

Town of Falmouth Wastewater Department, proposed O&M and Capital budgets 2014-15



TOWN OF FALMOUTH, MEMORANDUM

TO: NATHAN POORE
FROM: PETE CLARK
SUBJECT: PROPOSED 2014-15 BUDGET
DATE: MARCH 21, 2014
CC: ROBERT BOSCHEN

I offer the proposed sewer enterprise budget for the coming fiscal year.

This proposed budget provides cost of living wage increase, meets the expected operation and maintenance costs of the department, and maintains current funding levels towards the capital plan. That plan continues to remain viable for the short term despite the incorporation of expected needs and escalating costs for the Mill Creek pump station and force main, and infiltration reduction in the near term of the schedule. While this budget meets present needs, our planning for the coming year does include a rate review. At this time, we anticipate future budgets should include a moderate upward adjustment, primarily due to capital needs. The last increase took place in 2007.

Per your request, I would provide the following introductory overview of the enterprise budget.

The enterprise budget is typical of other town departments and comprised of similar categories, labor and benefits, contractual services, commodities, and capital improvements and debt. In addition, the enterprise budget includes six cost centers. The two "201", or Falmouth only, cost centers provide funding to the collection system and pump stations serving exclusively Falmouth and administrative functions related to the collection system and sewer billing. The four "202" cost centers provide funding towards pump stations utilized by both Falmouth and Cumberland, the treatment facility, sludge handling and disposal, and shared administrative costs.

The Falmouth system currently serves approximately 2,150 services in Falmouth and 1,200 in Cumberland, with these users funding the sewer "enterprise". Cumberland users are assessed a proportion of operational costs through a contractual agreement with the Portland Water District for shared services, pumping and treatment. This cost is proportional to the flow contributed. Historically, Cumberland's assessment yields approximately 20% to 26% of total treatment costs and approximately 40 to 45% of the cost to operate the Mill Creek and Johnson Road pump stations. These two stations, as well as the treatment plant, serve both communities.

Cumberland's share of capital cost in shared facilities derives from purchased capacity in the treatment facility, 30%, and from 35% to 64% in shared stations and sewer lines in accordance with the Town's contractual agreement with the Portland Water District. Fees for septic tank waste disposal, new connections, and interest also contribute a small percentage of the annual revenue.

As presented, this budget projects operational costs at levels very similar to previous years. It includes minor adjustments to certain commodity accounts based on expected variations. Labor costs include a modest cost of living increase, with similar adjustments to benefit costs. These regular costs have been conservatively estimated factoring logical fluctuations that we may see due to flow variations, unanticipated breakdown, labor needs, and potential commodity cost increases. Presuming that future operational costs will show similar incremental increase, our main budgetary concerns are capital replacement and renewal.

This budget considers major near term projects including Mill Creek pump station replacement, currently projected to cost \$3.9 M and the Mill Creek force main replacement, which represents an additional \$2 M investment. Other highlights of our capital planning include further study and capital replacement needs in the West Falmouth area, continued infiltration reduction effort, and anticipated equipment upgrades.

The following documents provide an overview of the department's proposal for the coming year. Additional detail is certainly available in support of the information presented.

