

WATER POLLUTION CONTROL

440

WATER POLLUTION CONTROL

- **661-440 OPERATIONS & MAINTENANCE**
- **661-449 HIGHWAY SUBSIDIARY**
- **661-700 SEWER DEBT**
- **661-910 WPCF BENEFITS**

PROGRAM SUMMARY: Sewer Enterprise Fund (budget code 661)
COMMENTS

The Sewer Enterprise Fund includes the functions typically associated with the Operation and Maintenance of the Water Pollution Control Facility, Pump Stations and Sewer Collection System. These include: **WPCF Operations and Maintenance** (code 661-440), **WPCF Highway Subsidiary** (code 661-449), **WPCF Debt** (code 661-700), and **WPCF Benefits** (code 661-910).

Expenditure Profile

Requested FY 2015 spending for the Sewer Enterprise Fund is \$2,187,174. This represents a \$152,631 or 7.5% increase over the FY 2014 budget as amended. The growth rate is actually greater though if one considers that the total prior year budget includes a one-time emergency expenditure of \$80,000. If adjusted to reflect the true FY 2014 budget, the Sewer Enterprise Fund will actually increase by \$232,631 or 11.9% over the actual FY 2014 budget of \$1,954,543.

Significant Changes

The most significant changes being proposed in the Sewer Enterprise Fund budget are:

- (1) WPCF Operations and Maintenance: an increase of \$100,651. This includes a \$47,534 in electricity accounts and an \$18,362 increase in the Millers Falls Sewer Assessment account. These two items alone account for 65% of the increase in the WPCF O&M budget. Smaller increases of \$5,000 each for the Building R&M and Grounds R&M, and Other Professional/Technical are also requested. It should be noted that the requested budget for solid waste disposal is very conservative. It is level funded at the FY 2014 budgeted number. If the department succeeds in achieving the level of savings that it thinks may be possible in this area of sludge disposal, the increase being projected for all other items could be easily offset.
- (2) WPCF Highway Subsidiary: The Highway Subsidiary budget is currently level funded at the FY 2014 level.
- (3) WPCF Debt: The WPCF Debt budget is projected to increase by \$100,206 or 27.8% in FY 2015. This reflects the new debt being added to pay for the sewer emergency work that was done on Millers Falls Road and Industrial Boulevard in FY 2013/2014. It is also anticipated that the town may incur at least \$3 million in additional sewer debt in FY 2015 if Town Meeting votes at its Annual Town Meeting to replace two pump stations. The new debt service associated with this project, other than the cost of temporary borrowing, would probably not hit the operating budget until FY 2016; but at that time would add more than a \$100,000/year in debt service payments.

- (4) WPCF Benefits: The WPCF benefits budget is projected to increase by \$31,385 or 17% in FY 2015. This is due to the addition of staffing at the WPCF, which will result in an increase of both pension and health/life insurance costs.

Highlights of Goals and Objectives

(1) Sewer Administration

- To advance the Operators and Secretary/Assistant Laboratory Technician by one pay grade.
- To complete union negotiations to provide a new union contract.
- To complete the determination of staffing requirements through negotiations with the DEP
- To receive a renewed NPDES Permit
- To realize funding from the DEP State Revolving Loan Fund for pump station upgrade.
- To define and begin the work for a facilities plan review

(2) Sewer Operations

- To complete the work to replace the existing alarm systems by migrating alarms to the Supervisory Control and Data Acquisition (SCADA) system.
- To replace or update the SCADA system software
- To replace at least one if not 2 pump stations
- To stabilize efforts involved with sludge reduction and revenue enhancement & staff to allow continuation.
- To finalize efforts to revise the Millers Falls Inter-Municipal Agreement.
- To replace at least 1 aeration tank blower with a turbo blower.

Major Accomplishments (last 5 years)

- Sewer rates did not increase for FY's 2010 through 2013. This is a savings to all sewer customers.
- Received and installed Fournier Press resulting in an increase in sludge dewatering efficiency.
- Presented in an article of the Treatment Plant Operator Magazine, April 2012. Increased respect for Montague in the industry.
- Began receiving thickened sludge, February 2012, from the Greenfield WWTP.

- Reduced septage handling rates to increase septage revenues.
- June 2013 began receiving thickened sludge/biosolids from other Franklin County town waste water treatment plants. Results have been favorable.
- Staff built, installed and wired 3 automatic valves as part of sludge & nutrient reduction efforts. Saved substantial amount of money vs. purchasing commercially available equipment.

