



ENGINEERING & PUBLIC SERVICES



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TO: **Sewer Commission**
Kevin Price
Rhonda Forrester

FROM: Katherine Kelley, Wastewater Division Manager

DATE: March 31, 2023

SUBJECT: FY2024 Wastewater Division Proposed Budget

The 2024 Fiscal Year Municipal Sewer Budget has been prepared and is ready for review and approval by the Westbrook Sewer Commission. Approval will be sought for the new budget and vendor list. Supporting documentation can be found attached to this cover letter.

If you have any questions or would like additional information, please feel free to call or email.

Thank you for your consideration.

Katherine S. Kelley, P.E.
Wastewater Division Manager



Wastewater

Katherine Kelley, P.E.
Wastewater Manager





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What We Do – An Overview

- Maintain:
 - 13 Pump Stations
 - 1,625+ Publicly Owned Manholes
 - 70+ Miles of Sewer Pipe
 - Street Excavations in Public ROW
 - Grounds Maintenance
- Emergency Response
- Winter Plowing
- Dig Safe
- New Sewer Lateral Inspections
- Voting Set Up/Take Down
- Flushing and Televising Lines





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Daily Operations

- 1. Pump Station Maintenance
 - Grounds
 - Equipment
 - Building
- 2. Manhole Maintenance
 - Adjusts
 - Repairs
 - Cleaning & Inspection
- 3. Pipeline Maintenance
 - Flushing
 - Televising
 - Repair and/or Replace
 - Recording new sewer tie cards

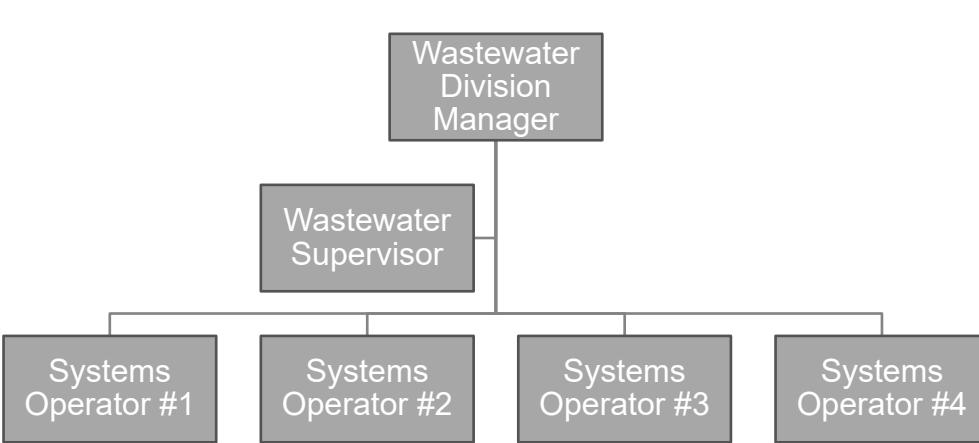




Westbrook, Maine

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Wastewater Staff




Westbrook, Maine

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Major Changes in Wastewater Budget

Increases:

- Salaries, overtime and benefits increased to reflect raises in AFSCME side bar
- Portland Water District debt services continue to increase due to the aeration upgrade at the Treatment Plant
- Gases increased due to the volatility experienced in oil market

Decreases:

- Debt services continue to decrease annually
- No major sewer rehabilitation is scheduled this year



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Wastewater Goals

Completed Goals

- Continued upgrade portions of the SCADA in the pump stations to better communicate wirelessly
- Worked with Portland Water District to begin process to updated the Long-Term Control PlanLined 1,600 LF of the Bridge Street sewer
- Flushed 122,731 LF of sewer lines
- Repaired portions of Brackett Street



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Lining Sewer Lines

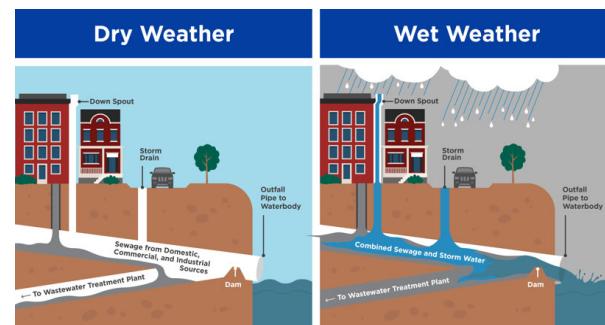
- CIPP – Cured-in-Place-Pipe lining
- Trenchless rehabilitation
- Requires little to no digging
- For pipes that do not need to be upsized
- Utilizes a flexible liner inside the pipe
 - Polyester
 - Vinyl
 - Epoxy



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Long-Term Control Plan (DEP)

- Westbrook has five combined sewer overflow (CSO) outfalls
- Expectation to close CSOs
- Westbrook may reduce IDDE through storage tank and/or go after private sources
- Current issue: Updating Storm Water Management Model (SWMM) – Not enough 1" rain events



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Wastewater Goals for FY2024

- Line the rest of the Bridge Street sewer
- Line portion of Brackett Street sewer
- Continue upgrading pump station SCADA
- Practice the new camera system and grading with NASSCO software
- Focus on adjusting low or damaged structures and establish channels in manholes that lack them
- Complete Melcher Court Pump Station design and bid Spring 2024



City of Westbrook

Sewer Fund

Budget Comparisons FY22, YTD FY23, & FY24

Account Description	Account Numbers		FY23 YTD				% Bud Inc.	
	80003250	FY22 Budgeted	FY22 Actuals	-/+	FY23 Budgeted	January 12, 2023	-/+	FY23/FY24
Sewer Assessments	41200	(5,265,045)	(5,449,914)	(184,869)	(5,181,875)	(2,938,534)	2,243,341	(5,223,715) 0.8%
Interest/Penalties on Tax	41900	(500)	(41)	459	(500)	(28)	472	(100) -80.0%
Investment Earnings	46000	(6,000)	(18,145)	(12,145)	(6,000)	(101,965)	(95,965)	(75,000) 1150.0%
Transfer from Sewer Fund Balance		-	-	-	-	-	-	0.0%
Total Revenue		(5,271,545)	(5,468,100)	(196,555)	(5,188,375)	(3,040,527)	2,147,848	(5,298,815) 74.3%
Expenses:								
Salaries - Regular	51100	395,249	363,116	32,133	436,103	214,007	222,096	465,841 6.8%
Salaries - Overtime	51300	24,143	25,088	(945)	26,000	16,397	9,603	28,860 11.0%
Cash In	51600	-	4,322	(4,322)	-	-	-	- 0.0%
Other Employee Benefits	52900	147,468	139,573	7,895	148,073	80,112	67,961	164,286 10.9%
Uniforms	52901	5,500	4,871	629	5,500	2,653	2,847	5,500 0.0%
Medical Exams/Physicals	52902	2,000	843	1,157	2,000	772	1,228	2,000 0.0%
Training	53300	5,000	1,734	3,266	5,000	3,013	1,988	5,000 0.0%
Architect & Engineering	53420	57,500	41,796	15,704	50,000	36,410	13,590	50,000 0.0%
Prof Services - IT/Technology	53520	500	346	154	500	-	500	500 0.0%
GIS Project	53617	57,000	54,638	2,362	55,200	36,233	18,967	57,400 4.0%
Portland Water Assessment	53622	3,196,094	3,038,184	157,910	3,266,359	1,896,820	1,369,539	3,811,152 16.7%
Utility/Water & Sewer	54105	3,000	1,281	1,719	3,000	770	2,230	3,000 0.0%
Maint Building & Grounds	54312	19,850	10,235	9,615	19,850	10,376	9,474	19,850 0.0%
Tech Consult Maint	54330	-	570	(570)	-	-	-	- 0.0%
Maint - Small Equip	54390	8,500	3,912	4,588	8,500	696	7,804	8,500 0.0%
Equipment & Vehicle Lease	54420	15,790	-	15,790	15,790	-	15,790	- -100.0%
Tel - Push Talk	55320	13,000	10,457	2,543	13,000	5,031	7,969	13,000 0.0%
General Supplies	56000	6,000	4,863	1,137	20,000	2,933	17,067	20,000 0.0%
Chemical Supplies	56044	-	-	-	-	-	-	- 0.0%
Natural Gas	56210	10,000	4,765	5,235	10,000	1,154	8,846	10,000 0.0%
Electricity	56220	47,000	52,615	(5,615)	47,000	20,818	26,183	47,000 0.0%
Fuel, Gas	56260	5,000	6,639	(1,639)	5,000	4,314	686	8,000 60.0%
Fuel, Diesel	56261	4,000	5,435	(1,435)	10,000	3,833	6,167	10,000 0.0%
Auto Parts	56700	6,500	1,425	5,075	6,500	4,525	1,975	6,500 0.0%
Vehicles, New	57320	-	-	-	-	-	-	- 0.0%
Furniture/Fixtures	57330	1,000	-	1,000	-	-	-	- 0.0%
Hardware/SCADA	57340	50,000	45,720	4,280	50,000	6,725	43,275	50,000 0.0%
Small Equipment	57390	28,500	13,350	15,150	30,000	4,964	25,036	30,000 0.0%
Reline Work - Sewer Rehab.	57400	386,000	97,255	288,745	332,000	6,479	325,521	200,000 -39.8%
Depreciation	57900	1,677,380	1,732,430	(55,050)	1,680,000			
Dues & Memberships	58100	1,900	1,777	123	2,000	573	1,427	2,000 0.0%
Debt Service -Principal & Interest	58310	348,429	338,344	10,085	323,225	164,012	159,213	298,096 -7.8%
Sludge Disposal	58981	4,500	1,633	2,867	6,000	2,438	3,562	6,000 0.0%
Inspection - TV	58982	20,000	7,509	12,491	30,000	9,249	20,751	20,000 -33.3%
Casting/Brick/Pipe	58983	55,000	38,628	16,372	50,000	4,232	45,768	25,000 -50.0%
NPDES	59000	50,000	37,085	12,915	115,000	79,125	35,875	70,000 -39.1%
Transfer to Capital Project Fund	59400	297,122	193,968	103,154	-	-	-	- 0.0%
Total Expenses		6,948,925	6,284,407	664,518	6,771,600	2,618,665	2,472,935	5,437,485 -19.7%
Total Sewer Surplus / (Deficit)		1,677,380	(816,307)	(816,307)	1,583,225	421,862	421,862	(138,670)