Operations and Maintenance Budget

DEPARTMENT: Wastewater; Falmouth Enterprise Fund 040					
Account Number		Budget 2013-14	Anticipated 2013-14	Proposed Budget 2014-15	
Falmouth only cost centers including gross debt payments					
201	PUMP STATIONS AND LINES	559,048	493,258	587,386	Falmouth users 100 %
201-1	ADMINISTRATION	552,267	542,887	563,956	Includes \$160,714 debt offset 2014-15
Falmouth / Cumberland shared cost centers based on flow contribution					
202	TREATMENT PLANT	404,447	393,775	402,884	Falmouth users approx. 78%
202-1	PUMP STATIONS	48,182	42,634	43,852	Falmouth users approx. 60 %
202-2	SLUDGE HANDLING	164,252	142,684	155,238	Falmouth users approx. 78%
202-3	ADMINISTRATION	155,724	152,571	156,700	Falmouth users approx. 78%
DEPARTMENT TOTAL		1,883,920	1,767,809	1,910,017	
Account Number	Account Name				Line Item Budget Request Justification
LABOR & BENEFITS					
4010	FULL-TIME SALARIES	446,365	452,500	482,155	Funding for labor portion of the activities that serve the combined Falmouth / Cumberland system.
4030	OVERTIME	39,900	29,700	40,800	Funding for overtime labor weekends and off hours for non - exempt employees.
4050	HEALTH INSURANCE	90,570	86,200	100,480	Department's share of employer's health insurance premiums.
4060	RETIREMENT	28,179	33,700	36,636	Department's share of employer retirement contributions.
4070	SOCIAL SECURITY	36,946	37,300	39,015	Department's share of of employer Social Security.
4080	GROUP INSURANCE	222	70	222	Employer's share of the group life insurance.
4090	INCOME PROTECTION	2,526	1,106	2,526	Employers share of the income protection insurance cost.
4100	WORKER'S COMPENSATION	6,459	5,615	5,915	Funding for Worker's Compensation insurance based on the department's specific payroll, based on manual rate and the Town's experience rate.
SERVICES					
5010	POSTAGE	1,000	340	1,000	Postage and maintenance costs on the town hall mail equipment.
5020	TELEPHONE	4,925	3,130	4,475	Department's prorated share of town wide telephone expenses.
5030	TRANSPORTATION	50	0	50	Employer's cost reimbursement for use of personal vehicle.
5040	EDUCATION/MEETINGS	1,980	1,405	1,980	Cost for meetings and seminars, primarily required training to maintain employee certifications.
5070	MAPS/BLUEPRINTS	200	100	200	Funds for plan copies and updated tax maps.
5080	LEGAL/ADVERTISING	650	100	650	Public notices and advertising costs.

Operations and Maintenance Budget

DEPARTMENT: Wastewater; Falmouth Enterprise Fund 040					
Account Number		Budget 2013-14	Anticipated 2013-14	Proposed Budget 2014-15	
5100	BUILDING/CONTENTS	23,710	20,248	23,710	Department's share of vehicle and property insurance.
5200	ELECTRICITY	161,125	149,100	148,600	Funds for electric cost for the treatment plant and 28 pump stations. Annual costs may vary due to flow levels.
5220	WATER	2,100	1,400	2,100	Funds for potable water cost from the Portland Water District.
5230	FUEL OIL	30,600	24,250	31,700	Funds for heating oil and standby generator fuel cost at the treatment plant and pumps stations.
5300	MACHINES/EQUIPMENT	13,750	13,200	14,750	Funds for outside vendor cost related to maintenance of plant and pump station equipment such as generator preventive maintenance, specialized maintenance tasks/calibrations.
5310	VEHICLE MAINTENANCE	5,180	2,820	5,180	Preventive and breakdown maintenance cost for 3 department pick-ups and sewer cleaning machine.
5320	SEWER LINE MAINTENANCE	4,000	2,500	4,000	Hired vendor cost for sewer cleaning, inspection, or repairs.
5330	RADIO/RADAR MAINTENANCE	620	100	620	Vendor maintenance and repair of portable radios, vehicle radios, telemetry communications network.
5400	LEGAL SERVICES	6,300	2,000	6,300	Funds for legal assistance related to ordinance, right of way, questions.
5410	COMPUTER SERVICES	10,625	9,100	10,625	Funds for a prorated share of maintenance agreements for software and funds fiber optic link to network servers.
5430	AUDIT	3,000	2,800	3,000	Funds for the prorated share of the annual Town audit.
5450	SAFETY SERVICES	2,290	4,800	2,790	Funds vendor cost for mandated safety training.
5490	OTHER PROFESSIONAL SERVICES	8,220	6,450	9,020	Funds for outside engineering and technical assistance.
5491	LABORATORY MONITORING	6,290	6,075	6,315	Hired vendor cost for lab testing for discharge compliance monitoring.
5500	MAINTENANCE/BUILDINGS	4,800	4,800	4,800	Funds for vendor cost for fabrication, electrical work, and specialized maintenance work on department buildings.
5610	EQUIPMENT RENTAL	400	0	400	Funds for rental of small equipment.
5620	UNIFORM RENTALS	2,200	2,360	2,200	Rental cost and cleaning of work uniforms for the operations crew.
5900	BIOSOLIDS MANAGEMENT	80,550	70,000	75,550	Funds for contract disposal of plant sludge, annual variance due to fluctuations in volume of material for disposal.
5930	PUMP STATION ALARMS	5,200	2,300	2,800	Funds for cellular network cost of the telemetry system for pump stations.
5980	PUMP STATION MAINTENANCE	23,000	22,900	23,000	Funds for vendor cost for maintenance activities at pump stations, including emergency pumping, routine cleaning.
COMMODITIES					
6010	OFFICE SUPPLIES	700	605	700	Funds for miscellaneous office supplies, paper, pens, record keeping.
6015	COMPUTER FORMS/SUPPLIES	390	30	390	Computer and printer supplies