General Category: Public Works - WPCF

Department WPCF

Dept # 661-440

EXPENDITURES		Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 WPCF Supt Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
5112	Wages Full Time	296,676	305,438	142,412.04	311,317		311,317
5124	P/T and Temp Wages	7,360	5,000	4,120.00	5,000		5,000
5132	F/T Wages OT	38,181	35,000	20,644.51	38,000		38,000
5142	Pager Pay	6,265	6,264	2,986.46	6,264		6,264
5143	Paid Holidays Worked	2,442	2,183	951.70	2,360		2,360
5144	Longevity	450	500	200.00	500		500
5194	Vacation/Sick Leave Buy Back						
	TOTAL PERSONAL SERVICES	351,374	354,385	171,314.71	363,441		363,441
5211	Electricity TP	137,014	135,818	75,958.74	182,302		182,302
5211.1	Electricity PS	18,659	21,000	8,210.05	22,050		22,050
5213	Heating Oil TP	6,650	15,750	9,899.98	16,538		16,538
5213.1	Heating Oil PS		735		772		772
5215	Kerosene		50		50		50
5231	Water TP	3,760	1,500	1,243.70	2,000		2,000
5231.1	Water PS	158	125	34.00	125		125
5241	Grounds R & M	3,626	5,000	2,662.99	10,000		10,000
5242	Buildings R & M	18,465	20,000	21,358.33	25,000		25,000
5243	HVAC R & M	9,459	10,000	491.63	10,000		10,000
5245	Vehicles R & M - Pickups	5,386	2,500	226.47	2,500		2,500
5246	Preliminary Equipment R & M	10,849	10,000	3,592.50	10,000		10,000
5246.1	Primary Equipment R & M	849	10,000	3,365.25	10,000		15,000
5246.2	Secondary Equipment R & M	13,900	13,500	14,680.49	15,000		7,500
5246.3	Sludge Handling Equipment R & M	6,675	7,500	1,918.52	7,500		16,500
5246.4	Instrumentation Equipment R & M	12,284	15,000	7,800.75	16,500		6,000
5246.5	Chlorination Equipment R & M	9,583	5,000	3,337.50	6,000		15,500
5246.6	Pump Station Equipment R & M	16,948	14,000	6,848.09	15,500		6,000
5246.7	Plant Water Equip R & M	176	6,000	1,430.99	6,000		10,000
5246.8	Intermediate Pumping Equipment R & M	1,942	10,000	1,717.34	10,000		5,000
5246.9	Septage Handling R & M		5,000		5,000		26,646
5246.10	CSO System R & M	16,044	26,646	11,363.34	26,646		2,000
5247	Computer R & M	2,718	1,500	1,115.97	2,000		5,200
5276	Rental/Lease Telemetry	5,287	5,200	2,663.93	5,200		200,000
5280	Solid Waste Disposal	134,217	200,000	5,712.34	200,000		

General Category: Public Works - WPCF

Department WPCF

Dept # 661-440

EXPENDITURES	Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 WPCF Supt Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
5302 Legal	275	8,000	105.00	6,000		6,000
5303 Engineering/Architectual	2,125	8,000		8,000		8,000
5310 Medical/Dental	233	300	157.00	300		300
5311 Safety Purchased Services	9,511	3,500	7,136.42	4,500		4,500
5314 Seminars	2,919	5,500	745.00	5,500		5,500
5315 Other Professional & Technical	33,322	15,000	24,220.36	20,000		20,000
5317 Pretreatment		150		150		150
5341 Telephone	2,024	2,300	1,122.73	2,300		2,300
5344 Postage	345	320	193.84	350		350
5345 Advertising	64	300	146.69	300		300
5346 Delivery		75	1,000.00	200		200
5350 Employment Service			2,477.76	1,000		1,000
5420 Office Supplies	2,080	1,000	827.77	1,300		1,300
5430 Building R & M Supplies	8,110	13,200	10,301.47	13,200		13,200
5431 HVAC		5,000	69.12	5,000		5,000
5440 Oil & Lubricants	12,745	5,000	2,714.43	5,500		5,500
5441 Preliminary Equipment Supplies	4,652	8,000	5,211.70	8,000		8,000
5441.1 Primary Equipment Supplies	21,405	12,000	7,715.27	14,000		14,000
5441.2 Secondary Equipment Supplies	15,478	8,000	2,630.23	9,000		9,000
5441.3 Sludge Handling Equipment Supplies	26,256	10,000	6,485.96	12,000		12,000
5441.4 Instrumentation Equipment Supplies	5,293	6,000	3,153.37	6,000		6,000
5441.5 Chlorination Equipment Supplies	1,421	3,000	261.30	3,000		3,000
5441.6 Pump Station Equipment Supplies	4,708	20,000	4,348.39	20,000		20,000
5441.7 Plant Water Equipment Supplies	40	5,000		5,000		5,000
5441.8 Intermediate Pumping Equipment Supplies	290	10,000		10,000		10,000
5441.9 Septage Handling Supplies	5,467	5,000	218.34	5,000		5,000
5441.10 CSO System Supplies	14	2,000	269.47	2,000		2,000
5442 Computer Equipment	2,040	3,000		3,000		3,000
5451 Cleaning Supplies	3,717	2,700	3,266.79	3,000		3,000
5460 Groundskeeping Supplies	6,233	3,000	25.19	3,000		3,000
5480 Vehicles - Pickups	6,374	3,500	8,747.46	4,500		4,500
5500 Medical Supplies	43	175	212.50	175		175
5511 Safety Supplies	1,874	3,620	271.17	3,620		3,620
5581 Subscriptions/Books		150		150		150
5582 Uniforms/Clothing	1,863	1,725	700.74	2,025		2,025

General Category: Public Works - WPCF

Department **WPCF**

Dept # 661-440

EXPENDITURES		Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 WPCF Supt Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
5583	Lab Supplies	10,331	7,000	7,490.00	8,000		8,000
5584	Chemicals	32,020	32,000	1,820.36	30,000		30,000
5585	Pretreatment Supplies			-			
5590	Equipment < \$2K						
5710	Travel	1,404	200	17.20	200		200
5730	Dues & Memberships	497	673	277.00	673		673
5741	Property Insurance	4,561	4,743	4,478.41	4,612		4,612
5742	Auto Fleet Insurance	1,834	1,908	1,287.26	1,327		1,327
5743	Boiler & Machinery Insurance	493	531	495.53	511		511
5745	Liability Insurance						
5746	Public Officials						
5747	Umbrella Ins	64	70	44.71	46		46
5748	Employee Assistance Program						
5780	Reserve Fund		7,121		2,000		2,000
5783	Hoister & Other Licenses	151	350	300.00			
5789	Safety Equipment	513	3,000	52.25	3,000		3,000
5790	Other Overhead - Town	38,596	39,392		41,187		41,187
5791	Other Overhead - TFFD	3,000	2,750	4,000.00	4,400		4,400
5795	Millers Falls Assessment	179,806	183,622	138,408.75	201,984		201,984
5799	Ind Park Emergency Operating		80,000	57,682.44			
	TOTAL EXPENSES	888,838	1,079,699	496,722.28	1,091,693		1,091,693
5855	Other Equipment	-					
	TOTAL CAPITAL OUTLAY	-	-	-	-	-	-
	TOTAL WPCF	1,240,212	1,434,084	668,036.99	1,455,134		1,455,134