City of Westbrook

Sewer Fund

Budget FY24

Account Description	FY23 Budget	FY24 Budget	+/-
Sewer Assessments	\$ (5,181,875.00)	\$ (5,223,715.00)	
Interest/Penalties on Tax	\$ (500.00)	\$ (100.00)	
Investment Earnings	\$ (6,000.00)	\$ (75,000.00)	
Transfer from Sewer Fund Balance	\$ -	\$ -	
Total Revenue	(5,188,375)	(5,298,815)	2.1%
Expenses:			
Salaries - Regular	\$ 436,103	\$ 465,841	\$ 29,738
Salaries - Overtime	\$ 26,000	\$ 28,860	\$ 2,860
Cash In	\$ -	\$ -	\$ -
Other Employee Benefits	\$ 148,073	\$ 164,286	\$ 16,213
Uniforms	\$ 5,500	\$ 5,500	\$ -
Medical Exams/Physicals	\$ 2,000	\$ 2,000	\$ -
Training	\$ 5,000	\$ 5,000	\$ -
Architect & Engineering	\$ 50,000	\$ 50,000	\$ -
Prof Services - IT/Technology	\$ 500	\$ 500	\$ -
GIS Project	\$ 55,200	\$ 57,400	\$ 2,200
Portland Water Assessment	\$ 3,266,359	\$ 3,811,152	\$ 544,793
Utility/Water & Sewer	\$ 3,000	\$ 3,000	\$ -
Maint Building & Grounds	\$ 19,850	\$ 19,850	\$ -
Tech Consult Maint	\$ -	\$ -	\$ -
Maint - Small Equip	\$ 8,500	\$ 8,500	\$ -
Equipment & Vehicle Lease	\$ 15,790	\$ -	\$ (15,790)
Tel - Push Talk	\$ 13,000	\$ 13,000	\$ -
General Supplies	\$ 20,000	\$ 20,000	\$ -
Natural Gas	\$ 10,000	\$ 10,000	\$ -
Electricity	\$ 47,000	\$ 47,000	\$ -
Fuel, Gas	\$ 5,000	\$ 8,000	\$ 3,000
Fuel, Diesel	\$ 10,000	\$ 10,000	\$ -
Auto Parts	\$ 6,500	\$ 6,500	\$ -
Furniture/Fixtures	\$ -	\$ -	\$ -
Hardware/SCADA	\$ 50,000	\$ 50,000	\$ -
Small Equipment	\$ 30,000	\$ 30,000	\$ -
Reline Work - Sewer Rehab.	\$ 332,000	\$ 200,000	\$ (132,000)
Depreciation			
Dues & Memberships	\$ 2,000	\$ 2,000	\$ -
Debt Service -Principal & Interest	\$ 323,225	\$ 298,096	\$ (25,129)
Sludge Disposal	\$ 6,000	\$ 6,000	\$ -
Inspection - TV	\$ 30,000	\$ 20,000	\$ (10,000)
Casting/Brick/Pipe	\$ 50,000	\$ 25,000	\$ (25,000)
NPDES	\$ 115,000	\$ 70,000	\$ (45,000)
Transfer to Capital Project Fund	\$ -	\$ -	\$ -
Total Expenses	\$ 5,091,600	\$ 5,437,485	\$ 345,885
Total City Expenses	\$ 1,825,241	\$ 1,626,333	\$ (198,908)
Total Sewer Surplus / (Deficit)	(96,775)	138,670	

Key:

	\$\$\$ Increase from FY23
	\$\$\$ Decrease from FY23

City of Westbrook FY2024
Sewer Fund Vendor List

Account Number	Account Name	Total Budget	Vendors
52901	Uniforms	\$5,500	Cintas Corporation, Lamey Wellehan, Pine Environmental
52902	Medical Exams/ Physicals	\$2,000	Cintas Corporation, Bayside Employee Health Center, Grainger
53300	Professional EE Training & Travel	\$5,000	American Red Cross, ASCE, Maine Rural Water Association, NASSCO, NEIWPCC, Wright Pierce
53420	Engineering	\$50,000	Gorill Palmer, Llyods Register Americas, RW Gillespie & Associates, Sebago Technics, St Germain, Stantec, SW Cole Engineering, Wright Pierce
53617	GIS Project	\$57,400	Cartographic Associates Inc
53622	Portland Water Assessment	\$3,811,152	Portland Water District
54105	Water & Sewer (Utility)	\$3,000	Portland Water District
54312	Maintenance - Building & Grounds	\$19,850	C N Wood Enviro LLC, Carbtrol Corporation, Corey Electric, Cummins Inc , Ed's Batteries, EJ Prescott, G&E Roofing, Glidden Paving, Hayes Pump Inc , Handyman Services , HD Supply, Home Depot, Honeywell, K & S Doors, Lowes, Overhead Door, Patriot Mechanical, Power Products, PTI Paving, Shaw Brothers, Southworth-Milton Inc , Stevens Electric, Stultz Electric, WW Grainger Inc
54390	Maintenance - Small Equipment	\$30,000	Aubuchon Hardware, C N Wood Enviro LLC, Cummins Northeast, Fastenal, Gorman Rupp Pump, Hall Implement, Hayes Pump, Home Depot, Honeywell, Jack Young Co, K & S Doors, Lowes, MB Tractor Equipment, MSA Gas Meters, Patriot Mechanical, Pine Tree Environmental, Portland North Truck Center, PW Plummer & Sons Inc , Southworth-Milton Inc, Sportsmans Hardware , Stevens Electric & Pump, Stultz Electric, Visual Imaging Resources , WW Grainger Inc
55320	Telephone - Push Talk	\$13,000	AT&T Mobility II LLC, Corey Electric, CRC Communications LLC , Otelco Telecommunications, Verizon Wireless
56000	General Supplies	\$20,000	Adobe, Amazon, Goodwill, Horizon Solutions, Lowes , Pine Environmental, PW Plummer & Sons Inc , Sportsmans Hardware , Staples, Walsh Printing & Graphics, WB Mason, WW Grainger Inc
56210	Natural Gas	\$10,000	Northern Utilities, Suburban Propane
56220	Electricity	\$47,000	Central Maine Power, Constellation Newenergy Inc , Corey Electric