Operations and Maintenance Budget

DEPARTMENT: Wastewater; Falmouth Enterprise Fund 040					
Account Number		Budget 2013-14	Anticipated 2013-14	Proposed Budget 2014-15	
6100	MAINTENANCE MACHINES/EQUIPMENT	14,100	13,425	14,100	Funds for spare and replacement mechanical parts for treatment plant and pumping stations.
6110	VEHICLE MAINTENANCE	3,875	2,255	3,875	Funds for parts cost for the three department pick ups.
6130	MOTOR FUEL/LUBRICANTS	9,990	8,550	10,000	Fuel cost for the department vehicles, 3 pickup trucks, sewer cleaning machine, and small equipment.
6300	SEWER MAINTENANCE SUPPLIES	3,300	4,000	3,300	Funds for supplies for the sewer system, grade rings and manhole covers, jetter parts, for example.
6320	PLANT MAINTENANCE SUPPLIES	200	170	200	Cleaning supplies for the treatment plant.
6330	PUMP MAINTENANCE SUPPLIES	150	0	150	Cleaning supplies for pump stations.
6340	LABORATORY SUPPLIES	14,000	12,500	14,000	Funds for lab materials, chemicals, and equipment.
6400	BUILDING/GROUNDS MAINT/SUPPLIES	8,700	8,500	8,700	Building and grounds maintenance supplies for pump station building and treatment plant, minor repairs, painting supplies, minor electrical work.
6450	CHEMICALS	72,650	63,500	64,000	Funds for disinfection, dechlorination, and sludge dewatering chemicals.
6520	SAFETY EQUIPMENT	4,240	3,700	4,240	Required portable and fixed safety equipment, gas detection, harnesses, confined space gear, personal protective gear.
6930	PUMPING STATION ALARMS	1,200	550	1,200	Funds for parts and supplies for the telemetry system at pump stations.
6980	PUMP STATION MAINT/SUPPLIES	7,400	7,000	8,900	Funds for spare and replacement parts for pump stations equipment.
CAPITAL CONTRIBUTIONS					
7010	TRANSFER TO RESERVES	65,000	65,000	65,000	Annual budget contribution to department capital reserve fund.
7015	TRANSFER TO EQUIPMENT RESERVE	20,000	20,000	28,000	Combined Falmouth & Cumberland contribution to shared reserve fund. \$8,000 increase consolidates former Computer Reserve account at past funding level.
7030	TRANSFER TO COMPUTER RESERVE	8,000	8,000	0	Inactive, now included within 7015 transfer to equipment reserve
7550	IMPROVEMENTS BUILDINGS/GROUNDS	64,000	20,000	0	Inactive, now included within 7570 sewer rehabilitation
7570	SEWER REHABILITATION	90,000	90,000	154,000	Contribution towards Capital Plan. \$64,000 increase in this account consolidates former Building Improvements account at past funding level.
DEBT					
8050	IMPROVEMENTS	324,000	324,000	324,000	Funds for the principal repayment of the bond bank loan for the 2006-08 plant upgrade, retires in 2026. Includes \$123,000 reimbursement/offset to Cumberland.