General Category: Public Works - WPCF

Department **WPCF**

Dept # 661-440

	Actual	Appropriated	Expended thru	FY15 WPCF Supt Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
	2013	2014	12/31/2013			
EXPENDITURES						

Staffing - Base Wages excluding Overtime/Shift/Holiday

FY10 Step Date	Title	Grade/Step 7/1/2014	Daily/Hrly Rate	Rate #1 Days/Hrs	Grade/Step Anniv	Daily/Hrly Rate	Rate #2 Days/Hrs	Total Annual
3/9/2015	Operator ML	H5-6	18.20	1,432	H5-7	18.57	648	38,095.76
3/18/2015	Operator JL	H5-13	20.89	1,488	H5-14	21.30	592	43,693.92
1/12/2015	Operator TL	H5-6	18.20	1,112	H5-7	18.57	968	38,214.16
10/1/2014	Operator Trainee TP	H4-2	16.52	528	H5-3	17.16	1,552	35,354.88
7/1/2014	Secretary & Asst Lab Tech TT	H5-13	20.73	2,088				43,284.24
7/1/2014	Superintendent RT	H9						83,808.00
9/23/2014	Laborer AS	H2-1	13.67	480	H2-2	13.94	1,600	28,865.60
								311,316.56

23-Oct per STM added 1180 to 5112

8-Jan Fixed Laborer rates

Tim's rates and hours will change when he gets operator license later in January

General Category: Public Works - WPCF

Department WPCF HIGHWAY

Dept # 661-449

EXPENDITURES		Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 Level Services Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
5112	F/T Wages	4,546	23,770	2,765.92	23,770		23,770
5132	F/T Wages OT	1,961	4,585	1,125.15	4,585		4,585
5142	Shift Differential	863	200	146.18	200		200
	TOTAL PERSONAL SERVICES	7,370	28,555	4,037.25	28,555		28,555
5249	Other Repairs	400	1,000		1,000		1,000
5252	Collection System	6,272	4,500		4,500		4,500
5271	Easements	100	500	100.00	500		500
5277	Rental/Lease Vehicles		1,000		1,000		1,000
5283	Other Equipment	386	1,000		1,000		1,000
5303	Engineering/Architectual		300		300		300
5443	Misc. Parts/Accessories	7,656	5,000	2,950.72	5,000		5,000
5530	Public Works Supplies	210	5,104		5,104		5,104
	TOTAL EXPENSES	15,025	18,404	3,050.72	18,404		18,404
5800	Capital Outlay	2,116	8,000		8,000		8,000
	TOTAL CAPITAL OUTLAY	2,116	8,000	-	8,000	-	8,000
	TOTAL WPCF HWY SUBSIDIARY	24,511	54,959	7,087.97	54,959		54,959

EXPENDITURES		Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 Level Services Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
	Long Term Principal						
710-5912	\$589,000 6-15-03 Multi Article	30,000	30,000		30,000		30,000
710-5913	Acquire 46 Greenfield Rd	5,000	5,000		5,000		5,000
710-5915	CSO MWPAT #01-33 \$179,059	14,299	14,863	14,862.59	14,863		14,863
710-5919	WPCF Gen Obligation 2006	25,000	20,000	20,000.00	15,000		15,000
710-5930	CSO MWPAT #05-22 \$957,448	26,122	26,650	26,649.60	27,188		27,188
710-5931	CSO MWPAT #05-22A \$1,911,052	29,077	29,788	29,787.60	30,515		30,515
710-5932	CSO USDA #91-16 \$1,024,000	8,144	8,144	8,143.77	8,500		8,500
710-5933	CSO USDA #92-18 \$958,000	7,219	7,517	7,517.00	7,828		7,828
710-5934	MWPAT #94-26 \$907,181	62,002	63,829	7,509.24	65,775		65,775
710-5935	MWPAT #91-76 \$159,435	14,231	15,042	881.82	15,899		15,899
	1.7 million sewer repair				25,000		25,000
							-
	WPCF General Obligation Bonds (Excess)						-
	Long Term Principal	221,094	220,833	115,351.62	245,568	-	245,568
							-

EXPENDITURES		Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 Level Services Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
	Long Term Interest						-
751-5912	\$589,000 6-15-03 Multi Article	14,325	13,200	6,600.00	12,000		12,000
751-5913	Acquire 46 Greenfield Rd	2,263	2,075	1,037.50	1,875		1,875
751-5915	CSO MWPAT #01-33 \$179,059	4,144	2,497	1,013.71	1,700		1,700
751-5915-100	CSO MWPAT #01-33 \$179,059 Admn	122	100		100		100
751-5919	WPCF Gen Obligation 2006	8,675	7,550	4,025.00	6,675		6,675
751-5930	CSO MWPAT #05-22 \$957,448	8,787	8,259	4,262.73	7,721		7,721
751-5930-100	CSO MWPAT #05-22 \$957,448 Adm	546	620	319.70	580		580
751-5931	CSO MWPAT #05-22A \$1,911,052	24,734	24,024	12,191.52	23,296		23,296
751-5931-100	CSO MWPAT #05-22A \$1,911,052 Adm	1,537	1,492	813.28	1,448		1,448
751-5932	CSO USDA #91-16 \$1,024,000	25,310	25,311	25,310.43	24,955		24,955
751-5933	CSO USDA #92-18 \$958,000	23,711	23,413	23,412.71	23,103		23,103
751-5934	MWPAT #94-26 \$907,181	18,051	14,610		11,042		11,042
751-5934-100	MWPAT #94-26 \$907,181 Admn	494	401	200.46	401		401
751-5935	MWPAT #91-76 \$159,435	2,325	1,507		634		634
751-5935-100	MWPAT #91-76 \$159,435 Admn	68	100	23.21	100		100
	1.7 million sewer repair				85,000		85,000
							-
	Long Term Interest	135,091	125,159	79,210.25	200,630	-	200,630
							-
752-5921	WPCF share s/t Int CSO						-
752-5925	Interest on Short Term Notes	-	15,000		15,000		15,000
	Short Term Interest	-	15,000	-	15,000	-	15,000
							-
	TOTAL WPCF DEBT	356,185	360,992	194,561.87	461,198		461,198

