



ENGINEERING & PUBLIC SERVICES



Eric Dudley, PE

Director, Engineering & Public Services

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

FROM: Katherine Kelley, Wastewater Division Manager

DATE: March 13, 2024

SUBJECT: FY2025 Wastewater Division Proposed Budget

The 2025 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



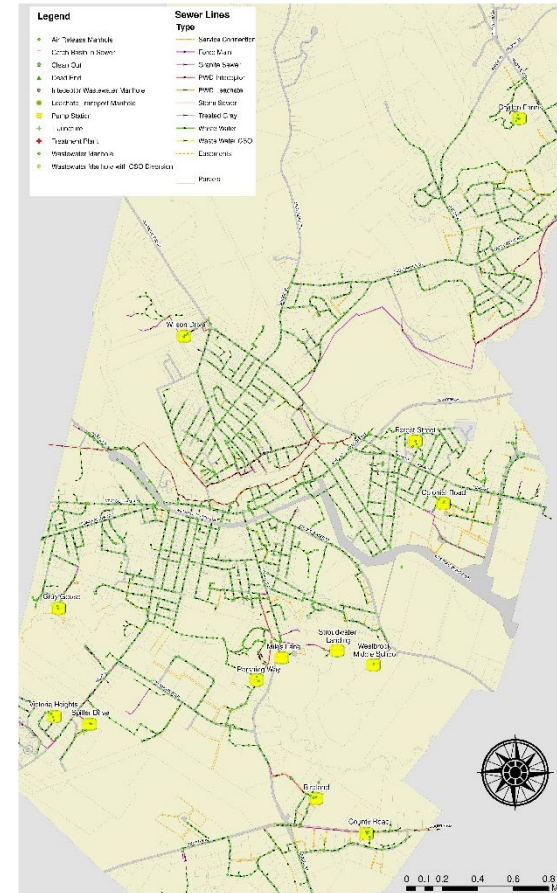
What We Do – An Overview

- 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

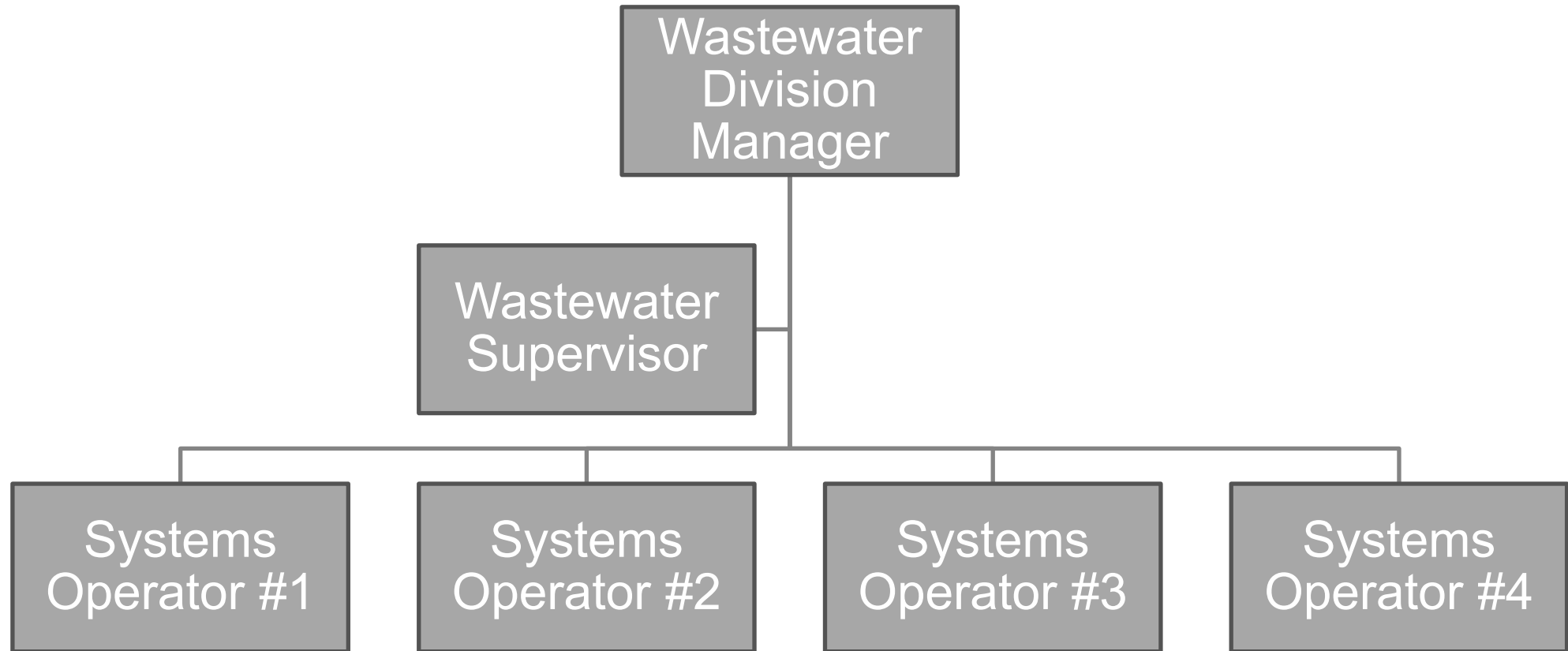


Daily Operations

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



Wastewater Staff



Major Changes in Wastewater Budget

Increases:

- Salaries, overtime, uniforms and benefits increased due to being fully staffed
- Portland Water District debt services continue to increase
- Increase in engineering for flow metering for next phase of Long-Term Control Plan with Department of Environmental Protection
- Increase in debt services due to Melcher Court Bonding & Vacuum Truck purchase
- Increase in Sewer Rehabilitation to account for lining projects & adjusts for the Main Street MaineDOT paving project

Decreases:

- Most SCADA upgrades at pump stations have been completed



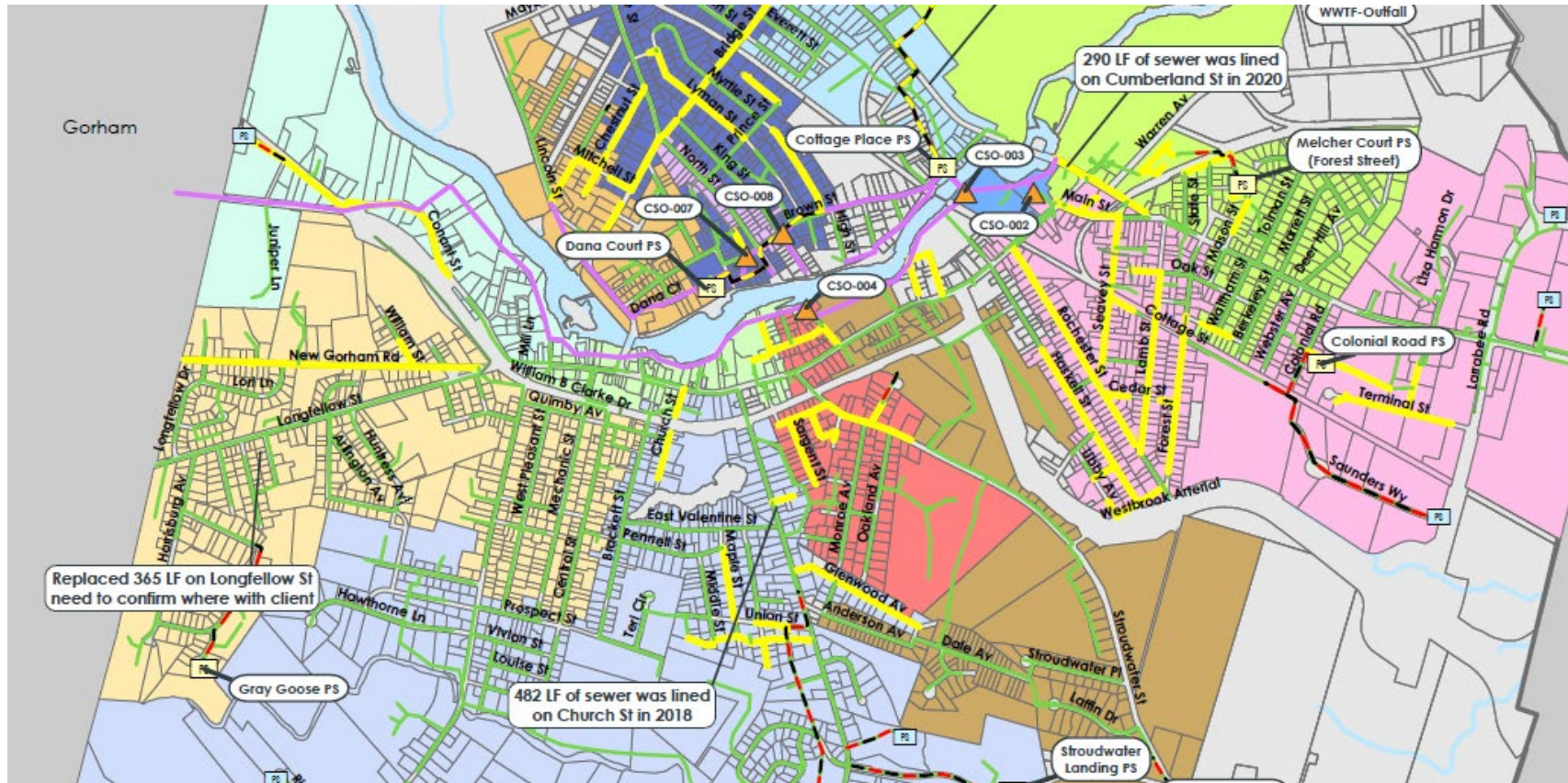
Wastewater Goals

Completed Goals

- Continued upgrade portions of the SCADA in the pump stations to better communicate wirelessly
- Worked with Portland Water District to bring Long-Term Control plan to 90% with the Maine DEP
- Completed design, put out to bid and began Melcher Court Pump Station upgrade
- Lined 3,010 LF of the Bridge Street sewer resulting in the entirety of Bridge Street being lined



Long-Term Control Plan Update



Long-Term Control Plan Update

Table 1-2 PWD & Westbrook 5-Year CSO Master Plan - Planning-Level Capital Costs

Item	Description	Planning-Level Costs	Completion Date
CSO 002, 003, 004 Abatement Projects			
1	Project 003-2a: WP Meter Basin 102-97 Phase 1 Flow Metering	\$145,000	December 31, 2024
2	Project 003-2b: WP Meter Basin 102-97 Phase 2 SSES and I/I Identification	\$125,000-\$575,000	December 31, 2025
3	Project 003-3a: WP Meter Basin 102-13 Phase 1 Flow Metering	\$65,000	December 31, 2026
4	Project 003-3b: WP Meter Basin 102-13 Phase 2 SSES and I/I Identification	\$125,000-\$575,000	December 31, 2027
5	Project 003-1a: Design and Construct Offline Storage Tank	\$10,000,000	December 31, 2028
6	Project 003-2c: WP Meter Basin 102-97 Phase 3 Targeted I/I Removal	TBD	December 31, 2028
7	Project 003-2d: WP Meter Basin 102-97 Phase 4 Post-Const. Flow Metering	\$65,000	December 31, 2029
CSO 007 & 008 Abatement Projects			
8	Projects 007-1 and 008-1: CSO Confirmation Flow Metering	\$78,000	December 31, 2025
9	Project 007-2a: Dana Court Pump Station - Design and Construct Force Main Upgrades	\$543,000	December 31, 2028
Total Project Costs (See Note 2)		\$11,150,000-12,000,000	



Targeting Private I&I

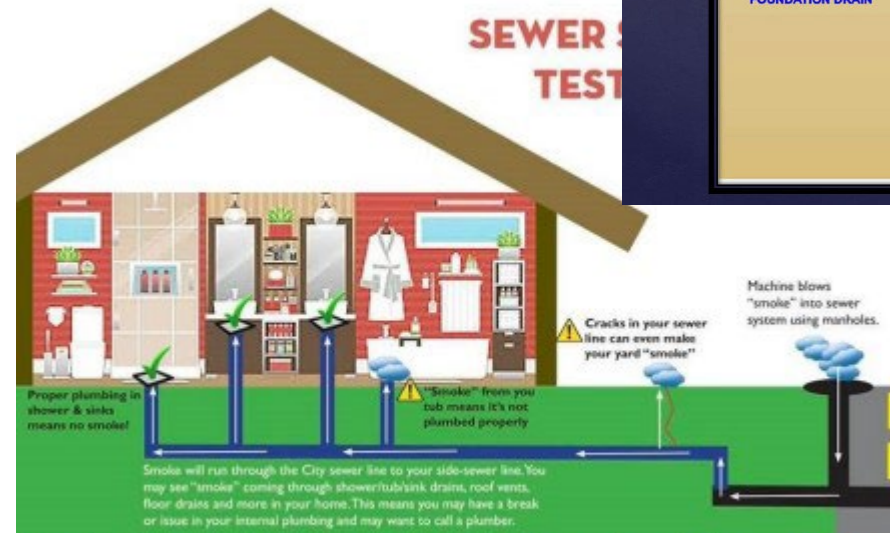
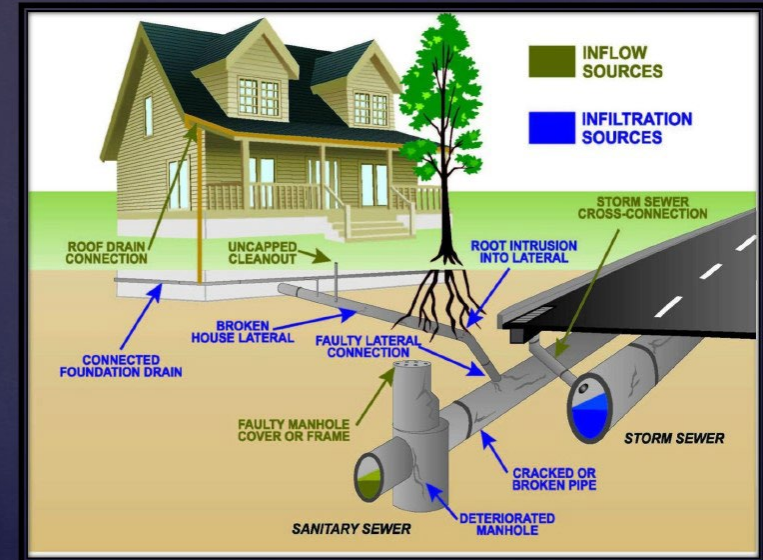
Why?

- Reduces localized overflows
- Improves operational efficiencies
- Reduces ongoing costs

Steps to Reduce

- Targets monitoring
- Identifying the problem
- Source Detection
- Rehabilitation

Infiltration/Inflow (I/I)



(Above) This graphic shows how the annual testing works, and where residents may notice some smoke.



Wastewater Goals for FY2025

- Upgrade Melcher Court PS and install force main and gravity sewer
- Line portions of Deer Hill Circle, Fairfield Ave and Rochester St
- Complete flow metering for the first two (2) meter basins identified in Wright-Pierce's LTCP
- 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