Operations and Maintenance Budget

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8200	BOND/NOTE INTEREST	102,543	102,543	96,147	Funds for the interest cost for the 2006-08 plant upgrade, declines annually and retires 2026. Includes \$37,714 reimbursement/offset from Cumberland.
8400	PWD ASSESSMENT	15,550	15,012	15,550	Funds for the department's cost for sewer billing and collection services by Portland Water District.

Revenues

DEPARTMENT: Wastewater; Falmouth Enterprise Fund 040				
Revenue Projection for 2014-15				
	Estimate 2014-15	Estimate 2015-16	Estimate 2016-17	Estimate 2017-18
Service Charges	\$1,568,432	\$1,572,432	\$1,576,432	\$1,580,432
Miscellaneous Revenue	\$35,000	\$35,000	\$35,000	\$35,000
Cumberland O & M at projected flow contributions	\$172,973	\$175,973	\$178,973	\$181,973
Interest	\$5,000	\$10,000	\$10,000	\$10,000
Falmouth on the Green reimbursement, system upgrades	\$12,026	\$12,026	\$12,026	\$12,026
Cumberland Reimbursement, plant upgrade	\$157,072	\$154,644	\$152,216	\$149,788
Projected Revenue	\$1,950,503	\$1,960,075	\$1,964,647	\$1,969,219
Proposed Budget 2014-15	\$1,910,017			
Projected undesignated revenue 2014-15	\$40,486			

Capital Overview

Town of Falmouth
Wastewater Capital Expenditure Schedule
Proposed 2014-15 Budget

Actual

	[a]	[b]	[c]	[d]	[e]	[f]	[g]	[h]	[i]	[h]
	Beginning	Plus	Plus	Subtotal	Capital	Less	Net	Subtotal	Plus	Projected
<u>Year</u>	<u>Balance</u>	<u>Budgeted</u>	<u>Misc.</u>	<u>Reserve</u>	<u>Purchases</u>	<u>Portion</u>	<u>Purchases</u>	<u>Purchases</u>	<u>Interest</u>	<u>Ending</u>
		<u>Funding</u>	<u>Revenue</u>							<u>Balance</u>
2012	1,828,619	247,000	-	2,075,619	179,703	48,847	130,856	1,944,763		1,944,763
2013	2,243,719	247,000	-	2,490,719	496,546	13,042	483,505	2,007,214		2,007,214
2014	2,194,845	247,000	-	2,441,845	510,950	47,850	463,100	1,978,745		1,978,745
2015	1,978,745	247,000	-	2,225,745	539,000	205,463	333,538	1,892,208		1,892,208
2016	1,892,208	247,000	-	2,139,208	748,125	193,631	554,494	1,584,713		1,584,713
2017	1,584,713	247,000	-	1,831,713	764,750	191,549	573,201	1,258,512		1,258,512
2018	1,258,512	247,000	-	1,505,512	634,375	187,067	447,308	1,058,204		1,058,204
2019	1,058,204	247,000	-	1,305,204	741,000	233,285	507,715	797,489		797,489
2020	797,489	247,000	-	1,044,489	821,875	251,978	569,897	474,592		474,592
2021	474,592	247,000	-	721,592	700,750	228,071	472,679	248,913		248,913
2022	248,913	247,000	-	495,913	673,625	230,864	442,761	53,153		53,153