General Category: Public Works - WPCF

Department **WPCF BENEFITS**

Dept # 661-910

EXPENDITURES		Actual 2013	Appropriated 2014	Expended thru 12/31/2013	FY15 Level Services Request	FY15 Fin Comm Recommend	FY15 Town Administrator Budget
5171	Retirement	64,911	74,513	71,513.00	74,959		74,959
5172	Workers' Compensation	5,853	6,407	4,536.74			
5173	Unemployment Compensation						
5174	Health Insurance	86,131	98,000	37,073.43	93,000		93,000 **
	HIns 3 new employees				41,000		41,000
5175	Life Insurance	760	850	334.88	850		850 *
	LIns 3 new employees				400		400
5176	Medicare	4,774	4,738		5,684		5,684
	TOTAL PERSONAL SERVICES	162,429	184,508	113,458.05	215,893	-	215,893
	TOTAL WPCF BENEFITS	162,429	184,508	113,458.05	215,893		215,893

*Life insurance-added 3 additional workers

** Additional 43,000 for 3 more employees

9-Jan changed 5174 from 98k to 93k per Patty

IDENTIFICATION AND EXPLANATION OF CHANGES

Narrative FY 2015

BUDGET CODE CATEGORY	PROPOSED CHANGE \$	PERCENT CHANGE	EXPLANATION
5100 Series Pers. Serv.	9,664	2.7%	Step raises + part time + overtime.
5211 Electricity TP	46,484	34%	Under review, figure is pro-rated at current expenditure to 30 June 2013.
5211.1 Electricity Pump Sta.	1,050	5%	Appropriated FY 2014 + 5% per Town Administrator.
5213 Heating Oil	788	5%	Appropriated FY 2014 + 5% per Town Administrator.
5213.1 Heating Oil Pump Sta.	37	5%	Appropriated FY 2014 + 5% per Town Administrator.
5231 Water Treatment Plant	500	33%	Move towards 3 year average of \$3,116.
5241 Grounds R&M	5,000	100%	Replace site sodium vapor lights with light emitting diode (LED) lights.
5242 Buildings R&M	5,000	25%	Move towards 3 year average of \$30,423.
5246.2 Secondary Eqpt. R&M	1,500	11%	Move towards 3 yr avg of \$20,122.
5246.4 Instrument. Eqpt. R&M	1,500	10%	Migration of alarms from old alarm panel to Supervisory Control & Data Acquisition System.
5246-5 Chlorination Eqpt. R&M	1,000	20%	Move towards 3 yr avg. of \$7,682.
5246-6 Pump Sta. Eqpt. R&M	1,500	11%	Move towards 3 year average of \$15,777.
5247 Computer R&M	500	33%	Move towards 3 yr avg of \$2,439.
5302 Legal Fees	(2,000)	-25%	Move towards 3 yr avg of \$2,380.
5311 Safety, Purchased Serv.	1,000	29%	Move towards 3 yr avg of \$9,512.
5315 Other Pro. & Tech.	5,000	33%	Move towards 3 year average of \$43,582.
5344 Postage	30	9%	Move towards 3 yr avg. of \$375.
5346 Delivery	125	167%	Move towards 3 yr avg. of \$667.
5350 Employment Service	1,000		Move towards 3 yr avg. of \$1,652.
5420 Office Supplies	300	30%	Move towards 3 yr avg. of \$1,711.
5440 Oil & Lubricants	500	10%	Move towards 3 yr avg. of \$7,189.
5441.1 Primary Eqpt. Supplies	2,000	17%	Move towards 3 yr avg. of \$15,655.
5441.2 Secondary Equipment	1,000	13%	Move towards 3 year average of \$10,432 & rebuild both secondary clarifier drives (per 5 years).
5441.3 Sludge Handling Eq. Sup.	2,000	20%	Move towards 3 yr avg. of \$16,363.
5451 Cleaning Supplies	300	11%	Move towards 3 yr avg. of \$4,150.
5480 Vehicles-Pickups	1,000	29%	Move towards 3 year average of \$8,950.
5582 Uniforms/Clothing	300	17%	Per union contract.
5583 Lab Supplies	1,000	14%	Move towards 3 yr avg. of \$12,274.
5584 Chemicals	(2,000)	-6%	Move towards 3 yr avg. of \$25,526.
5741 Property Insurance	(131)	-3%	3% over actual for FY 2014.
5742 Auto & Fleet Ins.	(681)	-30%	3% over actual for FY 2014.
5743 Boiler & Machinery Ins.	(20)	-4%	3% over actual for FY 2014.
5745 Liability Ins.			Carried under another insurance item FY 2013.
5746 Public Officials Ins.			Carried under another insurance item FY 2013.
5747 Umbrella Ins.	(24)	-34%	3% over actual for FY 2014.
5780 Reserve Fund	(5,121)	-72%	Move towards 3 yr avg. of \$1,724.
5783 Hoister & Other Lic.	(350)	-100%	Wastewater Operators license renews every 2 years. Due again in 2015.
5790 Other Overhead - Town	788	2%	Waiting for new estimate.
5791 Other Overhead - TFFD	1,650	60%	As determined by the Turners Falls Water Department.
5795 M. Falls Assessment	18,362	10%	Waiting for new estimate. Rough estimate only.
TOTAL WPCF	100,651		

**SEWER ENTERPRISE FUND
1 - PUBLIC WORKS - Program
440**

Program Description & Description of Services provided

In the space below provide a brief and concise description of your department/program. What is the overall mission of your department and what are your primary goals? How will your department go about achieving them? And in a few sentences, describe the responsibilities of each element/division of your department and the programs/services that each provides.