City of Westbrook
Sewer Fund
Budget Comparisons FY23, YTD FY24, & FY25

Account Numbers		FY24 YTD						
Account Description	80003250	FY23 Budgeted	FY23 Actuals	-/+	FY24 Budgeted	January 10, 2024	-/+	
Sewer Assessments	41200	(5,181,875)	(5,618,386)	(436,511)	(5,223,715)	(2,946,875)	2,276,840	
Interest/Penalties onTax	41900	(500)	(28)	472	(100)	(53)	47	
Investment Earnings	46000	(6,000)	(352,568)	(346,568)	(75,000)	(207,725)	(132,725)	
Transfer from Sewer Fund Balance			-	-	-		-	
Total Revenue		(5,188,375)	(5,970,983)	(782,608)	-	(5,298,815)	(3,154,653)	2,144,162
Expenses:								
Salaries - Regular FT/PT	51100	436,103	399,508	36,595	465,841	215,190	250,651	
Salaries - Overtime	51300	26,000	32,381	(6,381)	28,860	18,771	10,089	
Unused Comp Absences	51600	-	5,039	(5,039)	-	-	-	
Other Employee Benefits	52900	148,073	147,672	401	164,286	74,015	90,271	
Uniforms	52901	5,500	5,148	352	5,500	3,368	2,132	
Medical Exams/Physicals	52902	2,000	1,211	789	2,000	621	1,379	
Training	53300	5,000	5,945	(945)	5,000	932	4,068	
Architect & Engineering	53420	70,000	63,626	6,375	50,000	624	49,376	
Prof Services - IT/Technology	53520	500	346	154	500	-	500	
GIS Project	53617	55,200	59,229	(4,029)	57,400	28,699	28,701	
Portland Water Assessment	53622	3,266,359	3,448,110	(181,751)	3,811,152	1,861,548	1,949,604	
Utility/Water & Sewer	54105	3,000	1,455	1,545	3,000	572	2,428	
Maint Building & Grounds	54312	19,850	12,417	7,433	19,850	7,180	12,670	
Tech Consult Maint	54330	-	-	-	-	-	-	
Maint - Small Equip	54390	8,500	2,369	6,131	8,500	569	7,931	
Equipment & Vehicle Lease	54420	15,790	-	15,790	-	-	-	
Telephone	55320	13,000	8,984	4,016	13,000	5,283	7,717	
General Supplies	56000	20,000	7,333	12,667	20,000	7,405	12,595	
Chemical Supplies	56044	-	-	-	-	-	-	
Natural Gas	56210	10,000	3,613	6,387	10,000	849	9,151	
Electricity	56220	47,000	60,634	(13,634)	47,000	29,555	17,445	
Fuel, Gas	56260	5,000	6,753	(1,753)	8,000	1,913	6,087	
Fuel, Diesel	56261	10,000	4,040	5,960	10,000	1,170	8,830	
Vehicle Supplies/Auto Parts	56700	6,500	5,812	688	6,500	569	5,931	
Vehicles, New	57320	-	-	-	-	-	-	
Furniture/Fixtures	57330	-	-	-	-	-	-	
Capital Technology Hardware	57340	50,000	47,964	2,036	50,000	1,958	48,043	
Small Equipment	57390	30,000	31,800	(1,800)	30,000	8,402	21,598	
Reline Work - Sewer Rehab.	57400	332,000	304,066	27,934	200,000	56,809	143,191	
Depreciation	57900	1,680,000	1,715,142	(35,142)				
Dues & Memberships	58100	2,000	1,764	236	2,000	120	1,880	
Debt - Interest	58310	323,225	316,361	6,864	298,096	161,677	136,419	
Sludge Disposal	58981	6,000	2,438	3,562	6,000	-	6,000	
Inspection - TV	58982	30,000	29,136	864	20,000	7,145	12,855	
Casting/Brick/Pipe	58983	28,000	21,312	6,688	25,000	7,096	17,904	
NPDES	59000	115,000	106,045	8,955	70,000	34,178	35,823	
Transfer to Capital Project Fund	59400	-	-	-	-	60,000	(60,000)	
Total Expenses		6,769,600	6,857,650	(88,050)	5,437,485	2,596,217	2,841,268	
Total Sewer Surplus / (Deficit)		(1,581,225)	(886,668)	(886,668)	(138,670)	558,436	558,436	

FY25 Budgeted	% Bud Inc. FY24/FY25
(5,598,933)	7.2%
(100)	0.0%
(75,000)	0.0%
	0.0%
(5,674,033)	79.9%
499,829	7.3%
40,000	38.6%
-	0.0%
169,203	3.0%
7,000	27.3%
2,000	0.0%
5,000	0.0%
155,000	210.0%
-	-100.0%
59,000	2.8%
4,074,014	6.9%
3,000	0.0%
20,000	0.8%
-	0.0%
8,500	0.0%
-	0.0%
13,000	0.0%
20,000	0.0%
-	0.0%
10,000	0.0%
60,000	27.7%
8,000	0.0%
10,000	0.0%
6,500	0.0%
-	0.0%
-	0.0%
25,000	-50.0%
30,000	0.0%
250,000	25.0%
2,000	0.0%
374,539	25.6%
6,000	0.0%
20,000	0.0%
25,000	0.0%
70,000	0.0%
-	0.0%
5,972,585	9.8%
(298,552)	

**City of Westbrook
Sewer Fund
Budget FY25**

Account Description	FY24 Budget	FY25 Budget	+/-
Sewer Assessments	\$ (5,223,715.00)	\$ (5,598,933.00)	
Interest/Penalties onTax	\$ (100.00)	\$ (100.00)	
Investment Earnings	\$ (75,000.00)	\$ (75,000.00)	
Transfer from Sewer Fund Balance	\$ -	\$ -	
Total Revenue	(5,298,815)	(5,674,033)	7.1%

Expenses:

Salaries - Regular	\$ 465,841	\$ 499,829	\$ 33,988
Salaries - Overtime	\$ 28,860	\$ 40,000	\$ 11,140
Cash In	\$ -	\$ -	\$ -
Other Employee Benefits	\$ 164,286	\$ 169,203	\$ 4,917
Uniforms	\$ 5,500	\$ 7,000	\$ 1,500
Medical Exams/Physicals	\$ 2,000	\$ 2,000	\$ -
Training	\$ 5,000	\$ 5,000	\$ -
Architect & Engineering	\$ 50,000	\$ 155,000	\$ 105,000
Prof Services - IT/Technology	\$ 500	\$ -	\$ (500)
GIS Project	\$ 57,400	\$ 59,000	\$ 1,600
Portland Water Assessment	\$ 3,811,152	\$ 4,074,014	\$ 262,862
Utility/Water & Sewer	\$ 3,000	\$ 3,000	\$ -
Maint Building & Grounds	\$ 19,850	\$ 20,000	\$ 150
Tech Consult Maint	\$ -	\$ -	\$ -
Maint - Small Equip	\$ 8,500	\$ 8,500	\$ -
Equipment & Vehicle Lease	\$ -	\$ -	\$ -
Tel - Push Talk	\$ 13,000	\$ 13,000	\$ -
General Supplies	\$ 20,000	\$ 20,000	\$ -
Natural Gas	\$ 10,000	\$ 10,000	\$ -
Electricity	\$ 47,000	\$ 60,000	\$ 13,000
Fuel, Gas	\$ 8,000	\$ 8,000	\$ -
Fuel, Diesel	\$ 10,000	\$ 10,000	\$ -
Auto Parts	\$ 6,500	\$ 6,500	\$ -
Furniture/Fixtures	\$ -	\$ -	\$ -
Hardware/SCADA	\$ 50,000	\$ 25,000	\$ (25,000)
Small Equipment	\$ 30,000	\$ 30,000	\$ -
Reline Work - Sewer Rehab.	\$ 200,000	\$ 250,000	\$ 50,000
Depreciation			
Dues & Memberships	\$ 2,000	\$ 2,000	\$ -
Debt Service -Principal & Interest	\$ 298,096	\$ 374,539	\$ 76,443
Sludge Disposal	\$ 6,000	\$ 6,000	\$ -
Inspection - TV	\$ 20,000	\$ 20,000	\$ -
Casting/Brick/Pipe	\$ 25,000	\$ 25,000	\$ -
NPDES	\$ 70,000	\$ 70,000	\$ -
Transfer to Capital Project Fund	\$ -	\$ -	\$ -
Total Expenses	\$ 5,437,485	\$ 5,972,585	\$ 535,100
Total City Expenses	\$ 1,626,333	\$ 1,898,571	\$ 272,238

Key:

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

Total Sewer Surplus / (Deficit) **(138,670) (298,552)**

City of Westbrook FY2023-2024

Sewer Fund Vendor List

Account	Account Name	Total Budget	Vendors
52901	Uniforms	\$5,500	Cintas Corporation, Horizon Solutions, Lamey Wellehan, Pine Environmental
52902	Medical Exams/ Physicals	\$2,000	Cintas Corporation, Bayside Employee Health Center
53300	Professional EE Training & Travel	\$5,000	American Red Cross, ASCE, Maine Rural Water Association, NASSCO, NEIWPC, 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, Ed's Batteries, EJ Prescott, G&E Roofing, Glidden Paving, Grainger, Hayes Pump, HD Supply, Home Depot, Honeywell, K & S Doors, KL Jack, Lowes, Overhead Door, Patriot Mechanical, Power Products, PTI Paving, Shaw Brothers, Southworth-Milton, Stevens Electric, Stultz Electric, Timken Motor and Crane Services
54390	Maintenance - Small Equipment	\$8,500	Aubuchon Hardware, C N Wood Enviro LLC, Cummins Northeast, Fastenal, Gorman Rupp Pump, Grainger, Hall Implement, Hayes Pump, Home Depot, Honeywell, Jack Young Co, K & S Doors, Lowes, KL Jack, MB Tractor Equipment, MSA Gas Meters, Patriot Mechanical, Pine Tree Environmental, Plummers Hardware, Portland North Truck Center, Southworth-Milton Inc, Stevens Electric & Pump, Stultz Electric, Visual Imaging Resources
55320	Telephone - Push Talk	\$13,000	AT&T, Corey Electric, GoNetSpeed, Otelco Telecommunications , Verizon Wireless
56000	General Supplies	\$20,000	Adobe, Amazon, Goodwill, Grainger, Horizon Solutions, Lowes, Pine Environmental, Plummers Hardware, Spillers, Staples, Walsh Printing & Graphics, WB Mason
56210	Natural Gas	\$10,000	Northern Utilities, Suburban Propane
56220	Electricity	\$47,000	Central Maine Power, Constellation Newergy Inc, Corey Electric
56700	Vehicle Supplies/Auto Parts	\$6,500	Adams & Fogg, Advance Auto Parts, Aqua Solutions Inc, Atlantic Broom Service, C N Wood Enviro, Corey Electric, Cummings Northeast, DeVivo Bus Sales , Eastern Electric, Genuine Parts Company, Goodyear Tire, Hayes Pump, Hews Co, Howard P Fairfield, Hydraulic Hose & Assembly, Jack Young Co, Jordan Equipment, K L Jack Co, Lee Dodge, MB Tractor Equipment, McFarland Spring, Messer Truck Equipment, Morrison & Sylvester, MSA Meters, NAPA, Northland Holder, Nortrax, O'Connor GMC, Overhead Door, Portland North Truck, PRC Industrial Supply , PROLine Products, 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, Verizon Wireless