City of Westbrook FY2024

Sewer Fund Vendor List

56700	Vehicle Supplies/Auto Parts	\$6,500	Adams & Fogg, Advance Auto Parts, AEC Control System, Aqua Solutions Inc, Atlantic Broom Service, CN Wood Enviro LLC, Corey Electric, Cummings Northeast, Eastern Electric, Genuine Parts Company, Goodyear Tire, Gorham Tractor, Hayes Pump, Hews Co, Howard P Fairfield, Hydraulic Hose & Assembly, Jack Young Co, Jordan Equipment, K L Jack Co, Lee Dodge, McFarland Spring, Messer Truck Equipment, Morrison & Sylvester, MSA Meters, NAPA, Northland Holder, Nortrax, O'Connor GMC, Overhead Door, Portland North Truck, Roberts Auto Body, Stevens Electrical, Stultz Electric, Tenco, Vactor, Weirs Motor Sales, Westbrook Service Center, Wingfoot Commerical Tire, Yerxa's Power Equipment
57340	Computers/SCADA Maintenance	\$50,000	AT&T Mobility II LLC, Eastcom Associates Inc , Electrical Controls of Maine, ESRI, Maine Security, TPx, Unified Communications , Verizon Wireless
57390	Small Equipment	\$30,000	CN Wood, Cummins Inc, Eastern Electric, Ed's Batteries, EJ Prescott, Faulkner Welding, Genuine Parts Company, Hayes Pump, Home Depot, Horizon Solutions, K & S Doors, K L Jack & Co, Lowes, MSA Meters, NAPA, Nortrax, Overhead Door, Pine Environmental Services, Portland North Truck, PW Plummer & Sons Inc , Sportsmans Hardware , Stevens Electric, Stultz Electric, SupplyWorks, Tenco, Vactor Corp, WW Grainger
57400	Sewer Rehab & Repair	\$200,000	Advanced Auto Parts, American Concrete, CN Wood Enviro LLC, Coastal Road Repair, Corey Associates, Cummins Northeast, EcoClean, EJ Prescott, Faulkner Welding & Machine, Gorham Sand & Gravel, Gerrill Palmer, Handyman Services , Hayes Pump, Home Depot, Hydraulic Hose & Assembly, Les Wilson & Sons, Lowes, Messer, MSA Gas Meters, Overhead Door, RJ Grondin, Rowe Ford, Sebago Technics , Shaw Brothers, Sportsmans Hardware , Stevens Electrical, Tenco, Treasurer State of Maine , Westbrook Service Center, Wright-Pierce , WW Grainger, Zoom Drain
58981	Sludge Disposal	\$6,000	Pine Tree Waste

City of Westbrook FY2024
Sewer Fund Vendor List

58982	Sewer Inspection - TV	\$20,000	Eco-Clean, Ted Berry Co, Eastcom Associates Inc, Visual Imaging Resources, Vortex Companies, Zoom Drain
58983	Castings, Brick, Pipe	\$25,000	American Concrete, American Highway Products, At Work Flaggers, Carbtrol Corporation, Coastal Road Repair, Core & Main, Cretex Specialty Products , EJ Prescott, Ferguson Waterworks, Flow Assessments, Gagne & Son Concrete Blocks, Glidden Construction, Gorham Sand & Gravel, Handyman Rental, Keenan Excavation, Leavitt Earthworks, Les Wilson & Sons, Pavement Treatments Inc, Pre-Cast of Maine, RJ Grondin, Shaw Brothers, Sportsmans Hardware , Suburban Security, Treasurer State of Maine, Windham Rental
59000	NPDES	\$70,000	Cumberland County Soil & Water Conservation District, Garden State Highway Projects Inc , Long Creek Watershed Management District Restoration, Sterling Stormwater, Walsh Printing & Graphics

Portland Water District
Annual Wastewater Assessment Meeting - Westbrook
Meeting Date: November 21, 2022 at 1:00

Attendees: Westbrook Sewer Commission, Jerre Bryant and staff; Seth Garrison, Chris Crovo, Scott Firmin and David Kane

Agenda

1. 2023 Wastewater Assessment - \$3,723,096 – \$549,972 or 17.3% higher
2. Wastewater Operational and Capital Plans
 - CSO Projects Update
 - Treatment Plant Aeration project
3. Water System
 - Water rate increase (5.6%) scheduled for March 1, 2022, including 5.0% Public Fire Protection.

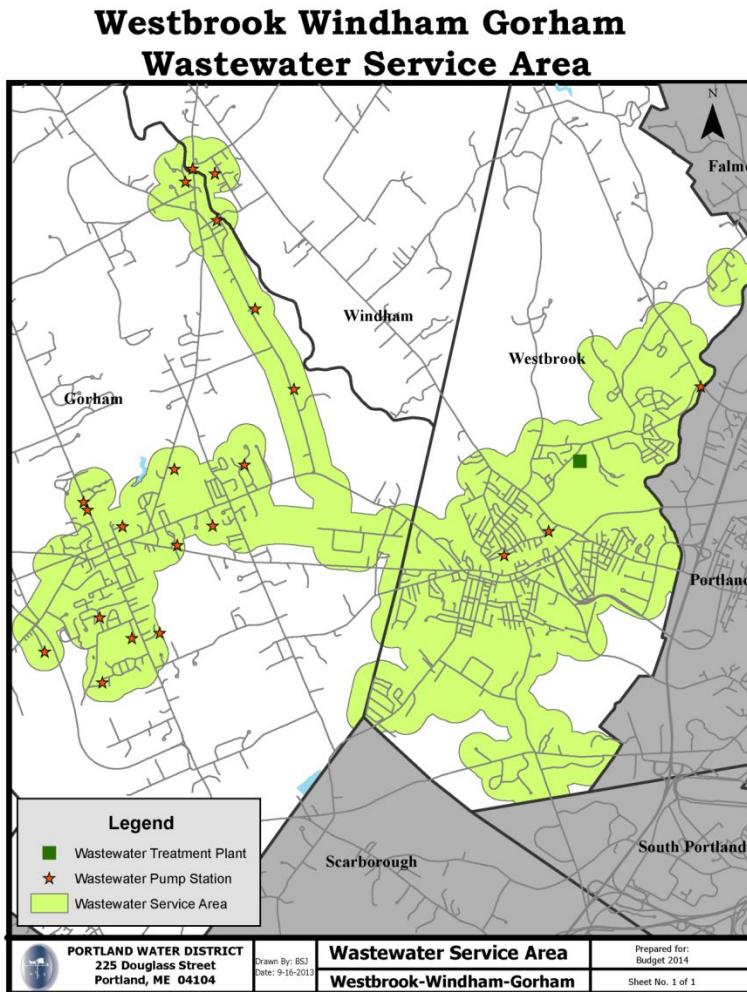
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Fund: Wastewater - Westbrook