Overall Mission

The treatment of combined sanitary, industrial, commercial and storm drain runoff (10% of sewer system is combined sanitary and storm) at the Water Pollution Control Facility (WPCF). Operation and maintenance of 8 sanitary sewage pump stations and associated force main discharge lines, 4 residential grinder pump systems, two canal crossing heaters, the Millers Falls Flume, 3 combined sewer overflow (CSO) regulators, 2 CSO outfalls and one underground CSO flow buffer storage line. The maintenance and operation these facilities portions of which are between 5 and 51 years of age.

A WPCF is tasked with the job of producing a product, clean water. An industry manufactures or produces a product from known, predetermined quantities of materials that have defined known qualities. This is very different for a WPCF, the source of raw materials, water + waste, are of unknown quantity and quality. The work to remove the wastes from the water begins immediately upon entrance into the facility. Samples are taken daily and some data is gathered from testing the same day but other data is not available for 5 days. This is our task, the treatment of sanitary sewage, defined by the National Pollution Discharge Elimination System (NPDES) Permit, MA0100137, and also Massachusetts General Laws (MGL) (314CMR).

Primary Goals

- The safe and efficient treatment of sanitary sewage at a reasonable cost to the sewer rate payers/customers.
- Meeting the requirements of the NPDES Permit and the MGL.

Achieving the goals

The goals can only be achieved by the maintenance of a WPCF staff of trained, knowledgeable and motivated employees. All waste water operators are required to maintain a Waste Water Treatment Plant Operator's license issued by the State.

Elements & Divisions - Responsibilities, Programs & Services Provided

(A) WPCF Operation & Maintenance (Sub-Program)

Sewer Administration (division/element) (d/e) - 441

441-1. Planning & Development (program/services) (p/s)

Planning is an ongoing integral part of responding to facility needs. Sludge and nutrient reduction efforts, do we continue, if so staffing needs to be addressed, procedures defined and the process fine tuned and patent considerations discussed. Short term less costly items are addressed in the operations budget while longer term items of greater cost are developed through the capital expenditures process. The facility plan is a larger engineering review effort the goal which is to generate a coordinated wide-ranging report on responding to facility replacement and operational needs. The resulting report is inclusive of the delineation of such needs accomplished via staff interviews, records review and equipment and process inspection. The final report contains recommendation, financial and sewer rate analysis and a look at the future regulatory climate as regards potential changes such as nutrient reduction in the facility effluent. It is time to consider again tying together remaining items deleted from the CSO project and new ones.

441-2. NPDES Permit Compliance (p/s)

The NPDES permit sets out the Federal requirements and approval that allows the Town to discharge treated effluent to the surface waters of the United States and the State of Massachusetts. The permit remains effective for a maximum of 5 years but may be revisited by the EPA, State Department of Environmental Protection or the Town during that period. The current permit expired October 2013 but as the Town has properly applied for renewal it remains effective until the new one is issued. We expect that there may be significant changes to effluent nutrient reduction requirements and the Capacity, Management, Operations & Maintenance (CMOM) of the gravity sewer collection system. Sludge and nutrient reduction trials have tested our ability to maintain permit limits.

441-3. Grants Management (p/s)

The ability of the Town to accomplishment needed equipment replacement is enhanced through the acquisition of grants. The Town has applied for the second year to the DEP State Revolving Fund for approval to receive a low interest loan to be associated with sanitary sewer pump station replacement. Need to determine what we can afford to do that most need to be done.

441-4. Budgeting (p/s)

The Town via the Enterprise accounting system develops a budget to support items needed for the operations of the WPCF, pump stations and other outlying infrastructure. By definition an enterprise accounting system is one in which users support expenditures.

441-6. State/Federal Regulatory Liaison (p/s)

The Superintendent fulfills this function. Issues dealt with are:

- NPDES permit issues and renewals. See page 2 Permit compliance, item 441-2.
- Consent Orders, a negotiated directive given by the DEP to the Town as resolution to some issue.
- Notices of non-compliance, as required by the NPDES permit and CMR's.

441-7 Purchasing (p/s)

The Superintendent, operators and Secretary/Assistant Lab Tech are involved. For large items the Town Administrator is consulted for review and approval as he is the designated Purchasing Officer.

441-8 WPCF Facilities Management (p/s)

The Superintendent is responsible for the management of the WPCF facilities. Efforts are supported by the staff and the budgeting process. The near term is within the next 2 years and the medium term 3 to 5 years. See page 2 Planning & Development, item 441-1.

Sewer Operations - 442 (d/e)

442-1. WPCF Operations & Maintenance (program/service) (p/s)

Operations - the physical work of facility personnel and equipment to meet identified goals of the NPDES permit & MGL.

- Process control or the management of the physical and biological activity within the various elements of treatment:

- Preliminary Treatment - removal of debris, grit & screenings that could foul and hinder treatment.
- Primary/physical Treatment - removal of materials that will physically settle or float.
- Secondary/biological Treatment - conversion of materials that will not settle or float to a state that will settle or float.
- Disinfection - seasonally dependent chlorination effluent before discharge to the Connecticut River.
- Sludge Handling - collection of materials, sludge/biosolids, from primary & secondary treatment for removal from the facility.

Maintenance - the physical work of personnel to keep operational and extend as far as economically feasible, and safety will allow, the life of equipment. This is supported by:

- Staff attentiveness and timely response to concerns.
- Automated work order system.
- Plant periodic inspection rounds.