City of Westbrook FY2023-2024

Sewer Fund Vendor List

57390	Small Equipment	\$30,000	CN Wood, Cummins Inc, Eastern Electric, Ed's Batteries, EJ Prescott, Faulkner Welding, Genuine Parts Company, Handyman Rental, Hayes Pump, Home Depot, Horizon Solutions, K & S Doors, K L Jack, Lowes, MSA Meters, NAPA, Nortrax, Overhead Door, Pine Environmental Services, Plummers Hardware, Portland North Truck, Power Products, Stevens Electric, Stultz Electric, SupplyWorks, Tenco, Timken Motor and Crane Services , 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, Grainger, Hayes Pump, Home Depot, Hydraulic Hose & Assembly, Les Wilson & Sons, Lowes, Messer, MSA Gas Meters, Overhead Door, PRC Industrial Supply , RJ Grondin, Rowe Ford, Shaw Brothers, Stevens Electrical, Tenco, Treasurer State of Maine, Westbrook Service Center, Zoom Drain
58981	Sludge Disposal	\$2,000	Pine Tree Waste
58982	Sewer Inspection - TV	\$20,000	Eastcom Associates, MiniCam, 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, Suburban Security, Treasurer State of Maine, Windham Rental
59000	NPDES	\$70,000	Cumberland County Soil & Water Conservation District, Long Creek Watershed Management District Restoration, Sterling Stormwater, Walsh Printing & Graphics

**Portland Water District
Annual Wastewater Assessment Meeting - Westbrook
Meeting Date: November 1, 2023 at 3:00**

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

Agenda

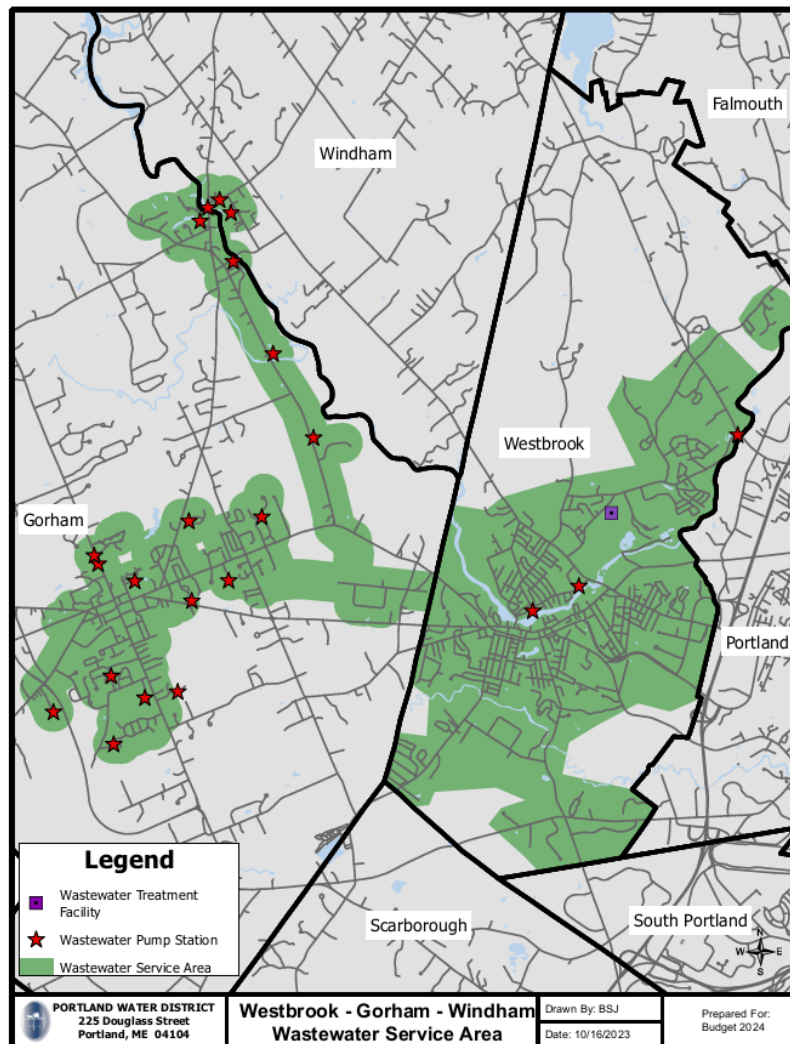
1. 2024 Wastewater Assessment - \$3,995,964 – \$272,868 or 7.3% higher
2. Wastewater Operational and Capital Plans
 - Treatment Plant Aeration Project
 - Treatment Capacity and 2024 Capacity Study and Allocation
 - CSO Long-Term Control Plan Update
 - Biosolids Master Plan
3. Water System
 - Water rate increase (6.4%) scheduled for January 1, 2024, including 5.7% Public Fire Protection.
 - Meter/meter reading
 - District charter change

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Fund: Wastewater - Westbrook

Background

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



Summary of Services 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
\$5,598,933 on 4,828
Customers (avg.
\$96.64/month)*

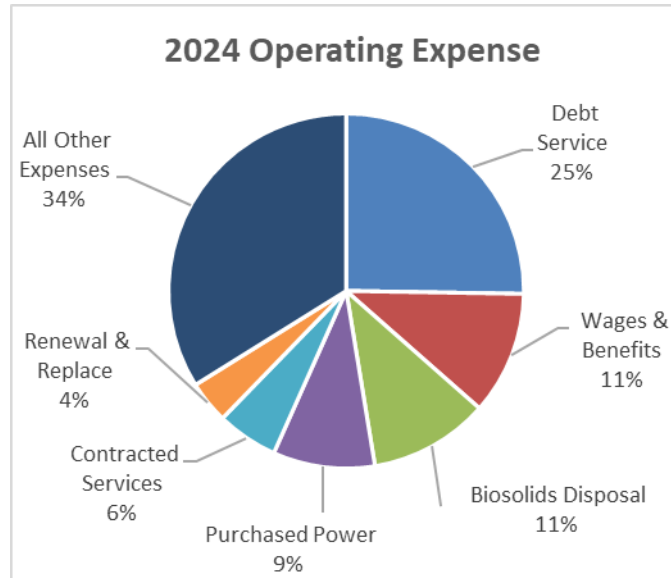
Fund: Wastewater - Westbrook

2024 Financial Summary

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

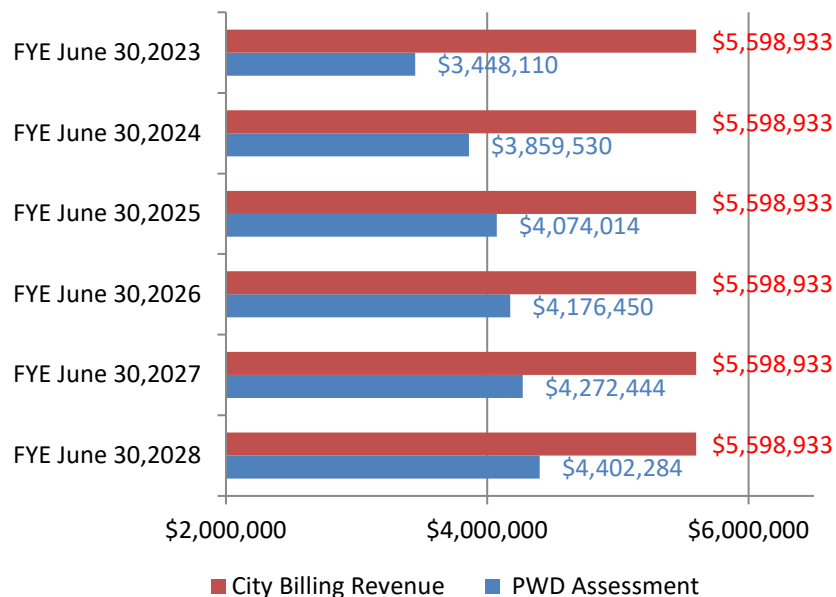
The proposed Operating Expense and Capital budgets are \$4,236,193 and \$639,700, respectively.

