

Procurement Issues:

Specifications are developed and proposals are solicited from approximately thirty vehicle and equipment dealers. Purchases are made on the basis of price and other criteria which lead to lowest life cycle cost.

2021 Annual Vehicle and Equipment Estimated Replacement Cost and Trade-in values

2021 Annual Vehicle and Equipment Replacement		Estimated Cost
TRL21510 Tow behind Compressor	ASSET PURCHASE	\$24,000
TRL05530 Tow behind compressor	TRADE	(\$2,500)
ESQ21810/TRL21910- Mini Excavator w/ Trailer	ASSET PURCHASE	\$130,000
EQS08610 Backhoe	TRADE	(\$20,000)
VEH21010- Crew Truck	ASSET PURCHASE	\$50,000
VEH10020 Crew Truck	TRADE	(\$10,000)
VEH21020- PU	ASSET PURCHASE	\$25,000
VEH13090- PU	TRADE	(\$7,000)
VEH21030- Small SUV	ASSET PURCHASE	\$25,000
VEH12030- Ford Tranist	TRADE	(\$5,000)
VEH21040/VEH21050/VEH21060- Vans	ASSET PURCHASE	\$75,000
VEH14040/VEH14030/VEH11020- Vans	TRADE	(\$12,000)
VEH21070- Utility Dump	ASSET PURCHASE	\$45,500
VEH10040- Utility Dump	TRADE	(\$5,000)
VEH21080- PU with Cap	ASSET PURCHASE	\$30,000
VEH13060- Ford Tranist	TRADE	(\$5,000)
VEH21090- 4x4 Plow	ASSET PURCHASE	\$50,000
VEH11090- 4x4 Plow	TRADE	(\$8,000)
Vehicle Set Up Costs	SET UP	\$20,000
	Total CIP Request	\$400,000

Subprogram # 63 **Meter Replacement and Leak Detection**

Division: Allocation
Funding: R & R – Water - Div. 10

Manager: Wallace, Jim
Priority: Routine replacement

Description:

This work includes the cost to maintain the Long Service Meter Change program, and replacement of damaged meters. It also includes the purchasing of leak detection and monitoring equipment. The District completed a change out all of its 50,000 meters to radio read system in 2009. The meters and batteries are expected to last 20 years for the smaller meters and less for the larger meters.

Justification / Impact:

This is a required program to meet PUC requirements and maintain accurate billing of customer accounts and account for lost water. Since long service meters typically under estimate the actual water flow, the Long Service Meter Change program is needed to ensure that the District receives all the revenue to which it is entitled.

History:

New terms and conditions have recently been instituted to increase the long service interval from 15 to 20 years.

Origin of the Subprogram:

These costs do not reflect the value of meters and radio reading devices which is contributed by customers.

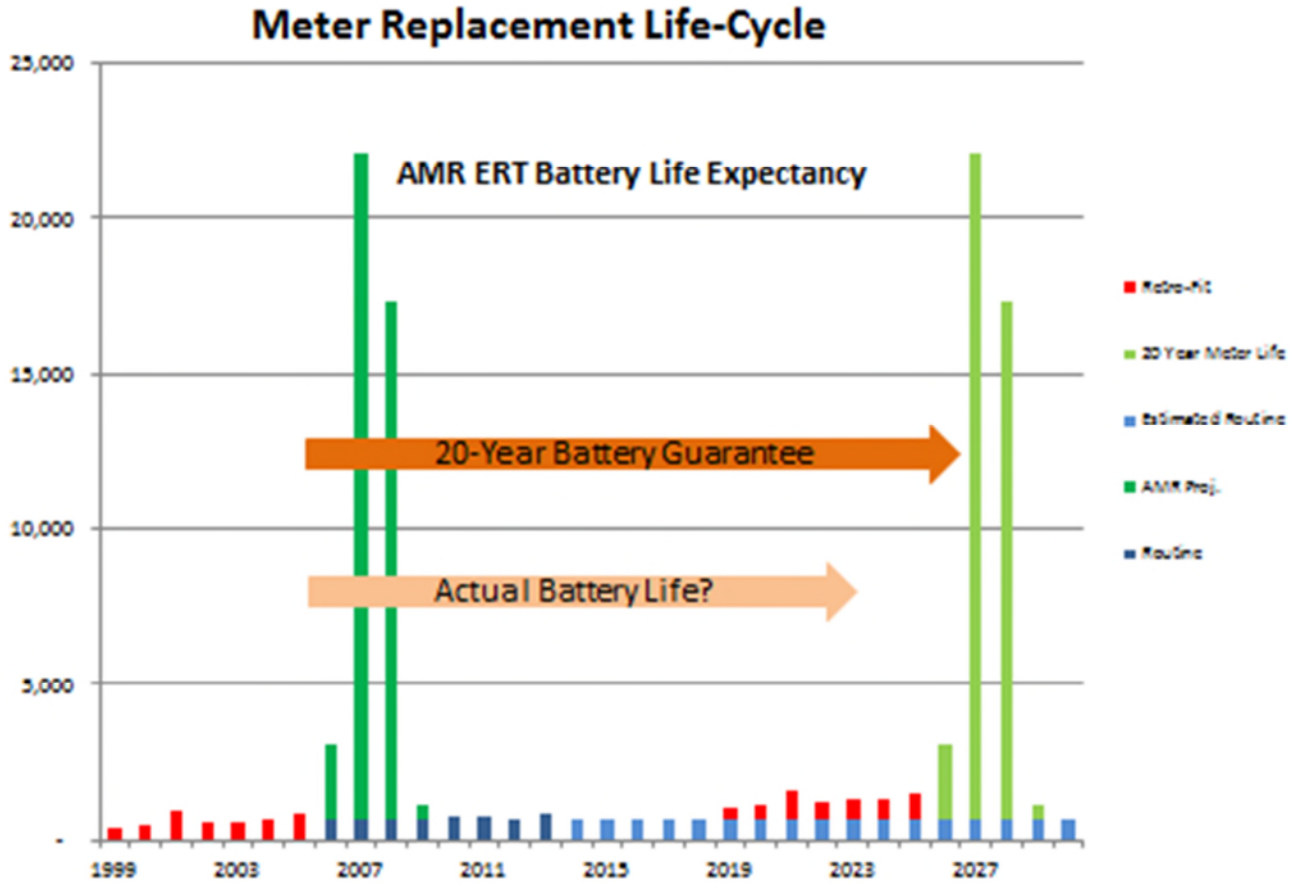
Budget Summary:

Budget year	Project	Budget Year Cost
2021 - R&R	3046 Meter Replacement and Leak Detection	\$400,000
2022 - R&R	3046 Meter Replacement and Leak Detection	\$400,000
2023 - R&R	3046 Meter Replacement and Leak Detection	\$400,000
2024 - R&R	3046 Meter Replacement and Leak Detection	\$400,000
2025 - R&R	3046 Meter Replacement and Leak Detection	\$400,000
Total Cost, All Years:		\$2,000,000

Previous Years on CIP: All
Related Projects: none
Procurement Issues: Standard meter procurement procedures.



Subprogram # 63 **Meter Replacement and Leak Detection**



The above graph is projecting the life cycle of the District’s 50,000 meters. The next major meter change-out is projected for 2026-2028.

Subprogram # 68

Facilities Improvements

Division: Allocation
Funding: R & R – Water- Div. 10

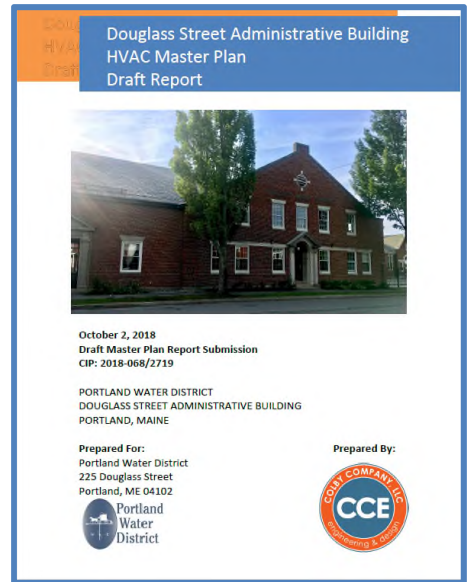
Manager: Hudak, Josh
Priority: Upgrade obsolete facility

Description:

This project is a combination of numerous subprojects addressing the improvements and maintenance needs of the Douglass Street and Lake office facilities. Some of the projects shown in this years plan are ongoing projects while others are for the current plan year only.

Justification / Impact:

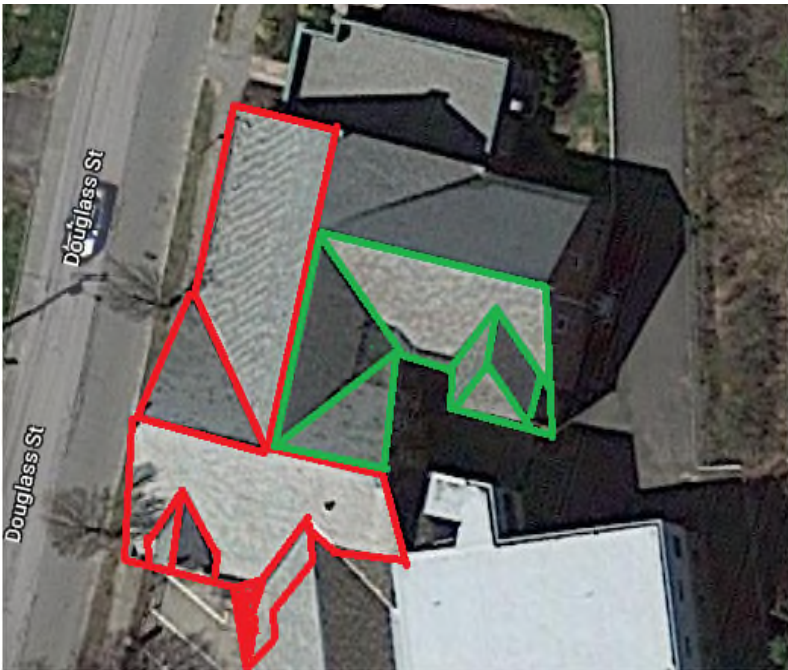
In order to maintain our office facilities in good condition and provide a suitable environment for our employees and customers, it is necessary to have a program to address any problem areas and additional requirements. In order to maintain the integrity of the facilities, problem areas such as leaks, indoor air quality, worn out or aging equipment and infrastructure needs to be addressed on an ongoing basis.



Budget Summary:

Budget Year		Project		Cost
2021	R&R	3050	Facility Upgrades	\$ 50,000
2021	R&R	3052	Douglass St. Fire Panel Replacement	\$ 60,000
2021	Bonds	3054	HVAC Improvements -Phase 1	\$ 450,000
2022	R&R	3216	Stockroom Platform Demo	\$ 30,000
2022	R&R	3050	Facility Upgrades	\$ 50,000
2022	R&R	3053	Douglass Street Roof replacement - Phase 3 of 3	\$ 280,000
2022	Bonds	3054	HVAC Improvements – Phase 2	\$ 500,000
2023	R&R	3050	Facility Upgrades	\$ 50,000
2023	Bonds	3054	HVAC Improvements -Phase 3	\$ 425,000
2023	R&R	3218	Renovation of Finance	\$ 75,000
2024	R&R	3050	Facility Upgrades	\$ 50,000
2024	Bonds	3054	HVAC Improvements -Phase 4	\$ 1,300,000
2024	R&R	3217	SMT Renovation/Carpet/Lighting	\$ 75,000
2025	R&R	3050	Facility Upgrades	\$ 300,000
Total Cost, All Years				\$ 3,695,000

Previous Years on CIP: 2000



2019 CIP #68, – Douglass Street – Slate Roof replacement – Phase 2 – Completed 2020



Watershed/Land Funds

Subprogram # 1

Watershed Land Acquisition

Division: Water - General
Funding: Watershed Land Reserve

Manager: Twaddel, Norman
Priority: Regulatory mandate

Description:

Purchase land with or without buildings in accordance with the Watershed Land Purchase Policy.

Justification / Impact:

Ownership of land, particularly along the shore of Sebago Lake within the two-mile limit is the surest way to control land use that affects Lower Bay water quality and body contact.

History:

The District has a long standing policy to purchase Sebago Lake water frontage and other critical land for the purpose of watershed protection and long-term maintenance of Sebago Lake water quality. We do not aggressively solicit land to buy, but we have made public our interest to purchase Watershed land and, in recent times, all purchases have resulted from seller initiated contacts.

Origin of the Subprogram:

Budget Summary:

<u>Budget year</u>	<u>Project</u>	<u>Budget Year Cost</u>
PEND 1	Watershed Protection Land Purchase	\$434,000
Total Cost, All Years:		\$434,000

Previous Years on CIP:

All since 1994

Related Projects:

None

Procurement Issues:

Purchase decisions are negotiated on the basis of professional real estate appraisals. Board of Trustees approval of individual purchases is required.

Eel Cove – Shorefront properties within the 2 mile limit left.



Properties left in Eel cove:

Tax Map Lot	Tax Assessed Value		
	Land	Building	Total
18-1	\$316,900	\$37,500	\$354,400
18-2	\$400,700	\$78,500	\$479,200
42-2	\$229,300	\$42,500	\$271,800
42-4	\$237,700	\$21,600	\$259,300
42-12A	\$30,900	\$0	\$30,900
42-13	\$30,900	\$0	\$30,900
42-18	\$269,500	\$184,700	\$454,200
42-20	\$396,200	\$125,800	\$522,000
42-24	\$63,300	\$11,700	\$75,000
TOTALS			\$2,477,700

Recent

purchases: Lanni/Porter purchased in 2007, Stanford in 2008 , Messenger 2017, Webb 2018

Subprogram # 2 Watershed Land Conservation

Division: Water - General

Manager: Hunt, Paul

Funding: Watershed Land Reserve

Priority: Regulatory mandate

Description:

Contribute towards land conservation projects in accordance with the Watershed Land Conservation Policy.

Justification / Impact:

There is a direct link between the degree to which a watershed is forested and the quality of water in the lakes and streams within it (AWWA, 2004). Conservation of forested land in perpetuity protects water quality, which benefits both customers of the Portland Water District and all other users of Sebago Lake.

History:

In 2007 the Portland Water District trustees adopted a policy to support measures to preserve Sebago Lake watershed land in perpetuity and to provide open space for lake-friendly public access. The District acknowledges that it is neither feasible nor necessary to own all land in the watershed. Instead the District cooperates and partners with organizations and individuals who seek to preserve and manage their watershed lands in a manner that protects water quality and therefore protects the health of drinking water consumers. In 2012, the policy was amended to allow for a contribution of up to 25% of the easement/acquisition value and a Standard Operating Procedure was developed for assessing projects. The District works closely with local partners and conservation organizations to achieve its watershed land protection goals and in 2017 a partnership called Sebago Clean Waters (SCW) was formalized. In 2020, the District, on behalf of Sebago Clean Waters, was awarded an \$8 million dollar grant from the Natural Resources Conservation Service via its Regional Conservation Partnership Program. As lead partner the District will manage the funds and report to NRCS on an annual basis. A goal of the grant is to conserve 10,000 acres over its 5-year term and the District's estimated contribution is outlined in the budget summary.

