

WPCA - FY 2019/2020

Pro-rated 7 months

Dec. 2019 - June 30, 2020

EXPENSES

Approved by WPCA
June 24, 2019

	FY 18/19 actual	FY 19/20 proposed	FY 19/20 actual
PERSONNEL			
board clerk		\$585.00	
CONTRACTUAL SERVICES			
prof. services/town attorney		\$1,458.31	
audit		\$2,625.00	
putnam wpca - flow based		\$22,882.23	
contractual services-Putnam		\$17,500.00	
chemicals/controls		\$7,291.62	
insurance		\$408.31	
electric		\$2,187.50	
telecommunications		\$1,166.62	
diesel		\$2,916.62	
advertising/legal notice		\$291.62	
lab supplies/testing		\$3,208.31	
COMMODITIES			
supplies		\$583.31	
contingency		\$5,833.31	
composite sampler (1x fee)		\$5,000.00	
CAPITAL TRANSFERS			
maintenance/repair		\$11,666.54	
operating sub-total:		\$85,604.30	
BOND AND NOTE RETIREMENT			bond, interest,
mandatory paydown	\$264,000.00	\$237,903.00	and paydown \$\$
USDA principal		\$91,655.00	are for illustration
			purposes only.
BOND AND NOTE INTEREST RETIREMENT			True costs and
USDA interest		\$177,445.00	note schedule
			still tbd.
bond and note sub-total:	\$264,000.00	\$507,003.00	
TOTAL EXPENSE:	\$264,000.00	\$592,607.30	

Pro-rated 7 months
Dec. 2019 - June 30, 2020

REVENUES

	FY 18/19 actual	FY 19/20 proposed	FY 19/20 actual
Pomfret School			
contractual-flow based		\$13,104.42	
operating		\$25,501.57	
lab supplies/testing		\$1,069.43	
composite sampler		\$1,666.66	
bond and note		\$42,876.20	
bond and note interest		\$83,008.77	
mandatory paydown	\$123,499.20	\$111,291.02	
sub-total Pomfret School	\$123,499.20	\$278,518.07	
Rectory School			
contractual-flow based		\$8,064.21	
operating		\$18,567.41	
lab supplies/testing		\$1,069.43	
composite sampler		\$1,666.66	
bond and note		\$31,217.69	
bond and note interest		\$60,437.76	
mandatory paydown	\$89,918.40	\$81,029.76	
sub-total Rectory	\$89,918.40	\$202,052.92	
Loos & Co.			
contractual-flow based		\$1,713.60	
operating		\$10,444.85	
lab supplies/testing		\$1,069.43	
composite sampler		\$1,666.66	
bond and note		\$17,561.09	
bond and note interest		\$33,998.46	
mandatory paydown	\$50,582.40	\$45,582.22	
sub-total Loos & Co.	\$50,582.40	\$112,036.31	
TOTAL REVENUE:	\$264,000.00	\$592,607.30	

Contractual flow-based taken from
engineer estimates - attached

operating is % of all other costs, less
bond and interest. Lab fees divided equally.
composite sampler divided equally
Participant % based on % billed for 2018 paydown.

Bond and interest % based on %
billed for 2018 paydown.

Pomfret School 46.78
Rectory School 34.06
Loos & Co. 19.16

Projections - Revised flow for Pomfret, Rectory Schools

Putnam Treatment Costs per Inter-Municipal Agreement

Total Flow (per 1,000,000 gallons)	\$2,379.585
BOD's (per pound)	\$0.557295
TSS's (per pound)	\$0.349949

Initial Projected Wastewater Flow

Rectory School (GPD)	8000
Pomfret School (GPD)	13000
Loos & Co. (GPD)	1700
Total Average Daily Flow (GPD)	22700

Adjusted to
7 months.

Standard TSS and BOD Projections

TSS (mg/L)	343
BOD (mg/L)	292
TSS (lb/gal)	0.0028565
BOD (lb/gal)	0.0024317

Projected TSS Loading

Rectory School (lb/day)	22.851774
Pomfret School (lb/day)	37.134133
Loos & Co. (lb/day)	4.856002
Total Average Daily Flow (lb/day)	64.841909

Projected BOD Loading

Rectory School (lb/day)	19.453988
Pomfret School (lb/day)	31.612731
Loos & Co. (lb/day)	4.1339725
Total Average Daily Flow (lb/day)	55.200692

TSS (lb/day)	64.841909
BOD (lb/day)	55.200692

Projected Annual Cost

Rectory School	\$13,824.46
Pomfret School	\$22,464.76
Loos & Co.	\$2,937.70

Total Putnam Cost	\$39,226.92
	\$39,226.92

Electric Costs - Rectory School PS

Head (ft)	66.6
Pumping Rate (gpm)	137
Pump and Motor Efficiency	0.385
Cost (\$/kWh)	\$0.18
Cost per Hour (\$/hr)	\$0.80
Hours Running	0.973236

Cost per Day	\$0.78
Cost per Year	\$285.47

Electric Costs - Pomfret School PS

Head (ft)	118
Pumping Rate (gpm)	268
Pump and Motor Efficiency	0.485
Cost (\$/kWh)	\$0.18
Cost per Hour (\$/hr)	\$2.21
Hours Running	1.3059701
Cost per Day	\$2.89
Cost per Year	\$1,053.94