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



Assessment Compared to Ratepayers' Billing

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



Revenue Assumptions:

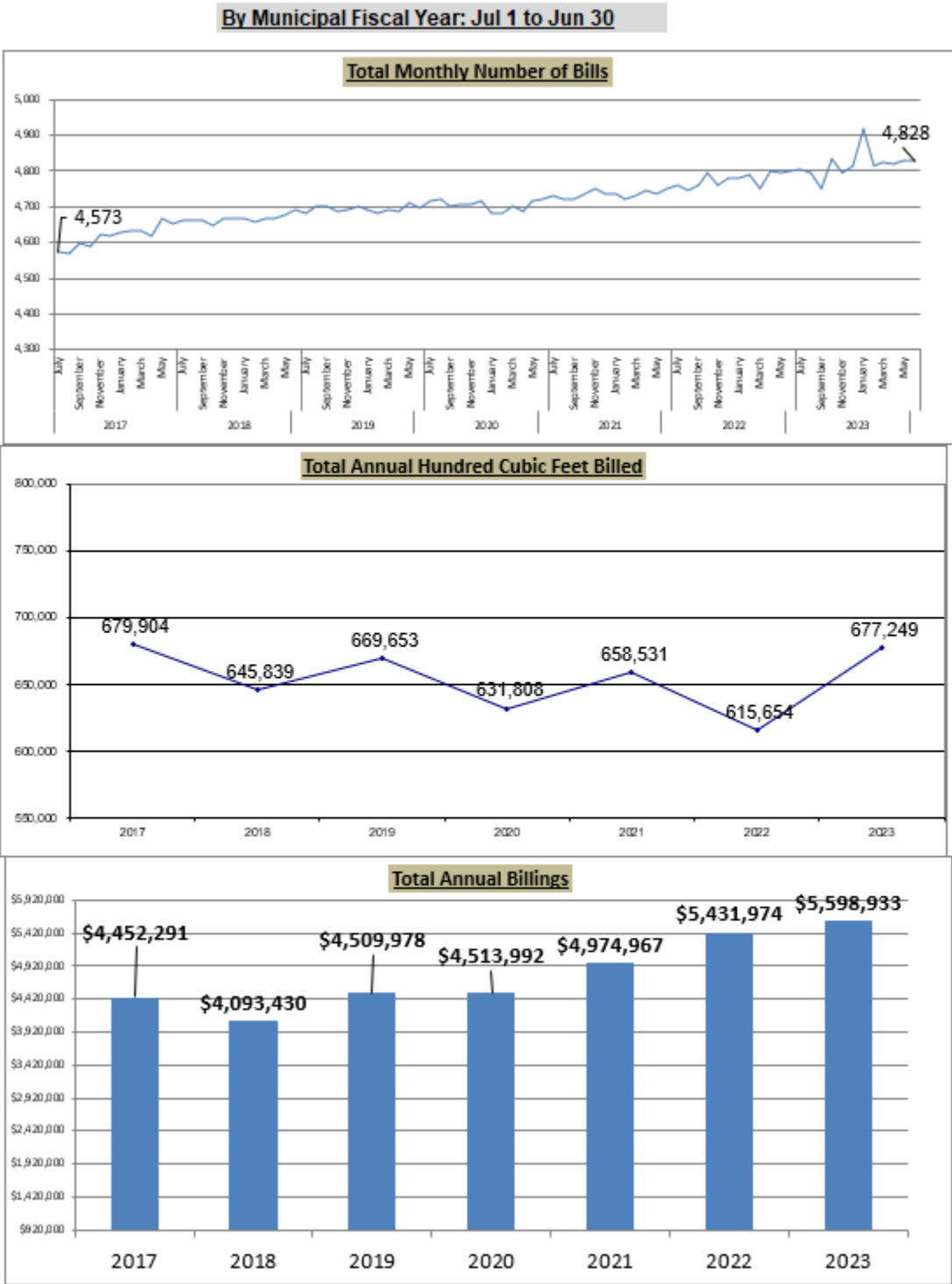
- Consumption assumed is based on consumption through June 30, 2023

- Rates History:

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

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



2024 Operating Expense Highlights

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

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

Biosolids Disposal – Following several years of dramatically increasing biosolids costs, related to legislative action limiting the options available in Maine, costs have stabilized with a new biosolids management contract. The projected volume wet tons of biosolids processed at the Westbrook Regional Wastewater Treatment Facility (WRWWTF) is expected to decrease 5.5% and the budgeted per unit cost of disposal will decrease 2.0%. Overall, the budget in Westbrook is anticipated to decrease \$28,873 or 5.9%.

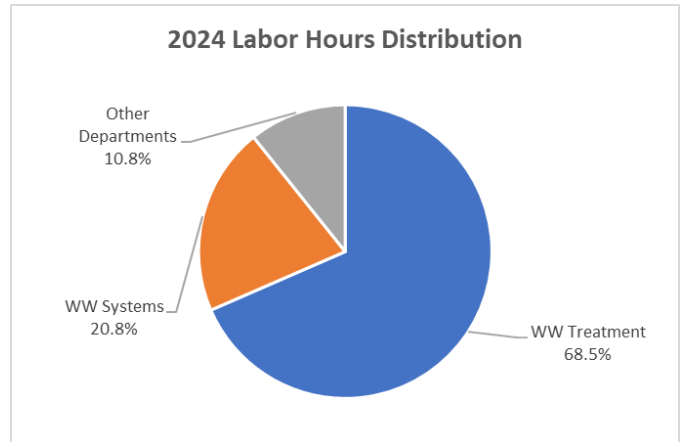
Contracted Services – Overall this category was up \$53,898 or 29.6%. This increase is mostly driven by higher maintenance needs at the WRWWTF (\$46.4k). This includes annual maintenance on the new aeration system and work with the chemical piping system.

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

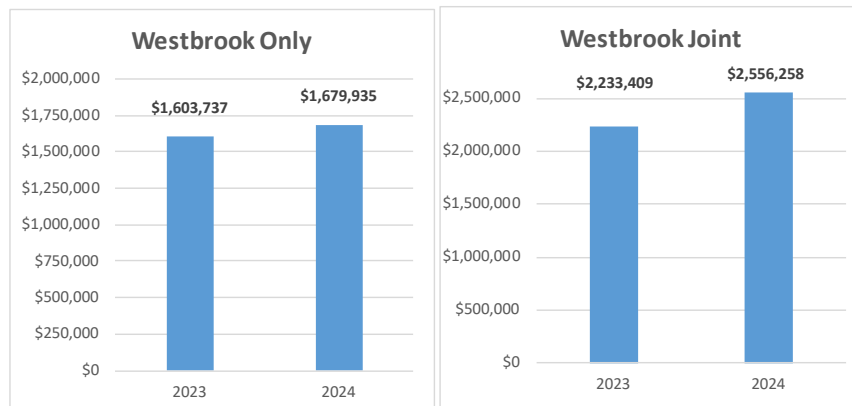
Support Services – These costs are related to general work done that cannot be directly charged to a fund as noted above (such as customer billing or information technology) or work done on behalf of several municipalities at the same time (engineering or laboratory services) that is allocated based on the value to each fund. Overall, Support Services increased \$61,833 or 6.6%.

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

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



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



- Overall costs up \$76.2k (4.8%)
- Operating Expense up \$138.9k (11.8%)
- R&R was reduced \$60.6k

- Overall Westbrook JT up 14.9%
- Westbrook's share up 14.5% (\$322k)
- Westbrook's share of Debt Service up \$157k

Projections for Rate-Making Purposes

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

Major Assumptions:

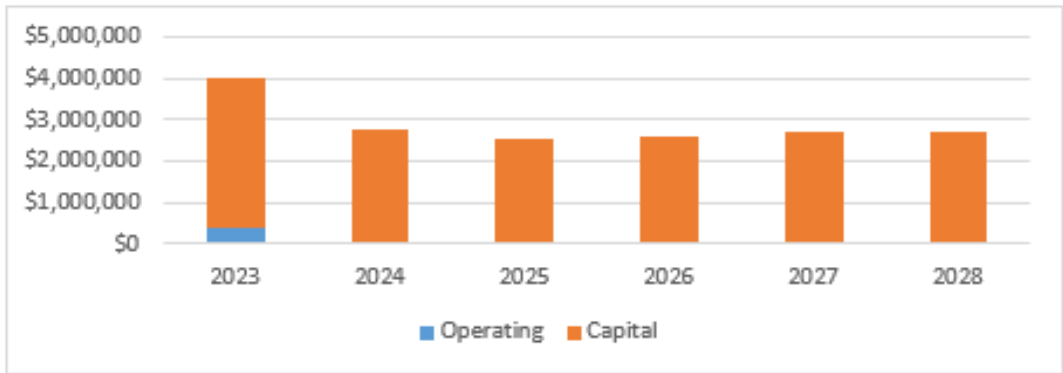
The assumptions incorporated in the projections are as follows:

- Salary increases of 5.0% in 2024 and 3.5% in other years. No change in number of employees.
- Benefit increases of 6% each year.
- Other expenses increase between 3% and 5% each year.
- New debt service and renewal/replacement fund expenditures consistent with the 2024 5-year capital plan, which includes close to \$9.7 million of capital projects. Most new debt assumed a 20-year life between 1% and 4.5% interest depending on funding source and year of financing

Summary of Projection Impact:

Assessment is projected to increase to \$4,460,515 in 2028, a 11% increase over 2024 Budget.