Budget Summary:

Budget year	Project	Budget Year Cost
2021	Pend Watershed Land Conservation - District's match	\$280,000
2022	Pend Watershed Land Conservation - District's match	\$280,000
2023	Pend Watershed Land Conservation - District's match	\$280,000
2024	Pend Watershed Land Conservation - District's match	\$280,000
2025	Pend Watershed Land Conservation - District's match	\$280,000
Total Cost, All Years:		\$1,400,000

Previous Years on CIP:

None

Related Projects:

Subprogram #1 – Watershed Land Acquisition (lower bay)

Procurement Issues:

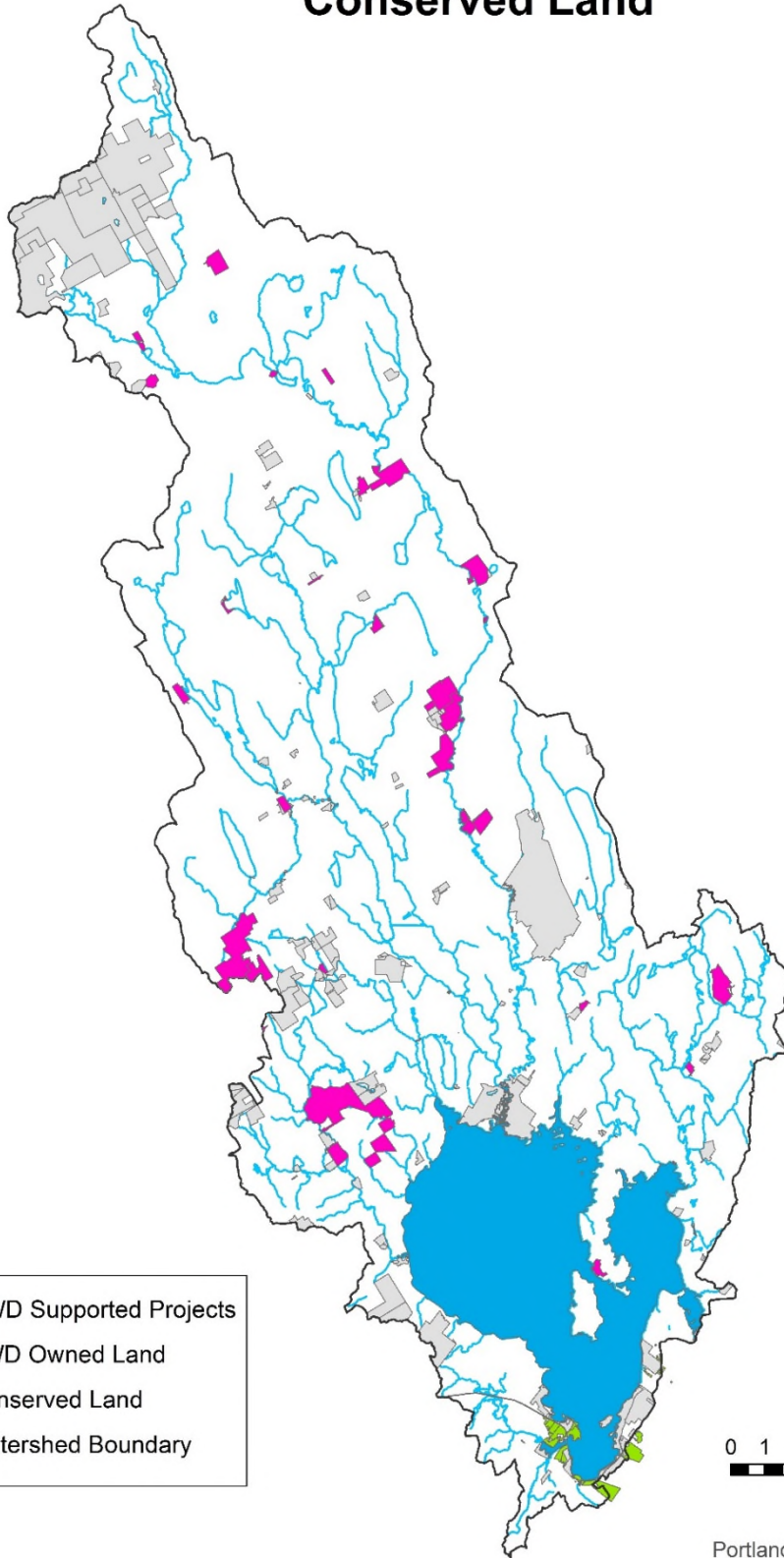
Project contributions are recommended by staff based on a formula. Board of Trustees approval of contributions is required.

Subprogram #1 and #2 are pending unscheduled work that may occur in 2021. 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 2021 budget.

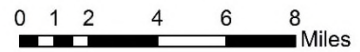
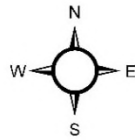
Summary of Watershed Conservation Projects 2008-2020 – 5564 Acres Conserved – District's contribution \$915,987

Project	Town	Acres	Year	PWD Contribution
Hague	Waterford	350	2008	\$5,000
Little Moose Pond	Waterford	23	2009	\$500
Watkins	Waterford	690	2011	\$9,250
Camp Wawenock	Raymond	60	2010	\$10,000
Tenny River	Raymond	28	2012	\$5,000
Hague Farmstead	Waterford	88	2012	\$1,900
Perley Mills	Bridgton/Denmark	800	2013	\$50,000
Maple Ridge	Harrison	35	2013	\$5,880
Moon Valley	Harrison	14	2013	\$5,510
Flint Farm	Albany Township	156	2013	\$7,600
Perley Pond/NW River	Sebago	150	2014	\$33,600
Crooked River Watershed Forestland	Harrison/Otisfield	791	2014	\$268,899
Cummings Parcel	Harrison	10	2014	\$5,000
Stanley Parcel	Waterford	21	2015	\$1,575
Raymond Community Forest	Raymond	350	2014	\$38,944
Whitney Pond	Stoneham	70	2015	\$36,860
Proctor Pond	Albany Township	54	2015	9000
Howe Woodlot	Waterford	40	2017	3,200
Fogg Lot	Otisfield	68	2017	13,600
Hawk Mountain	Waterford	16	2017	2,420
Crooked River Forest	Harrison	38	2018	5,270
Peabody-Fitch	Bridgton	191	2018	20,724
Tiger Hill/ Sebago Community Forest	Sebago	1417	2018	345,000
Deering-Northwest River	Sebago	20	2019	\$8,970
Briggs Parcel	Waterford	27	2019	\$9,000
Scribner Parcel	Otisfield	41	2020	\$8,610
City Brook	Waterford	16	2020	\$4,675

Sebago Lake Watershed Conserved Land

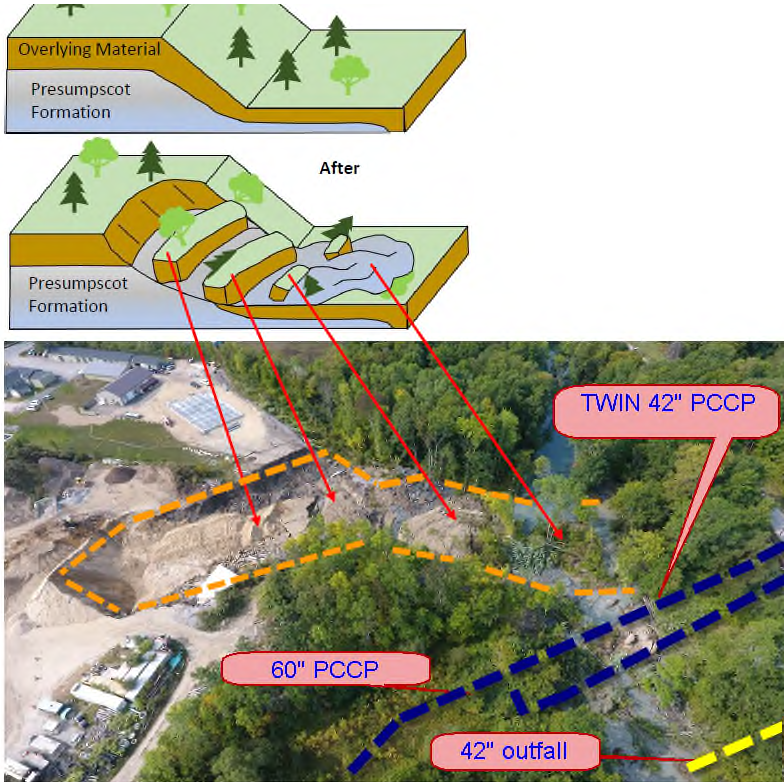


-  PWD Supported Projects
-  PWD Owned Land
-  Conserved Land
-  Watershed Boundary



Presumpscot River Landslide – September 16, 2020

On September 16, 2020, a landslide occurred blocking the Presumpscot River. The landslide threatened the two water transmission pipes and the Westbrook Regional Treatment Plant’s outfall. The District responded, with Shaw Brother Construction, to remove debris from over the District’s Water Transmission Line and Wastewater outfall. Fortunately, the facilities were not damaged. The \$400,000 cost was expensed in 2020.



Completed debris removal 10-7-20



Introduction

The District has the responsibility to manage their financial resources by establishing and following prudent financial policies and procedures. A summary of the significant financial policies is listed below. The district is in compliance with the policies except where noted below. Each policy is designated as being adopted by Law, Board or Management – see designation in parenthesis by policy title.

Significant Financial Policies

Accounting, Auditing, and Financial Reporting:

Basis of Accounting (Law-Charter)

The District maintains its accounting records and reports on its financial conditions and results of operations in accordance with generally accepted accounting principles as promulgated by the Governmental Accounting Standards Board (GAAP). As a business-type activity, the District is accounted for in enterprise funds. The basic financial statements are accounting for on the flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities are included in the statement of net position, revenues are recorded when earned, and expenses are recorded the time the liabilities are incurred. (See Budgeting and Financial Planning section for difference between GAAP and Budget.)

Fund Structure (Law-Charter)

As required by the District's charter, eight-supporting enterprise funds will be maintained – one fund for water service and seven funds for each of the communities we provide wastewater service. Revenues and expenses that are solely for the benefit of that fund are allocated directly to the enterprise fund. Enterprise funds, used for business-like activities, operate on an accrual basis. The accrual basis of accounting used by enterprise funds requires revenue to be recognized when it is earned and expenses to be recognized when the related benefit is received.

By contract, the District provides billing and meter reading services to two other communities. Related costs are recorded in the appropriate fund.

Costs that benefits more than one fund are recorded in an allocated fund. The balance in each fund is fully allocated to the appropriate enterprise or contracted utility billing funds. A detail explanation of the allocation methods used is provided on subsequent pages (see Cost Allocation Policy Detail on subsequent pages).

2020/21 Policy Changes Highlights

New Water Fund Reserves

Two new reserve accounts were created by the Board – Water Master Plan and Water Rate Stabilization Funds. The Water Master Plan fund was created to provide funding to update the water master plan and related periodic studies. A contribution of \$944,548 was approved in January 2020. The Rate Stabilization Fund was created to assist in smoothing out rate adjustments in futures. A contribution of \$300,000 was approved in January 2020.

Pension Plan Funding

The policy outlining how the defined benefit plans are funded was amended due to the impact COVID-19 had on the equity market. An actuarial report is completed each May to determine the following year contribution to the pension plans. The unadjusted 2021 contribution was \$1.7 million, a \$0.6 million increase. The primary reason was the temporary decline in the equity market due to COVID-19. The policy was amended to allow the contribution to be adjusted for the temporary decline. The adjusted contribution of \$1.4 million was included in the 2021 Budget.

Watershed Land Conservation Policy

Policy amended outlining when the District will obtain a real estate interest when contributing to the purchase on a conservation easement in the watershed. The District has been selected to manage a \$8 million federal grant to purchase such easement in the next 5 years. The policy allows the District to match that contribution up to 25% in cash or in-kind services. The projects will be individually approved and thus the expenditures are not included in the budget.

Significant Financial Policies (continued)

Financial Planning Policies:

Annual Audit (Law-Charter)

Annual audit shall be conducted each year by June 30. The Board of Trustees shall appoint auditors.

Financial Reporting (Management)

Monthly financial reports should be distributed to the Board of Trustees and Management for their review. The report should include a comparison of actual results to budget with variance noted and explained.

Basis of Budgeting (Management)

The budget is consistent with GAAP, including the utilization of accrual accounting, except for the following items:

- Depreciation, being a non-cash expense, is not budgeted,
- Contributions to asset renewal and replacement cash reserve is budgeted,
- Principal Payments are included in the budget,
- Contributed assets are not included in the operating or capital budget,
- Pension Actuarially Determined Contribution is included in the budget opposed to the pension expense, and
- Net proceeds of asset sales are not recorded in the budget.

The Board must authorize any amendment to the operating budget that results in a net increase in the total net operating budget. The general manager and treasurer are authorized to approve transfers between department and funds. The Board of Trustees must approve all capital projects. The upcoming year's projects listed in the Capital Expenditure section of this document are approved when the document is adopted. As long as the actual costs are at or below the approved amount and it is awarded to the lowest bidder, the project does not need additional Board approval.

The policy requires the preparation of a multi-year projection of operating and capital expenses. The budget must be completed so the wastewater communities can be assessed the annual estimated costs by January 15th. The budget year is January 1 to December 31.

Balanced Budget (Charter)

A balanced operating budget is a budget that has total expenditures equal to total revenues, including use of fund balance. A balanced capital budget is a budget that has total expenditures that do not exceed available renewal/replacement fund amounts and external financing (bonds, grants or contributions).

Significant Financial Policies (continued)

Financial Planning Policies (continued):

Long –Range Planning (Management)

Capital Improvement Plan

A five-year capital improvement plan will be updated annually. The Board may authorize capital expenditures in the upcoming year as long the staff awards the project to lowest bidder and the total project budget is within the amount in the capital improvement plan.

Operating Budget

Operating projections of at least three future years are created. For the water fund, the projection is used to decide the appropriate water rate adjustment to consider. For most communities, wastewater services are a joint effort of the District providing treatment and interception service and the community providing collection and storm drain services. The District's projected assessment of our cost and their internal costs are considered when determining the appropriate sewer rate. All funds incorporate the recommendations of the capital improvement plans and operational evaluations/studies when projecting operating costs.

Asset Inventory (Management)

The District utilizes an asset management system that identifies the District assets. All employees must record their time to work orders and the applicable asset they are working on. Assets classifications are being reviewed for accuracy and completeness with review focusing on the most important assets. Condition rating of assets has been done on some assets and efforts will continue on critical assets. Asset evaluation studies are completed periodically on critical assets.

Revenue Policies:

Water Rates (Board)

Water rates are established to provide sufficient revenues to fully support the operation of the water fund's activities. In 1994, 2006, and 2016 cost of service studies calculated for each customer class (e.g. – residential, commercial, etc.) the amount of revenues generated and costs incurred. The study indicated that some classes were subsidizing other classes. Recognizing the impact of changing rates to reflect the cost of service for each customer class would cause significant rate shock for some customers, the approach of gradually adjusting rates over the future rate adjustments was adopted. Cost of service studies should be done periodically, approximately every 10 years, or if significant financial or operational change occurs that may have shifted the costs to serve the different customer classes. Generally, the Board has approved a small annual rate adjustment near the increase in the consumer price index.

In 2013, a new state law allowed for funding through an infrastructure capital reserve. The law allows the District to include an additional 10% in rates to fund a capital reserve. The 2021 budget assumes 1% of the proposed December 1, 2020 3.4% water rate adjustment be dedicated to the capital reserve. The 1% will fund the debt service on \$2 million, 10-year bond for replacing aging water mains. Past practice is to issue 20-year bond to finance main renewal. An additional 1% will be added for the each of the ten years beginning in 2014.

Significant Financial Policies (continued)

Revenue Policies (continued):

Wastewater Assessment (Law-Charter)

Wastewater assessments are established to provide sufficient revenues to support the operation for each of wastewater funds' activities. By state law, the municipality must pay the district's assessment.

Service Fees (Board)

Fees for miscellaneous service should be based on the cost to provide the service. Effective January 1, 2016, the District's Board can unilaterally authorize changes for water related fees. The District must file 'terms and conditions' (T&C) with the Maine Public Utilities Commission for information only. The T&C includes the fees for any service the District requires customers to obtain from the District. The District intends to file updated T&C at least every two years to assure the fees assessed covers the costs of providing the service. Updated T&C were approved with an effective date of May 1, 2019. Additionally the Board approved a policy authorizing non-water related fees and will approve those fees in the future at the same time they approve the water related fees.

Investments (Board)

Operating fund investments must be invested with the primary objective, in priority order, of safety, liquidity and yield. Investments should be made in securities that are backed directly or indirectly by the federal government. Currently, we are in compliance with the policy.

Pension funds' investments will be primarily invested in a diversified portfolio of equity and debt securities within guidelines established in the policy. The policy was revised to allow for US equities portion of plan assets, securities of foreign-based issuers that are transacted in US dollars on US exchanges are permitted up to a limit of 20%, an increase from 10%, and will be classified as US equities.

	Minimum <u>Weight</u>	Target <u>Weight</u>	Maximum <u>Weight</u>
US Equities	30%	40%	50%
International Equities	10%	25%	30%
Bonds	20%	25%	40%
Alternatives	0%	10%	15%
Cash & Equivalents	0%	0%	30%

Use of One-time/Unpredictable Revenue (Board)

The District's Board has established a fund to collect the net proceeds of water land sales. The fund is dedicated to future investment in protecting the watershed land. Unexpected water net income is typically allocated to contingency or rainy day fund. However, the Board considers whether any portion should be allocated to the watershed land fund. The Board has established a goal of 25% and 15% of operating expense for the contingency and watershed land funds, respectively. Unexpected wastewater net income is retained in the individual funds contingency fund.