There are a number of items needing to be addressed, both those not addressed by the WPCF facility upgrade & CSO project as well as new items. Many are listed in the Capital Expenditures plan.

442-2. Pump Stations Operation & Maintenance (p/s)

Operations - the physical work of personnel to control the pump stations to cause the unhindered flow of sanitary sewage from the area of gravity sewers collection to a point where continued flow by gravity to the WPCF is accomplished. Each station has automated control systems to allow the untended operation of the station. All stations are inspected 3 times per week. Please note that the current CMR State regulations require daily, 7 days/week, inspections which we are not staffed to support. All but the Denton St. and Lake Pleasant Rd. stations have automatic back up emergency power available. A pump station report was completed in 2012 and a list of alternative actions discussed. As alerted by the force main failure of the Tech School station we must not assume all is well! The age of the system, quality of construction materials, confined space entry and inspection frequency is of concern. New technologies such as remote station monitoring would enhance safety and affect staffing numbers.

Maintenance - the physical work of personnel to keep operational and extend as far as economically feasible, and safety will allow, the life of equipment. This is supported by:

- Staff attentiveness and timely response to concerns.
- Automated work order system.
- Pump station inspection rounds.

442-3. Equipment Repairs & Maintenance (p/s)

Equipment repairs and maintenance is by and large accomplished by the facility staff. Repairs that schedules and timing do not allow staff to perform are sent out to vendors. Most of the vendors we use are local due to the availability of shops servicing area industry. The automated work order system provides notice of checks, services and major inspections & repairs. Staff experience and history determine whether a work order needs to be done. Daily plant operations and periodic inspection rounds result in staff being able to observe equipment and situations that needs a response outside of the work order system. Inventory control needs greater attention, staffing availability directly affects this.

442-4 Solid Waste Disposal (p/s)

Solids waste disposal at the facility consists of 4 components:

- Household waste - disposed of in a 15 cubic yard roll-off container.
- Metals, electronics, waste oil etc. - disposal at Town recycling station.
- Screenings & grit from preliminary treatment - disposed of in a 15 cubic yard roll-off container.
- Sludge/biosolids disposal - collection and disposal of materials, sludge/biosolids, from primary & secondary treatment for removal from the facility. The largest of the 4 components. The need here is to determine if the Town wants to continue the sludge Reduction efforts. To do so requires additional staffing.

442-5 Millers Falls Inter-Municipal Agreement (IMA) (p/s)

The village of Millers Falls is split physically by the Millers River and the respective Towns, Montague & Erving contain their side in the Town's political jurisdiction. Due to the location of Montague's side and the distance from the Montague WWTP the sanitary sewage from Montague/Millers Falls is handled by Erving's Publicly Owned Treatment Works #1. The IMA is the document that defines relative Town's responsibilities and charges. Inflow and infiltration in the Millers Falls collection system is an issue, reduction of this will help reduce the Town charge.

(B) WPCF Highway (Sub-Program) (s/p) 661-449

Sewer Collection System Repairs/Maintenance (d/e) - 449

The work to maintain and repair the sanitary sewer collection system gravity sewer sections are the responsibility of the Highway Department. The Highway Subsidiary portion of the appropriations is developed by the Highway Superintendent. Also supported by this budget is the work to minimize inflow and infiltration into the Town system. Any reduction will help to reduce the I/I charge to the Town.

(C) WPCF Debt Service (s/p) 661-700

Principal (d/e) & interest (d/e), short and long term (p/s) are provided by the Town Treasurer/Collector.

(D) WPCF Benefits (s/p)

Division/elements under this sub-program are provided by the Town Accountant or Treasurer/Collector.

Budget Statement 661-910

Describe the most significant changes that you are proposing in your FY 2015 budget submission. What are the key factors that are driving spending in your budget? These could include uncontrollable increases (greater than inflation) for materials, supplies or utilities; increases related to the implementation of collective bargaining agreement; staffing increases; the implementation of new programs or services, possibly driven by new statutory requirements, compliance issues or need to address deferred maintenance. Conversely, note any savings that are anticipated due to greater efficiency in your operations.

Most Significant Changes

The development of the WPCF budget for FY 2015 in all honesty has been very challenging. There are 6 factors driving the budgeting difficulty:

- 1 & 2 - Sludge reduction trials of 2 types. The first involves the change in plant process control that through December 2013 has resulted in no sludge needing to be removed from the plant since 13 June 2013. The goal here is the reduction in disposal costs that through December 2013 has realized a cost savings of approximately \$85,000. The second is a composting trial that takes sludge and reduces the quantity, the goal of which is to reduce disposal costs and potentially produce a saleable product thereby generating a new source of revenue. This effort if it is to continue requires additional staff.
- 3 - Receiving and treatment of thickened sludge from other waste water treatment facilities within Franklin County providing a substantial revenue source. The revenue received through November 2013 shows a monthly average of \$17,000.
- 4 - The reduction of nutrients, nitrogen & phosphorous, in the WPCF effluent to the river. This falls under the heading of major project avoidance. We have been evolving a low cost process to accomplish this and have shown good results. This is a spinoff of sludge reduction efforts begun in 2008. As you may recall the Facilities Plan of 2005 indicated a project price tag of \$4,000,000 to install a system to reduce nutrients. To date our expenditures have been under \$100,000 and we have seen benefits of sludge reduction & cost savings in that area.
- 5 - Staffing level. The DEP inspection of 3 July 2013 resulted in a staffing review concluding that there needs to be 11.3 personnel to adequately run the WPCF facilities; since 1994 the average staffing level has been 7. The Town is in the process of negotiating a Consent Order concerning this. Also we are awaiting the revision of CMR 314 regulations that will determine how often the pump stations will be inspected, i.e. 7 days per week as opposed to the current 3 days per week. An increase in staff is not addressed in the budget provided. It is my belief that a staff of no more than 9 full time positions will be able to handle all required functions and also continue the added work as described in items 1 through 4 above. A staff of 9 that is as fully motivated and engaged as is the current staff versus a staff of 11+ would as can be seen have less of an impact on sewer rates and industrial surcharges.
- 6 - Emergency expenditure debt service is added to the budget in FY 2015 for long term debt principal and interest of \$110,000.