Background

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



**Summary of Services
Provided:**

Treatment

4.54 million gallons/day

Collection System

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

Utility Billing

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

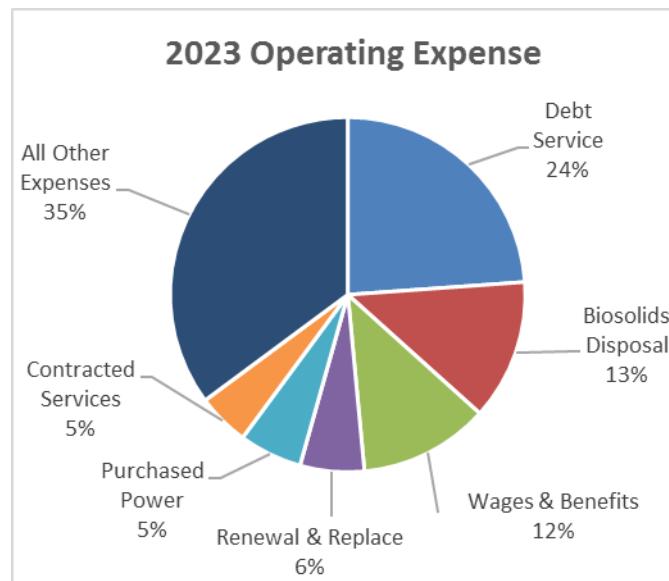
Fund: Wastewater - Westbrook

2023 Financial Summary

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

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

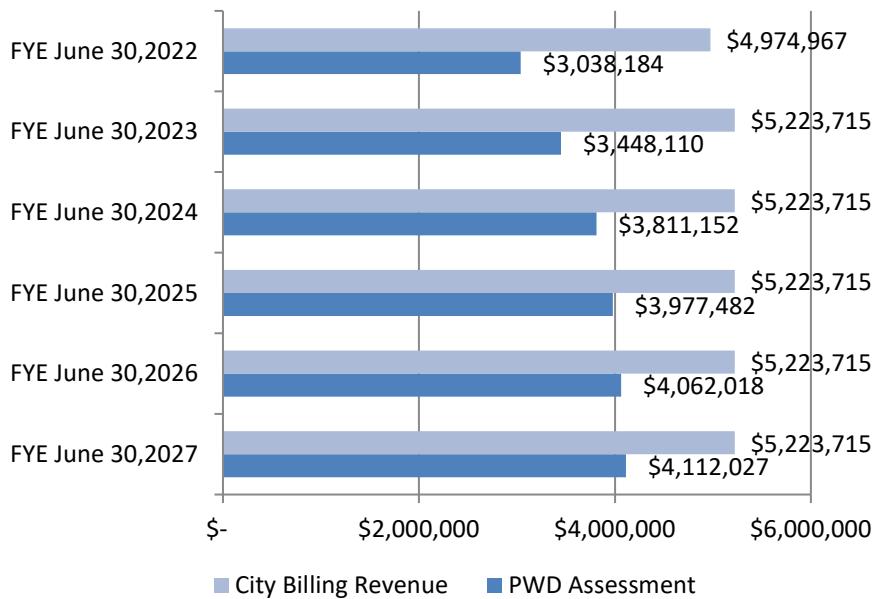
The Total Expense budget is \$596,883 higher (18.4%) than the previous year. Operating Expense increased by \$457,068 or 20.4%, Debt Service decreased 17.5% (\$136,157) and Renewal & Replacement (direct and indirect) funding increased \$3,658 to \$224,193.



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

Assessment Compared to Ratepayers' Billing

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

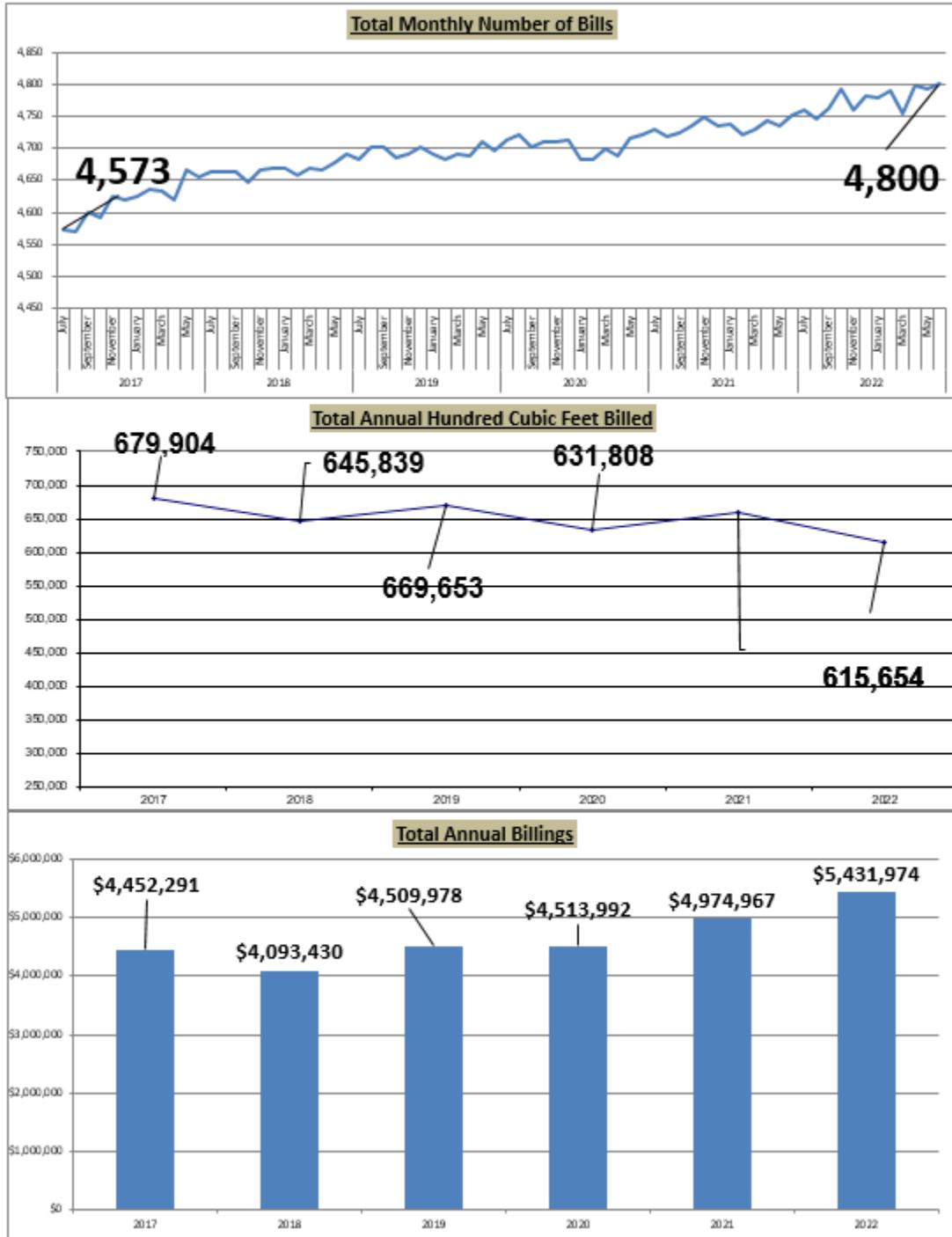


Revenue Assumptions:	
- Consumption assumed is based on consumption through December 31, 2019	
- Rates Assumed:	
Effective Date:	Base/Per HCF
Jan 2013	\$11.13/\$6.13
Jan 2019	\$11.53/\$6.53
Jan 2020	\$11.93/\$6.93
Jan 2021	\$12.33/\$7.00
Jan 2022	\$12.73/\$7.73

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



2023 Operating Expense Highlights

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

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

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

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

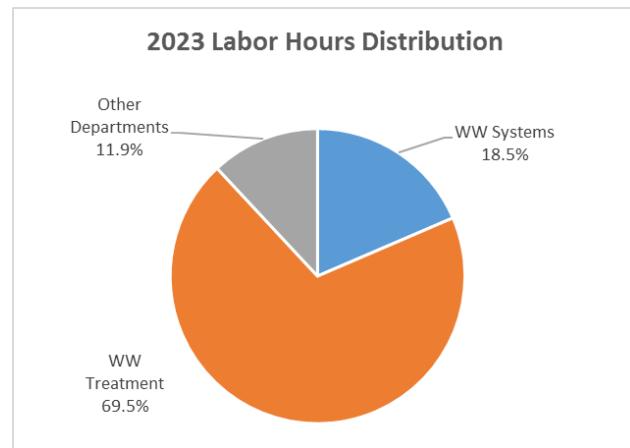
Heat/Fuel Oil – The budget increased 37.7% (\$12,732) mostly due to an estimated increase in the cost of heating oil from \$2.29 to \$3.80 per gallon at the treatment plant.