Significant Financial Policies (continued)

Expenditure Policies:

Debt (Board)

Debt may be issued for capital expenditures only. There is no legal limit for the amount of debt the District can issue. However, the Board has set a maximum target for debt service in any fund to 35% of total budget. The target is close to industry standard (AWWA Industry Benchmark, median quartile, 2012). In addition, operating revenue available for debt service should be at least 125% of the annual debt service. The District is in compliance with the policy in 2020 and projected to be in compliance in 2021. Debt will not be issued for longer than the useful life of the assets being financed. The average duration of outstanding debt should be 10 years or less.

Reserve Balances (Board)

Each operating fund has a target balance of 25% of annual net operating budget. All funds, except the Windham wastewater fund, are expected to meet the target in the coming year. The Windham fund is projected to be at 13.8%, 11.2% below the target reserve balance.

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 Westbrook and Windham meet the revised wastewater target. Cape Elizabeth, Cumberland, Gorham and Portland do not meet the increased target. The Water fund is anticipated to meet the target by the end of 2021. 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 7% at the end of 2021.

The 2021– 2025 trend of operating and renewal & replacements fund balances for each of the Water & Wastewater funds are located in the Budget by Fund section.

Capital Expenditures (Board)

A capital expenditure is a project with a cost of \$10,000 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 \$10,000 amount in a year. For example, individual hydrants, meters and service lines costs less than \$10,000 but total annual purchases exceed \$10,000.

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 is not exceeded and the lowest bid is accepted. If project cost is anticipated to exceed budget or the lowest bid is not accepted, the Board must specifically authorize. The General Manager who must inform the Board of the expenditure must approve emergency capital expenditures.

Purchasing (Board)

The policy outlines the requirements for obtaining competitive pricing and the formal bidding processes. It also establishes authorization levels for operating expenses including the requirement that expenses greater than \$50,000 be approved by the Board. Amounts less than \$50,000 must be included in the Board approved budget. We are in compliance with the policy.

Significant Financial Policies (continued)

Expenditure Policies (continued):

Pension Funding Policy (Board)

The Board voted to fully fund the District's defined benefit plan by contributing at least the annual required contribution as calculated by the actuary. Because of new accounting rules that went into effect in 2015, the Board adopted a new pension funding policy effective for 2015. The policy states the District's intention to adequately fund the pension plan and contribute at least the actuarially determined contribution consistent with assumption used to calculate the pension expense under the new accounting rule, except to spread out the funding for impact of changes of the benefits negotiated as part of the three-year union contract over the life of the union contract. The policy states the District will fund \$1 million a year, assuming the \$1 million is greater than the actuarially determined contribution (ADC). The 2021 Budget assumes the ADC of \$1.42 million will be paid in 2021.

Risk Management Policies

Maine Tort Claims Act (Law-State)

As a public entity, the District's liability for third party tort claims is limited by the provisions of the Maine Tort Claims Act. The Act provides that the District is immune from claims, unless the Act provides a specific exception from immunity. In the District's case, the exception most likely to affect the District is one making the District liable for negligent use of machinery and equipment. Should the District be liable for a claim under the provisions of the Act, its liability is capped by the Act at \$400,000. The immunity provided public entities by the Tort Claims Act helps keep to keep the cost of the District's insurance lower, allowing the District to pass this savings to its ratepayers.

Property and Liability Insurance (Board)

Property and liability insurance is purchased to cover building and personal property losses including losses due to flood and earthquakes. Certain liability claims are limited under the Maine Tort Claim Act to \$400,000. The Board adopted a change to limit insurance on claims covered by the Tort Claim Act to the Act's limit.

Safety Program (Management)

A full-time safety officer and executive safety team oversee various safety policies including confined space entry, electrical safety, ergonomic for video display terminals, fall protection, hazard communication and safety commitment policies. A safety incentive policy outlines an employee award program recognizing good safety performance.

Employee Management (Management)

A four-person Employee Services department oversees the district's employee relations management and practices. Over 60 policies have been created to guide management and employees with one goal of reducing the District's risk to losses.

In-House Legal Counsel (Board)

In 2006, the Board authorized hiring in-house legal counsel. Legal counsel actively participates in overseeing the district's operation, including reviewing all contracts, and proactively identifying ways to reduce or avoid legal issues.

Cost Allocation Policy Detail

The District has one water fund and six wastewater funds (Cape Elizabeth, Cumberland, Gorham, Portland, Westbrook and Windham). In addition, the District also provides billing and/or meter reading services to three other municipalities (Falmouth, Scarborough and South Portland).

It is the District's policy to directly assign expenses to a fund/municipality whenever possible. However, there are some expenses, such as paid time off or work done by administrative personnel, where such an assignment is not possible. In such cases, an allocation of that cost must be done.

In 1995, the District engaged an outside consultant to review and update its cost allocation process. Since that time, organizational and other changes have necessitated updates and modifications. The changes that were made used the guidelines from the 1995 study. The current allocations were reviewed and approved by the District's current auditors during 2013.

Currently the District uses the following methods to allocate costs:

- Customers Served
- Direct Labor
- General Allocation Percentage
- Gross Asset Value
- Meter Equivalent Units
- Relative Benefits
- Square Footage Utilized

A description of each method, the percentages used in this Budget and the dollars allocated, are in the following pages.

Each financial transaction is assigned a cost center number when the transaction is recorded in the financial system. The fund number indicates whether it is a 'direct' charge to the fund or an 'indirect' charge that will be allocated. Each department's costs are broken down into the fund category in the Departmental Expense section. All costs ultimately are assigned to the one of the seven enterprise funds or three contact billing municipalities.

<u>Fund</u>	<u>Description</u>	<u>Fund</u>	<u>Description</u>
10	Allocated to All Direct Funds	57	Portland Wastewater
20	Water - members	59	South Portland Billing
30	Water - nonmembers	61	Gorham Wastewater
50	Allocated to All Wastewater Funds	62	Westbrook Wastewater
51	Cape Elizabeth Wastewater	64	Allocated to
53	Cumberland Wastewater		Gorham/Westbrook/Windham
54	Falmouth Wastewater	65	Allocated to Gorham/Windham
55	Windham Wastewater	66	Portland Wastewater (Peaks Island)

Customers Served

This method determines the ratio of customers per fund to the total number of customers served based on the average total number of water and sewer customers.

The costs for Customer Service have three different allocations (general, billing and meter reading costs) that vary slightly. Falmouth has flat billings for their sewer customers; therefore, their general needs are limited (compared with sewer bills based on usage) and they do not utilize meter reading data. In addition, Scarborough does its own billing and payment processing utilizing the District's meter reading data, thus they have no general or billing expenses.

Sub-Groups Using Method:

F1 – Customer Service

H1 – Financial Services (payment processing)

2021 Allocation %:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	67.70%	66.24%	67.68%	66.24%
Cape Eliz	2.15%	2.15%	2.15%	2.15%
Cumberland	1.10%	1.10%	1.10%	1.10%
Falmouth	0.36%	1.82%	0.00%	1.82%
Gorham	1.72%	1.72%	1.72%	1.72%
Portland	15.51%	15.51%	15.51%	15.51%
Scarborough	0.00%	0.00%	0.38%	0.00%
So Portland	7.16%	7.16%	7.16%	7.16%
Westbrook	4.25%	4.25%	4.25%	4.25%
Windhan	0.05%	0.05%	0.05%	0.05%
	100.00%	100.00%	100.00%	100.00%

2020 Allocation %:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	67.50%	66.13%	67.57%	66.13%
Cape Eliz	2.15%	2.15%	2.15%	2.15%
Cumberland	1.08%	1.08%	1.08%	1.08%
Falmouth	0.36%	1.82%	0.00%	1.82%
Gorham	1.69%	1.71%	1.71%	1.71%
Portland	15.67%	15.60%	15.60%	15.60%
Scarborough	0.00%	0.00%	0.38%	0.00%
So Portland	7.23%	7.20%	7.20%	7.20%
Westbrook	4.27%	4.26%	4.26%	4.26%
Windhan	0.05%	0.05%	0.05%	0.05%
	100.00%	100.00%	100.00%	100.00%

Dollars Allocated:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	\$713,281	\$306,443	\$52,194	\$119,464
Cape Eliz	\$22,652	\$9,946	\$1,658	\$3,878
Cumberland	\$11,590	\$5,089	\$848	\$1,984
Falmouth	\$3,793	\$8,420	\$0	\$3,282
Gorham	\$18,122	\$7,957	\$1,326	\$3,102
Portland	\$163,412	\$71,753	\$11,961	\$27,972
Scarborough	\$0	\$0	\$293	\$0
So Portland	\$75,437	\$33,124	\$5,522	\$12,913
Westbrook	\$44,778	\$19,662	\$3,278	\$7,665
Windhan	526	232	39	90
	\$1,053,591	\$462,626	\$77,119	\$180,350

Dollars Allocated:

	General F1	Billing F1	Meter Read F1	Paymts H1
Water	\$697,482	\$227,500	\$53,955	\$120,309
Cape Eliz	\$22,216	\$7,396	\$1,717	\$3,911
Cumberland	\$11,160	\$3,715	\$862	\$1,965
Falmouth	\$3,720	\$6,261	\$0	\$3,311
Gorham	\$17,463	\$5,883	\$1,365	\$3,111
Portland	\$161,919	\$53,667	\$12,457	\$28,381
Scarborough	\$0	\$0	\$303	\$0
So Portland	\$74,708	\$24,769	\$5,749	\$13,099
Westbrook	\$44,122	\$14,655	\$3,402	\$7,750
Windhan	517	173	40	91
	\$1,033,307	\$344,019	\$79,850	\$181,928

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

L6 – Laboratory

B3 – East End (Portland) Wastewater Treatment

L9 – Water/Wastewater Systems

C1 – Facilities Services

E7 – Instrumentation (general wastewater)

2021 Allocation %:	B1	B3	C1	E7	L6	L9
Water	0.00%	0.00%	81.64%	0.00%	36.07%	0.00%
Cape Elizabeth	11.84%	7.21%	3.51%	11.84%	5.26%	11.84%
Cumberland	3.92%	0.00%	0.72%	3.92%	0.00%	3.92%
Gorham	5.68%	2.28%	1.12%	5.68%	2.42%	5.68%
Portland	63.26%	75.90%	10.08%	63.26%	39.83%	63.26%
Westbrook	12.94%	14.11%	2.81%	12.94%	15.81%	12.94%
Windham	2.36%	0.50%	0.12%	2.36%	0.61%	2.36%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Dollars Allocated:	B1	B3	C1	E7	L6	L9
Water	\$0	\$0	\$176,025	\$0	\$105,700	\$0
Cape Elizabeth	49,710	35,499	7,568	9,816	15,414	66,929
Cumberland	16,458	0	1,552	3,250	0	22,159
Gorham	23,847	11,226	2,415	4,709	7,092	32,108
Portland	265,594	373,704	21,734	52,446	116,719	357,597
Westbrook	54,328	69,473	6,059	10,728	46,330	73,147
Windham	9,908	2,462	258	1,956	1,787	13,341
	\$419,845	\$492,364	\$215,611	\$82,905	\$293,042	\$565,281
2020 Allocation %:	B1	B3	C1	E7	L6	L9
Water	0.00%	0.00%	83.08%	0.00%	34.00%	0.00%
Cape Elizabeth	11.88%	7.34%	3.69%	11.88%	4.68%	11.88%
Cumberland	4.00%	0.00%	0.84%	4.00%	0.00%	4.00%
Gorham	5.73%	2.28%	1.09%	5.73%	3.94%	5.73%
Portland	63.39%	75.73%	8.74%	63.39%	35.82%	63.39%
Westbrook	12.72%	14.15%	2.41%	12.72%	21.02%	12.72%
Windham	2.28%	0.50%	0.15%	2.28%	0.54%	2.28%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Dollars Allocated:	B1	B3	C1	E7	L6	L9
Water	\$0	\$0	\$179,130	\$0	77,074	\$0
Cape Elizabeth	46,612	34,416	7,461	9,152	10,609	63,425
Cumberland	15,694	0	1,698	3,081	0	21,355
Gorham	22,482	10,691	2,204	4,414	8,932	30,592
Portland	248,713	355,088	17,672	48,832	81,200	338,429
Westbrook	49,907	66,348	4,873	9,799	47,650	67,910
Windham	8,946	2,344	(10,844)	1,757	1,224	12,173
	\$392,354	\$468,887	\$202,194	\$77,035	\$226,689	\$533,884

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 – Instrumentation

H1 – Financial Services

J1 – General Manager's

G1 – Information Service

I1 – Employee Services

Office

2021 Allocation %:	E7	G1	H1	I1	J1
Water	55.89%	55.89%	55.89%	55.89%	55.89%
Cape Elizabeth	3.76%	3.76%	3.76%	3.76%	3.76%
Cumberland	2.14%	2.14%	2.14%	2.14%	2.14%
Gorham	2.56%	2.56%	2.56%	2.56%	2.56%
Portland	28.64%	28.64%	28.64%	28.64%	28.64%
Westbrook	6.14%	6.14%	6.14%	6.14%	6.14%
Windham	0.87%	0.87%	0.87%	0.87%	0.87%
	100.00%	100.00%	100.00%	100.00%	100.00%

Dollars Allocated:	E7	G1	H1	I1	J1
Water	\$86,561	\$694,948	\$417,861	\$348,322	\$1,049,630
Cape Elizabeth	5,823	46,753	28,112	23,433	70,614
Cumberland	3,314	26,609	16,000	13,337	40,190
Gorham	3,965	31,832	19,140	15,955	48,078
Portland	44,357	356,116	214,127	178,492	537,868
Westbrook	9,510	76,346	45,906	38,266	115,311
Windham	1,348	10,817	6,503	5,423	16,338
	\$154,878	\$1,243,421	\$747,649	\$623,228	\$1,878,029

2020 Allocation %:	E7	G1	H1	I1	J1
Water	56.05%	56.05%	56.05%	56.05%	56.05%
Cape Elizabeth	3.66%	3.66%	3.66%	3.66%	3.66%
Cumberland	2.17%	2.17%	2.17%	2.17%	2.17%
Gorham	2.66%	2.66%	2.66%	2.66%	2.66%
Portland	28.45%	28.45%	28.45%	28.45%	28.45%
Westbrook	6.13%	6.13%	6.13%	6.13%	6.13%
Windham	0.88%	0.88%	0.88%	0.88%	0.88%
	100.00%	100.00%	100.00%	100.00%	100.00%

Dollars Allocated:	E7	G1	H1	I1	J1
Water	\$80,451	\$605,929	\$396,169	\$289,974	\$1,003,733
Cape Elizabeth	5,253	39,566	25,869	18,935	65,543
Cumberland	3,115	23,459	15,338	11,226	38,860
Gorham	3,818	28,756	18,801	13,761	47,635
Portland	40,836	307,559	201,089	147,186	509,477
Westbrook	8,799	66,268	43,328	31,713	109,775
Windham	1,263	9,513	6,220	4,553	15,759
	\$143,535	\$1,081,050	\$706,814	\$517,348	\$1,790,781

Gross Asset Value

The allocation percentage is each fund's gross (fixed) asset value as a ratio to all gross assets. Costs allocated include those that involve all District assets (All) or in some cases only wastewater assets (WW). The same asset values are used in both calculations except that the Water assets are removed for the wastewater calculations.