As all these trials, 1 through 4, so far are promising we want to complete the current fiscal year to allow a full 12 months of operation and transition through all 4 seasons. This makes budgeting extremely tedious when estimating appropriations and revenues. The initial or first pass budget as provided reflects costs for current operations, i.e. actual expenditures as of December projected through to the end of FY 2014. The budget provided does not reflect an increase in staffing or a one grade increase that I strongly recommend, for all operators and the Secretary and Assistant Laboratory Technician; I have attached additional budget request noting such. It is as the result of the recommendations and actions of these personnel that items 1 through 4 have been possible. I firmly believe the current or recommended pay and also the pay classification study results do not compensate these individuals for the work they do and for the

responsibility reflected in consistent efforts to make the trials successful. Should we continue to perform positively as concerns cost reduction and revenue generating efforts we believe that the benefits, cost reduction, increased revenue & project avoidance will more than outweigh the added cost of the one grade increase and the addition of 2 personnel as well. It is also our hope that it will cover the debt service incurred for item 6, the emergency repairs of the industrial park sanitary sewer gravity line. Until we complete the current fiscal year the FY 2015 budget and revenue become a risk analysis exercise.

The information below was provided by the Franklin Solid Waste District. This is an example of how the Town is benefitting the region in a very critical area. This is also an example of an environmentally friendly effort in that for each long distance hauling trip avoided, less fuel is burnt and carbon emissions to the atmosphere reduced as well as being an economic benefit to the County and Montague.

Positive Regional Impact of Montague WPCF
Jan Ameen, Executive Director FCSWMD
December 31, 2013

The Franklin County Solid Waste District holds contracts for hauling and disposal of wet sludge and sludge cake. Currently, ten public facilities, including Montague, use the District's contract pricing and services. When the District went out to bid in May 2013, it requested "intra-county" hauling prices from local facilities to the Montague WPCF. The resulting prices are, in general, \$200 less for this service than hauling to a disposal facility out-of-state. For Greenfield, the savings is \$342 per haul. These savings are directly passed on to the nine treatment plants in and around Franklin County. The table below shows financial savings to Franklin County towns for hauling intra-county to Montague's WPCF from July through October 2013.

Town	Project	Cost Savings
Deerfield	sludge to Montague vs. RI July-Oct	\$ 8,668
Erving	sludge to Montague vs. RI July-Oct	\$ 1,691
Greenfield	sludge to Montague vs. RI July-Oct	\$21,204
Orange	sludge to Montague vs. RI July-Oct	\$ 3,587
Sunderland	sludge to Montague vs. RI July-Oct	\$ 4,158
		\$39,308

Objectives

Describe the department's primary objectives for the upcoming fiscal year. These could include both "maintenance objectives" (i.e. continuing to provide the same level of services as the current year) and "new initiative objectives. Wherever possible an attempt should be made to identify the two or three key objectives for each division/element of your department.

Sewer Administration (d/e)

- Advance the Operators and Secretary/Assistant Laboratory Technician by one pay grade.
- Complete union negotiations to provide a completed new union contract.
- Complete the determination of staffing requirements through negotiations with the DEP.
- Receive a renewed NPDES permit.
- Realize funding from the DEP State Revolving Fund for pump stations upgrade.
- Define and begin the work for a facilities plan review.

Sewer Operations (d/e)

- Complete the work to replace the existing alarms system by migrating alarms to the Supervisory Control & Data Acquisition (SCADA) System.
- Replace or update the SCADA system software.
- Replace at least one if not 2 pump stations.
- Stabilize efforts involved with sludge reduction and revenue enhancement & staff to allow continuation.
- Finalize the efforts to revise the Millers Falls Inter-Municipal Agreement.
- Replace at least 1 aeration tank blower with a turbo blower.

Major Accomplishments

Describe the most significant accomplishments of your department over the past eighteen months. Also, describe why you consider these accomplishments significant and identify the benefits that have been/will be realized by the town. These could include costs savings, greater efficiency, increased service levels, improved safety, or enhancements to quality of life.

- Sewer rates did not increase for FY's 2010 through 2013. This is a savings to all sewer customers.
- Received and installed the 4th dewatering zone on the Fournier Rotary Press. An increase in sludge dewatering efficiency.
- Presented in an article of the Treatment Plant Operator Magazine, April 2012. Increased respect for Montague in the industry.

- Began receiving thickened sludge, Feb. 2012, from the Greenfield WWTP. To assess the effect on WWTP as a receiving facility and a new revenue source.
- Reduce septage handling rates to increase septage revenue. Results have been favorable.
- June 2013 began receiving thickened sludge/biosolids from other Franklin County town wastes water treatment plants. Results have been favorable.
- Staff built, installed & wired 3 automatic valves as part of sludge & nutrient reduction efforts. Saved substantial amount of money vs. purchasing commercially available equipment.

Performance/Workload Indicators

Provide comparative measures of performance and workload delivered in FY 2013, estimated in FY 2014, and anticipated in FY 2015 in for key departmental divisions/elements.