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

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

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

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



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



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

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

Projections for Rate-Making Purposes

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

Major Assumptions:

Major assumptions incorporated in the projections are as follows:

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

Summary of Projection Impact:

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

Reserve Fund Balances



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

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

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

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

Projections for Rate-Making Purposes (continued)

Operating Fund:

	2021 Actual	2022 Budget	2023 Budget	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast
Revenues:							
Assessment Income	2,903,244	3,173,124	3,723,096	3,899,208	4,055,755	4,068,281	4,155,772
Interest Income	3,168	16,938	35,193	35,193	35,193	35,193	35,193
Other Income	55,689	50,200	78,856	78,856	78,856	78,856	78,856
Total Revenues	2,962,101	3,240,262	3,837,145	4,013,257	4,169,804	4,182,330	4,269,821
Operating Expenses:							
Salaries & Wages	263,233	252,011	317,049	329,731	342,920	354,922	367,344
Employee Benefits	121,476	108,878	137,395	144,265	151,478	159,052	167,005
Biosolids Disposal	323,628	353,873	491,117	510,762	528,639	544,498	560,833
Chemicals	146,536	141,517	220,723	227,345	234,165	241,190	248,426
Contracted Services	129,483	147,268	182,538	188,014	193,654	199,464	205,448
Heat/Fuel Oil	31,674	33,752	46,484	47,879	49,315	50,794	52,318
Insurance	10,087	10,798	12,096	12,459	12,833	13,218	13,615
Materials & Supplies	68,882	51,769	64,742	66,684	68,685	70,746	72,868
Other Expense	1,781	5,440	4,272	4,400	4,532	4,668	4,808
Purchased Power	226,703	251,974	220,599	242,659	252,365	259,936	267,734
Regulatory/Taxes	5,516	39,145	5,386	5,548	5,714	5,885	6,062
Tele/Other Utilities	28,988	34,504	35,398	36,460	37,554	38,681	39,841
Transportation	11,103	13,298	15,856	16,332	16,822	17,327	17,847
SS - Administration	350,582	365,694	425,711	442,739	460,449	477,716	495,630
SS - Engineering Services	68,721	114,912	140,496	146,046	151,815	157,470	163,336
SS - Environmental Services	115,512	110,453	115,112	119,716	124,505	129,174	134,018
SS - Wastewater Services	225,728	197,656	254,734	264,923	275,520	285,852	296,571
SS - Water Services	6,005	7,412	7,714	8,023	8,344	8,657	8,982
	2,135,638	2,240,354	2,697,422	2,813,985	2,919,309	3,019,250	3,122,686
Debt Service	598,204	779,373	915,530	1,075,695	1,058,918	971,503	955,558
Renewal & Replacement - Direct	270,000	168,000	168,000	100,000	168,000	168,000	168,000
Renewal & Replace - Indirect	47,040	52,535	56,193	23,577	23,577	23,577	23,577
Capital Finance Expense	915,244	999,908	1,139,723	1,199,272	1,250,495	1,163,080	1,147,135
Total Operating Expenses	3,050,882	3,240,262	3,837,145	4,013,257	4,169,804	4,182,330	4,269,821
Current Year Surplus(Deficit)	-88,781	0	0	0	0	0	0
Prior Year Surplus	704,619	638,566	358,219	358,219	358,219	358,219	358,219
Accumulated Surplus	615,838	638,566	358,219	358,219	358,219	358,219	358,219
Target Balance(25% of budget)	762,721	810,066	959,286	1,003,314	1,042,451	1,045,583	1,067,455
Above/(Below)	-146,883	-171,500	-601,067	-645,095	-684,232	-687,364	-709,236

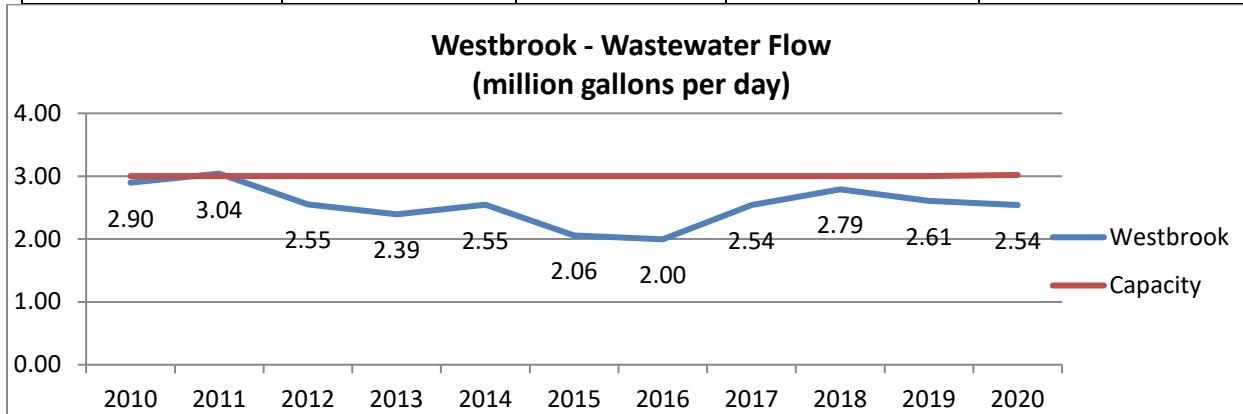
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$1,149,000

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

Operation Summary Westbrook

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

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



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

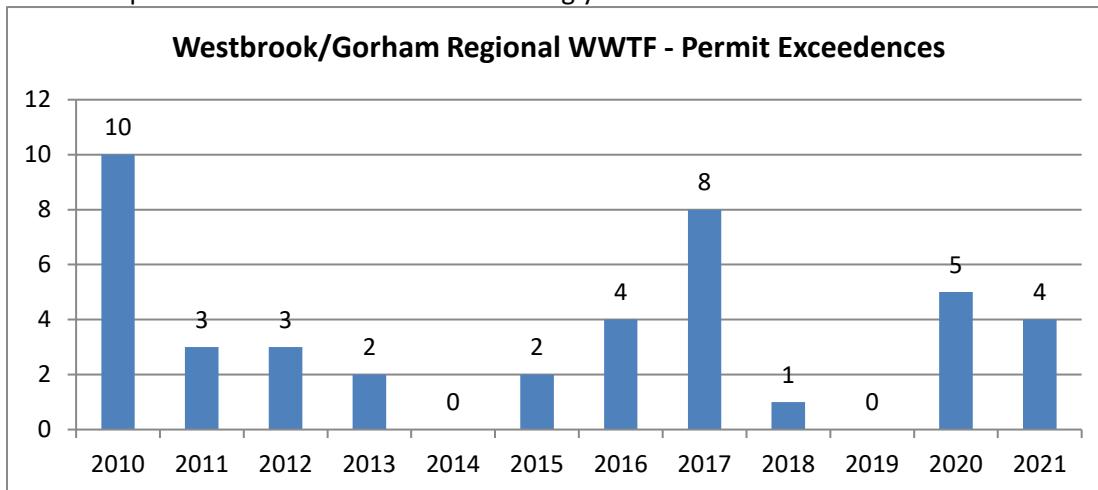
WGWT Parameter	DEP Limit	2021 Facility Average
Biosolids Removed (wet tons/month)	N/A	346 wet ton/month

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

Operation Summary (continued)

Effluent Permit Requirements:

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



Wastewater Conveyance – interceptors and pumping stations

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

2022 Other Highlights

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

2023 Work Plan

- The Asset Management Program will continue to drive the preventive maintenance program, generating both monthly and annual preventive maintenance work orders for each of the pump stations.
- Wet wells will continue to be scheduled for cleaning on a quarterly basis.
- Construction of the aeration system at the treatment plant will continue and the plant team will be working to operate the facility through the project.