Sub-Group Using Method:

E2 – Planning and Design

2021 Allocation %:

	All	WW
Water	64.70%	0.00%
Cape Elizabeth	3.34%	9.46%
Cumberland	1.66%	4.70%
Falmouth	0.00%	0.00%
Gorham	3.38%	9.59%
Portland	22.04%	62.44%
Westbrook	4.30%	12.17%
Windham	0.58%	1.64%
	100.00%	100.00%

2020 Allocation %:

	All	WW
Water	64.36%	0.00%
Cape Elizabeth	3.25%	9.12%
Cumberland	1.54%	4.31%
Falmouth	0.00%	0.00%
Gorham	3.50%	9.83%
Portland	22.36%	62.74%
Westbrook	4.40%	12.34%
Windham	0.59%	1.66%
	100.00%	100.00%

Dollars Allocated:

	All	WW
Water	\$657,703	\$0
Cape Elizabeth	33,953	25,970
Cumberland	16,875	12,902
Falmouth	0	0
Gorham	34,359	26,326
Portland	224,046	171,410
Westbrook	43,711	33,409
Windham	5,896	4,503
	\$1,016,543	\$274,520

Dollars Allocated:

	All	WW
Water	\$636,348	\$0
Cape Elizabeth	32,134	22,876
Cumberland	15,226	10,811
Falmouth	0	0
Gorham	34,606	24,657
Portland	221,080	157,374
Westbrook	43,504	30,953
Windham	5,834	4,164
	\$988,732	\$250,835

Meter Equivalent Units

This calculation takes each meter and assigns a weight based on its size to determine a value of meter service provided to each fund.

Sub-Group Using Method:

A6 – Utility Services (meter service)

2021 Allocation %:

	A6
Water	65.47%
Cape Elizabeth	1.76%
Cumberland	0.99%
Gorham	1.59%
Portland	17.12%
Scarborough	1.14%
South Portland	7.54%
Westbrook	4.26%
Windham	0.13%
	100.00%

2020 Allocation %:

	A6
Water	65.48%
Cape Elizabeth	1.75%
Cumberland	0.96%
Gorham	1.56%
Portland	17.21%
Scarborough	1.12%
South Portland	7.61%
Westbrook	4.23%
Windham	0.08%
	100.00%

Dollars Allocated:

	A6
Water	\$110,283
Cape Elizabeth	2,965
Cumberland	1,668
Gorham	2,678
Portland	28,838
Scarborough	1,920
South Portland	12,701
Westbrook	7,176
Windham	219
	\$168,448

Dollars Allocated:

	A6
Water	\$105,909
Cape Elizabeth	2,831
Cumberland	1,553
Gorham	2,523
Portland	27,836
Scarborough	1,812
South Portland	12,309
Westbrook	6,842
Windham	128
	\$161,743

Relative Benefits

This method of allocation is based upon management's assessment of the benefit received by the departments and funds from the areas providing the service. Customer Service (control/dispatch) allocation assumes most work (95%) will involve the Water fund; the remaining dollars are allocated to wastewater funds based on the number of pump stations in each community. 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)

2021 Allocation %:

	F1	L6	IPT
Water	95.00%	0.00%	0.00%
Cape Elizabeth	1.64%	7.94%	0.00%
Cumberland	0.93%	0.00%	0.00%
Gorham	0.99%	3.80%	14.20%
Portland	1.00%	62.50%	62.00%
Westbrook	0.17%	24.80%	21.40%
Windham	<u>0.27%</u>	<u>0.96%</u>	<u>2.40%</u>
	100.00%	100.00%	100.00%

Dollars Allocated:

	F1	L6	IPT
Water	\$224,395	\$0	\$0
Cape Elizabeth	3,874	18,328	0
Cumberland	2,197	0	0
Gorham	2,338	8,772	8,365
Portland	2,362	144,273	36,523
Westbrook	402	57,248	12,606
Windham	<u>637</u>	<u>2,216</u>	<u>1,414</u>
	\$236,205	\$230,837	\$58,908

2020 Allocation %:

	F1	L6	IPT
Water	95.00%	0.00%	0.00%
Cape Elizabeth	1.64%	7.94%	0.00%
Cumberland	0.93%	0.00%	0.00%
Gorham	0.99%	3.80%	12.00%
Portland	1.00%	62.50%	64.00%
Westbrook	0.17%	24.80%	22.00%
Windham	<u>0.27%</u>	<u>0.96%</u>	<u>2.00%</u>
	100.00%	100.00%	100.00%

Dollars Allocated:

	F1	L6	IPT
Water	\$187,084	\$0	\$0
Cape Elizabeth	3,230	19,156	0
Cumberland	1,831	0	0
Gorham	1,950	9,168	6,783
Portland	1,969	150,790	36,179
Westbrook	335	59,833	12,436
Windham	<u>532</u>	<u>2,317</u>	<u>1,131</u>
	\$196,931	\$241,264	\$56,529

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.

2021 Allocation %:

Water Operations	
A1 - Water Administration	2.00%
A2 - Transmission/Distribution	5.79%
A6 - Utility Services	<u>1.56%</u>
	9.35%
Environmental Services	
A5 - Water Resources	0.82%
L6 - Water/WW Laboratory (IPT)	<u>0.55%</u>
	1.37%
Wastewater Operations	
B1 - WW Administration	1.78%
L9 - Water/WW Systems	<u>3.66%</u>
	5.44%
Engineering Services	
C1 - Facility Services	23.12%
E2 - Planning & Design	15.04%
E7 - Instrumentation	1.34%
	39.50%
Administration	
F1 - Customer Service	11.53%
G1 - Information Services	5.61%
H1 - Financial Services	8.47%
I1 - Employee Services	3.89%
J1 - BOT & Senior Management	<u>14.84%</u>
	44.34%
	100.00%

Dollars Allocated:

	\$
Water Operations	\$70,145
Environmental Services	10,278
Wastewater Operations	40,812
Engineering Services	296,335
Administration	<u>332,645</u>
	\$750,215

2020 Allocation %:

Water Operations	
A1 - Water Administration	2.00%
A2 - Transmission/Distribution	5.79%
A6 - Utility Services	<u>1.56%</u>
	9.35%
Environmental Services	
A5 - Water Resources	0.82%
L6 - Water/WW Laboratory (IPT)	<u>0.55%</u>
	1.37%
Wastewater Operations	
B1 - WW Administration	1.78%
L9 - Water/WW Systems	<u>3.66%</u>
	5.44%
Engineering Services	
C1 - Facility Services	23.12%
E2 - Planning & Design	15.04%
E7 - Instrumentation	1.34%
	39.50%
Administration	
F1 - Customer Service	11.53%
G1 - Information Services	5.61%
H1 - Financial Services	8.47%
I1 - Employee Services	3.89%
J1 - BOT & Senior Management	<u>14.84%</u>
	44.34%
	100.00%

Dollars Allocated:

	\$
Water Operations	\$71,306
Environmental Services	10,448
Wastewater Operations	41,487
Engineering Services	301,239
Administration	<u>338,150</u>
	\$762,630

Vehicle Rates

Internal Transportation costs are charges the departments receive for the availability of District owned vehicles. Each type of vehicle and piece of equipment has an assigned hourly rate. Most vehicles are charged for 40 hours per week. Charges are either assigned directly to the task or to a “stand-by” account or later allocated. Transportation costs represent the expense of operating the garage and include labor, materials, occupancy and depreciation. Overall budget is 3.7% greater than 2020 due to the rates increasing by 3.5%.

2021 Budget Details

Vehicle Type	Rate	Active Hours	Stand-by Hours	Total Hours
Backhoe/Loader <19,501 GVW	\$ 35.15	2,100		2,100
Backhoe/Loader >=19,500 GVW	\$ 40.47	730		730
Car	\$ 3.33	560	2,070	2,630
Compressor	\$ 21.28	2,810		2,810
Dump Truck < 15,000 GVW	\$ 8.99	475	1,605	2,080
Dump Truck 15,001-40,000 GVW	\$ 11.53	1,456	2,704	4,160
Dump Truck >= 40,000 GVW	\$ 15.41	3,615	2,625	6,240
Generator/Load Bank	\$ 36.21	436		436
Misc. Const. Equipment - Forklift, etc.	\$ 24.49	1,495		1,495
Misc. Trailed Equipment - Trailer Mounted Pump, Jet M	\$ 15.99	1,700		1,700
Pick-up Truck/SUV - Light - < 6,000 GVW	\$ 3.33	1,675	2,485	4,160
Pick-up Truck/SUV - Medium - 6,001-7,500 GVW	\$ 3.59	13,898	23,543	37,440
Pick-up Truck/SUV - Heavy - 7,501-10,000 GVW	\$ 4.36	7,085	7,675	14,760
Special Purpose - C - Crane, Sludge, etc.	\$ 47.93	104		104
Special Purpose - D - Jetvac, etc.	\$ 63.90	2,696		2,696
Utility Truck 10,001 - 14,000 GVW	\$ 3.59	7,690	6,870	14,560
Utility Truck 14,001 - 16,000 GVW	\$ 5.12	4,928	3,392	8,320
Utility Truck 16,001 - 19,500 GVW	\$ 5.64	5,719	4,681	10,400
Utility Truck 6,001 - 10,000 GVW	\$ 6.15	5,519	2,896	8,415
Van < 6,000 GVW	\$ 3.33	1,230	2,930	4,160
Van 6,001-7,500 GVW	\$ 3.58	1,132	948	2,080
Van 7,501-10,000 GVW	\$ 4.36	24,006	15,514	39,520
Total Hours		91,059	79,937	170,996

Sub-Group	2020 Budget	2021 Budget	\$ - Difference	% - Difference
A1 - Water Administration	\$ -	\$ -	\$ -	n/a
A2 - Transmission/Distribution	\$ 598,008	\$ 612,268	\$ 14,260	2.4%
A3 - Water Treatment	\$ 32,427	\$ 35,969	\$ 3,542	10.9%
A5 - Water Resources	\$ 34,524	\$ 35,741	\$ 1,217	3.5%
A6 - Utility Services	\$ 161,219	\$ 166,913	\$ 5,694	3.5%
B1 - WW Administration	\$ -	\$ -	\$ -	n/a
B3 - Wastewater Treatment	\$ 55,141	\$ 57,082	\$ 1,941	3.5%
C1 - Facility Services	\$ 52,283	\$ 61,777	\$ 9,494	18.2%
E2 - Planning & Design	\$ 17,970	\$ 18,368	\$ 398	2.2%
E7 - Instrumentation	\$ 21,133	\$ 21,877	\$ 744	3.5%
F1 - Customer Service	\$ 14,417	\$ 14,920	\$ 503	3.5%
I1 - Employee Services	\$ -	\$ -	\$ -	n/a
J1 - BOT & Senior Management	\$ -	\$ -	\$ -	n/a
L6 - Water/WW Laboratory	\$ -	\$ -	\$ -	n/a
L9 - Water/WW Systems	\$ 172,942	\$ 178,407	\$ 5,465	3.2%
	\$1,160,064	\$1,203,322	\$43,258	3.7%

Joint Use Facilities – Operations and Maintenance Allocations

The District has two areas where wastewater flows from more than one community are combined. Costs associated are allocated by the percentage of the flow contributed by each:

Portland Water District Facilities:

Westbrook Regional – All of the wastewater from Gorham, Westbrook and Windham is treated at Westbrook Regional WWTF, with one pump station handling the flow from all communities. The budget for 2021 is \$1,269,867, up \$101,899 or 8.7% due to higher costs for biosolids disposal and chemicals.

Little Falls – The Little Falls areas of Gorham and Windham previously used a small treatment facility. Since 2008, flows from this area was 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 \$81,097 up 4.8% (\$3,706) mostly due higher labor/benefit costs and power costs.

----- Westbrook Regional -----				----- Little Falls -----	
	Gorham	Westbrook	Windham	Gorham	Windham
2014	14.00%	83.70%	2.30%	15.00%	85.00%
2015	13.00%	84.70%	2.30%	20.00%	80.00%
2016	15.00%	82.00%	3.00%	22.50%	77.50%
2017	16.50%	80.25%	3.25%	21.50%	78.50%
2018	15.75%	81.00%	3.25%	27.50%	72.50%
2019	13.00%	84.00%	3.00%	28.00%	72.00%
2020	13.00%	84.00%	3.00%	24.50%	75.50%
2021	13.00%	84.00%	3.00%	22.50%	77.50%

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. Charges to the District are budgeted to be \$181,800 in 2021 (an increase of 5.9%).

Falmouth – All of the wastewater from Cumberland is treated at the Falmouth Treatment Facility through a contractual agreement. This cost is budgeted to be \$513,529 in 2021 which is a decrease of \$283 from the previous year.

---- South Portland ----			----- Falmouth -----		
	Cape Eliz	So Portland	Cumberland	Falmouth	Millcreek PS
2014	6.7%	93.3%	24.0%	76.0%	40.8%
2015	6.7%	93.3%	24.0%	76.0%	40.8%
2016	6.7%	93.3%	24.0%	76.0%	40.8%
2017	6.7%	93.3%	24.0%	76.0%	40.8%
2018	6.7%	93.3%	24.0%	76.0%	40.8%
2019	6.7%	93.3%	24.0%	76.0%	40.8%
2020	6.7%	93.3%	24.0%	76.0%	40.8%
2021	6.7%	93.3%	24.0%	76.0%	40.8%

Note: Starting in 2013 Millcreek Pump Station (PS) costs were be allocated to Cumberland at the specific rate above whereas in prior years it was allocated based on the Cumberland flow ratio.

Joint Use Facilities – Capital Cost Sharing Allocations

The District has two areas where wastewater flows from more than one community are combined. Costs associated with these combinations are allocated by the percentage of the design flow contributed by each community. The areas of combined flow are:

Portland Water District Facilities:

Westbrook Regional – All of the wastewater from Gorham, Westbrook and Windham is treated at Westbrook Regional Wastewater Treatment Facility. In addition, one pump station handles the combined waste from all three communities.

System	--- Millions of Gallons/Day (MGD) ---				----- Flow Percentage -----		
	Westbrook	Gorham	Windham	Total	Westbrook	Gorham	Windham
Southside Interceptor above Manhole 60	0.16	1.06	0.12	1.34	12.0%	79.1%	9.0%
Manhole 60 up to and including Siphon	5.00	1.06	0.12	6.18	81.0%	17.2%	1.9%
Cottage Place Pumping Station & Force Main	2.12	0.70	0.06	2.88	73.7%	24.3%	2.1%
Westbrook Regional WWTF & Outfall	3.02	1.40	0.12	4.54	66.6%	30.8%	2.6%

Little Falls – The Little Falls areas of Gorham and Windham used to be a self-contained system with a small wastewater treatment facility. Starting in 2008, wastewater from this area was conveyed to the Westbrook Regional Wastewater Treatment Facility. As it is presently constituted, wastewater from Windham moves into Gorham where it is combined with that community's flow until it joins with the Westbrook flow at the Westbrook town line.

Facility Name	----- Gallons/Day -----			-- Flow Percent --	
	Gorham	Windam	Total	Gorham	Windam
Gray Rd/Mallison St Gravity Sewer	63,500	53,500	117,000	54.3%	45.7%
Mallison St Pump Station (PS)/Flow Meter (FM)	84,000	100,000	184,000	45.6%	54.4%
Mosher Rd Gravity Sewer	145,000	100,000	245,000	59.2%	40.8%
Little River PS/FM	222,500	100,000	322,500	69.0%	31.0%
Mosher Rd & Cross Country Gravity Sewer	638,000	100,000	738,000	86.4%	13.6%
Industrial Park Gravity Sewer Upgrade	2,105,000	100,000	2,205,000	95.5%	4.5%
Woodlawn Ave PS (Town Path Rd) effective 2008	-	-	-	100.0%	0.0%
Fire Station (Route 202) PS	-	-	-	0.0%	100.0%
Androscoggin St PS	-	-	-	0.0%	100.0%

Contracted Services Facilities:

South Portland – All of the wastewater from the Northern portion of Cape Elizabeth is treated at the South Portland Treatment Facility through a contractual agreement.

Facility Name	--- Millions Gallons/Day (MGD) ---			---- Flow Percentage ----	
	Cape Eliz	So Portland	Total	Cape Eliz	So Portland
Treatment Plant	0.716	8.584	9.300	7.7%	92.3%

Note: In Cape Elizabeth 1/13th of average design flow = 7.7% per Sewer Service Agreement dated 08/11/93.

Falmouth – All of the wastewater from Cumberland is treated at the Falmouth Treatment Facility through a contractual agreement.