Reserve Fund Balances



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

2022	2023	2024	2025	2026	2027	2028
24%	24%	25%	24%	22%	22%	21%

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

2022	2023	2024	2025	2026	2027	2028
128%	124%	115%	118%	120%	119%	120%

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

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

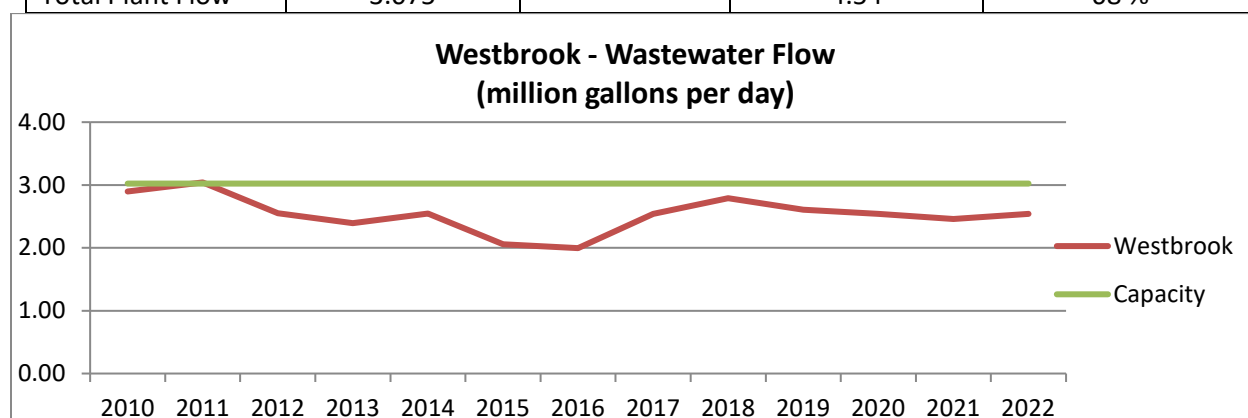
Capital Expenditures: (See details in the Capital Expenditure section) Target Balance: \$1,149,000

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

Operation Summary Westbrook

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

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



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

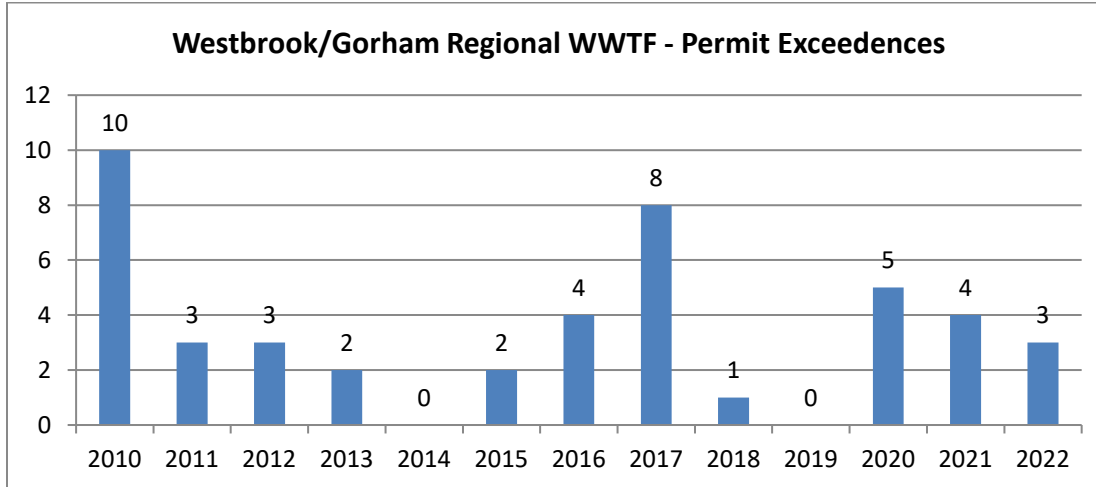
WGWWTF Parameter	DEP Limit	2022 Facility Average
Biosolids Removed (wet tons/month)	N/A	339 wet ton/month

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



Wastewater Conveyance – interceptors and pumping stations

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

2023 Other Highlights

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

provided ample flow and the results are being used to calibrate the model. The draft report is expected this year. This plan will assess the reductions in overflows following the significant work over the past 5 years and develop initiatives required to further reduce overflow frequency and volumes.

2024 Work Plan

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

Capital Summary

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

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

Gorham/Westbrook/Windham Wastewater

Westbrook Regional Treatment Facility

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

- Plant water system (2006)
- Clarifier scum removal (2006)
- Scum handling, and sludge conveyances control (2006)
- Plant electrical system – Standby Generator (2008)
- Polymer system (2010), Polymer system improvements (2019)
- RAS pumps (2011)
- Plant Control System (2013)
- RAS distribution and flow split to the secondary clarifiers (2014)
- Sludge Dewatering (2018)
- Aeration and Secondary Clarifiers (2023)
- Additional Screening at influent Pump stations (2023)
- New power distribution system and switchgear

Proposed major modifications for a headworks upgrade were set aside in favor of installing screens at the two major pump stations feeding the treatment plant. Start-up of these systems at the Cottage Place and East Bridge St. Pump Stations in 2008 successfully eliminated pump plugging and has reduced the quantity of rags at the treatment plant. Additional improvements to reduce the spacing of the screens at the pump stations were installed in 2023 to further remove rags and debris from the plant influent.

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

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

The secondary clarification process at Westbrook has not been upgraded or modified since its original construction and the sludge withdrawal mechanisms are nearing the end of their useful life based on an assessment of the clarifiers completed in 2016. Construction of the aeration and secondary clarification upgrade was completed in the fall of 2023. This upgrade included a new power distribution system and electrical switchgear.

Gorham/Westbrook/Windham Wastewater (continued)

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

In 2020 PWD competitively pre-procured a 3-way valve and pneumatic actuator to create a 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**



**2019 CIP 416 project 3026 - Polymer
System Improvements**

Gorham/Westbrook/Windham Wastewater (continued)

Westbrook – Sewer System

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

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

Gorham/Windham – Pump Stations and Collector Systems

In May of 2008, flows from the Town of Windham, the Maine Correctional Center and the Little Falls section of Gorham were re-directed to the Westbrook/Gorham/Windham WWTF for treatment. This action led to the closure of two outfalls into the Presumpscot River. This project also led to an upgrade of the Tow Path pump station and the decommissioning of the treatment plant in Little Falls in 2010. Due to the relatively young age of most of Gorham's other pump stations, preventive maintenance, condition assessment through CCTV inspection of buried infrastructure, and minor repairs have been the focus in recent years.

To increase reliability and improve service during power outages, standby generators have been installed at most of the pump stations. In 2014, an assessment of all of the pump stations in the system was completed, and stations with identified needs were then flagged for more detailed investigation. As a result of those studies, upgrades at the Androscoggin PS (CIP #180 project 2317) and Canterbury Pines PS (CIP #60 project 1117) were completed by the end of 2017.