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

Capital Summary

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

Expenditures by CIP Year:

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

Source of Funds:

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

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

Gorham/Westbrook/Windham Wastewater

Westbrook Regional Treatment Plant

The Westbrook Regional WWTF was brought online in the mid '70s. Over the years the District has completed various improvements including:

- Plant water system (2006)
- Clarifier scum removal (2006)
- Scum handling, and sludge conveyances control (2006)
- Plant electrical system – Standby Generator (2008)
- Polymer system (2010)
- RAS pumps (2011)
- Plant Control System (2013)
- RAS distribution and flow split to the secondary clarifiers (2014)
- Sludge Dewatering (2018)

Proposed major modifications for a headworks upgrade were set aside in favor of installing screens at the two major pump stations feeding the treatment plant. Start-up of these systems at the Cottage Place and East Bridge St. Pump Stations in 2008 successfully eliminated pump plugging and has reduced the quantity of rags at the treatment plant. Additional improvements to reduce the spacing of the screens at the pump stations are planned to begin in the fall of 2022 to further remove rags and debris from the plant influent.

In 2013, design and replacement of the control system began. This was completed in 2014 along with chemical feed pumps, residual samplers, and enhanced automation of the disinfection system.

The aeration system was evaluated in 2015 to develop a roadmap for the eventual upgrade of the aeration system as it nears the end of its service life. The 2019 CIP included design phase services to upgrade the aeration system and secondary clarification process. These upgrades will facilitate process control to maintain dissolved oxygen to meet today's loadings, match current peak demand, and provide more energy efficient oxygen delivery. Similar to the East End plant in Portland, a selector is recommended to enhance process control and improve settleability.

The secondary clarification process at Westbrook has not been upgraded or modified since its original construction and the sludge withdrawal mechanisms are nearing the end of their useful life based on an assessment of the clarifiers completed in 2016. Construction of the aeration and secondary clarification upgrade is underway and scheduled for completion by the summer of 2023. In addition to much needed replacement of the aeration and secondary clarification equipment, the upgrades will include new power distribution systems and electrical switchgear.

Gorham/Westbrook/Windham Wastewater (continued)

In 2015, the District completed an evaluation of sludge dewatering technologies for the Westbrook Regional WWTF, including rehabilitation of the existing belt filter press. Alternative technologies were piloted to quantify the improvement in dewatering performance as compared to the existing equipment. It was determined that alternative technologies would increase the dewatered sludge solids content from an average of approximately 16% to a minimum of 20%, which significantly reduces the volume of sludge to be disposed. As a result, in 2016 the proposed belt filter press rehabilitation project was replaced with a proposed upgrade to an alternative technology (CIP #167 project 2534). In 2016, equipment was competitively procured and upgrade to a screw press began in January of 2017 and was completed in the spring of 2018.

In 2020 the District competitively pre-procured a 3-way valve and pneumatic actuator to create a 4th discharge zone to facilitate more complete filling of the sludge storage container with the drier cake produced by the new screw press system. The new valve was installed along with a new control station and associated electrical during the summer of 2021.



2019 CIP 416 project 3001 - Cake Unloading Valve during installation

In 2020 the District designed improvements to the dewatering polymer handling system including competitive pre-procurement of a polymer makedown system and an improved tote storage area to facilitate access, polymer mixing, and complete tote drainage to maximize product usage. Construction of the new storage area is now complete and in use.



2019 CIP 416 project 3026 - Polymer System Improvements

Gorham/Westbrook/Windham Wastewater (continued)

Westbrook – Sewer System

In late 2007, the District hired Woodard & Curran, Brown & Caldwell and Jordan Environmental to update the City of Westbrook's CSO Master Plan. This plan was completed and submitted to Maine DEP in 2008. Some of the work included in the plan involved the City, and some involved the District. Because the City operates the collection system, the bulk of the first five years would focus on the removal of infiltration and inflow (I/I) from the City collection system. Later portions of the plan would include storage and other work on District owned assets. Since the plan was updated, all flow from all the CSO outfalls are now continuously monitored.

The plan was updated in 2014 and submitted to the DEP per the State's requirements. The plan included a summary of the work completed in the first 5 years and a revised set of projects and schedule. The projects that involve District facilities are being completed in accordance with the Master Plan and have included several projects to increase the capacity of the interceptor system. The Master Plan included upgrades and capacity increase at the Dana Court Pump Station (CIP #29 project 2527). This project was completed in 2019. The plan also included the addition of floatables containment at the CSO diversion structure prior to the Cottage Place pump station (CIP #29 project 2524). This project was completed in 2020. The most recent 5 year portion of the mitigation, or Long Term Control Plan, has been in large part completed. The plan is currently undergoing another review and will be updated with the next series of projects and goals to be completed in the next 5 year period.

Gorham/Westbrook/Windham Wastewater (continued)

Gorham, Westbrook and Windham are served by a centralized wastewater treatment plant in Westbrook. Capital costs are allocated by each municipality's relative design capacity of the specific infrastructure.

Program Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
□ SCADA & Technology	\$115,000			\$25,000	
Westbrook Joint	\$115,000			\$25,000	
□ WW Collection & Pumping	\$380,000	\$260,000	\$135,000	\$60,000	\$4,075,000
Gorham	\$40,000	\$20,000	\$95,000	\$20,000	\$20,000
Westbrook	\$170,000	\$220,000	\$20,000	\$20,000	\$3,220,000
Westbrook Joint	\$150,000				
Windham	\$20,000	\$20,000	\$20,000	\$20,000	\$835,000
□ WW Treatment	\$8,180,000	\$11,200,000	\$10,585,000	\$7,395,000	\$12,585,000
Westbrook Joint	\$180,000	\$1,200,000	\$585,000	\$395,000	\$2,585,000
Windham	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
Grand Total	\$8,675,000	\$11,460,000	\$10,720,000	\$7,480,000	\$16,660,000

Projects by Program

	-2023-	-2024-	-2025-	-2026-	-2027-
□ SCADA & Technology	\$115,000			\$25,000	
177/3127/Westbrook SCADA Server Replacement Program	\$115,000			\$25,000	
□ WW Collection & Pumping	\$380,000	\$260,000	\$135,000	\$60,000	\$4,075,000
180/3138/Windham- Little Falls WW System - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
180/3139/Windham - Depot St/Kiddy Mill Force main					\$750,000
180/3183/Route 202 Telemetry Upgrade					\$65,000
29/3231/PEND - CSO Storage Facility					\$3,200,000
411/3134/Westbrook WW Systems R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
411/3284/Cottage Place Roof Replacement	\$150,000				
60/3137/Gorham WW Pump Station - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
60/3180/Briarwood PS Telemetry Upgrade					\$75,000
60/3274/East Bridge Roof Replacement	\$150,000				
60/3275/Dana Ct. Force main Replacement			\$200,000		
60/3276/South Gorham Sewer Study	\$20,000				
□ WW Treatment	\$8,180,000	\$11,200,000	\$10,585,000	\$7,395,000	\$12,585,000
182/3241/North Windham WWTF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000
416/3132/Westbrook Gorham Windham WWTF R&R	\$130,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls					\$125,000
416/3166/Process Area Ventilation Upgrades			\$750,000		
416/3190/Access Road and Parking Lot Resurfacing	\$15,000	\$400,000			
416/3191/TWAS Mixing System Replacement				\$150,000	
416/3198/WAS and GBT System Upgrade/Rehabilitation				\$350,000	
416/3232/Septage Screening Facilities				\$200,000	\$2,000,000
416/3256/Dewatered Sludge Conveyance Upgrade					\$500,000
416/3270/Process Valve/Actuator Replacement				\$20,000	
416/3271/Structural/Architectural Assessment/Rehab				\$35,000	
416/3272/Fire Monitoring System Upgrade		\$35,000			
Grand Total	\$8,675,000	\$11,460,000	\$10,720,000	\$7,480,000	\$16,660,000