Facility Name	Millions of Gallons/Day (MGD)*			---- Flow Percentage ----	
	Cumberland	Falmouth	Total	Cumberland	Falmouth
Route 88 Interceptor - Town Line to Millcreek PS	1.790	1.007	2.797	64.0%	36.0%
Millcreek PS & Force Main	1.076	1.998	3.074	35.0%	65.0%
Millcreek Interceptor	2.030	1.595	3.625	55.5%	44.5%
Treatment Facility (average design flow)	0.468	1.092	1.560	30.0%	70.0%
Cumberland Route 1 Sewer Extension to Johnson Rd PS	0.144	0.490	0.634	22.7%	77.3%
Existing Sewers & Mains - Johnson Rd to Millcreek	0.144	0.216	0.360	40.0%	60.0%
Johnson Road PS (gallons pumped per minute)	100	150	250	40.0%	60.0%

* = Peak flow unless noted otherwise

Introduction

The appendix contains the following:

- 2022-2024 Financial Forecast
- CES Renewable Energy Consortium
- Maine Measures of Growth 2019 Scorecard
- Water Benchmark Data
- Portland Water District Rate Sheet Summary
- Customer Satisfaction Survey
- Board of Trustees' Orders and Resolutions
- Glossary

2022 to 2024 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:

	2020 Budget	2021 Budget	2022 Forecast	2023 Forecast	2024 Forecast
Revenues:					
Water Sales	\$ 25,686,370	\$ 25,660,964	\$ 26,966,738	\$ 28,327,382	\$ 29,754,163
Assessment Income	\$ 20,218,572	\$ 21,083,736	\$ 22,639,772	\$ 23,324,915	\$ 24,213,314
Contracted Billing Income	\$ 212,460	\$ 212,796	\$ 230,342	\$ 227,203	\$ 224,169
Interest Income	\$ 707,747	\$ 276,655	\$ 276,655	\$ 276,655	\$ 276,655
Other Income	\$ 664,790	\$ 691,482	\$ 691,482	\$ 691,482	\$ 691,482
Total Revenues	\$ 47,489,939	\$ 47,925,633	\$ 50,804,989	\$ 52,847,637	\$ 55,159,783
Operating Expenses:					
Salaries & Wages	\$ 6,861,489	\$ 7,021,477	\$ 7,161,908	\$ 7,305,145	\$ 7,451,248
Employee Benefits	\$ 3,015,776	\$ 3,213,915	\$ 3,374,612	\$ 3,543,343	\$ 3,720,511
Biosolids Disposal	\$ 1,731,815	\$ 2,181,419	\$ 2,207,597	\$ 2,234,089	\$ 2,260,898
Chemicals	\$ 1,220,309	\$ 1,361,632	\$ 1,402,481	\$ 1,444,555	\$ 1,487,891
Contracted Services	\$ 3,217,876	\$ 3,083,447	\$ 3,129,698	\$ 3,176,643	\$ 3,224,293
Facilities	\$ 112,336	\$ 110,506	\$ 112,164	\$ 113,846	\$ 115,554
Heat/Fuel Oil	\$ 318,991	\$ 253,551	\$ 257,354	\$ 261,213	\$ 265,131
Insurance	\$ 72,179	\$ 75,779	\$ 76,916	\$ 78,070	\$ 79,240
Materials & Supplies	\$ 1,161,661	\$ 1,165,698	\$ 1,183,184	\$ 1,200,930	\$ 1,218,943
Other Expense	\$ 232,468	\$ 211,782	\$ 214,959	\$ 218,182	\$ 221,456
Purchased Power	\$ 1,853,010	\$ 1,813,824	\$ 1,813,824	\$ 1,813,824	\$ 1,813,824
Regulatory/Taxes	\$ 244,649	\$ 256,046	\$ 259,887	\$ 263,785	\$ 267,742
Tele/Other Utilities	\$ 258,343	\$ 273,206	\$ 277,304	\$ 281,463	\$ 285,685
Transportation	\$ 984,302	\$ 993,413	\$ 1,008,314	\$ 1,023,438	\$ 1,038,789
SS - Administration	\$ 6,209,365	\$ 6,511,094	\$ 6,682,011	\$ 6,857,413	\$ 7,037,419
SS - Engineering Services	\$ 1,669,169	\$ 1,744,457	\$ 1,789,813	\$ 1,836,349	\$ 1,884,093
SS - Environmental Services	\$ 524,546	\$ 585,687	\$ 601,062	\$ 616,840	\$ 633,032
SS - Wastewater Services	\$ 1,403,111	\$ 1,485,809	\$ 1,679,862	\$ 1,623,906	\$ 1,616,534
SS - Water Services	\$ 162,437	\$ 168,740	\$ 207,469	\$ 212,916	\$ 218,506
Debt Service	\$ 10,664,571	\$ 11,190,042	\$ 12,397,725	\$ 13,414,842	\$ 14,632,149
Renewal & Replacement - Direct	\$ 4,477,349	\$ 3,244,849	\$ 3,970,849	\$ 4,330,849	\$ 4,690,849
Renewal & Replace - Indirect	\$ 1,093,981	\$ 990,000	\$ 995,996	\$ 995,996	\$ 995,996
Total Operating Expenses	\$ 47,489,733	\$ 47,936,373	\$ 50,804,989	\$ 52,847,637	\$ 55,159,783
	\$ 206	\$ (10,740)	\$ -	\$ -	\$ -

Consolidated Capital Budget:

Program Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Division 10 - Water and Wastewater	\$2,310,000	\$1,710,000	\$1,550,000	\$2,425,000	\$1,300,000
Division 20 - Water	\$8,365,000	\$10,700,000	\$10,990,000	\$13,400,000	\$16,505,000
Division 50 -Wastewater General	\$450,000				
Division 51 - Cape Elizabeth Wastewater	\$400,000	\$125,000	\$515,000	\$50,000	\$125,000
Division 53 - Cumberland Wastewater	\$20,000	\$420,000	\$20,000	\$20,000	\$20,000
Division 55 - Windham Little Falls Wastewater	\$35,000	\$10,090,000	\$520,000	\$20,000	\$20,000
Division 57 - Portland Wastewater	\$2,225,000	\$6,900,000	\$1,875,000	\$11,620,000	\$375,000
Division 61 - Gorham Village Wastewater	\$20,000	\$20,000	\$350,000	\$20,000	\$20,000
Division 62 - Westbrook Wastewater	\$270,000	\$20,000	\$20,000	\$20,000	\$3,220,000
Division 64 - Joint Westbrook Wastewater	\$250,000	\$150,000	\$50,000	\$1,025,000	\$2,225,000
Division 66 - Peaks Island Wastewater	\$50,000	\$20,000	\$420,000	\$20,000	\$50,000
Grand Total	\$14,395,000	\$30,155,000	\$16,310,000	\$28,620,000	\$23,860,000

2022 to 2024 Financial Forecast(continued)

A summary of future revenue impact to water ratepayers and wastewater municipal assessments is provided below. Water Funding for capital project was decreased for 2021 resulting in no increase between budget years and 6% less than the forecast done last year. The planned 3.5% effective May 1, 2020 was delayed until December 1, 2020 and will fully fund 2021 budget. Total water revenues are projected to increase about 5% each year. The impact to retail customers is listed in the second table.

All 2021 wastewater assessments are at or below projections that were provided to the wastewater municipalities for ratemaking purposes last year except for Cumberland and Portland. The updated 2022-2024 are preliminary and will be reviewed with municipal officials in November 2020 before being finalized.

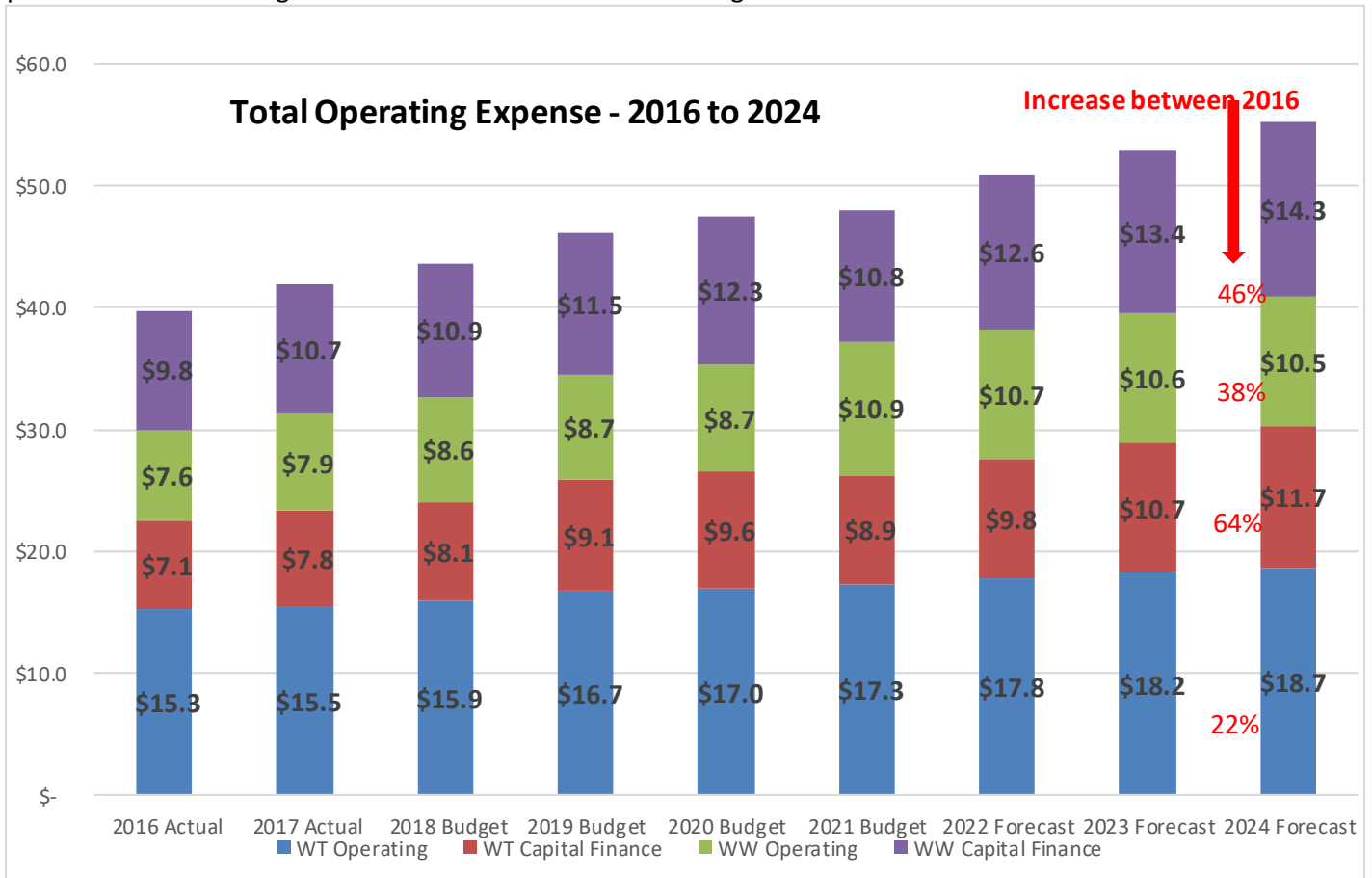
Water Revenues and Municipal Assessments:

	Proposed 2021 Budget	Prior Year 2021 Projection	2022 Forecast	2023 Forecast	2024 Forecast
Water	\$ 25,660,694	\$ 27,232,956	\$ 26,966,738	\$ 28,327,382	\$ 29,754,163
	0.0%	6.0%	5.1%	5.0%	5.0%
Wastewater:					
Cape Elizabeth	1,835,412	1,854,425	1,995,786	2,067,434	2,066,448
	8.4%	8.7%	8.7%	3.6%	0.0%
Cumberland	989,268	962,955	1,009,089	1,025,369	1,033,802
	6.6%	-0.2%	2.0%	1.6%	0.8%
Falmouth	314,112	312,050	312,413	310,296	308,190
	0.00%	-0.70%	-0.54%	-0.56%	-1.35%
Gorham	1,188,840	1,255,249	1,313,155	1,389,934	1,471,489
	2.4%	8.1%	10.5%	5.8%	5.9%
Portland	13,441,944	13,190,949	14,316,905	14,640,352	14,910,200
	2.0%	2.5%	6.5%	2.3%	1.8%
Westbrook	2,903,244	2,951,910	3,173,272	3,341,682	3,521,313
	11.1%	4.6%	9.3%	5.3%	5.4%
Windham	410,916	419,184	519,152	549,848	901,872

(By Dollar)		5/1/2019	12/1/2020	1/1/2022	1/1/2023	1/1/2024
Residential	.62" meter, 7 HCF	\$ 24.39	\$ 25.10	\$ 26.21	\$ 27.39	\$ 28.57
Commercial	.62" meter, 40 HCF	\$ 115.94	\$ 119.55	\$ 125.47	\$ 131.50	\$ 137.53
Small Industrial	2" meter, 1,300 HCF	\$ 1,857.46	\$ 1,940.18	\$ 2,064.52	\$ 2,201.97	\$ 2,339.47
Large Industrial	8" meter, 56,000 HCF	\$60,115.10	\$ 62,945.23	\$ 66,918.02	\$ 71,451.76	\$ 75,985.91
Government	2" meter, 70 HCF	\$ 193.56	\$ 201.28	\$ 213.12	\$ 225.77	\$ 238.47
Sprinkler	6" meter (month)	\$ 37.27	\$ 38.53	\$ 40.46	\$ 42.48	\$ 44.60
Public Fire (per year)		\$1,461,684	\$ 1,511,988	\$ 1,587,600	\$ 1,666,968	\$ 1,750,320
(By Percent)						
Residential	.62" meter, 7 HCF		2.9%	4.4%	4.5%	4.3%
Commercial	.62" meter, 40 HCF		3.1%	5.0%	4.8%	4.6%
Small Industrial	2" meter, 1,300 HCF		4.5%	6.4%	6.7%	6.2%
Large Industrial	8" meter, 56,000 HCF		4.7%	6.3%	6.8%	6.3%
Government	2" meter, 70 HCF		4.0%	5.9%	5.9%	5.6%
Sprinkler	6" meter (month)		3.4%	5.0%	5.0%	5.0%
Public Fire (per year)			3.4%	5.0%	5.0%	5.0%

2022 to 2024 Financial Forecast (continued)

Total expenses are projected to increase to over \$55 million by 2024, a 39% total increase since 2016 (or 4.8% a year). As the chart shows, increases in capital financing are driving the increases with water and wastewater capital finance cost increasing by 64% and 46%, 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 27%.



Major assumptions incorporated in the projections are as follows:

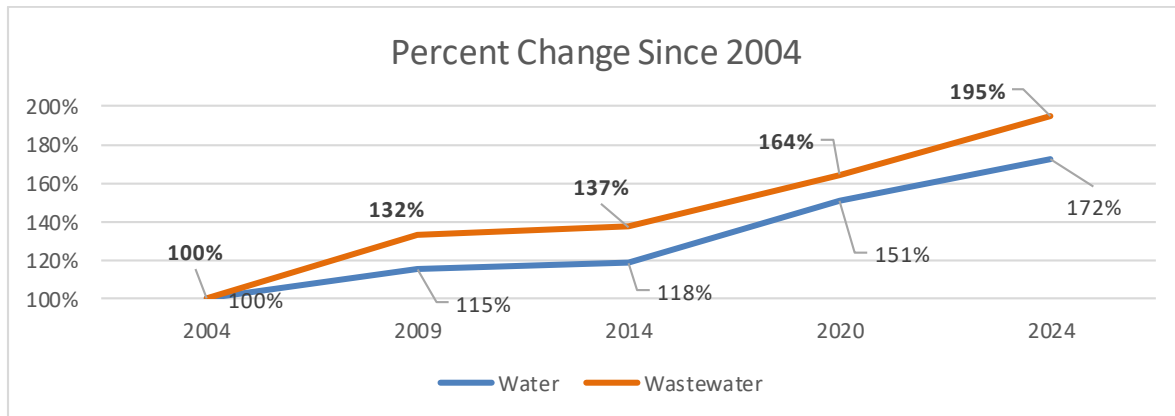
- Salary increases of 2.0% each year. No changes in the number of employees.
- Benefit increases of 5% each year.
- Biosolids contract expires in 2020; assumed unit price increase to \$90 and 1.2% annual increases.
- Other expenses increase between 1.5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2021 5-year capital plan. The Capital Expenditures Section provides details of the projects.

The following pages provides additional information on the each major expense category.

2022 to 2024 Financial Forecast (continued)

Budget by Fund Trends

The proposed 2021 budget is 70% and 49% higher than 2004 budget for the wastewater funds and water fund, respectively. 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.