Plan detail revised 2014-2015 budget preparation	Key	Actual	West Falmouth study dependent	Approach (bonded?) or timing dependent	Cumberland cost						
Wastewater Capital Expenditures											
Year	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	
Expense Total	\$510,950	\$539,000	\$748,125	\$764,750	\$634,375	\$47,850	\$205,463	\$193,631	\$191,549	\$187,067	
Falmouth portion	\$463,100	\$333,538	\$554,494	\$573,201	\$447,308						
Cumberland portion	\$47,850	\$205,463	\$193,631	\$191,549	\$187,067						
Projects & Equipment											
Projects & Equipment											Explanation
Manhole stabilization - Shoreline Drive	\$100,000										Proposal repairs displaced riprap and reinforces exposed manholes along Shoreline Drive and Carroll Street
FinalDesign - Manhole stabilization Shoreline Drive	\$5,450										
Right of way clearing	\$75,000					\$33,375					Restore Mill & Webes Creek ROW, dependent on force main route
Generator - Johnson Road	\$30,000					\$10,500					This proposal would add a new in place generator at one of three pump stations that now require fairly dedicated service with the one high capacity portable unit that is available to serve 12 sites during widespread outages. Expect that the upgrade will provide needed flexibility for the portable unit and manpower during prolonged outages.
West Falmouth/ Sewer master plan	\$100,000										This would factor in future development and recommended capacity needs at several stations, perhaps as many as six. Maybe implications for plant capacity. Wait for comp plan to be complete?
VFD upgrade - Underwood	\$20,000										This work replaces the electrical control panel with a new above ground panel and controls and adds variable frequency drives which eliminates an existing roto-phase unit that currently converts the single phase electric service to 3 phase. Benefits of the conversion include reduced below ground entry / improved safety, improved efficiency / reduced power, reduced failure due to electrical problems, and improved overall reliability.

VFD upgrade - Woodlands Drive	\$14,000										This work replaces the electrical control panel with a new above ground panel and controls and adds variable frequency drives which eliminates an existing roto-phase unit that currently converts the single phase electric service to 3 phase. Benefits of the conversion include reduced below ground entry / improved safety, improved efficiency / reduced power, reduced failure due to electrical problems, and improved overall reliability.
Generator - Middle Road	\$35,000										This proposal would add a new in place generator at one of three pump stations that now require fairly dedicated service with the one high capacity portable unit that is available to serve 12 sites during widespread outages. Expect that the upgrade will provide needed flexibility for the portable unit and manpower during prolonged outages.
ISCO Sampler (2)	\$7,000					\$2,100					Proposal funds replacement of two refrigerated samplers used to composite plant monitoring samples mandated by State imposed licensing requirements
Junction box - Waite's Landing	\$2,500										
Screw conveyor		\$7,000					\$2,100				Proposal provides funding for ancillary screw conveyor replacement as part of the centrifuge upgrade.
Polyblend		\$7,500					\$2,250				Proposal provides funding for ancillary polymer dosing system as part of the centrifuge upgrade.
Panel replacement - Johnson Road		\$12,000					\$4,200				This improvement replaces one of five existing control panels that have been prone to intermittent wiring problems. This style panel has resulted in numerous call ins due to intermittent problems with the friction type connectors used to connect the various electrical components.