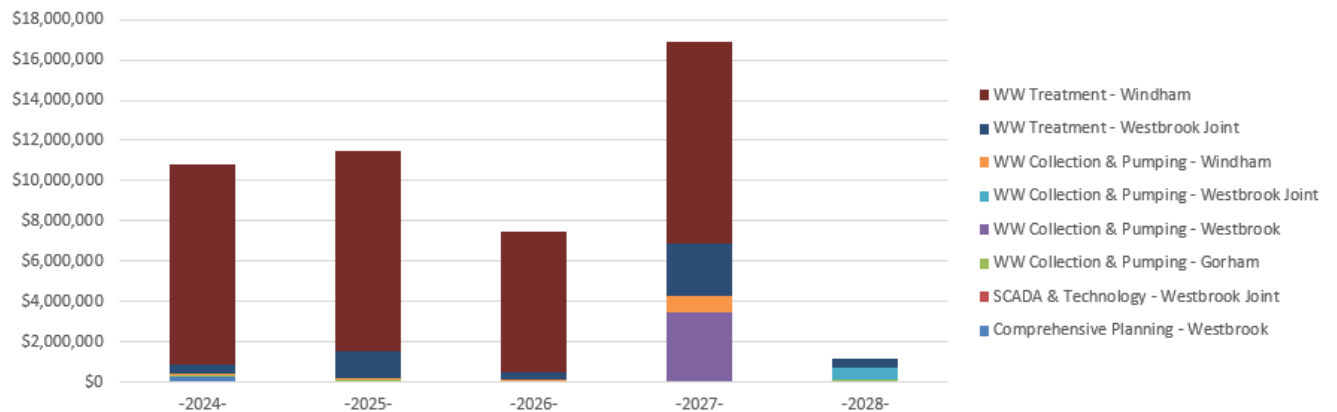
To ensure that accurate wastewater flow is measured and used for allocating operating costs to the Town of Gorham, a flow meter was installed to measure the flow from the Town of Gorham to the Westbrook/ Gorham/Windham WWTF. This meter was installed and is maintained by a third-party vendor as part of PWD's extensive flow monitoring program.

Gorham/Westbrook/Windham Wastewater (continued)

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

Program Summary

	-2024-	-2025-	-2026-	-2027-	-2028-
<input checked="" type="checkbox"/> Comprehensive Planning	\$300,000				
Westbrook	\$300,000				
<input checked="" type="checkbox"/> SCADA & Technology					\$50,000
Westbrook Joint					\$50,000
<input checked="" type="checkbox"/> WW Collection & Pumping	\$95,000	\$170,000	\$95,000	\$4,310,000	\$695,000
Gorham	\$35,000	\$110,000	\$35,000	\$35,000	\$35,000
Westbrook	\$40,000	\$40,000	\$40,000	\$3,440,000	\$40,000
Westbrook Joint					\$600,000
Windham	\$20,000	\$20,000	\$20,000	\$835,000	\$20,000
<input checked="" type="checkbox"/> WW Treatment	\$10,450,000	\$11,335,000	\$7,395,000	\$12,585,000	\$395,000
Westbrook Joint	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$395,000
Windham	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000	
Grand Total	\$10,845,000	\$11,505,000	\$7,490,000	\$16,895,000	\$1,140,000



	-2024-	-2025-	-2026-	-2027-	-2028-
Bond		\$750,000	\$200,000	\$5,950,000	\$600,000
Grant				\$6,450,000	
Renewal and Replacement	\$845,000	\$755,000	\$290,000	\$945,000	\$540,000
Bond SRF	\$10,000,000	\$10,000,000	\$7,000,000	\$3,550,000	
Grand Total	\$10,845,000	\$11,505,000	\$7,490,000	\$16,895,000	\$1,140,000

Gorham/Westbrook/Windham Wastewater (continued)

Projects by Program

	-2024-	-2025-	-2026-	-2027-	-2028-
Comprehensive Planning	\$300,000				
3/3301/WWGWWTF Capacity Study	\$300,000				
SCADA & Technology					\$50,000
177/3127/Westbrook SCADA Server Replacement Program					\$50,000
WW Collection & Pumping	\$95,000	\$170,000	\$95,000	\$4,310,000	\$695,000
180/3138/Windham- Little Falls WW System - R&R	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
180/3139/Windham - Depot St/Keddy Mill Forcemain				\$750,000	
180/3183/Route 202 Telemetry Upgrade				\$65,000	
29/3231/PEND - CSO Storage Facility				\$3,200,000	
411/3134/Westbrook WW Systems R&R	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
411/3302/Cottage Place PS- Generator/Transfer Repl.					\$600,000
411/3306/East Bridge St PS - Generator/Transfer Replac.					
60/3137/Gorham WW Pump Station - R&R	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
60/3180/Briarwood PS Telemetry Upgrade		\$75,000			
60/3275/Dana Ct. Forcemain Replacement				\$200,000	
WW Treatment	\$10,450,000	\$11,335,000	\$7,395,000	\$12,585,000	\$395,000
182/3241/North Windham WWTF	\$10,000,000	\$10,000,000	\$7,000,000	\$10,000,000	
416/3132/Westbrook Gorham Windham WWTF R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls			\$125,000		
416/3166/Process Area Ventilation Upgrades		\$750,000			
416/3190/Access Road and Parking Lot Resurfacing	\$400,000				
416/3191/TWAS Mixing System Replacement		\$150,000			
416/3198/WAS and GBT System Upgrade/Rehabilitation		\$350,000			
416/3199/RAS Pumping Upgrade					\$300,000
416/3200/Hypochlorite Storage Tank Replacement					
416/3232/Septage Screening Facilities			\$200,000	\$2,000,000	
416/3256/Dewatered Sludge Conveyance Upgrade				\$500,000	
416/3270/Process Valve/Actuator Replacement			\$20,000		\$20,000
416/3271/Structural/Architectural Assessment/Rehab		\$35,000		\$35,000	
416/3273/Outfall Condition Assessment					\$25,000
Grand Total	\$10,845,000	\$11,505,000	\$7,490,000	\$16,895,000	\$1,140,000

Subprogram # 29**Westbrook CSO Abatement**

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

Manager: Poulin, Charlene
Priority: Regulatory mandate

Description:

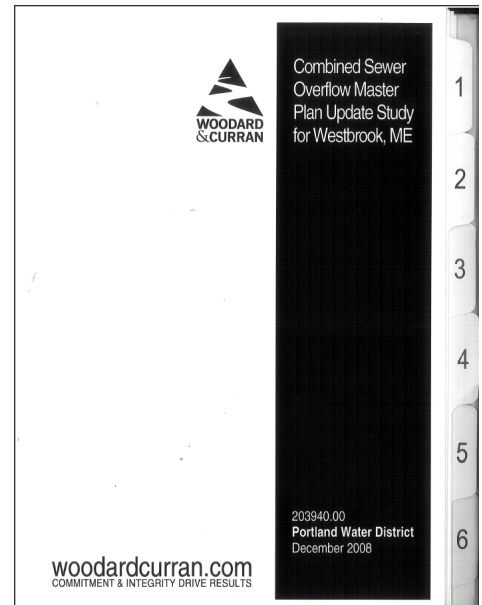
This project is driven by the permit requirement to mitigate combined sewer overflows in the City of Westbrook. The most recent 5 year portion of the mitigation, or Long Term Control Plan, has been in large part completed. The plan is currently undergoing another review and will be updated with the next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

	-2024-	-2025-	-2026-	-2027-	-2028-
<input type="checkbox"/> Bond				\$3,200,000	
<input 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
Funding: R & R - Wastewater facility

Manager: Pellerin, Greg
Priority: Upgrade obsolete

Description:

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

Justification / Impact:

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

History:

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

Budget Summary:

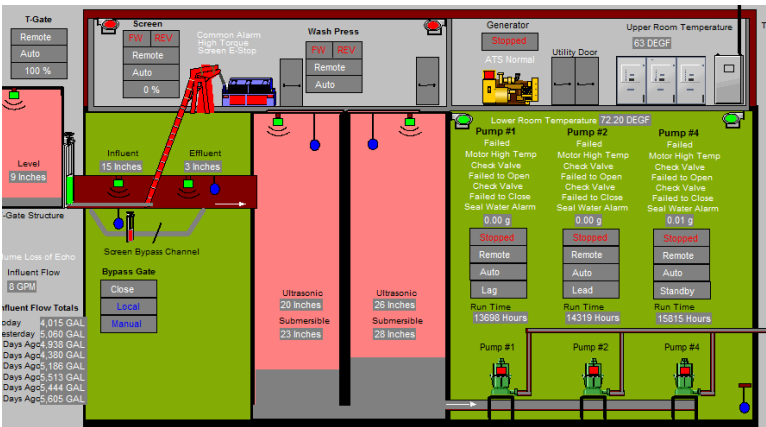
	-2024-	-2025-	-2026-	-2027-	-2028-
<input type="checkbox"/> Renewal and Replacement					\$50,000
<input type="checkbox"/> SCADA & Technology					\$50,000
177/3127/Westbrook SCADA Server Replacement Program					\$50,000
Grand Total					\$50,000

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
Charlene
Funding: R&R - Wastewater – Div. 62
replacement