Financing Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
Bond				\$1,250,000	
Operating Expense	\$20,000		\$35,000	\$20,000	\$35,000
Renewal and Replacement	\$655,000	\$1,460,000	\$685,000	\$260,000	\$175,000
Bond SRF	\$8,000,000	\$10,000,000	\$10,000,000	\$7,200,000	\$15,200,000
Grand Total	\$8,675,000	\$11,460,000	\$10,720,000	\$7,480,000	\$16,660,000

Subprogram # 180**Windham - Little Falls WW System**

Division: Wastewater - Windham Little Falls
Funding: Bonds, R&R – Wastewater – Div. 55

Manager: Poulin, Charlene
Priority: Routine replacement

Description:

This program provides for a planned approach to the replacement of obsolete equipment for the Windham-Little Falls wastewater pump stations. Few improvements had taken place during the first 35 years of operation. The scope of this program is based on the amount of required maintenance and current performance of the existing infrastructure. The scope includes complete replacement of drives, motors, pumps, controls and other major equipment to ensure operational reliability of the pump stations.

Justification / Impact:

When pump stations have reached the end of their useful design life (typically 20-years) obsolete equipment should be replaced. These improvements will ensure the pump stations continue to deliver adequate flows to the WWTF with increased reliability. Additionally, these needed improvements will allow for a Preventative Maintenance plan that will keep the pump stations operating at the design level well into the life of the upgrade.

History:

The original Windham-Little Falls wastewater system was built in 1987. The original system included two pump stations. These two pump stations were to be replaced with a single new pump station as part of the 2008 redevelopment of the Keddy Mill site. This project was never completed and the existing pump stations are now more than 35-years old. In 2019 CIP Depot street Pump Station Phase 1 design and construction was approved but due to delays the project was completed in October of 2021. Phase 2 of the Depot Street Pump Station project will coincide with the Keddy Mill clean-up and redevelopment.

Origin of the Subprogram:**Budget Summary:**

		-2023-	-2024-	-2025-	-2026-	-2027-
<input type="checkbox"/> Bond						\$750,000
<input type="checkbox"/> WW Collection & Pumping	180/3139/Windham - Depot St/Keddy Mill Force main					\$750,000
<input type="checkbox"/> Renewal and Replacement		\$20,000	\$20,000	\$20,000	\$20,000	\$85,000
<input type="checkbox"/> WW Collection & Pumping	180/3138/Windham- Little Falls WW System - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$85,000
	180/3183/Route 202 Telemetry Upgrade	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Grand Total		\$20,000	\$20,000	\$20,000	\$20,000	\$835,000

Previous Years on CIP:

2000 to present

Procurement Issues:

Engineering and contracting will be via standard competitive retention procedures.

Subprogram # 29**Westbrook CSO Abatement**

Division: Wastewater - Westbrook
Funding: Bond – Wastewater Div 62

Manager: Poulin, Charlene
Priority: Regulatory mandate

Description:

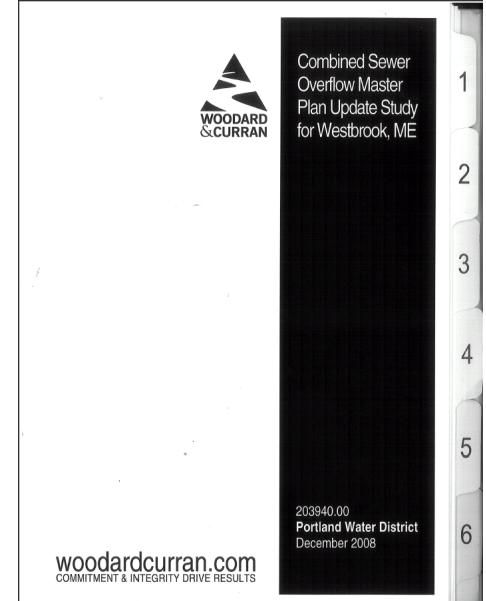
This project is driven by the permit requirement to mitigate combined sewer overflows in the City of Westbrook. The most recent 5 year portion of the mitigation, or Long Term Control Plan, has been in large part completed. The plan is currently undergoing another review and will be updated with the next series of projects and goals to be completed in the next 5 year period.

Justification / Impact:

The work completed by PWD and the City of Westbrook have dramatically reduced the frequency and volume of overflows. With an ultimate goal of further reducing, or even eliminating, these events, the next phase of the Long Term Control Plan is being developed. This plan, when submitted and approved by DEP, will identify the next series of projects to continue the work.

History:

The City and PWD have jointly entered into a permit that has developed and implemented previous plans. Those projects have been very successful. Future plans will likely focus on the possible storage conduit at Cottage Place Pump Station, optimization of sewer and pump station storage, the location of flows contributing to combined sewer overflows, and collection system work to address those flows.

**Budget Summary:**

	-2023-	-2024-	-2025-	-2026-	-2027-
<input checked="" type="checkbox"/> Bond SRF					\$3,200,000
<input checked="" type="checkbox"/> WW Collection & Pumping					\$3,200,000
29/3231/PEND - CSO Storage Facility					\$3,200,000
Grand Total					\$3,200,000

Previous Years on CIP: 2000 to present
Weir at Warren Ave CSO



Subprogram # 177**SCADA/Process Control - Wastewater****Division:** Wastewater – Westbrook, Div 64**Manager:** Pellerin, Greg**Funding:** R & R - Wastewater facility**Priority:** Upgrade obsolete**Description:**

The program supports all 80 wastewater sites across the District in upgrading and replacing the existing Supervisory Control and Data Acquisition (SCADA) equipment. The work needed is replacement of hardware and software to be compatible to the District SCADA standards and provide for increased automation of wastewater systems and treatment. Programmable Logic Controllers (PLC) have been replaced across the District to meet the new standards and remove outdated, non-maintainable equipment.

Justification / Impact:

The benefit of this program is to increase the automation and reduce the staff hours needed to perform routine activities for the systems and treatment plants across the District.

History:

The District started changing out the system in 2003 by replacing the existing 20 year-old system across the six wastewater communities and installing new SCADA equipment where it did not exist. All systems have been retrofitted or replaced but more automation of these systems will continue.

Budget Summary:

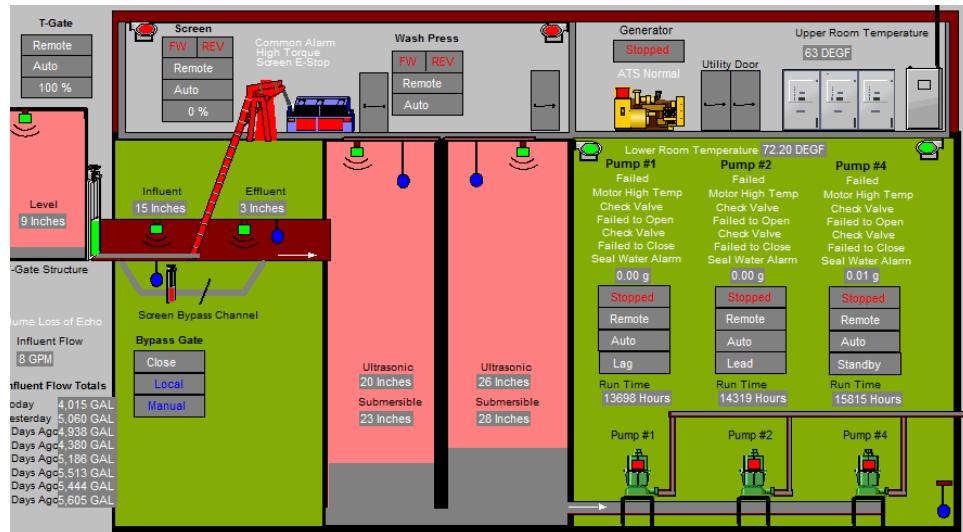
	-2023-	-2024-	-2025-	-2026-	-2027-
Renewal and Replacement	\$115,000	\$25,000			
SCADA & Technology	\$115,000	\$25,000			
177/3127/Westbrook SCADA Server Replacement Program	\$115,000	\$25,000			
Grand Total	\$115,000	\$25,000			

Previous Years on CIP:

2003 to present

Related Projects:

Subprogram #110 Water, #177 Sewer Portland,



Subprogram # 411

Westbrook WW Systems R&R

Division: Wastewater - Westbrook

Manager: Poulin,

Charlene

Funding: R&R - Wastewater – Div. 62

Priority: Routine

replacement

Description:

This project provides for the timely renewal of equipment associated with pump stations and the purchase of monitoring equipment for the interceptor system. Major pump stations have been recently upgraded but funds need to be available for replacement parts when necessary.