Total Expense Budget

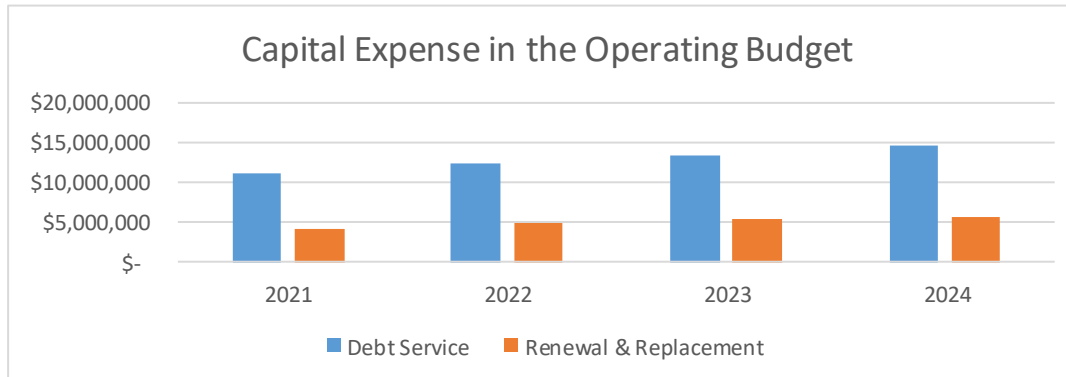
	2004	2009	2014	2020	2024
Water	\$17,608,717	\$20,245,019	\$20,817,310	\$26,519,287	\$30,331,078
WW- Cape Elizabeth	1,043,475	1,089,695	1,378,857	1,726,264	2,074,448
WW- Cumberland	498,146	767,586	771,632	978,595	1,039,803
WW- Falmouth	45,721	10,937	15,012	307,301	309,190
WW- Gorham	578,340	1,056,084	1,121,671	1,179,131	1,483,486
WW- Portland	8,481,000	10,951,209	10,982,397	13,227,844	15,180,203
WW- Westbrook	1,920,536	2,474,362	2,645,693	2,931,963	3,610,529
WW- Windham	54,091	338,117	355,253	397,107	905,877
Other Contract Billing	<u>136,834</u>	<u>206,279</u>	<u>189,158</u>	<u>222,242</u>	<u>225,169</u>
Total	\$30,366,860	\$37,139,288	\$38,276,983	\$47,489,734	\$55,159,783

2022 to 2024 Financial Forecast (continued)

Capital

The operating budget includes the annual contribution to a renewal/replacement fund to pay for smaller capital projects, and debt service on existing and proposed larger capital projects. Contributions were decreased in 2021 due to lower level of expenditures and the decision to draw down from reserves. Starting in 2022, contributions return to the prior level.

Capital Expense decrease by 5% between 2020 and 2021. In 2022, the expense increase by 13% next to return back to normal level. Both 2023 and 2024 are forecasted to increase by 8% each year.



Over \$86 million of new bonds are forecasted to be issued between 2021 and 2024. 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 is 2.5%. The Capital Improvement Plan assumes the following funding of future projects.

Program Summary

	-2021-	-2022-	-2023-	-2024-	-2025-
Bond	\$8,545,000	\$8,195,000	\$9,390,000	\$13,150,000	\$19,100,000
Bond SRF	\$300,000	\$16,400,000	\$1,050,000	\$10,620,000	
Operating Expense	\$75,000				
R&R	\$4,825,000	\$5,560,000	\$5,870,000	\$4,850,000	\$4,760,000
Reserves	\$750,000				
Grand Total	\$14,495,000	\$30,155,000	\$16,310,000	\$28,620,000	\$23,860,000

2022 to 2024 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 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.

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

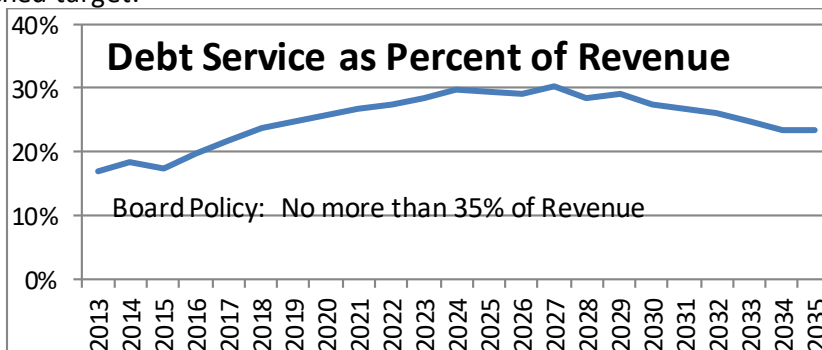
Funds	2018	2019	2020	2021	2022	2023	2024
Water	21%	22%	23%	23%	25%	26%	28%
Wastewater							
Cape Elizabeth	15%	15%	15%	17%	21%	22%	22%
Cumberland	33%	34%	31%	30%	30%	30%	29%
Gorham	31%	34%	32%	31%	36%	39%	41%
Portland	21%	20%	19%	20%	20%	21%	21%
Westbrook	17%	19%	21%	21%	24%	27%	30%
Windham	35%	38%	35%	34%	47%	49%	68%

Debt Service Ratio – Target: Greater or Equal to 1.25

Funds	2018	2019	2020	2021	2022	2023	2024
Water	1.82	1.51	1.57	1.57	1.53	1.49	1.44
Wastewater							
Cape Elizabeth	1.65	1.50	1.53	1.51	1.40	1.40	1.41
Cumberland	1.03	1.19	1.28	1.28	1.27	1.27	1.27
Gorham	1.12	1.25	1.30	1.32	1.26	1.23	1.20
Portland	1.50	1.36	1.53	1.33	1.44	1.41	1.40
Westbrook	1.81	1.67	1.56	1.52	1.41	1.35	1.30
Windham	0.96	1.19	1.29	1.28	1.16	1.15	1.06

Long-Term Water Fund Target

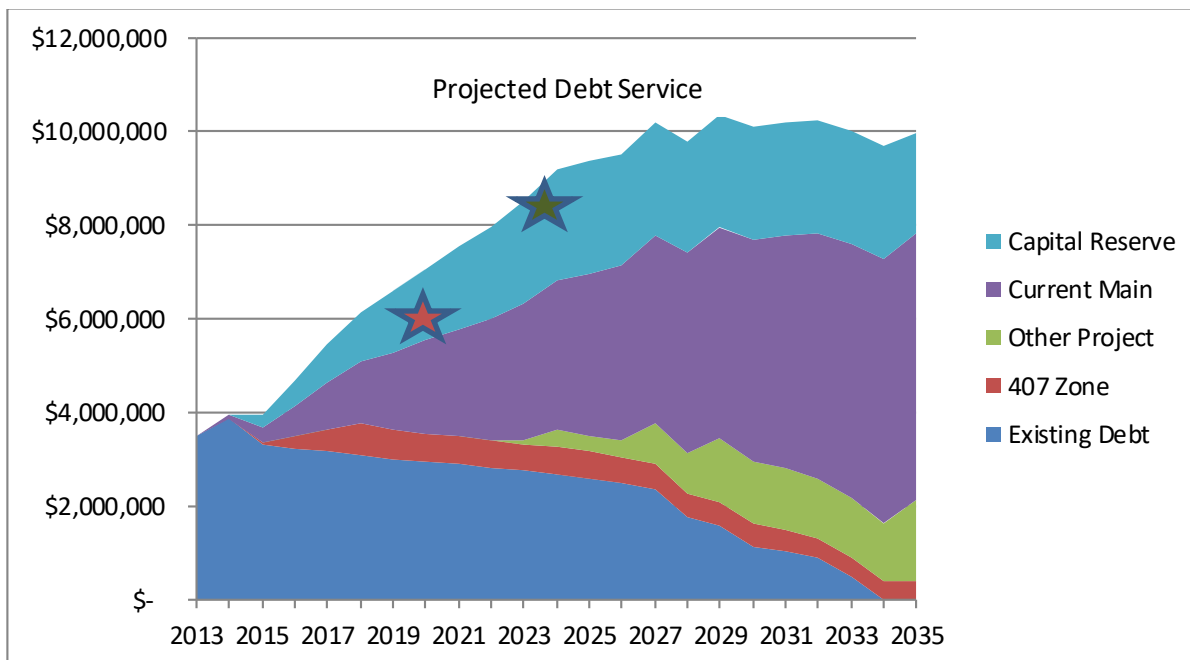
The long-term water fund target was established in 2013. The projected 2022-2024 ratio is at or below the established target.



2022 to 2024 Financial Forecast (continued)

Projected Water Debt

The Water Fund has significant future bond financing needs including completing the 407 zone system upgrade 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 2021 Budget requests \$6.3 million of debt service, below the long-term plan

★ The updated multi-year projection indicates debt service payments will be \$8.0 million in 2024, \$1,200,000 below 2024 target.

CES Renewable Energy Consortium

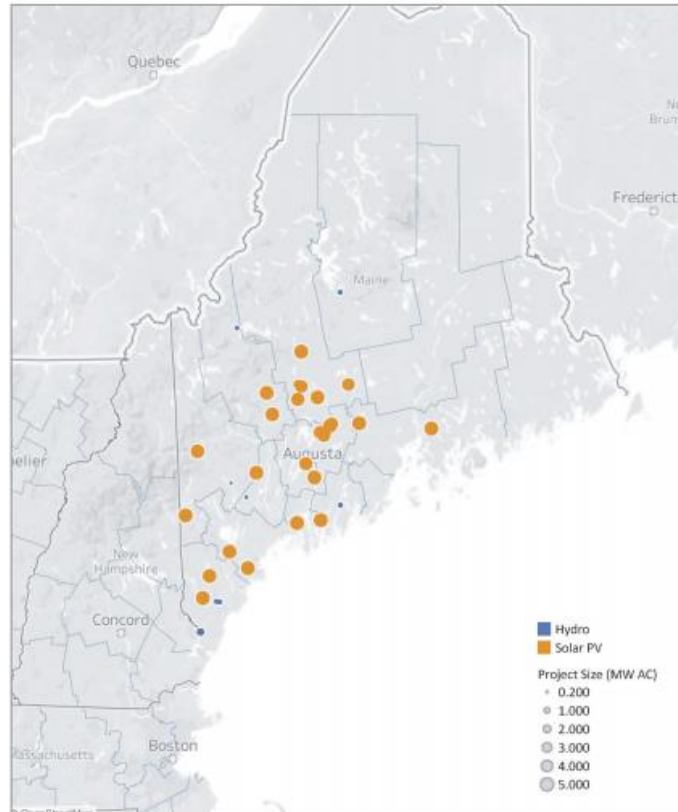
Portland Water District is among 23 CES Consortium members taking advantage of Maine’s new net energy billing credit program. The program which was enacted in June 2019, allows utility billing credits to be issued in exchange for electricity exported to the grid by qualified solar and hydro power generators.

Annually the Portland Water District (PWD) spends approximately \$1.9 million in electricity costs, and this initiative is expected to save PWD roughly \$437,000 a year, which includes \$237,000 in Renewable Energy Credits.

PWD is already seeing small savings, but full effects will not be realized until mid-2022 when all power generators are expected to be online.






CONSORTIUM MEMBERS	COMMITTED LOAD (MWH)	SHARE OF PROJECTS
Auburn School Department	1,805	0.9%
AVX Tantalum Corporation	4,700	2.2%
Bowdoin College	2,500	1.2%
City of Portland	20,047	9.5%
Colby College	10,000	4.7%
County of York Maine	1,949	0.9%
Falmouth Public Schools	1,744	0.8%
L L Bean Inc	20,040	9.5%
Maine Community College System	5,887	2.8%
Maine Maritime Academy	4,687	2.2%
MaineGeneral Medical Center	19,396	9.2%
MSAD 11	1,300	0.6%
MSAD 15	1,145	0.5%
Nestle Waters North America Inc	29,927	14.1%
Northern Light Healthcare System	13,525	6.4%
Pleasant River Lumber Co	12,885	6.1%
Portland Water District	9,910	4.7%
Pratt & Whitney	25,000	11.8%
Pride Manufacturing Co LLC	3,100	1.5%
RSU 14 Windham Raymond	2,311	1.1%
Scarborough School Department	3,126	1.5%
University of Maine	15,231	7.2%
Waterville Public Schools	1,504	0.7%
TOTAL	211,720	100%

- Across all projects, Consortium members will receive Net Energy Billing Credits and Renewable Energy Credits (RECs) for 20 years.
- Net Energy Billing Credits will vary by individual entity and their specific utility rate classes, but annual savings across the Consortium are estimated to be in the millions of dollars.
- All RECs generated will be transferred to Consortium Members
 - Each Member will decide whether to sell its RECs into the market for additional revenue or retain them to claim the greenhouse gas emissions benefits.
 - As a whole the Consortium will offset more than 50,000 metric tons of CO₂e each year (based on New England regional emissions, [2018 EPA egrid](#)). For individual calculations, each 1,000 MWhs represents 239 metric tons of CO₂e. **NOTE:** emissions savings may only be claimed by a Consortium Member if the RECs it receives are retained and retired.



Maine Measures of Growth 2019 Scorecard


FUNDAMENTAL PERFORMANCE INDICATORS


-  **1. Gross Domestic Product** pg 3
Maine's Gross Domestic Product grew by 1.9% from 2016 to 2017, from \$54.6 to \$55.6 billion. GDP growth in Maine trailed the national average of 2.2% and surpassed the New England rate of 1.4%.
-  **2. Per Capita Personal Income** pg 4
From 2016 to 2017, per capita income in Maine grew by 3.7% to \$46,455. Income grew in Maine at nearly the same rate as the U.S. and New England averages and slightly better than the EPSCoR average growth of 3.0%.
-  **3. Value Added per Worker** pg 5
Value added per worker in Maine increased from \$94,017 in 2016 to \$96,729 in 2017. Worker productivity in Maine has been about 25% lower than the U.S. average for the past seven years.
-  **4. Employment** pg 6
Maine total employment exceeded the pre-recession level for the first time in 2017, and another 4,500 jobs were added in 2018 for a total of 628,500 jobs.
-  **5. Poverty** pg 7
Poverty in Maine dropped from 12.3% to 11.3% in 2017, below the pre-recession level of 12.2% in 2007. The national and New England poverty rates are still slightly above their pre-recession rates.

ECONOMY


Business Innovation


-  **6. Research and Development Expenditures** pg 9
In 2016, Maine's total spending on R&D was approximately \$483 million, down from \$508 million in 2015 and \$757 million in 2009, the high point of the past decade. R&D spending in Maine represents 0.8% of total GDP, which ranks 45th of the 50 states.
-  **7. International Exports** pg 10
After declining from 2016 to 2017, Maine exports increased by 4.2% from 2017 to 2018, while U.S. exports increased by 7.6%.


-  **8. Broadband Connectivity** pg 11
While 90% of Mainers are served by basic broadband—close to the national rate of 92%—only 30% have broadband subscriptions, compared with 53% nationally. About one in ten Mainers (11%) subscribe to high-speed broadband, compared with 44% nationwide.


-  **9. Entrepreneurship** pg 12
Maine jumped from a 50-state ranking of 37th on the early stage entrepreneurship index in 2016 to 6th in 2017. Maine's strong 2017 performance was driven by the highest first-year survival rate in the country, 88%.

Skilled and Educated Workers

-  **10. Fourth Grade Reading Scores** pg 13
In 2017, 36% of Maine 4th graders were proficient in reading, equal to the national average and trailing the New England average by seven points.


-  **11. Eighth Grade Math Scores** pg 14
The proportion of Maine 8th-graders proficient in math increased from 34% in 2007 to 40% in 2013 but has since fallen to 36% in 2017. Maine 8th grade math proficiency is two points above the national average but trails the New England rate by three percentage points.

-  **12. Postsecondary Educational Attainment** pg 15
Maine's postsecondary educational attainment improved from 40% in 2016 to 42% in 2017, just above the national average of 41%, but well below the New England average of 48%.

-  **13. Working Age Population** pg 16
Maine's working-age population percentage fell to 61% in 2017 from 61.5% in 2016 and 63.4% in 2010. In 2014, Maine's proportion of working-age population fell below the U.S. average, which now stands at 61.8%.

Business Climate

-  **14. Cost of Doing Business** pg 17
Maine's cost of doing business index value has been stable at 110 since 2012. In 2017, Maine's cost of doing business index ranked 8th highest in the U.S., up from 10th in 2015.