Manager: Poulin,

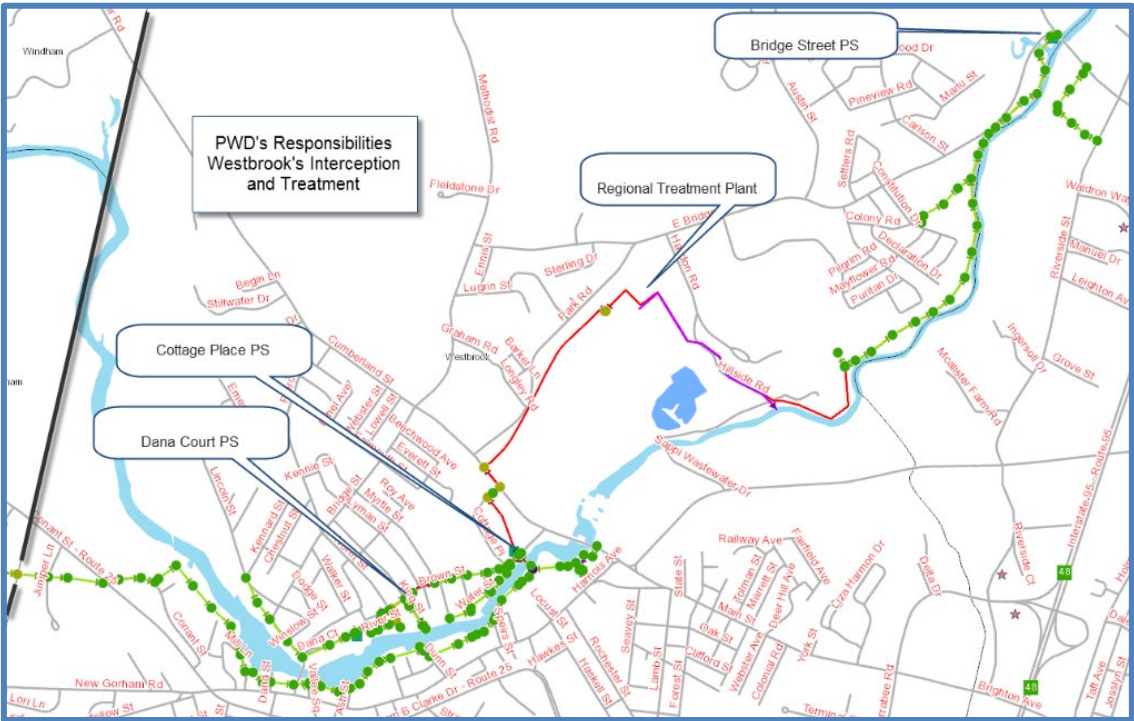
Priority: Routine

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

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

Budget Summary:

	-2024-	-2025-	-2026-	-2027-	-2028-
<input type="checkbox"/> Bond					\$600,000
<input type="checkbox"/> WW Collection & Pumping					\$600,000
411/3302/Cottage Place PS- Generator/Transfer Repl.					\$600,000
<input type="checkbox"/> Renewal and Replacement	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
<input type="checkbox"/> WW Collection & Pumping	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
411/3134/Westbrook WW Systems R&R	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
411/3306/East Bridge St PS - Generator/Transfer Replac.					
Grand Total	\$40,000	\$40,000	\$40,000	\$40,000	\$640,000



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:**

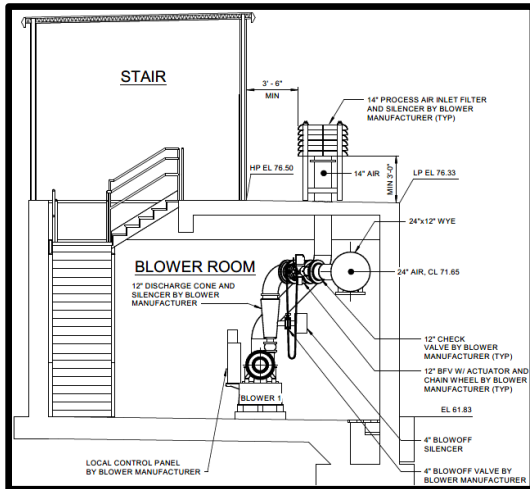
To meet the goals of this subprogram PWD is continuously engaged in the Capital Improvement Program Process described in the Introduction of the Capital Expenditures section. Recent planning and design efforts include the Aeration System Alternatives Analysis (2015), the Secondary Clarifier Condition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

Budget Summary:

	-2024-	-2025-	-2026-	-2027-	-2028-
Bond		\$750,000	\$200,000	\$2,000,000	
WW Treatment		\$750,000	\$200,000	\$2,000,000	
416/3166/Process Area Ventilation Upgrades		\$750,000			
416/3232/Septage Screening Facilities			\$200,000	\$2,000,000	
Renewal and Replacement	\$450,000	\$585,000	\$195,000	\$585,000	\$395,000
WW Treatment	\$450,000	\$585,000	\$195,000	\$585,000	\$395,000
416/3132/Westbrook Gorham Windham WWTF R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
416/3159/Plant Water System Rehab/Controls			\$125,000		
416/3190/Access Road and Parking Lot Resurfacing	\$400,000				
416/3191/TWAS Mixing System Replacement		\$150,000			
416/3198/WAS and GBT System Upgrade/Rehabilitation		\$350,000			
416/3199/RAS Pumping Upgrade					\$300,000
416/3200/Hypochlorite Storage Tank Replacement					
416/3256/Dewatered Sludge Conveyance Upgrade				\$500,000	
416/3270/Process Valve/Actuator Replacement			\$20,000		\$20,000
416/3271/Structural/Architectural Assessment/Rehab		\$35,000		\$35,000	
416/3273/Outfall Condition Assessment					\$25,000
Grand Total	\$450,000	\$1,335,000	\$395,000	\$2,585,000	\$395,000

Subprogram # 416 Westbrook Gorham Windham Regional WWTF

CIP 2020, Subprogram #416, Project # 3023: \$11,250,000 - Westbrook aeration and secondary clarifier upgrade. Construction Started in 2021 and was completed in the fall of 2023. To the left is a diagram of the below grade aeration blower building. Right is foundation being constructed and below is the completed blower building.



Subprogram # 60 **Westbrook WW Pump Stations - R&R**

Division: Wastewater - Westbrook
Funding: Bond and R&R – Wastewater – Div. 62
Manager: Poulin, Charlene
Priority: Routine replacement

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

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

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

Budget Summary:

	-2024-	-2025-	-2026-	-2027-	-2028-
<input type="checkbox"/> Renewal and Replacement					\$200,000
<input type="checkbox"/> WW Collection & Pumping					\$200,000
60/3275/Dana Ct. Forcemain Replacement					\$200,000
Grand Total					\$200,000

Previous Years on CIP: 2000 - present



East Bridge PS roof replacement completed fall of 2023

Subprogram # 421 Wastewater Asset Condition Evaluations

Division: Wastewater – Westbrook Gorham Windham
Greg

Manager: Pellerin,

Funding: R & R – Wastewater – Div. 64
Planning

Priority:

Description:

This subprogram will provide needed engineering evaluation and programming of similar asset classes across all wastewater treatment plants and critical influent pump stations and force mains. Many of the processes have been upgraded over the years but systems such as electrical and HVAC were not prioritized to be replaced but are critical to the overall operations. Performing engineering evaluations on these critical systems would be the first step in developing a long term plan to replace or upgrade these systems to meet current codes.

Justification / Impact:

Engineering evaluation to develop prioritized schedule and budget to upgrade electrical distribution and heating and ventilation systems across the major wastewater treatment plants. This was completed in 2017 and has led to multi-year CIP improvements as outlined in the evaluations. Many of these systems are original to the plants and pump stations (35- 40 years old). The goal is to upgrade these systems to meeting code and allow for additional capacity to meet the future needs.

Budget Summary:

	-2024-	-2025-	-2026-	-2027-	-2028-
<input type="checkbox"/> Renewal and Replacement	\$300,000				
<input type="checkbox"/> Comprehensive Planning	\$300,000				
3/3301/WWGWWTF Capacity Study	\$300,000				
Grand Total	\$300,000				

Previous Years on CIP: none

Related Projects: Subprogram # 3, Comprehensive Infrastructure Asset Management Plan

Procurement Issues: RFP for engineering procurement

- PWD has been discussing the treatment plant capacity allocated to the three communities that contribute to PWD's treatment plants; Westbrook, Gorham, and Windham. With continued and planned growth, PWD expect that some communities will reach their allocations in the future. A study is planned to more clearly understanding the amount and timing for capacity increases, the work that will be required to accommodate additional loadings at the treatment plant, and how those costs will be allocated. While growth pressures are emerging, the existing treatment plant, and the plan to understand development needs, should allow for the needs of all communities to be served.