Justification / Impact:

An on-going study to upgrade the Westbrook CSO Master Plan will be complemented with the addition of a portable flow monitoring device.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
☐ Renewal and Replacement	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
☐ WW Collection & Pumping	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
411/3134/Westbrook WW Systems R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Grand Total	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000

	-2023-	-2024-	-2025-	-2026-	-2027-
☐ Renewal and Replacement	\$150,000				
☐ WW Collection & Pumping	\$150,000				
411/3284/Cottage Place Roof Replacement	\$150,000				
Grand Total	\$150,000				



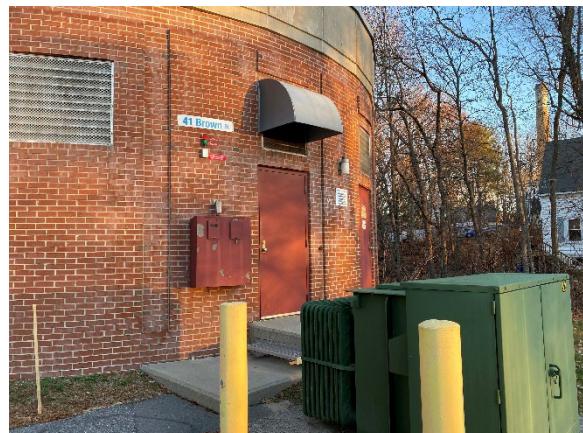
Condition Assessment – Westbrook Pump Stations

2020 Westbrook Pump Station Report

Westbrook			
ID	Name	2020 rating	2014 rating
WEP43	Dana CT PS	4.61	2.90
WEP42	E. Bridge St. PS	3.79	3.85
WEP41	Cottage Place	3.66	3.93
Westbrook Average		4.02	3.56
PWD -All Average (74 Pump Stations)		3.72	3.47



East Bridge Pump Station



Cottage Street Pump Station



Dana Court Pump Station
New dry pit submersible
pumps installed in 2019

Subprogram # 416 Westbrook Gorham Windham Regional WWTF

Division: Wastewater - Joint Westbrook

Funding: Bonds, R&R – Wastewater- Div. 64
obsolete facility

Manager: Firmin, Scott

Priority: Upgrade

Description:

Provide for plant upgrades required to continue to meet regulatory and operational requirements and for the timely routine replacement of equipment nearing the end of its service life. The main focus of the proposed projects is to improve plant performance and efficiency.

Justification / Impact:

Physical assets require scheduled maintenance and eventual replacement. Planned upgrades also include instrumentation and control in accordance with current industry practice and provide enhanced automation, monitoring and control of the treatment processes.

Regulatory requirements are continuously revised and updated by the EPA and administered by the Maine Department of Environmental Protection. This account provides for the equipment replacement and system upgrades necessary to continue to meet regulatory and operational requirements.



History:

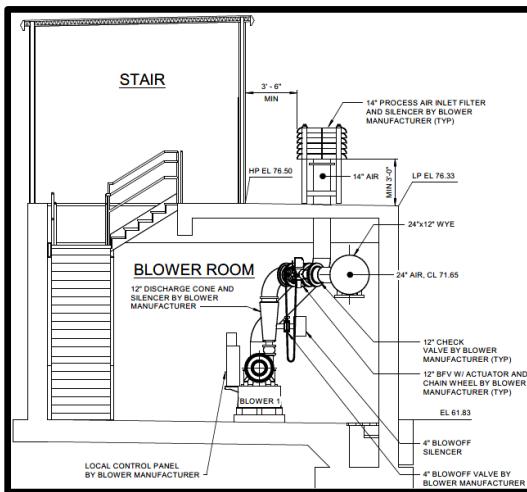
To meet the goals of this subprogram the District is continuously engaged in the Capital Improvement Program Process described in the Introduction of the Capital Expenditures section. Recent planning and design efforts include the Aeration System Alternatives Analysis (2015), the Secondary Clarifier Condition Assessment (2016), and the Aeration and Secondary Clarification Upgrade Design (2019). These projects are currently under construction with an expected startup date of Summer of 2023.

Budget Summary

	-2023-	-2024-	-2025-	-2026-	-2027-
■ Bond					\$500,000
■ WW Treatment					\$500,000
416/3256/Dewatered Sludge Conveyance Upgrade					\$500,000
■ Bond SRF				\$200,000	\$2,000,000
■ WW Treatment				\$200,000	\$2,000,000
416/3232/Septage Screening Facilities				\$200,000	\$2,000,000
■ Operating Expense		\$35,000	\$20,000	\$35,000	
■ WW Treatment		\$35,000	\$20,000	\$35,000	
416/3270/Process Valve/Actuator Replacement				\$20,000	
416/3271/Structural/Architectural Assessment/Rehab			\$35,000		\$35,000
■ Renewal and Replacement	\$180,000	\$1,200,000	\$550,000	\$175,000	\$50,000
■ WW Treatment	\$180,000	\$1,200,000	\$550,000	\$175,000	\$50,000
416/3132/Westbrook Gorham Windham WWTF R&R	\$130,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls					\$125,000
416/3166/Process Area Ventilation Upgrades			\$750,000		
416/3190/Access Road and Parking Lot Resurfacing	\$15,000	\$400,000			
416/3191/TWAS Mixing System Replacement				\$150,000	
416/3198/WAS and GBT System Upgrade/Rehabilitation				\$350,000	
416/3272/Fire Monitoring System Upgrade		\$35,000			
Grand Total	\$180,000	\$1,200,000	\$585,000	\$395,000	\$2,585,000

Subprogram # 416 Westbrook Gorham Windham Regional WWTF

CIP 2020, Subprogram #416, Project # 3023: \$11,250,000 - Westbrook aeration and secondary clarifier upgrade. Construction Started in 2021 with an anticipated two year construction duration. To the left is a diagram of the below grade aeration blower building. Right is foundation being constructed and below is the completed blower building.





Subprogram # 60**Westbrook WW Pump Stations - R&R****Division:** Wastewater - Westbrook**Manager:** Poulin, Charlene**Funding:** Bond and R&R – Wastewater – Div. 62**Priority:** Routine replacement**Description:**

This is an ongoing project designed to maintain and improve Westbrook wastewater pump stations. Modifications and upgrades will ensure adequate capacity, reliability and safety.

Justification / Impact:

Components of the older pump stations have reached their useful life and obsolete equipment should be replaced. Replacing this equipment before it fails completely reduces the amount spent on operating and maintaining the equipment.

History:

This planned renewal and replacement will assist operations in moving toward a goal of performing more predictive and preventive maintenance instead of emergency maintenance.

Budget Summary:

	-2023-	-2024-	-2025-	-2026-	-2027-
☒ Renewal and Replacement	\$150,000	\$200,000			
☒ WW Collection & Pumping	\$150,000	\$200,000			
60/3274/East Bridge Roof Replacement	\$150,000				
60/3275/Dana Ct. Force main Replacement		\$200,000			
Grand Total	\$150,000	\$200,000			

Previous Years on CIP:

2000 - present