-  **15. Cost of Health Care** pg 18
In 2017, health care spending in Maine stood at 17.8% of all personal expenditures, above the 2007 rate of 16.3%, but at a stable level since 2015. Health care spending in New England dropped below the national average of 17.1%, and stood at 16.8%, a full percentage point below the Maine rate.

Source: Maine Economic Growth Council, see details: <https://www.mdf.org/wp-content/uploads/2019/04/MOG-ExecutiveSummary2019-FNL.pdf>

Why is this of significance to Portland Water District? Ability to hire new skilled employees will be a challenge in the future. Cost of doing business in Maine is high, which might inhibit the ability to continue to increase water rates.

Maine Measures of Growth 2019 Scorecard

Business Climate

- 16. Cost of Energy** pg 19
 The industrial price of electricity in Maine declined slightly from 9.2 to 9.06 cents per kilowatt hour from 2017 to 2018, while the average New England price increased from 12.54 to 12.96 cents and the U.S. average increased from 6.88 to 6.93 cents.
- 17. State and Local Tax Burden** pg 20
 State and local tax burden is higher in Maine than the New England average, and has remained around 12% since 2009. Maine ranks 3rd highest of the 50 states in taxes as a percent of income and 14th highest in taxes paid per capita, about \$5,200 in 2016.
- 🚩
18. Transportation Infrastructure pg 21
 In 2017, two-thirds (67%) of Maine's most-traveled highway miles were graded A, B or C, and 33% received grades of D or F. This was an improvement over 2016 but indicates a small decline since 2012.



COMMUNITY

Civic Assets

- ★

19. Safety (NEW) pg 23
 Maine's crime rate in 2017, 16.3 per 1,000 residents, was 40% below the national rate of 27.5 and among the lowest of the 50 states.
- **20. Housing Affordability** pg 24
 Housing is more affordable in Maine than the national and Northeast averages. But after improving from 2007 to 2014, housing affordability in Maine has been declining slightly in each subsequent year.
- **21. Gender Income Disparity** pg 25
 After improving from 79% in 2014 and 2015 to 84% in 2016, women's income as a percentage of men's in Maine dropped to 82% in 2017.

★
Exceptional Performance
 Very high national standing and/or established trend toward significant improvement.

🚩
Needs Attention
 Very low national standing and/or established trend toward significant decline. The indicator may show improvement but is still viewed as needing attention.

Health and Wellness

- +
22. Wellness and Prevention pg 26
 Nearly two-thirds of Maine adults—65%—were overweight or obese in 2017. While Maine's rate has grown slightly from 63% in 2007, it decreased in both 2016 and 2017, and is now two points below the national average of 67%.
- 23. Health Insurance Coverage** pg 27
 In 2017, 91.9% of Mainers had health insurance, slightly above national average of 91.3%. An estimated 106,000 people in Maine do not have health insurance coverage.
- 24. Food Security** pg 28
 14.4% of Maine households were food insecure in 2017, a substantial decline from 16.4% in 2016. Food insecurity in Maine is well above the U.S. (12.3%) and New England (11.4%) averages.



ENVIRONMENT

Environmental Quality

- ★

+
25. Air Quality pg 30
 In 2018, there were 29 moderate air quality days and 3 days were rated unhealthy for sensitive groups, the lowest figures to date.
- ★

26. Water Quality pg 31
 Since 2006, Maine's water quality has remained steady and well above national averages, with 95% of rivers and streams and 91% of lakes achieving category 1 or 2 ("good") in 2016.
- ★

27. Sustainable Forest Lands pg 32
 Since 2010, Maine has maintained net forest growth to removals ratios slightly in favor of growth over harvest. The growth to harvest ratio rose slightly from 1.43 in 2016 to 1.47 in 2017.

+
 Movement toward the benchmark since the last available data.

No significant movement relative to the benchmark since the last available data.

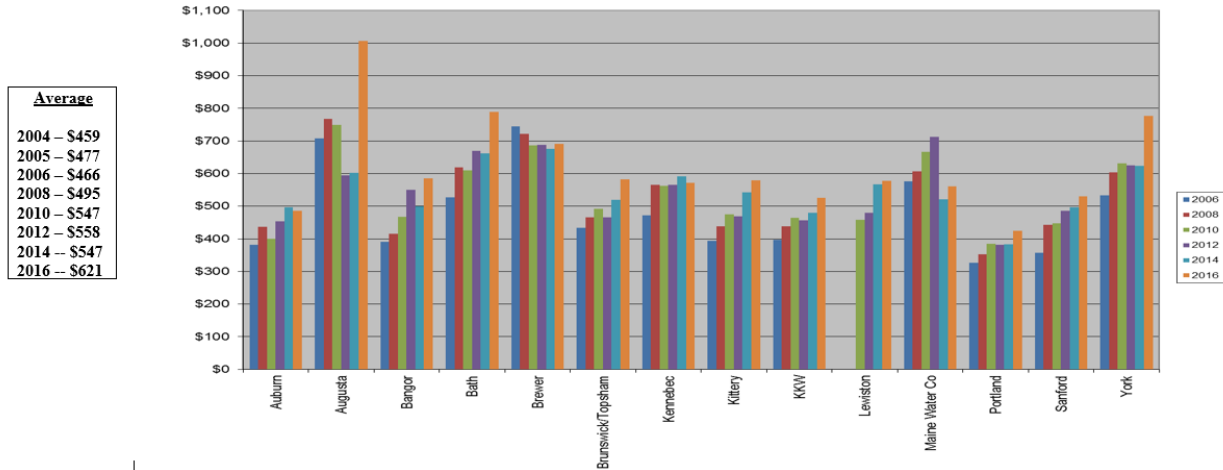
-
 Movement away from the benchmark since the last available data.

Water Benchmark Data

Maine Water Utilities Survey Results

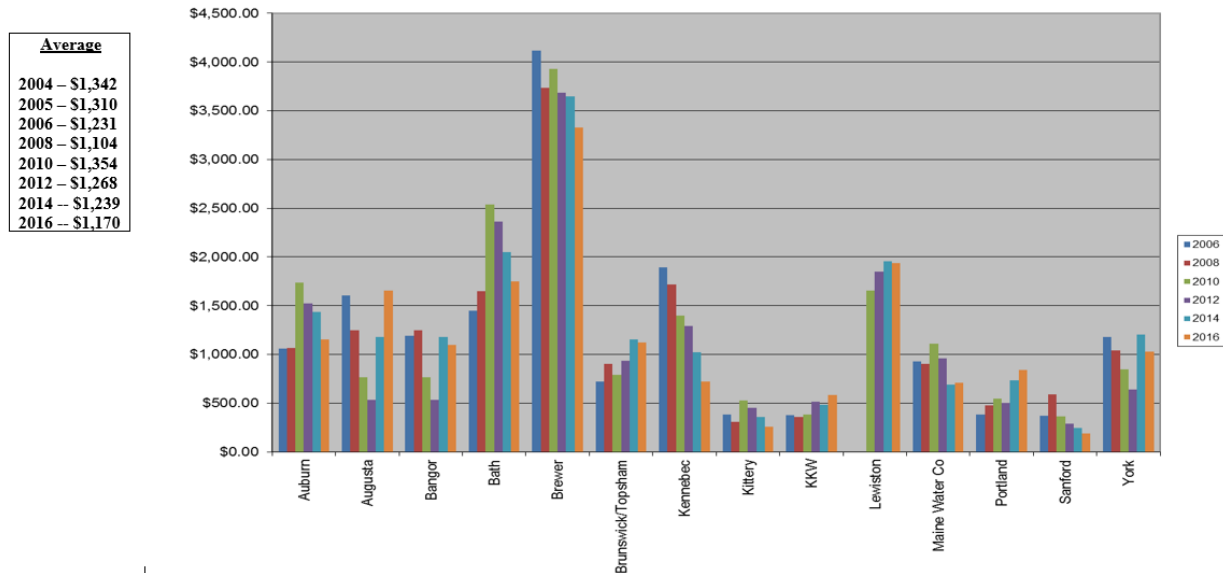
The District participates in a survey of Maine water utilities. Two selected items surveyed are average customer revenue per thousand and debt per capita.

Key Ratio: **Average Customer Revenue**
 Significance: Important to understand customer revenue for rate purposes.
 Calculation: *PUC Annual Report Page F-4 Operating Revenue divided by W-3 Number of Customers*



District's average revenue collected per customer is lower than other utilities indicating the relative efficiency of the District's operation.

Key Ratio: **Total Debt Per Capita**
 Significance: Measures debt burden relative to service area population.
 Calculation: *PUC Annual Report Page F-2 Account 221/232 Bond/Notes Payable divided by W-3 Number of Customers*

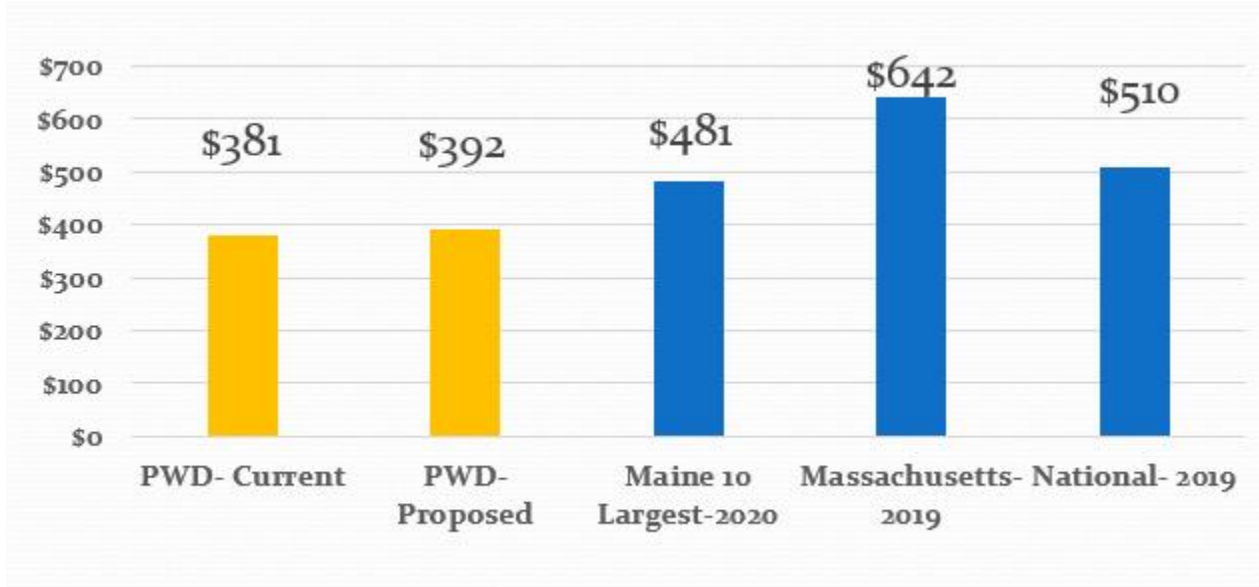


District has relatively lower debt service costs per capita, indicating the relative higher ratepayer capacity to pay for additional debt financing.

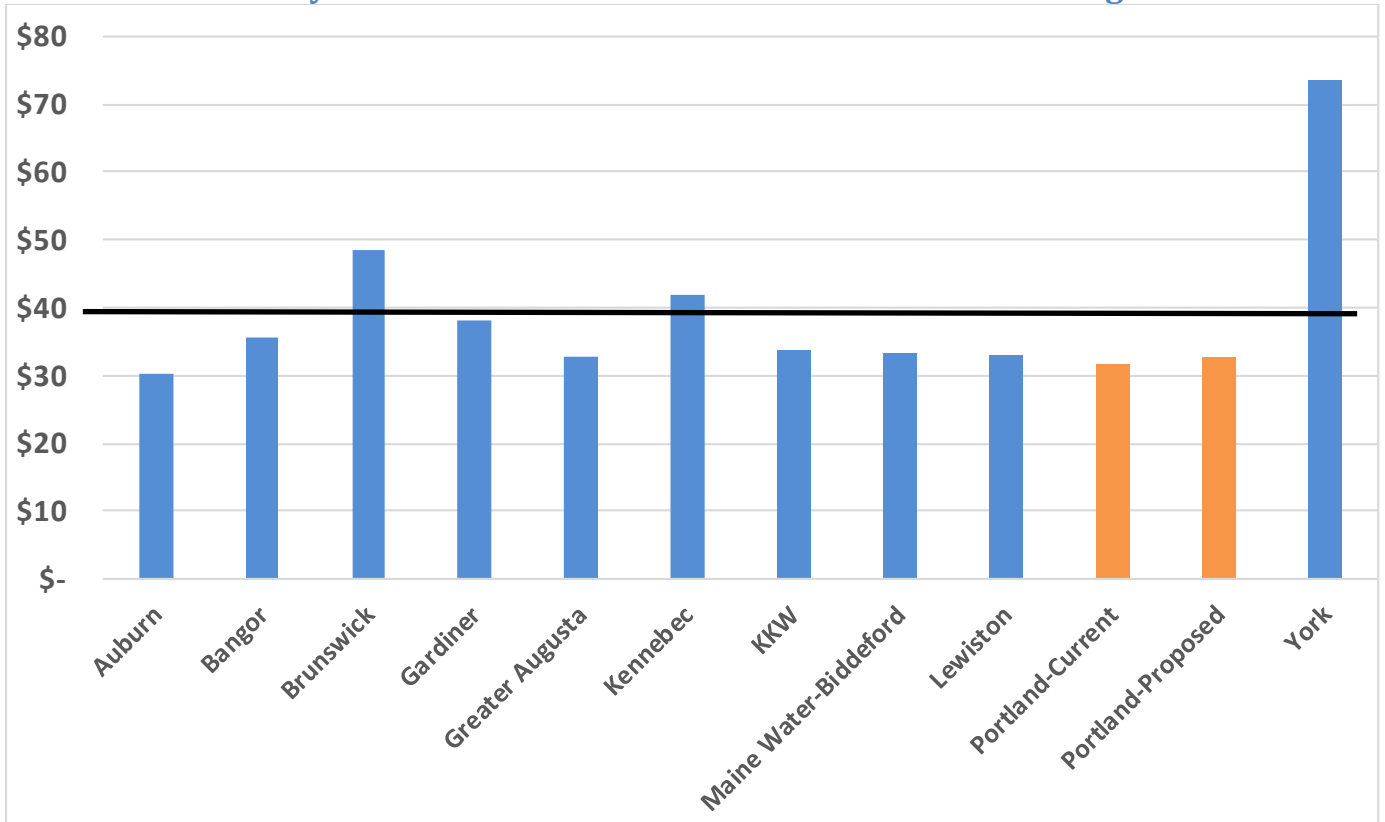
Water Benchmark Data (continued)

Water Rates

The District's water rates for a typical household are relatively lower than other Maine, Massachusetts and National utilities.



Residential Monthly Bill - Portland Water District vs Other Maine Larger Utilities



Portland Water District Rate Sheet Summary

A summary of Portland Water District's Water Rates and Municipalities' Sewer Rates as of October 1, 2020 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

Typical monthly consumption and charges for Residential users with 5/8' meter on daily usage of 60 gallons per person

Usage is rounded to nearest hundred cubic feet (hcf). 1 HCF = 748 gallons.