*Adjusted
to 7 months*

Electric Costs - Loos & Co. PS

Head (ft)	108
Pumping Rate (gpm)	144
Pump and Motor Efficiency	0.391
Cost (\$/kWh)	\$0.18
Cost per Hour (\$/hr)	\$1.35
Hours Running	0.1967593
Cost per Day	\$0.27
Cost per Year	\$96.86

Electric Costs - Pomfret Street PS

Head (ft)	113
Pumping Rate (gpm)	463.9
Pump and Motor Efficiency	0.56
Cost (\$/kWh)	\$0.18
Cost per Hour (\$/hr)	\$3.17
Hours Running	0.8155493
Cost per Day	\$2.59
Cost per Year	\$944.87

Total Electric Costs	\$2,381.15
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Budget Line Items

Board Clerk	\$1,000.00
Insurance	\$700.00
Professional Services (Town attorney)	\$2,500.00
Audit	\$4,500.00
Odor Control	\$12,500.00
System Maintenance and Repair	\$20,000.00
Electric	\$3,750.00 1
Telecommunication	\$2,000.00
Advertising and Legal Notices	\$500.00
Supplies	\$1,000.00
Diesel	\$5,000.00
Reserve	\$10,000.00
Subtotal	\$63,450.00

Putnam Treatment Costs	\$39,226.92
Total	\$102,676.92

Notes:

1. Electric line adjusted to include 50% factor of safety over calculated values.

*Adjusted
to 17 months*

Estimated			6,172,000	@2.875	38 Yrs	AMORT	PER \$1000	PAYMENT
Town of Pomfret		Beginning	Principal	Interest	Total	43.6	6172	269100
		Balance	Payment	Payment	Payment			
	5/1/2020	6,172,000.00	91,655.00	177,445.00	269,100.00	0.02875		
	5/1/2021	6,080,345.00	94,290.08	174,809.92	269,100.00	0.02875		
	5/1/2022	5,986,054.92	97,000.92	172,099.08	269,100.00	0.02875		
	5/1/2023	5,889,054.00	99,789.70	169,310.30	269,100.00	0.02875		
	5/1/2024	5,789,264.30	102,658.65	166,441.35	269,100.00	0.02875		
	5/1/2025	5,686,605.65	105,610.09	163,489.91	269,100.00	0.02875		
	5/1/2026	5,580,995.56	108,646.38	160,453.62	269,100.00	0.02875		
	5/1/2027	5,472,349.18	111,769.96	157,330.04	269,100.00	0.02875		
	5/1/2028	5,360,579.22	114,983.35	154,116.65	269,100.00	0.02875		
	5/1/2029	5,245,595.87	118,289.12	150,810.88	269,100.00	0.02875		
	5/1/2030	5,127,306.75	121,689.93	147,410.07	269,100.00	0.02875		
	5/1/2031	5,005,616.82	125,188.52	143,911.48	269,100.00	0.02875		
	5/1/2032	4,880,428.30	128,787.69	140,312.31	269,100.00	0.02875		
	5/1/2033	4,751,640.61	132,490.33	136,609.67	269,100.00	0.02875		
	5/1/2034	4,619,150.28	136,299.43	132,800.57	269,100.00	0.02875		
	5/1/2035	4,482,850.85	140,218.04	128,881.96	269,100.00	0.02875		
	5/1/2036	4,342,632.81	144,249.31	124,850.69	269,100.00	0.02875		
	5/1/2037	4,198,383.50	148,396.47	120,703.53	269,100.00	0.02875		
	5/1/2038	4,049,987.03	152,662.87	116,437.13	269,100.00	0.02875		
	5/1/2039	3,897,324.16	157,051.93	112,048.07	269,100.00	0.02875		
	5/1/2040	3,740,272.23	161,567.17	107,532.83	269,100.00	0.02875		
	5/1/2041	3,578,705.06	166,212.23	102,887.77	269,100.00	0.02875		
	5/1/2042	3,412,492.83	170,990.83	98,109.17	269,100.00	0.02875		
	5/1/2043	3,241,502.00	175,906.82	93,193.18	269,100.00	0.02875		
	5/1/2044	3,065,595.18	180,964.14	88,135.86	269,100.00	0.02875		
	5/1/2045	2,884,631.04	186,166.86	82,933.14	269,100.00	0.02875		
	5/1/2046	2,698,464.18	191,519.15	77,580.85	269,100.00	0.02875		
	5/1/2047	2,506,945.03	197,025.33	72,074.67	269,100.00	0.02875		
	5/1/2048	2,309,919.70	202,689.81	66,410.19	269,100.00	0.02875		
	5/1/2049	2,107,229.89	208,517.14	60,582.86	269,100.00	0.02875		
	5/1/2050	1,898,712.75	214,512.01	54,587.99	269,100.00	0.02875		
	5/1/2051	1,684,200.74	220,679.23	48,420.77	269,100.00	0.02875		
	5/1/2052	1,463,521.51	227,023.76	42,076.24	269,100.00	0.02875		
	5/1/2053	1,236,497.75	233,550.69	35,549.31	269,100.00	0.02875		
	5/1/2054	1,002,947.06	240,265.27	28,834.73	269,100.00	0.02875		
	5/1/2055	762,681.79	247,172.90	21,927.10	269,100.00	0.02875		
	5/1/2056	515,508.89	254,279.12	14,820.88	269,100.00	0.02875		
	5/1/2057	261,229.77	261,229.77	7,510.36	268,740.13	0.02875		
			6,172,000.00		10,225,440.13			
				4,053,440.13				
					10,225,440.13			