SERVICE LEVELS:							
Service Category	FY 2008 Act.	FY 2009 Act.	FY 2010 Actual	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate
1. Wastewater Treated - Million Gallons, Eff.	401	391	365	367	369	330	319
2. Septage Treated - Gallons	798,650	556,600	328,854	472,050	1,389,891	2,346,334	472,050
Treated Pounds of:							
3. Biochemical Oxygen Demand (BOD), pounds	1,117,265	763,215	1,198,113	1,364,735	1,418,390	1,835,220	1,322,983
4 Total Suspended Solids(TSS), pounds	1,780,835	1,820,255	1,224,393	1,218,735	1,290,640	1,723,165	1,471,801
Total BOD & bTSS pounds treated, all sources	2,898,100	2,583,470	2,422,506	2,583,470	2,709,030	3,558,385	2,794,784
5. Millers Falls Sewage - Million Gallons	26	36	42	28	37	28	28
6. Screenings, Tons wet.	19	15	17	17	15	12	13
7. Grit, Tons wet.	47	39	40	36	24	33	27
Solids Disposal:							
8. Dry Tons of Biosolids disposed of.	699	594	383	451	565	357	447
9. Gallons of Thickened Biosolids pumped.	3,627,500	3,117,798	2,391,500	2,616,500	3,198,754	2,444,174	3,110,415
10. Thickened Sludge % Solids	5%	5%	4.0%	4%	4%	4%	4%
11. Biosolids from WWTP's.					497,750	1,329,500	?

Department WWTP Additional Request FY 2015

Title: Full Time Wages Item 5112 Estimated Cost: \$40,237

Description: The addition of: 1 full time 40 hours per week position.
1 full time 25 hours per week position.

Justification:

The Department of Environmental Protection (DEP) conducted a plant inspection on 3 July 2013. As a result of that visit 2 main issues were noted in the inspection report:

1. Staffing level – an evaluation was done by the DEP indicating that 11.3 personnel are required to operate the WPCF facilities. I feel only 9 trained and motivated personnel would be needed. This would enable the Town to operate all WPCF facilities as well as continue to work on our sludge and nutrient reduction efforts.
2. Pump station inspection frequency – Current Massachusetts General Law (MGL) requires that all pump stations that meet certain criteria, as ours do, are to be inspected daily. The current frequency is 3 times per week. The MGL associated with this is under review and any changes made will be available in spring of 2014. Should this not result in a change in the daily inspection requirement it appears the DEP is going to enforce the MGL as concerns Montague. To inspect the stations would require another full time position, not part of the 2 above. Discussion with the DEP indicates that not all the 8 pump stations may fit the new criteria when promulgated.

I have addressed only the personnel required in item 1 above as concerns estimated cost.

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Department WWTP Additional Request FY 2015

Title: Full Time Wages Item 5112 Estimated Cost: \$20,873

Description:

A change, 1 grade increase for licensed Wastewater Treatment Plant Operators and 1 grade increase for the Secretary/Assistant Laboratory Technician,

Justification:

This increase reflects my position on where the Operators and Secretary/Assistant Laboratory Technician should be in the pay scale. This is an effort to recognize their level of proficiency, provides an incentive to attain the higher grade license thereby aiding in developing an operational staff of higher value to the Town. The WPCF has grown and will continue to grow in technical requirements, i.e. Combined Sewer Overflow and nitrogen & phosphorous and sludge reduction efforts. This is a step in planning for the future.

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Department WWTP Additional Request FY 2015

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Town of Montague
Water Pollution Control Facility
34 Greenfield Road
Montague MA 01351-9522
WPCFSUPT@MONTAGUE-ma.gov

(413) 773-8865
FAX: (413) 774-6231

TO: Frank Abbondanzio, Town Administrator
Selectmen/Sewer Commission
FROM: Robert J. Trombley, Superintendent
DATE: 23 January 2014

I have written this correspondence as the result of a number of events that have come together recently and so feel that it is imperative that we meet to discuss my concerns. The ability to initiate and carry out the work we have been doing is dependent upon the operations staffing team that has been developed at the facility. The Town has assembled over time a unique group of people with talents that are the driving force in what we have been able to accomplish. Events will be occurring relative to staffing that are of great concern to me. The events involve the retiring of personnel (2 Operators) from the Town of Deerfield WPCF, 1 in May & 1 in June) and the filling of one operational position at the Greenfield facility. I am aware that one of our team members will be sought out in the spring by Greenfield. The loss of any of the operations personnel from Montague puts in jeopardy what we have accomplished to date. I do not want to lose any of the staff. Also as I will be retiring in just under 4 years there is a need for staffing stability and continuity of operations in as seamless a manner as is possible.

1. Today Mr. Tim Peura, Operator Trainee, provided paperwork sent to him from the Department of Environmental Protection. Mr. Peura has been awarded a Massachusetts Grade III Waste Water Treatment Operators license; this will now permit him to advance from pay grade 4, Operator Trainee, to a Grade 5; yet another operator that could be lost at the expense of the Town.
2. This month is the second anniversary of initiating the handling of thickened sludge from the Greenfield Waste Water Treatment Facility. Since then the operation has expanded and we now handle thickened sludge from 10 communities in Franklin County the average monthly revenue of which is approximately \$17,000 per month, July – December 2013.
3. It has also been 2 years since the septage rates were reduced in an effort to take in more septage and increase revenue. For fiscal year 2013 the Town took in \$79,368.23 over the estimated \$99,400.
4. Sludge reduction trial, cost savings, efforts #1 began 20 February 2013. Through December 2013 disposal cost budgeted for \$200,000 has been \$5,712.34. The savings in that line item alone is greater than the increased WPCF electrical cost.
5. Sludge reduction #2 composting trial, cost savings and potential new revenue source effort began in July 2013. We have produced several batches of compost and continue to experiment with the goal of producing a product that could be sold, the trial continues.

These are all beneficial events that support the Town. We are hoping to continue in this manner into the future but that is uncertain should we lose staff. Standard operations alone at a WPCF are difficult enough and require licensed, trained personnel to fulfill regulatory requirements. We have added to this operation, to date results are positive and so a discussion on my recommendation to address these concerns plus what we hope to accomplish in the future is I feel necessary.