WATER RATES				
Effective Date		05/01/19		
# OF PEOPLE	GALLONS = HCF	MEMBERS	NON-MEMBERS	
1	1,800 =	2	12.19	14.02
2	3,600 =	5	19.51	22.45
3	5,400 =	7	24.39	28.07
4	7,200 =	10	31.71	36.50
5	9,000 =	12	36.59	42.12
6	10,800 =	14	41.47	47.74
7	12,600 =	17	48.79	56.17
8	14,400 =	19	53.67	61.79
9	16,200 =	22	60.99	70.22

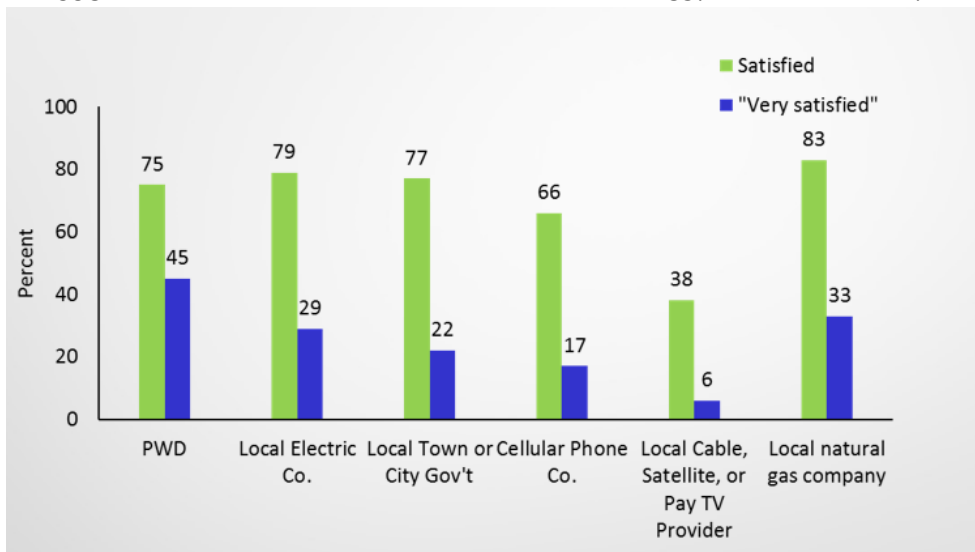
SEWER RATES						
10.01.20	09/01/18	07/01/20	03/01/16	01/01/20	05/01/20	11/01/06
PORTLAND	CUMBERLAND	SOUTH PORTLAND	CAPE ELIZABETH	WESTBROOK	WINDHAM	GORHAM
22.30	47.96	10.76	55.18	18.86	48.84	20.03
55.75	64.52	26.90	72.22	39.65	48.84	38.90
78.05	75.56	37.66	83.58	53.51	62.84	51.48
111.50	92.12	53.80	100.62	74.30	83.84	70.35
133.80	103.16	64.56	111.98	88.16	97.84	82.93
156.10	114.20	75.32	123.34	102.02	111.84	95.51
189.55	130.76	91.46	140.38	122.81	132.84	114.38
211.85	141.80	102.22	151.74	136.67	146.84	126.96
245.30	158.36	118.36	168.78	157.46	167.84	145.83

WATER RATES	Min Charge includes 1 HCF	Per additional HCF 2-30 HCF	Per additional HCF 31-100 HCF	Lifeline Water Rate (Reduction in Monthly Minimum Charge)	Minimum includes 1 HCF
MEMBERS	9.75	2.44	2.13	MEMBERS	2.44
NON-MEMBERS	11.21	2.81	2.47	NON-MEMBERS	2.81
SEWER RATES	Min HCF	MIN CHARGE	HCF	Municipal Contacts for Sewer	
PORTLAND	1	11.15	11.15	Ben Pearson	874-8843
CUMBERLAND	0	36.92	5.52	Pam Bosarge	829-2207
SOUTH PORTLAND	1	5.38	5.38	Vicki Inman	767-3201
CAPE ELIZABETH	1	49.50	5.68	Ben McDougal	799-5251
WESTBROOK	1	11.93	6.93	Eric Dudley	854-9105 x222
GORHAM	1	13.74	6.29	Freeman Abbott	222-1608
				Laurie Nordfors	222-1675
WINDHAM	5 hcf per unit	48.84	7.00	Barry A. Tibbetts	892-1907
FALMOUTH eff 07.01.2020	RATE PER LIVING UNIT	Commercial Fixtures > 17	SCHOOLS	Diane Moore	781-4462
	\$45.51 x # of units (Residential)	(\$45.51 x # of units) + (# of fixtures - 17 fixtures x \$2.15) (Com'l combination of fixtures)	\$39.06 for every 15 students (Schools)	Note: These are the most common sewer rates, but this is not a complete list.	

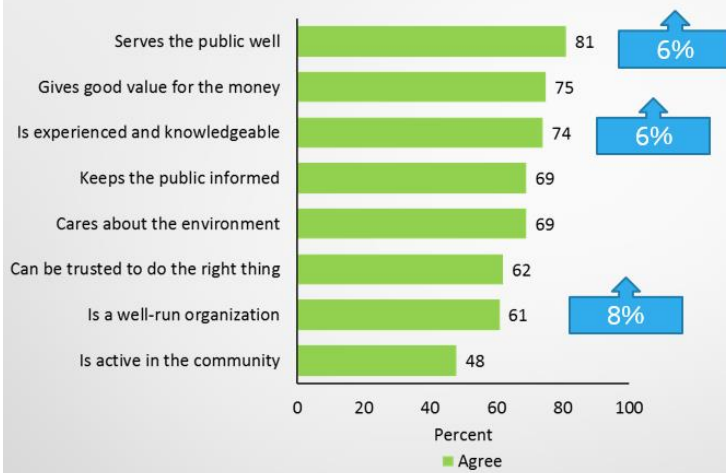
Customer Satisfaction Survey

A periodic customer satisfaction survey is conducted. The last survey was conducted in 2017. A summary of the results is below and indicate that overall satisfaction remains high relative to other local utilities. The 2021 Budget includes funding to do another survey.

Year	Overall	Water Service/Quality	Sewer
2017	75%	89%	85%
2014	82%	88%	70%
2011	87%	92%	71%
2008	85%	90%	76%
2005	88%	89%	78%
2002	89%	90%	83%
2000	89%	91%	79%
1998	NA	85%	74%



General Reputation Trends



Generally, respondents (92%) feel very positive about the Portland Water District. 7%

Proposed Board of Trustees' Orders and Resolutions



Portland Water District
From Sebago Lake To Casco Bay

BOARD OF TRUSTEES / AGENDA ITEM SUMMARY

Agenda Items:

Date of Meeting: November 23, 2020
 Subject: Proposed Budget Orders
 Presented By: Carrie Lewis

The Administration and Finance, Operations and Planning Committees reviewed the 2021 Budget and CIP for which they have jurisdiction. Below are the recommended motions to be considered at the regular meeting.

The proposed motion accepts the 2021 budget and authorizes billing the municipalities for wastewater and billing services.

Order 20-031

ORDERED that the 2021 Budget and Wastewater Assessments as presented by the General Manager are accepted and adopted and shall be filed with the minutes of this meeting; and pursuant to Section 12 of the District's Charter, to assess for 2021 the participating municipalities for wastewater related costs as follows:

Town of Cape Elizabeth	\$ 1,835,412
Town of Cumberland	989,268
Town of Falmouth	314,112
Town of Gorham	1,188,840
City of Portland	13,441,944
City of Westbrook	2,903,244
Town of Windham	410,916

and to assess non-participating municipal corporations for billing-related costs as follows:

City of South Portland	\$ 201,132
Scarborough Sanitary District	11,664

The motion accepts the proposed capital improvement plan and authorizes staff to implement the 2021 projects within the restrictions stated below and in compliance with the purchasing policy guidelines.

Order 20-032

ORDERED that the 2021-2025 Capital Improvement Plan is hereby adopted and the General Manager is authorized to solicit bids or proposals for the year 2021 projects and to authorize the General Manager to award contracts for approved projects to the lowest bidder if the bid is within the project budget.;

BE IT FURTHER ORDERED that the General Manager shall solicit bids or proposals and to partner with Municipalities, MDOT and Developers for the year 2021 for the replacement and extension of water mains, services, valves and hydrants as outlined in the Water Distribution Systems Upgrades 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. Resolutions 20-014 to 20-017 are intent to borrow motions for each fund. 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 20 - 014

RESOLVED the Board hereby declares its intent to issue debt to reimburse costs incurred by the District for water fund projects identified in the 2021 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 20 - 015

RESOLVED the Board hereby declares its intent to issue debt to reimburse costs incurred by the District for the Cape Elizabeth wastewater fund projects identified in the 2021 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 20 – 016

RESOLVED the Board hereby declares its intent to issue debt to reimburse costs incurred by the District for the Portland wastewater fund projects identified in the 2021 CIP. The full form of the Resolution is attached hereto and incorporated herein by reference, and shall be a part of the minutes of this meeting.

Resolution 20 – 017

RESOLVED the Board hereby declares its intent to issue debt to reimburse costs incurred by the District for the Westbrook, Gorham and Windham wastewater fund projects identified in the 2021 CIP. The full form of the Resolution is attached hereto and incorporated herein by reference, and shall be a part of the minutes of this meeting.

Resolution 20-014
DECLARATION OF OFFICIAL INTENT PURSUANT TO
TREASURY REGULATION §1.150-2
(Water Fund)

WHEREAS, the Portland Water District (the “Issuer”) intends to proceed with the projects described in section 2 below (the “Projects”); and

WHEREAS, the Issuer intends to finance some or all of the costs of the Projects through the issuance of tax-exempt bonds or notes in anticipation thereof; and

WHEREAS, the Issuer may incur certain of the costs of the Projects prior to the issuance of such bonds or notes and the Issuer expects to be reimbursed from the proceeds thereof; and

WHEREAS, Treasury Regulation §1.150-2 requires that the Issuer declare its official intent to reimburse itself for such expenditures with the proceeds of such bonds or notes.

NOW, THEREFORE, the Issuer does hereby declare its official intent as follows:

1. **Declaration of Intent.** The Issuer reasonably expects to reimburse itself for expenditures made on the Projects with the proceeds of tax-exempt bonds or notes in anticipation thereof to be issued by the Issuer to finance the costs of the Projects in the maximum principal amount of \$10,675,000.
2. **General Description of Property to which Reimbursement Relates.** The following is a reasonably accurate general functional description of the type and use of the property with respect to which reimbursements will be made:
 - Construction or installation of new water mains, valves, hydrants, services and meters;
 - Acquisition of vehicles, leak detection and related equipment;
 - Renovation of various water facilities;
 - Acquisition and installation of various computer-related equipment; and
 - Building improvements at the Douglass Street facilities including the HVAC system.
3. **Public Availability of Official Intent.** This Declaration of Official Intent shall be maintained as a public record of the Issuer.
4. **Treasury Regulations.** This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.
5. **Authority for Declaration.** This declaration is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.

Resolution 20-015
DECLARATION OF OFFICIAL INTENT PURSUANT TO
TREASURY REGULATION §1.150-2
(Cape Elizabeth Sewer Fund)

WHEREAS, the Portland Water District (the “Issuer”) intends to proceed with the projects described in section 2 below (the “Projects”); and

WHEREAS, the Issuer intends to finance some or all of the costs of the Projects through the issuance of tax-exempt bonds or notes in anticipation thereof; and

WHEREAS, the Issuer may incur certain of the costs of the Projects prior to the issuance of such bonds or notes and the Issuer expects to be reimbursed from the proceeds thereof; and

WHEREAS, Treasury Regulation §1.150-2 requires that the Issuer declare its official intent to reimburse itself for such expenditures with the proceeds of such bonds or notes.

NOW, THEREFORE, the Issuer does hereby declare its official intent as follows:

1. **Declaration of Intent.** The Issuer reasonably expects to reimburse itself for expenditures made on the Projects with the proceeds of tax-exempt bonds or notes in anticipation thereof to be issued by the Issuer to finance the costs of the Projects in the maximum principal amount of \$645,000.
2. **General Description of Property to which Reimbursement Relates.** The following is a reasonably accurate general functional description of the type and use of the property located in the Town of Cape Elizabeth with respect to which reimbursements will be made:
 - Replacement of obsolete assets or installation of new equipment at various pump stations, including Peabbles Cove, Algonquin, Stonegate South and Ottawa pump stations,
 - Acquisition and installation of SCADA equipment, and
 - Replacement or installation of equipment at the treatment plant.
3. **Public Availability of Official Intent.** This Declaration of Official Intent shall be maintained as a public record of the Issuer.
4. **Treasury Regulations.** This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.
5. **Authority for Declaration.** This declaration is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.

Resolution 20-016
DECLARATION OF OFFICIAL INTENT PURSUANT TO
TREASURY REGULATION §1.150-2
(Portland Sewer Fund)

WHEREAS, the Portland Water District (the “Issuer”) intends to proceed with the projects described in section 2 below (the “Projects”); and

WHEREAS, the Issuer intends to finance some or all of the costs of the Projects through the issuance of tax-exempt bonds or notes in anticipation thereof; and

WHEREAS, the Issuer may incur certain of the costs of the Projects prior to the issuance of such bonds or notes and the Issuer expects to be reimbursed from the proceeds thereof; and

WHEREAS, Treasury Regulation §1.150-2 requires that the Issuer declare its official intent to reimburse itself for such expenditures with the proceeds of such bonds or notes.

NOW, THEREFORE, the Issuer does hereby declare its official intent as follows:

1. **Declaration of Intent.** The Issuer reasonably expects to reimburse itself for expenditures made on the Projects with the tax-exempt proceeds of 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 \$2,460,000.
2. **General Description of Property to which Reimbursement Relates.** The following is a reasonably accurate general functional description of the type and use of the property located in the City of Portland with respect to which reimbursements will be made:
 - Renovation and repair of equipment and facilities at the East End and Peaks Island Treatment Plant, including projects related to the Primary Sludge Handling, process gate automation, power feed;
 - Replacement of obsolete assets or installation of new equipment at various pump stations, including Northeast, Congress Street, and Garrison pump stations;
 - Acquisition and installation of SCADA equipment, and
 - Replacement of equipment at various pump stations, including Baxter Boulevard Pump Stations.
3. **Public Availability of Official Intent.** This Declaration of Official Intent shall be maintained as a public record of the Issuer.
4. **Treasury Regulations.** This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.
5. **Authority for Declaration.** This declaration is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.

Resolution 20-017
DECLARATION OF OFFICIAL INTENT PURSUANT TO
TREASURY REGULATION §1.150-2
(Westbrook, Gorham and Windham Sewer Funds)

WHEREAS, the Portland Water District (the “Issuer”) intends to proceed with the projects described below (the “Projects”); and

WHEREAS, the Issuer intends to finance some or all of the costs of the Projects through the issuance of tax-exempt bonds or notes in anticipation thereof; and

WHEREAS, the Issuer may incur certain of the costs of the Projects prior to the issuance of such bonds or notes and the Issuer expects to be reimbursed from the proceeds thereof; and

WHEREAS, Treasury Regulation §1.150-2 requires that the Issuer declare its official intent to reimburse itself for such expenditures with the proceeds of such bonds or notes.

NOW, THEREFORE, the Issuer does hereby declare its official intent as follows:

1. **Declaration of Intent.** The Issuer reasonably expects to reimburse itself for expenditures made on the Projects with the proceeds of tax-exempt bonds or notes in anticipation thereof to be issued by the Issuer to finance the costs of the Projects in the maximum principal amount of \$595,000.
2. **General Description of Property to which Reimbursement Relates.** The following is a reasonably accurate general functional description of the type and use of the property located in the City of Westbrook with respect to which reimbursements will be made:
 - Replacement of obsolete assets or installation of new equipment at various pump stations in Gorham, Westbrook and Windham, and
 - Renovation and repair of equipment and facilities at the Westbrook Regional Treatment Plant, including access road and parking lot improvements.
3. **Public Availability of Official Intent.** This Declaration of Official Intent shall be maintained as a public record of the Issuer.
4. **Treasury Regulations.** This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.
5. **Authority for Declaration.** This declaration is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.

Glossary/Acronyms

Term	Description
407 Zone	A water pressure zone, supported by pump stations and water tanks, that is at an elevation above the District's water source (Sebago Lake).
ABC Project	ABC stands for "Asset, Billing & Customer Relations". It is made up of two parts: the Cayenta Billing and Central Square Asset Management projects.
Accurate bill index	The ratio of correct read adjustments on accounts to the total of all accounts.
Accrual Basis	The method of accounting under which revenues are recorded when they are earned (whether or not cash is received at that time) and expenditures are recorded when goods and services are received (whether or not cash disbursements are made at the time)
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

Glossary/Acronyms

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 \$5,000 and has a useful life of greater than 5 years or extends the useful life of an existing asset for more than 5 years.
Cayenta Billing Project	Current project to update/replace the District's billing and customer service information system.
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
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

Glossary/Acronyms

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
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
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

Glossary/Acronyms

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.

Glossary/Acronyms

Industrial Pretreatment Program	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.
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.
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
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
Ozone	A gas formed by electrical discharge in air used as an oxidizing, deodorizing and bleaching agent in the purification of water.

Glossary/Acronyms

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
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.
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).
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
SLWTF	Sebago Lake Water Treatment Facility

Glossary/Acronyms

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
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.

Glossary/Acronyms

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
WGWRWWTF	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