Panel replacement - Northbrook		\$12,000									This improvement replaces one of five existing control panels that have been prone to intermittent wiring problems. This style panel has resulted in numerous call ins due to intermittent problems with the friction type connectors used to connect the various electrical components.
Pump replacement - Woodland's Clubhouse			\$20,000								Proposal upgrades the capacity of the pumps at the Woodlands station and presumes a fairly straightforward upsize. Should added study identify some greater capacity need, additional electrical, generator, improvements would need to be added which would affect the current cost estimate.
Panel replacement - Clubhouse			\$12,000								This improvement replaces one of five existing control panels that have been prone to intermittent wiring problems. This style panel has resulted in numerous call ins due to intermittent problems with the friction type connectors used to connect the various electrical components.
Panel replacement - Pinehurst			\$12,000								This improvement replaces one of five existing control panels that have been prone to intermittent wiring problems. This style panel has resulted in numerous call ins due to intermittent problems with the friction type connectors used to connect the various electrical components.
Pump replacement - Pinehurst			\$20,000								Proposal upgrades the capacity of the pumps at the Pinehurst station and presumes a fairly straightforward upsize. Should added study identify some greater capacity need, additional electrical, generator, improvements would need to be added which would affect the current cost estimate.

Panel replacement - High School			\$12,000								This improvement replaces one of five existing control panels that have been prone to intermittent wiring problems. This style panel has resulted in numerous call ins due to intermittent problems with the friction type connectors used to connect the various electrical components.
Pump station upgrade - Brown Street			\$75,000								Proposal upgrades the capacity of the pumps at the Brown Street station and presumes a fairly straightforward upscale. Should added study identify some greater capacity need, additional electrical, generator, improvements would need to be added which would affect the current cost estimate.
Force main replacement - Pinehurst			\$150,000								Proposal upgrades the capacity of the force main from the Pinehurst station and presumes a fairly straightforward upscale. Should added study identify some greater capacity need, additional pump, electrical, generator, improvements would need to be added which would affect the current cost estimate.
Rebuild sludge grinder				\$4,000					\$1,200		Proposal funds parts required to rebuild sludge grinder
Pump station upgrade - Clearwater Drive					\$74,000						Proposal upgrades the capacity of the pumps at the Clearwater drive station and presumes a fairly straightforward upscale. Should added study identify some greater capacity need, additional electrical, generator, improvements would need to be added which would affect the current cost estimate.
Sludge pump					\$3,000						Proposal funds parts required to rebuild two sludge pumps in the dewatering system.
Bonded & Recurring											
Mill Creek P&I, estimate revised to \$3.9M		\$292,500	\$287,625	\$282,750	\$277,875		\$130,163	\$127,993	\$125,824	\$123,654	Recurring principal and interest Mill Creek upgrade
Mill Creek force main replacement, estimate revised to \$2M		\$150,000	\$147,500	\$145,000	\$142,500		\$66,750	\$65,638	\$64,525	\$63,413	Recurring principal and interest Mill Creek force main replacement
Infiltration reduction	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000						Flow assessment, smoke testing, rehabilitation work to reduce peak flows.

Misc. Line work			\$100,000		\$75,000						Proposal provides funding of as yet unidentified line replacement or capacity upgrade.
Vehicles replacement											
Truck, one ton chassis											Proposal funds replacement of an existing 2003 one ton truck chassis.
Pickup truck with plow	\$30,000					\$9,000					Proposal funds replacement of an existing 2006 3/4 ton 4x4 pickup truck and plow.
Pickup truck with plow				\$30,000							Proposal funds replacement of an existing 2009 3/4 ton 4x4 pickup truck and plow.
John Deere mower			\$4,000								Proposal provides replacement of 2002 lawn tractor
Portable generator											Proposal funds replacement of 1998 hi capacity portable generator
Jet flushing machine and camera system				\$95,000							Proposal provides funds to replace 1995 sewer cleaning /jet flushing tow behind unit and 1994 sewer television camera and recording systems.
Mobile portable generator	\$24,000										Proposal adds a new hi capacity portable generator to service stations without in place standby power.
Lift Crane	\$10,000										Proposal funds replacement of service truck mounted hydraulic/electric crane used to service pumps at 28 pump stations.
Office equipment replacement											
Photocopier					\$4,000						Proposal funds replacement of photocopier in line with IT equipment replacement schedule.
Computers and network	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000						Expected annual computer replacement cost